

KANSAS FARMER

WITH WHICH IS COMBINED
FARMERS ADVOCATE

Volume XLVII. Number 12.

TOPEKA, KANSAS, MARCH 20,

Established 1863. \$1 a Year

Seed Selection and Breeding

By A. D. SHAMEL.

The object of seed selection and breeding is the production of new or improved varieties of crops adapted for profitable commercial growing. The discussion of this subject in this connection will be confined to the general farm crops propagated from seed, although the principles involved apply to a greater or less extent to all cultivated plants. The average yield per acre of the cultivated varieties of our farm crops is small compared with possibilities when better seed and improved varieties are used. The causes of this low average yield are many, but among the most important are the use of seed of weak vitality, resulting in a poor or uneven stand, the growing of a large proportion of inferior and unprofitable plants, and the use of varieties not adapted to local conditions of soil and climate. If the work of breeding could be extended in the case of farm crops to the origination of varieties possessing stronger germinative power, producing more uniformly productive plants, and adapted to the conditions of soil and climate under which they are to be grown, the profitability of these crops would be greatly increased, with little additional effort or expense.

The object of the breeder should be the finding of the best plants in the variety with which he is working, the propagation of these plants under conditions favorable for the fixing of the desired characteristics, so that they will come true to type under ordinary methods of cultivation, and the securing of reliable seed for planting.

ADAPTATION TO CLIMATIC AND SOIL CONDITIONS.

The acclimatization of the varieties of crops to the conditions of soil and climate where they are grown is one of the most important fields for the breeder. The farmers suffer great annual loss from the growing of varieties of crops not adapted to their local conditions, and there is a growing demand for the production of varieties adapted to the soils and climatic conditions of each region where crops are grown. The range of adaptability of varieties has never been determined so that with known soil and climatic conditions growers can intelligently buy seed for planting. However, with more knowledge of the relation of the different types of soil to the different varieties of crops, it will be possible for the breeder to produce and distribute seed specially adapted to particular sections.

The New England farmers have found that it is more profitable to grow a dent variety of corn for feeding purposes than the flint varieties which have heretofore been grown for this purpose. The dent varieties not only produce a larger yield, but have a higher feeding value than the flint corn. The difficulty with the dent varieties grown heretofore has been that the productive sorts would not mature in the short season of New England; consequently, the growers have been compelled to send to Western sources for seed every year. In 1905 the writer secured special ears, grown in Illinois, of Reid's Yellow Dent, an early maturing variety of dent corn, and planted this seed on the farm of Mr. S. Brewer, at Hockanum, Conn. The first season only a few ears matured fully. These were carefully selected and saved for planting the following season. In 1906 this seed was

planted in a large field on the same farm and yielded 121 bushels of mature shelled corn per acre, more than double the yield of flint corn grown on this farm under the same conditions. The earliest and best ears were again saved for planting in 1907. The season was unfavorable for corn growing in Connecticut, but the crop of the dent variety produced 71 bushels of shelled corn per acre, while flint varieties grown under the same conditions produced only about 35 bushels. Not only was the yield of shelled corn of the dent variety more than double that of the flint variety, but the yield of the stover from the dent corn was about double that from the flint corn.

THE PRODUCTION OF MORE UNIFORM VARIETIES OF CROPS.

The most important field for the breeder's work is in the improvement of the established varieties of crops by the production of strains approximating more uniformly to the best types of these varieties. This lack of uniformity in high productive capacity is responsible in great measure for the present low average yield of most of

our crops. It is due to the variability of the plants of these varieties, which is more evident in the cross-fertilized crops than in the self-fertilized ones. In the case of corn this variability of plants is particularly striking. It is the experience of most corn breeders that it is not possible to produce on an acre more than 5 bushels of uniform ears even of our most improved strains. A large majority of the plants produce ears of small size, irregular shape, and light weight, which are undesirable. Many of the stalks are barren. Only a small proportion of the plants produce the maximum size and weight of ear. In the cornfields of the central Mississippi Valley the corn is usually planted in hills, 3 feet 6 inches apart in the row. The rows are arranged 3 feet 6 inches apart and the hills checked so as to permit cross cultivation. This arrangement provides for 3,556 hills to the acre. An average of about 3 kernels are planted in every hill. If every kernel produced a uniform plant and the plants bore uniform ears weighing 1 pound each, the yield per

acre would be about 10,668 pounds, or about 155 bushels of shelled corn per acre. The fact that the average yield of this section is less than 40 bushels per acre is striking evidence that only a small proportion of the plants bear ears of the maximum weight.

A thorough study of ears of the cornfields in many places in the cornbelt by the writer during the past ten years has shown that only a small percentage of the plants produce the best returns possible under the conditions of soil and climate in which the varieties have been grown.

Considerable of this variability and lack of uniformity of the corn plants can be overcome by systematic selection of the best seed ears year after year and the propagation of this seed free from crossing with the undesirable types of plants or inferior varieties of corn. This fact has been fully proven in the production of varieties by many years of continued selection by corn breeders of the seed which has been found to be more productive and profitable for culture than the unselected or unimproved sorts. The gradual increase in yield of corn in Illinois, Iowa, Kansas, and other great corn-growing States during the past ten years can safely be attributed in no small degree to the use of the improved varieties produced in these sections by breeders.

The variability of all crops is so great that the field for securing improved and more uniform types is very wide and extends to every community where these crops are grown. The methods to be used in securing improvements depend to a greater or less extent on the natural habits of fertilization of the crops and must be modified to meet these conditions.

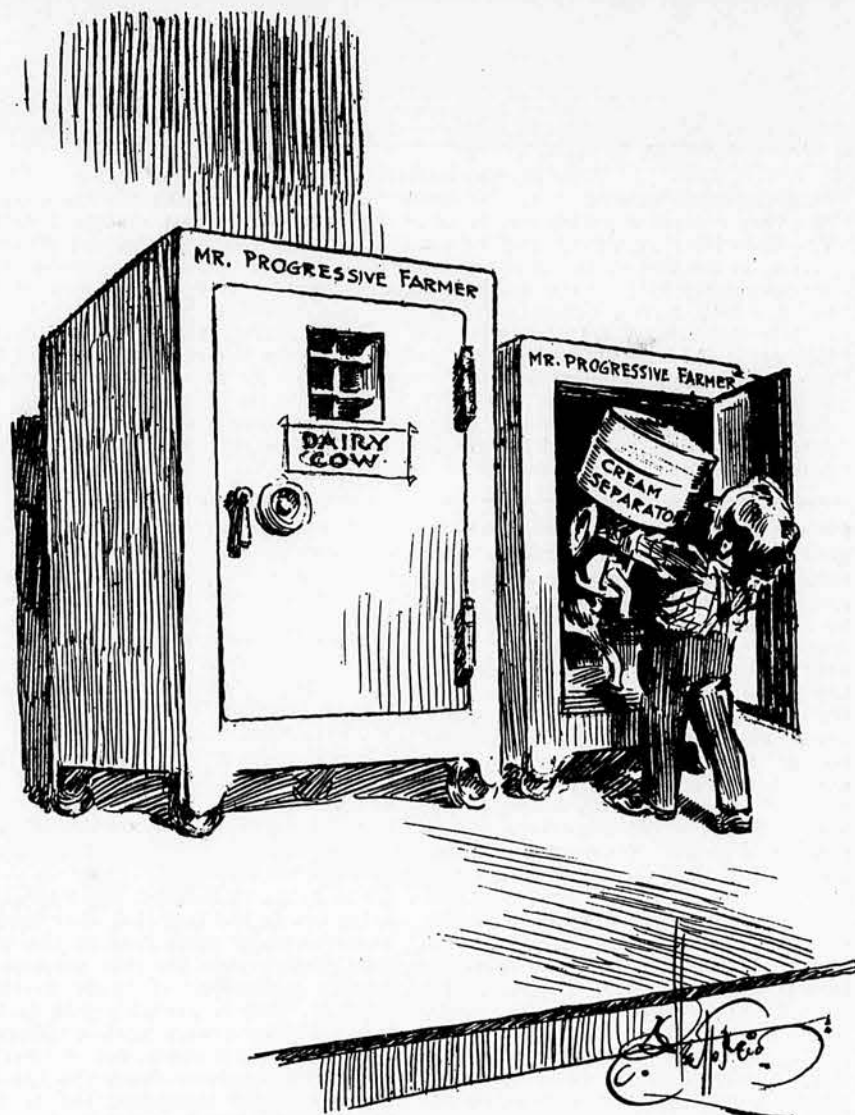
The work of producing improved strains of existing varieties can best be done by the growers of these crops on their farms. The improved varieties of corn, tobacco, wheat, and other crops which have been produced under these circumstances are strong evidence of the desirability of further and more extensive breeding work by the growers.

ORIGINATION OF NEW VARIETIES.

The production of new varieties is the most attractive field for the breeder, though of less importance than the development of uniform and more productive types of the existing varieties. In the origination of new varieties, variability is not only desirable but necessary, and one of the aims of the breeder is to make plants vary in order to find new and ideal plants as the basis for the development of new varieties.

Among the means for inducing this variability, two are of the greatest possible practical importance. The first and most effective is the change of seed from one set of conditions to others markedly different. As a rule the greatest variability is induced by changing the seed from the most favorable to less favorable conditions of soil and climate. The conditions favorable to the production of variability, and therefore to the finding of new types of plants, are not always the most favorable for the commercial production of the crop.

The Whelchel's Dent corn, originated by J. M. Whelchel, of Gainesville, (Continued on page 15.)



Putting Away His Valuables.

WHEELER'S ANSWERS

Alfalfa, Corn, Cottonseed.

Please advise me of your experience in feeding cottonseed-cake, caddo cake, or the straight cottonseed-meal; also which you decided to be the best; also how the above feeds correspond with corn. Would also like to be advised as to whether alfalfa and cottonseed-meal are a good balanced ration for cattle, that is, as good as alfalfa hay and corn. What, in your judgment, is the difference in feeding shelled corn and cornmeal? How much alfalfa should one feed per day? How much of corn and how much of cottonseed- or caddo-meal?—J. B. C., Abilene, Kan.

We have made no test here at this station to determine directly the comparative values of these various forms of cottonseed-meal. The ordinary, choice cottonseed-meal, of course, is nothing but the cake ground up into the meal form. The cold pressed meals or cakes which are being put upon the market the last few years, of which the caddo brand is a typical representative, differ from the choice cottonseed-meal or cake in that the whole seed, hull and all, is ground up before the oil is pressed out. Cottonseed-meal in any form contains the highest amount of digestible protein of any of the feeds available for cattle feeding. Its pounds of digestible nutrients per hundred pounds of feed are as follows: 37.2 protein; 16.9 carbohydrates, 12.2 fat. We have no figures showing the exact digestible nutrient value of the caddo cake. Its crude composition is, as registered with the director of the experiment station, as follows: Crude protein, 25.12 per cent; crude fat, 5.62; crude fiber 25.96; nitrogen free extract, 32.3.

The old or choice cottonseed-meal is guaranteed as follows: Crude protein, 42.3 per cent; crude fat, 13; crude fiber, 5.6; nitrogen free extract, 23.6. The crude fiber of any feed has the smallest percentage of actual nutrient value of any of its constituents, and for that reason the caddo cake would necessarily be classed as lower in feeding value.

Indian corn has digestible nutrients per hundred pounds as follows: 7.9 protein, 66.7 carbohydrates, 4.3 fat. The digestible carbohydrates and fat material in any food are the nutrients from which the animal stores up body fat and likewise maintains the heat of the body and develops energy required for the production of work. The protein is used for the building up of flesh and repair or replacement of the worn out nitrogenous tissues of the body. The proper nutritive ratio or the proportion of protein to the carbohydrates and fats in the steer feeding ration should be about 1:7 or 1:8. The nutrients occur in cottonseed-meal the proportions of 1:1.2, in alfalfa hay in the proportions of 1:3.8. You can readily see that by combining these two feeds it would give you a ration in which the protein would be in very great excess of the amount required for best results with the steers. Indian corn has these nutrients in the ratio of 1:19.8.

Where alfalfa hay is the sole roughage used, ordinarily there is no better concentrate to use than corn. The bulk of the cattle fattened for market are fed upon this combination. With the present high price of corn it is the judgment of many practical feeders that some use may be made of either the choice cottonseed or of the cold pressed cakes or meals. This of course will make the ration contain a much larger amount of digestible protein than is considered necessary for the steer, and we have no accurate experimental knowledge to show to just what extent the nutritive ratio may be narrowed with profit, considering the present high price of corn. It is my opinion that not to exceed two or three pounds of the cottonseed-meal should be used daily under any consideration where alfalfa hay constitutes the sole hay ration.

For full-feeding mature cattle, from 15 to 20 pounds of corn may be combined with from 1 to 2 or 3 pounds of cottonseed-meal and considered a full feed. Where it is not desirable to make a short feed the grain fed may be somewhat less in quantity, making greater use of roughage.

There is considerable difference of opinion as to the advisability of grinding corn for cattle. There is not much question but what cornmeal will force a steer more rapidly than ear corn or shelled corn, and, where it is desirable to make very rapid gains

and finish the steers in a very short time, it would probably pay when corn is as high in price as at present. In the main, it is not considered a profitable practice to grind corn for cattle, the cost of grinding usually being greater than the enhanced value of the meal over shelled or ear corn.

A Ration for Fattening Hogs.

How shall I feed a bunch of 100 head of 75-pound pigs from now on to, say June 1? I have some corn, but not enough. I can get corn at from 60 to 61 cents per bushel; meat-meal at \$43 per ton; oil-meal at \$39.60, and shorts at \$23.00 (not very good); low grade flour at \$28.00. I have not pasture for my hogs and intend to keep them up and feed to a finish.—A. A. P., Ellsworth, Kan.

With the present high prices of feed it is impossible to fatten hogs without having the gains cost almost as much as they are worth on the market. If these are good, growthy pigs they should not require to exceed 400

about 2 per cent is added to the value of corn by soaking. This method of feeding should give you gains costing not to exceed \$4.50 to \$4.75 per hundred. Of course the hogs should have dry, clean yards and a comfortable place to sleep. Salt and wood ashes should be kept before them constantly and they should be dipped as soon as the weather is warm enough, to kill the lice. If you have any alfalfa which you can cut green and give to them in the spring early, it will help to reduce the cost of the gains.

I am sending you under separate cover one of our swine pamphlets which may give you some help on the question of feeding and caring for hogs.

Mangels—Oil-Meal.

In a recent issue of Kansas Farmer I noticed that mangels were recommended for milch cows, to be fed in winter.

Will you please tell me the method of planting, culture, harvesting, and

culent material which can only be supplied in the winter by the use of a mangel or some root crop as stock beet or mangels.

The old process oil-meal is the meal or cake resulting from the extraction of the oil from the flax seed by hydraulic pressure. The new process meal is that from which the oil has been extracted from the flax seed by the use of naphtha as a solvent. The meal is heated to drive off the naphtha and is not generally considered to have as high a value for feeding purposes. The oil has been more perfectly extracted and some change has taken place in the character of the nutrients remaining, undoubtedly due to the heat which has been applied in the process. Professor Wolf of the Wisconsin Agricultural College gives the following method of determining whether an oil-meal is new or old process: "Pulverize a small quantity of the meal and put a level teaspoonful of it into a small vessel and then add ten tablespoonfuls of boiling hot water to the meal. Stir thoroughly and leave to settle. If the meal is new process it will settle in the course of an hour and will leave about one-half of the water clear on top. Old process meal will remain jelly like."

You are not properly balancing your ration by combining linseed-oil-meal with fresh separated milk for your pigs. Although called "oil-meal" it contains a relatively small amount of oil in proportion to its large amount of digestible protein. The separated milk has likewise had its fat or oil removed. You are therefore combining two feeds, both of which have had the fat removed. The proper grain to combine with separated milk should contain a relatively large amount of non-nitrogenous material. It is not necessary that this non-nitrogenous material be fat as starch or other carbohydrates have a similar function in the animal body. Either corn or cotton meal would make a much better combination for your pigs.

We are full feeding steers on alfalfa hay and shelled corn at 60 cents per bushel. Would you advise adding a ration of cotton seed cake at \$1.35 per cwt. or linseed-oil-meal at \$1.70 per cwt.? Which is the cheaper of above feeds and what amount would give best results with corn and alfalfa hay?—L. C. A. Mee, Cedarvale, Kan.

Where a combination is fed it usually does not call for the addition of any supplementary feed. A ration of 18 or 20 pounds of corn with the 10 to 12 pounds of good alfalfa hay supplies nutrients in almost exactly the right proportions for the best results with steers. Shelled corn theoretically has a greater producing value than either linseed-oil-meal or cottonseed cake pound for pound. Where a carbonaceous roughage, like prairie hay or corn stover is used, it is necessary to introduce some of the rich protein concentrates to supply the deficiency in protein.

With corn and alfalfa hay at the prices mentioned, it might be advisable to feed a small portion of the cake mainly for its stimulating value. A rich protein concentrate undoubtedly stimulates to some extent the appetite and digestion of the animal. Of the two mentioned, the cottonseed cake would be cheaper, being richer in fat and likewise containing a large amount of digestible protein. In total digestible nutrients there is very little difference in the cottonseed cake and the linseed-oil-meal. I would advise feeding not to exceed two or three pounds daily per steer in connection with the shelled corn. The following table gives you the total digestible nutrients in a ration of this kind. It makes a very rich concentrated feed and your cattle should make rapid gains upon it.

KANSAS FARMER has an assortment of beautiful imported post cards which will be given away during the month of March. These cards are finished in natural photo color, were made in Germany, and the subjects, of which there are twelve, cannot help but please. Here's how the cards can be secured. Send 25 cents for a month's trial subscription to Kansas Farmer and by return mail the cards will be sent you postage paid. You had better do this now as the offer expires April 1.



Myron McHenry, 11175.

A beautiful chestnut horse, with star and white hind pasterns, has a trotting race record of 2:15½ and is an own brother to John R. Gentry 2:00½, Theodore Shelton 2:09¼, and James Ramey 2:26. His sire, Ashland Wilkes 2:17¼, is the sire of 133 in the 2:30 class and his dam, Damewood by Wedgewood 2:19¼, is the dame of John R. Gentry, 2:00¼, Theodore Shelton 2:09¼, Myron McHenry 2:15½, and James Ramey 2:26.

Myron McHenry 2:15½ has sired E. M. R. 2:07¼, Mack Henry 2:16, Katherine 2:16¼, McShad 2:19¼, and four others better than 2:30 and is the grandsire of Bonnie Mack (4) 2:13¼, G. M. R. (4) 2:15¼, Ruby of Rubles (4) 2:20, and Alice Mack (3) 2:24¼. He is a race horse and a show horse and impresses his offspring with his good qualities to a remarkable degree. He is owned by the Granite Creek Stock Farm, M. A. Smith, Manager, Cawker City, Kan.

pounds of properly combined grains to produce 100 pounds of increase. The cheapest feed you quoted to supply the necessary protein in the ration would be the meat-meal. I am somewhat in doubt as to whether it would be more profitable to use some shorts or the low grade flour. If the shorts are similar in quality to what we are using here, I should use a considerable quantity of this feed. If you are so situated that you can grind corn into a meal at reasonable cost, I would suggest that you make a mixture of 100 pounds of shorts, 100 pounds of cornmeal and 10 to 15 pounds of meat-meal. Mix this thoroughly and feed in a reasonably thick slop. If it is impossible to grind the corn mix up the shorts and meat-meal and then feed this mixture as about half of the ration, giving shelled corn separately. You might soak this shelled corn since you say you have a tank and can readily do this. It will make it a little more palatable to the pigs and will be an advantage if it can be done without too great an outlay of time and expense. According to our experimental data

storing or keeping of mangels. I would also like to know the difference between oil-meal made by the old process and the new, and the value as a feed of each. I bought some and commenced to feed it to pigs but they did not seem to like it, although I use it very sparingly in fresh separated milk. It was labelled "Old Process."—J. E. W., Princeton, Kan.

Stock beets or mangels contain per hundred pounds, 9 pounds of total dry matter of which 1.1 is digestible protein, 5.4 digestible carbohydrates, and 0.1 fat, the remainder being water and indigestible material.

For milk-cow feeding, their greatest value lies in the fact that they supply a succulent or fresh feed in the winter. Their value for this purpose is greatly in excess of their nutrient value. This is probably due to the fact that they have a marked influence over the general conditions of the cow and in the appetite which she has for the dry feeds commonly fed in the winter. The milk cow invariably gives better results when at least some portion of the ration consists of some suc-

FARM INQUIRIES



ANSWERED BY
Prof. A. M. Ten Eyck

Blue-Grass for Pasture.

Can you give me directions for sowing Kentucky blue-grass in this county? As the station seed for sale? Would you think something else preferable for pasture in this locality?—W. W. Wheeler, Delphos, Kan.

Kentucky blue-grass may be sown either early in the spring or early in the fall. It is usual to sow two to three bushels of the seed per acre, since the vitality of the seed is usually very low. Prepare a well pulverized, well settled seed-bed. We have no seed of Kentucky blue-grass for sale.

I would not advise to sow Kentucky blue-grass for pasture in your section of the State except in the more favorable locations, namely fertile soil and well watered bottom land. Even in this section of the State this grass does not make productive pasture on the average prairie land. You may secure more profit from seeding other grasses. I prefer a combination of *Bromus inermis* and alfalfa, sowing about twelve to fourteen pounds of *Bromus inermis* with six pounds of alfalfa seed per acre. On well watered land you might sow three or four pounds of Alsike clover with the *Bromus inermis*.

Cow Peas.

Will you give me some information about cow peas, the best kind and their culture? I live in Linn county and have some very rich black soil and some very light soil. Give me your ideas of this soil and kind of crop to which it is best adapted. Will you please put me on your mailing list?—J. W. Eck, Mound City, Kan.

Our publications on cow peas are exhausted. I refer you to bulletin 318 of the U. S. Department of Agriculture, Washington, D. C. In your section of the State the Whippoorwill cow pea is one of the best varieties to grow and you may secure seed from Kansas seed firms.

The cow pea will produce perhaps as well on the "light soil" and this crop will improve the fertility of the "light soil," making the soil more productive when it is planted to other crops. You can probably secure a larger yield of cow peas from the fertile "black soil," but the "black soil" does not, perhaps, need the rotation with cow peas so much as the "light soil." The more fertile land should be best adapted for growing corn, oats, and grasses. The lighter soil may produce a good crop of cow peas as stated above, and may also produce good potatoes, and perhaps good crops of alfalfa if a good stand is secured.

Such land may give better returns planted with Kafir or sorghum, for forage and grain, rather than corn, but the legume crops should be used in rotation with the sorghum or Kafir corn in order to maintain the fertility of the land.

I have mailed you circulars 2, 3, and 5 on manures, fertilizers, and rotation of crops as related to maintaining soil fertility.

Seed Corn—Seed Wheat.

Will you kindly advise me if the State Experiment Station will have any seed corn to send out this spring. Which of the white varieties would you recommend for our part of the State?

As to seed wheat, which you may have for distribution for this fall's seeding, do you take the names of persons wishing to secure seed at this time? I wish to secure pure seed of the wheat best adapted to our locality. Which variety of the hard winter wheat would you recommend for us?—G. F. Rollings, Delphos, Kan.

I have mailed our Circular 12 giving information regarding the seed-corn which we have for sale. Of the white varieties, perhaps the Boone County, Silvermine, or Hammett White Dent may be preferred, in your section of the State, the Boone County being preferred perhaps.

We shall be pleased to book your order for seed wheat at any time. I enclose Circular 11 for last fall. I prefer the Kharkof or our improved Turkey Red varieties.

Vetch.

Will you tell us what you know about vetch? How to put it in the ground, how to harvest and feeding value? Green or as hay? When to put in and how long will live? Where can I get seed and at what price?—Albert Davis, Goodrich, Kan.

Hairy vetch, also called sand vetch, (*Vicia villosa*) is an annual legume closely related to peas, and is used in somewhat the same manner as field peas as a forage and pasture crop. The crop may be seeded either in the fall or early in the spring. For forage it should be sown with rye, wheat, or winter barley in the fall and could be sown with oats or other spring grains in the spring. Sow about a bushel of grain with one to one and a half bushels of vetch seed per acre.

The purpose in using the small grain is to afford a support for the vetch vines which do not stand but tend to recline on the ground but are readily harvested with the mower when planted with some grain crop.

Hairy vetch, or sand vetch, is really northern crop and may not succeed so well in that section of the State as cowpeas or soybeans. The crop does best on rather sandy or warm soils. I would always recommend fall seeding in this State. Our experiments in sowing the vetch in the spring at this station have not given good results. I prefer to sow field peas, early in the spring for an early spring crop, rather than the vetch, with oats or barley, or plant cowpeas later as a regular forage crop. The vetch and grain may be mixed together and the proper amount sown per acre by regulating the drill or the mixture may be sown broadcast by hand and covered with the harrow or disk. In using the drill, care should be taken to keep the mixture of seed stirred up, so as to get an even distribution of the vetch and grain.

When the vetch is sown with grain it is readily harvested with the mower or it may be cut with the binder and placed in shocks. Vetch makes good rich forage similar to clover, fieldpeas, and cowpeas. The crop may also be used for pasture. By sowing early in the fall some late fall and winter pasture may be secured and the vetch comes on early in the spring, and, if it is not pastured too late, it may still furnish a good crop of hay. The crop should be harvested for hay when the vetch is in bloom and before the grain with which it is sown becomes too mature to make good forage. The Hairy vetch lives only one year although as stated it may be sown in the fall but lives through only one winter. The seed may be secured from Kansas seed firms.

Sand Lucerne.

I have just received from the Department of Agriculture at Washington, 5 pounds of "sand lucerne" which I propose to sow alongside a like amount of ordinary alfalfa. I do this to test the "sand lucerne" as it has been recommended to me by J. M. Westgate of the department.

It is my intention to use the same field which was tried once before as it may be inoculated now. Previous to the death of the old plants I noticed nodules on the roots.

However I don't want to sow until next fall and I want to ask what would be the best treatment for the land during the summer? Did the station ever try sand lucerne? If so, with what results, or success?—C. F. Barth, Iola, Kan.

Your plan for preparing the seed bed for fall seeding of alfalfa should give good results. I would advise to manure and plow the ground early, the earlier the better, in order to cultivate it once or twice before the millet is planted. Take the millet off early in the summer for hay, when by disking and harrowing at intervals, a good seed-bed should be prepared for sowing

the alfalfa about the first of September. Doubtless you already have our Bulletin 155 on alfalfa. If not, you should write to the director of the experiment station, requesting that he mail you a copy.

We have been growing sand lucerne in a small way for several years and the crop produces nearly as well as alfalfa and the quality of the hay is similar to that of alfalfa. We have not made any feeding tests with this hay. For further information regarding this crop, I have mailed you circular letter.

Alfalfa on Buckwheat Stubble—Varieties of Oats and Barley.

Last summer we planted buckwheat on ground from which barley had been harvested. The buckwheat kept the ground in a fine condition free from weeds but fairly loose and had very little stubble of its own left on the ground after binding. We had intended to double disk and sow to alfalfa this spring but a man who saw it advised us that alfalfa positively would not grow on ground which had raised buckwheat.

While I do not anticipate any trouble, because the field in question raised fine alfalfa a few years ago. I do not intend to throw the seed away trying to seed a place where it would not grow, so I want your advice. The buckwheat paid for itself many times as an egg producer, fed in the bundle to the hens.

What variety of oats and barley do you recommend? Is there any seed of either left for sale at the college. Would you advise sending to Nebraska or Iowa for seed? Between what dates would it be most advisable to plant oats and barley?—R. E. King, Solomon, Kan.

I know of no reason why alfalfa will not start well on the buckwheat ground. I would advise to prepare the ground by disking and harrowing, taking care not to loosen the soil too deeply. Of course the buckwheat ground is apt to be rather dry, as well as mellow and with insufficient rainfall the young plants may not start well. At the present writing the ground is rather dry in this vicinity. In fact we have had little rain since last October. I would advise that you get the ground ready as soon as possible and harrow it after rains sowing the alfalfa at the most opportune time, but not too late in the spring.

The Kherson, Sixty-Day, and Red Texas oats have given the largest yields at this station as an average for the last five years. The Mansury and Bonanza barleys have produced better than other varieties of barley. We have a limited amount of the varieties of grains named above at \$1.50 per bushel or \$1.25 in ten bushel lots. The seeds which we send out are carefully fanned, making a very good grade of seed.

Seed oats and seed barley secured from northern sources, even as far north as Nebraska have given good results at this station. However, if you can get a good quality of well-bred seed in this State, I see no reason why you should import seed from northern sources.

I prefer to sow oats and barley very early in the spring, as soon as the soil is in fit condition to plant. We have had good success by early March seedings. I usually prefer to sow about the last of March or first of April. I have mailed you Bulletin 144 on small grains in which you will find a report of our experiments with oats and barley.

Falls to Get Good Stand of Alfalfa.

I have tried alfalfa five times, spring and fall, and with one exception I did not get enough back to pay for the seed. My neighbors have tried to raise it quite a number of times and have always failed, excepting a small patch of possibly 13 acres that was sown last fall about September 15, and is now looking well. I came to the conclusion that we did not yet understand how to sow it. So I went over to Fort Scott and had a talk with Miller, the good roadsman who owns a large farm consisting of upland and bottom land, and he told me that he had tried alfalfa on both and made a failure of it, and that Ex-Sheriff Brooks had made a failure of it, and also W. Shenault, ex-president of the First National Bank and that they had given up trying to raise alfalfa.

My own field that I speak of was sown April 15. The first year I did not get anything but the next year I got about two tons of hay to the acre in two cuttings. The third year the alfalfa got yellow and I cut about 1/2 ton to the acre in two cuttings. Then

I followed out the directions as I understood them from the Manhattan school point of view, with the help of Coburn's books. I am anxious to try it again this spring, also next fall.

I have between two and three thousand acres of land in this county and ship my hogs and cattle by the care-load of my own raising, but am afraid that I will get left if I fail to raise some other feed for cattle and hogs besides corn. I did not know but that you might suggest a variety of seed that would help me out. My soil at the place I want to try now is a sandy reddish soil in a field that has a very large pond on one side with plenty of water in a large well that flows water the year around. This spring I want to try about 4 acres and this fall about 30 acres. This is good corn ground put into rye last year and in wheat now. Can you name any variety and can you supply me with enough seed for this spring sowing 4 acres? If so kindly send me a bill and I will send check or draft. Price is no object if I can get it started.—E. C. Hughes, Hiattville, Kan.

You doubtless have our bulletin 155 on "Alfalfa." If not, you should send immediately to Director E. H. Webster for one. It is one of the most complete treatises on the subject which has ever been published. The variety best adapted for growing in your section of the State is perhaps the German alfalfa. It is better adapted to most climates than our western alfalfa and has perhaps given better success than the common alfalfa in the Eastern and Southern States. There has been considerable seed imported from Germany this year and you may secure seed from regular seedsmen.

Your soil is not particularly well adapted for growing alfalfa on account of its physical condition, the soil being too compact and the subsoil too hard and impervious to water. Now, in order to overcome, in part, this bad physical condition of the soil, I would recommend to continue to sow alfalfa on the same field. Take the field you have just had seeded for three years, plow it and prepare a good seed-bed, and sow it again this fall. The alfalfa roots, although the plants may not live more than two or three years, will penetrate the subsoil more or less and gradually this land will be put into better physical condition for growing the crop.

A light application of well-rotted barnyard manure, well worked into the soil previous to seeding, will greatly assist the young plants in starting. Perhaps, also, you should apply a light dressing of lime with this manure, or ground limestone may answer, say 1,000 pounds of lime or two or three tons of ground limestone per acre.

Again, although this may not be necessary, it may be advisable for you to inoculate the soil with the bacteria which grow on the roots of the alfalfa plants. This may be done by securing soil from an old alfalfa field in localities where alfalfa thrives well, and distributing the soil over the field in question at the rate of three or four hundred pounds per acre.

Again it occurs to me that you do not cut your alfalfa regularly. Since it makes little growth you let it go, allowing it to mature and the leaves dry up and turn yellow, being infected with the leaf spot and then drop off, and thus the land is infected with the disease, which weakens the alfalfa plants and may finally destroy them.

Alfalfa should be cut regularly every time it reaches the blooming stage, no matter whether there is a good growth on the field or not, and it is advisable to always rake and remove the crop from the field before the leaves have crumbled and fallen off. It is even advisable to clip the alfalfa at blooming time and let it lay on the ground rather than not to cut at all.

I would advise that you get some of the German alfalfa seed and sow it. I shall be pleased to keep in touch with you and help you in any way possible to solve this problem of growing alfalfa in Southeastern Kansas.

Hard Wheat Deterioration.

What are the causes of the alleged degeneration of our Kansas hard wheat? Why does it seem in certain cases to be getting softer? The answer to this question can be found in one or more of several facts:

First. Deterioration in quality and size of grain, owing to poor soil and poor culture. This form of degeneration is only temporary, is not hereditary, and can be remedied in any year

(Continued on page 2.)

KANSAS FARMER

WITH WHICH IS COMBINED

Farmers Advocate

Published Weekly at 625 Jackson street, Topeka, Kan., by the Kansas Farmer Company.

ALBERT T. REID, President.
S. H. PITCHER, Secretary.
J. R. MULVANE, Treasurer.

E. W. RANKIN, Business Manager.

T. A. BORMAN, } Editors.
E. B. COWGILL, }

Chicago Office—1736 First National Bank Building, Geo. W. Herbert, Manager.
New York Office—725 Temple Court, Wallace C. Richardson, Manager.

Entered at the Topeka, Kansas, postoffice as second class matter.

SUBSCRIPTION PRICE.—\$1.00 per year; \$1.50 for two years; \$2.00 for three years. The date of subscription will be found on the label on your paper. We follow the usual custom of publications, and conform to the desire of most subscribers, by sending the paper until an order is received to discontinue it. We must be notified in writing when the subscriber desires the paper stopped. Returning the paper is not sufficient as we cannot tell from the label alone what the address is. Both name and address must be given and all arrearages paid.

ADVERTISING RATES.—25 cents per square line, 14 lines to the inch. Announcements of reputable advertisers respectfully solicited. No medical nor questionable worded advertising accepted. Forms close Monday.

OUR GUARANTEE.—It is our belief that all advertisements in this paper are from reliable persons or firms. To show that we are in earnest in protecting our subscribers we guarantee the trustworthiness of our advertisers under the following conditions: will make good the loss of any paid up subscriber who suffers by dealing with any fraudulent advertiser in our columns, provided complaint is made to us within thirty days after the transaction. This guarantee means just what it says. It does not mean that we guarantee to settle all trifling disputes between a subscriber and an advertiser, though we offer our good offices to this end. We do, however, protect you from fraud under the above conditions. In writing to advertisers be sure always to say: "I saw your advertisement in Kansas Farmer."

CONTRIBUTIONS.—Correspondence invited on all farm topics, live stock, soil cultivation, grains, grasses, vegetables, household matters, recipes, new and practical farm ideas, farm news. Good photographs of farm scenes, buildings, live stock, etc., are especially invited. Always sign your name, not for publication unless you desire it, but as an evidence of good faith. Address all communications to

KANSAS FARMER COMPANY,
Topeka, Kansas.

It is believed that the new law regulating the disposal of Kansas school lands will benefit both the State school fund and bona fide settlers.

The increase in the acreage of alfalfa has been rapid in Kansas for the last decade. The more alfalfa the more net profits are possible on the farm.

The Indiana Farmer says more silos will be erected in the Hoosier State this year than in any year heretofore. As feed becomes more costly the necessity of making the entire corn plant available becomes more imperative. Result, more silos.

Receipts of hogs at Kansas City from January 1 to March 13 were 222,389 less in 1909 than for the corresponding period in 1908. The decrease in receipts of cattle was 11,121. There was a gain of 4,909 in the receipts of sheep.

On the St. Louis Merchant's Exchange on March 6 farm reserves of wheat were figured at about 125,000,000 bushels against 148,700,000 bushels last year; corn 900,000,000 bushels, against 963,000,000 bushels; oats 250,000,000 bushels, against 267,000,000 bushels.

Good citizens of Kansas will be glad to know that the last session of Congress incorporated into the Penal Code of the United States an interstate liquor shipment amendment which prohibits C. O. D. shipments and delivery to fictitious consignees, and requires packages of liquor to be so branded as to show the contents.

The Illinois Farmers' Institute has resolved that the game laws of that State should be so amended that it shall be unlawful to kill any quail or pheasant for a period of five years; that hunting on private premises without the permission of the owner, shall be a misdemeanor and the penalty shall be the same as that for hunting

without a license; that all game killed shall be carried in open view, and that shooting on the public highways or on the premises of another on Sunday, shall void the license of the hunter.

If the farm renter has become accustomed to his new location he has done a good three weeks' work since March 1. When the renter shall cease to move every year, but shall remain to get the good of his care in improving the fertility of the farm there will be opportunity for greater prosperity for both landlord and tenant.

The inauguration of Wm. H. Taft as President of the United States on Thursday, March 4, marks another period in the triumphant march of "government by the consent of the governed." It is another realization of Lincoln's high resolution "that government of the people, by the people, for the people, shall not perish from the earth."

"Flies are among the most dangerous disease-conveyors, and one fly which was examined was carrying on its legs 100,000 disease bacteria and making straight for a bottle of milk." That was the testimony of an expert, in an exchange. "Flies spend their days gathering up germs, and get into houses at night to distribute infection in food."

While the corn crop of '08 was large, the supplies have run out rapidly during the winter, and this, too, without foreign buying. The usefulness of corn as based on its nutritive constituents and its proven feeding value is receiving a recognition that tells on the price and makes it a desirable crop to plant, a profitable crop to so cultivate as to produce a big yield.

To any farmer boy who will within the next 30 days send a club of 15 subscribers to KANSAS FARMER at \$1 per year, we will give a handsome gold watch. These watches are 7-jewel Waltham or Elgin movement with 14k gold filled case carrying a guarantee. Of such a watch anyone may well be proud. Remember this offer is good for 30 days only, and those wishing to take advantage of it will have to get busy now.

The Federal quarantine on account of foot-and-mouth disease has been entirely removed from the States of Michigan and Maryland, effective March 15, no cases of the disease having been found in those States since early in December. The quarantine on certain portions of New York and Pennsylvania remains in effect, but covers only the particular townships in which the disease existed together with certain adjoining townships.

Cooperation is held out as the one great element that is to bring betterment to the farmers. The farm papers nearly all advocate it, and now comes Theodore Roosevelt and names it as the one greatest thing that can place the farmers on a higher level of existence. When trained experts in conducting cooperative enterprises shall be available and shall be employed, placed under bond and held responsible to competent boards of directors, good more often than evil will come of cooperative enterprises.

The Kansas Legislature has authorized the use of county poor farms as demonstration grounds under the direction of the extension department of the State Agricultural College. It is not proposed to use these farms for experiments for the discovery of new varieties or of new methods, but for illustration of the best in agriculture as developed at the experiment stations and elsewhere. The details are arranged with the extension department of the college by the county commissioners of the several counties.

The Nebraska Press Association at its last meeting adopted a preamble and resolution in which it is stated that carefully compiled statistics show that the average annual yield of corn per acre in Nebraska is approximately 23 bushels, and if by a more careful selection of seed-corn and the adoption of improved methods of cultivation, the production per acre be increased only five bushels per acre, it will annually increase the wealth of

Nebraska to an amount in excess of \$20,000,000. As a help towards this desirable increase in wealth the editors approve and endorse the efforts to establish and make permanent an annual National corn exposition in the West.

Immediately on the confirmation of James Wilson to succeed himself as Secretary of Agriculture, the employees of the Department in Washington organized themselves by bureaus, and filed through the secretary's office, each taking him by the hand and congratulating him upon his retention in office. There are now some 2,400 of these employees in Washington, and to a man they were glad that their chief is to remain and direct the policies of the great department. There is now, it is said, no talk of retaining the secretary until he shall have broken the record for continuous service as a cabinet officer, but it is conceded that Mr. Wilson will remain at the head of the department so long as he may care to discharge the many and varied duties that devolve upon the incumbent of this place.

When the battleship squadron after its mission of peace around the world was approaching the end of its long voyage there were several days during which the Navy Department was unable to get wireless messages from the fleet, because of the interference of many amateurs in and about Washington who persisted in trying out their home made apparatus. Such interference in future has it is believed been provided against by a contract entered into with Fessenden, said to be one of the leading wireless experts of the country, to put up a wireless station near Washington that will be aloof from interference. The conditions are that the station must be capable of transmitting messages at all times to a radius of 3,000 miles from Washington, and that such messages must not be interrupted or interfered with either by atmospheric disturbances or by messages from neighboring stations.

THE CORNER ON MAY WHEAT.

Figuring on a world demand fully equal to the supply of wheat, speculators have manipulated a "corner" on this grain for "delivery" in May. It is not correct to say delivery for it is not expected or desired that the grain will be delivered. Quite likely the amounts "sold" are greater than all the wheat in the country. But by offering to contract to buy wheat for delivery in May at stipulated prices and paying margins on such purchases, those in the deal seek to "corner" the market to the extent of intimidating sellers from assuming the risk of being able to deliver the wheat at the prices named.

It is a peculiarity of situations like this that persons of speculative turn throughout the country seize upon such occasions to "buy wheat," that is to pay margins on contracts to deliver wheat to their order during the month for which the corner is being "run." This helps the conspirators who are manipulating the "corner."

Persons who have entered into contracts to deliver have two courses open to them. They may continue to contract to sell if they have money enough to make their offers good. In this case the contest between the buyers—bulls—on the one side and the sellers—bears—on the other side means one of bank accounts. The bulls are helped as above shown by most speculators throughout the country, while the bears are helped by the flood of wheat that comes out from the reserves in response to higher prices, and must be bought by the bulls to prevent the bears from getting it and delivering the actual grain at the time of settlement of the "May deal." In some instances in the past the bears have thus "broken the corner," and with it the fortune of those who were the heaviest investors in the deal. This was notably the case in the matter of the "Leiter corner" of a few years ago. Joseph Leiter was the leader of the buyers—the bulls. When more money was needed on account of unexpected strength of the sellers, Leiter's father came with his millions to his son's assistance. P. D. Armour, the packing house magnate, was interested as a seller. Navigation on the lakes was about to close, and the Leiter crowd had shipped immense quantities of wheat to Buffalo, leaving Chicago elevators somewhat depleted. Mr. Armour returned from Europe just in time. By his directions, his agents bought the actual wheat that was afloat and or-

dered the cargoes returned to Chicago. Country speculators became alarmed and sold their contracts. To prevent a break in the market, it was necessary for Leiter to continue buying. To break the market it was necessary for Armour to continue selling. Armour won by supplying more actual wheat than the immediate demands of the market could absorb and by offering more contracts than Leiter could finance. The corner was broken. Leiter settled with Armour by paying the difference between the prices stated in his contracts and the prices at which Armour could buy the wheat to fill the contracts. Leiter had expected to force sellers to settle on his terms and thereby to get their millions, but Armour forced the settlement and got Leiter's millions.

It has often been thought that had Armour's return been delayed a few days his agents would not have had the nerve to take the heroic measures necessary to success, in which case the transfer of the millions would have been in the other direction. That is, the sellers—bears—would have taken the other alternative and failing to break the market would have "settled."

Aside from the other uncertainties of a game like this, the country speculator is subject to still another. The leaders of the corner may at any moment find it very profitable, at least cheaper, to settle than to continue the contest. This they will do without reference to the interests of country speculators. It is quite possible that before this number of the KANSAS FARMER shall have reached its readers the leaders of the present corner on May wheat will have settled their contracts with the leaders on the other side, thus leaving the market without its artificial support with a resulting fall in prices, and confiscating the margins paid by country speculators on their deals.

Whether this kind of gambling wins or loses little or much, it is in every case demoralizing and pernicious in its effects upon those engaged in it. One of the worst experiences that can come to a young man is to win money at any kind of gambling. The most valuable asset of any generation is the determination of its men and women to render full value for every benefit received. He who gets something for nothing inevitably loses more in manhood than he gains in money.

CONCRETE CONSTRUCTION ON THE FARM.

The inevitable and growing scarcity of timber renders increasingly important the use of concrete in the construction of farm buildings and fences. The happy thought of reinforcing the tensile strength of concrete by placing steel rods in it has overcome its greatest inherent deficiency.

In city structures, great and small, reinforced concrete is extensively used. Its durability and its fire proof qualities have commended it.

When it was shown that under changing temperatures the expansion and contraction of concrete is almost exactly identical with the expansion and contraction of steel it dawned upon the engineering and architectural experts that concrete reinforced with steel was about to enter upon an era of usefulness never before known. When to this was added the demonstration that steel embedded in concrete is practically safe from corrosion, activity in concrete construction received a great impetus. When to this was added the superiority of reinforced concrete buildings above all others in withstanding fire in the great cities, insurance companies and economists of every class added their influence for its general use.

The great arch bridge over the Kansas River at Topeka is of reinforced concrete. When it had been completed but a few days the contractors invited the authorities to test it by crowding it with loaded teams, by driving across it rapidly and by any other test that could ever come to it. The new bridge stood the strain, uninjured. When the great flood of 1903 washed away the approaches and destroyed buildings in its vicinity, this reinforced concrete bridge stood like an island in the middle of a great river and was uninjured by floating drift which piled against it, or by bridges from upstream which struck it.

One of the first important business houses constructed of reinforced concrete in Kansas was the State Printing House. Reinforced concrete foundations were laid. On these reinforced concrete columns were cast in place. When the columns had reached the

height of the first story, reinforced concrete beams and floors were molded in place. The columns were carried up for another story and another floor was laid. The walls of brick were built outside of the columns. Heavy machinery was placed on the floors. They have shown the strength and solidity of rock.

The record made by reinforced concrete buildings at the time of the San Francisco earthquake and fire was such that this form of construction has been the prevalent one in rebuilding the city.

The cost of reinforced concrete construction is somewhat greater than the cost of inferior forms. An experienced architect in Topeka has stated that the difference between the cost of a well constructed brick or stone business house as formerly built and an absolutely fire proof building of the same dimensions would be about 20 per cent. This would provide reinforced concrete floors, and metal sashes, casings, etc.

Reinforced concrete roofs have been successfully used.

In view of the record of reinforced concrete in municipal and other structures large and small, it is not surprising that many inquiries arise as to its use on farms.

Fence posts reinforced with wires within the corners are not new. Properly made, they are reasonable in price, satisfactory in the using, neat in appearance, and durable.

Watering troughs and water tanks of reinforced concrete have made their appearance on some farms.

Stable floors of concrete have been used for many years. For ground floors the reinforcing steel rods may be omitted.

Attention has turned of late to concrete construction for the walls and perhaps the upper as well as the lower floors of barns. That reinforced concrete will be found a most desirable material for barn-building can not be doubted. The reduced risk from fire, if even the ground floor and the first story walls are made of concrete will be well worth while.

That presently farm buildings, including both barns and dwellings will be commonly built of concrete is more than probable.

To answer inquiries received and to give information of general interest the following discussion of methods of handling concrete is compiled:

WHAT IS CONCRETE?

Concrete is the manufactured stone formed by mixing cement, sand, and broken stone or gravel. Various proportions of each are used, depending upon the use to which the concrete is put. The mixture in which all the spaces between the stone or gravel are filled with sand and all the spaces between the sand are filled with cement is the ideal mixture. This mixture is rarely obtained, as the voids in each load of gravel and sand vary slightly, and in order to be absolutely safe, a little more sand and a little more cement than will just fill the voids are used. Where gravel or broken stone can not be readily obtained it may be cheaper to use cement and sand alone. Some builders find it practicable to use larger proportions of sand where the broken stone is omitted. In many localities natural mixtures of sand and gravel are found. In these the proportion of gravel is often not as great as would be desirable, but such natural mixtures permit the use of smaller proportions of cement than if sand alone were used. Very fine sand alone is not desirable.

PROPORTIONS OF MATERIALS.

Standard proportions of materials recommended for good work and the volume of the resulting concrete are shown in the following table:

1:2:4 Concrete—Cement 1 part, 2 bags; sand 2 parts, 3½ cu. ft.; stone or gravel 4 parts, 7½ cu. ft.; water 10 gal. Sufficient for 8½ cu. ft. of concrete.

1:3:6 Concrete—Cement 1 part, 2 bags; sand 3 parts, 5½ cu. ft.; stone or gravel 6 parts, 11½ cu. ft.; water 13½ gal. Sufficient for 12 cu. ft. of concrete.

For use in construction of ground floor and walls of a barn the 1:3:6 concrete if well made will be found entirely satisfactory. If the broken stone be not used a 1:4 or perhaps a 1:5 concrete will be strong enough. If the sand varies from fine through coarse to gravel 1:6 may be found sufficient. It is well to make test blocks, using various proportions and examine these at times while seasoning and afterwards. The quality of the product will not be reduced by the use of more than the necessary proportion of cement, but the building may be made unnecessarily expensive.

HOW CONCRETE IS MADE.

Contractors on large buildings provide a machine into which the materials are placed for mixing. An engine revolves the machine. On the farm and on all small jobs satisfactory mixing may be done by hand. A board platform about 10 feet square is provided. Two by four pieces may be nailed around the edges. The platform should be smooth, tight, and level, and should be located close to the work to be done.

The following suggestions for mixing and handling concrete will be found helpful:

First load the sand in wheelbarrows from the sand pile, wheel on to the "board," and fill the sand-measuring box, which is placed about two feet from one of the 10-foot sides of the board. When the sand box is filled, lift it off (it has no bottom) and spread the sand over the board in a layer 3 inches or 4 inches thick. Take the two bags of cement and place the contents as evenly as possible over the sand. With two men start mixing the sand and cement, each man turning over the half on his side. Starting at his feet and shoveling away from him, each man takes a full shovel-load, turning the shovel over. In turning the shovel, do not simply dump the sand and cement but shake the materials off the end and sides of the shovel, so that the sand and cement are mixed as they fall. In this way the material is shoveled from one side of the board to the other.

After a second turning the sand and cement should be well mixed and ready for the stone and water. After the last turning spread the sand and cement out carefully, place the gravel or stone measuring box beside it, and fill from the gravel pile. Lift off the box and shovel the gravel on top of the sand and cement, spreading it as evenly as possible. With some experience equally good results can be obtained by placing the gravel measuring box on top of the carefully leveled sand and cement mixture, and filling it, thus placing the gravel on top without an extra shoveling. Add about three-fourths the required amount of water, using a bucket and dashing the water over the gravel on top of the pile as evenly as possible. Be careful not to let too much water get near the edges of the pile, as it will run off, taking some cement with it. This caution, however, does not apply to a properly constructed mixing board, as the cement and water cannot get away. Starting the same as with the sand and cement, turn the materials over in much the same way, except that, instead of shaking the materials off the end of the shovel, the whole shovel load is dumped and dragged back toward the mixer with the square point of the shovel. This mixes the gravel with the sand and cement, the wet gravel picking up the sand and cement as it rolls over when

dragged back by the shovel. Add water to the dry spots as the mixing goes on until all the required water has been used. Turn the mass back again, as was done with the sand and cement. With experience the concrete would be well mixed after three such turnings; but if it shows streaky or dry spots, it must be turned again. After the final turning, shovel into a compact pile. The concrete is now ready for placing.

After the concrete is properly mixed it should be placed immediately. Concrete may be handled and placed in any way, best suited to the nature of the work, provided the materials do not separate in placing. Concrete may be properly placed by shoveling off the concrete board directly into the work, by shoveling into wheelbarrows, wheeling to place and dumping, by shoveling down an inclined chute, or by shoveling into buckets and hoisting into place. Concrete should be deposited in layers about 6 inches thick.

CONSISTENCY.

There are three kinds of mixtures used in general concrete work as follows:

1. Very Wet Mixture.—Concrete wet enough to be mushy and run off a shovel when handling. Used for reinforced work, thin walls, or other thin sections, etc.; no ramming necessary.

2. Medium Mixture.—Concrete just wet enough to make it jelly-like. Used for some reinforced work, also foundations, floors, etc. Ramming with tamper or treading with feet necessary to remove air-bubbles and fill voids. This concrete is of a medium consistency, and a man would sinkle ankle deep if he were to step onto the top of the pile.

3. Dry Mixture.—Concrete like damp earth; used for foundations, etc., where it is important to have the concrete set as quickly as possible. This must be spread out in a 4 inch to 6 inch layer in placing and thoroughly tamped until the water comes to the surface.

The difference between the mixtures is that the drier the mixture, the quicker the concrete sets. A dry mixture, however, can not be readily used in reinforced work, is harder to handle, and must be protected from drying too quickly, and is likely to show pockets in the face after the forms are removed.

Concrete of any of the three degrees of consistency should be carefully "spaded" next to the form where the finished concrete will be exposed to view. "Spading" consists of running a sharp or flattened shovel down against the face of the form and working up or down. This action causes the stone or gravel to be pushed back slightly from the form, and allows the cement grout to flow against the face of the form and fill any voids that might be there, thus making the face of the work present an even, homogeneous appearance. Where the narrow-

ness of the concrete section, such as in a 6 inch silo wall, prevents the use of a spade, a 1 inch by 4 inch board, sharpened to chisel edge on the end, will do as well. Only sharpen on one side and place the flat side against the form. In the case of a dry mixture "spading" must be done with greatest care by experienced hands to get uniform results, but with a medium or wet mixture it is very easy to obtain first-class work.

CONCRETE BARN.

In building a barn or any structure in which either animals or people are to be housed, it is important to remember that fresh air and sunlight are the two greatest foes to the disease germs which cause much of the sickness and death of living creatures. In reinforced concrete construction, it is especially important to plan beforehand for plenty of openings of ample size, on account of the difficulty and expense of making changes after the walls have hardened. A barn should be above ground on all sides, at least from the lower ends of the windows upwards. The windows should be large and arranged for easy opening and closing.

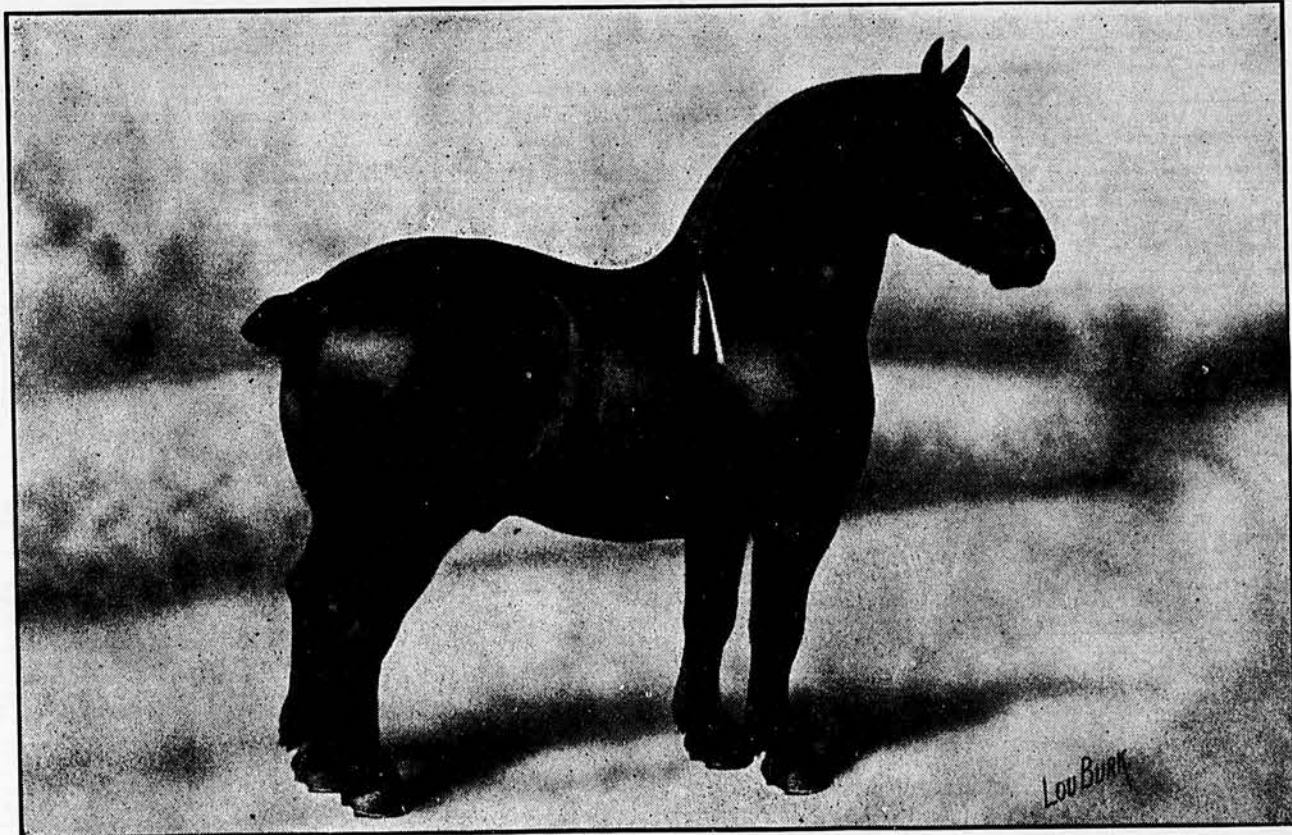
If the lower story, only, of a two-story barn is to be of concrete it will be well to place the foundation deep enough to have firm footing and to make it 16 inches thick. From the floor up the walls may be 10 inches thick. Iron or steel, ¾-inch rods having an inch at either end bent over at a right angle may be placed in the walls just below the height of the lower ends of the windows. These should "break joints" or be hooked together at their ends and at the corners of the building. Just above the tops of the windows and doors it will be well to place two lines of the hooked steel rods continuing them entirely around the building. If great strength were required or there were much apprehension of settling it would be well to use the steel rods more plentifully, distributing them through the walls. Where strength against wind is required, as in very tall structures, especially in smoke stacks and towers, reinforcing rods are placed vertically as well as horizontally.

The construction of reinforced concrete overhead floors and roofs requires descriptions for which we have not space at this time. Should there be demand for this information, that branch of the subject may be taken up in some future number of KANSAS FARMER.

Breakfast Hours.

A traveler stopped at a hotel in Greenland, where the nights are six months long, and, as he registered, asked a question of the clerk:

"What time do you have breakfast?"
"From half-past March to quarter to May."—Harper's Weekly.



Triston 48595. This is the class of stallions that fill Rhea Bros.' stalls and yards at Arlington, Neb. Triston is a black, two years old, and you can see by the picture that he is a good one. He weighs over 1900 pounds now and is ready to go into service. See Rhea Bros.' ad in this issue and write or go and see the horses.

READERS MARKET PLACE

HELP WANTED.

AGENTS WANTED—Lady or gentleman in every county in Kansas. Liberal commission and paid promptly. Write for particulars. Address Kansas Farmer, Topeka, Kan.

WANTED—Man in every county in Kansas, Nebraska and Oklahoma to do canvassing. Good pay for right person. Write for full particulars. Address circulation department, Kansas Farmer, Topeka, Kan.

WANTED—Lady or gentleman as local representative in every Kansas county. Splendid chance to make good wages without great effort and no expense. Write for particulars. Address Circulation Department, Kansas Farmer, Topeka, Kan.

FOR EXCHANGE.

WE CAN GET YOU what you want in exchange for your farm, hardware, merchandise or other property. We have 500 propositions to choose from, Graham Bros., Eldorado, Kan.

SEEDS AND PLANTS.

ALFALFA seed for sale. J. G. Berry, Sterling, Kan.

20 PACKETS garden seed postpaid 50 cents. Cure & Son, Atchison, Kan.

500 BUSHELS COW-PEAS, \$2.25 per bushel, bags included. J. P. Johnston, Carmen, Okla.

CATALPA SPECIOSA seed 75c lb. Plymouth Rock eggs 75c setting. S. Smerchek, Irving, Kan.

BIMETALIC seed corn for sale. Winner Omaha exposition. Write Chas. Kubik, R. 2, Caldwell, Kan.

WELL-BRED seed corn, oats, barley, etc. Best producing varieties. Ten Eyck Co., Concordia, Kan.

FREE—My 27th annual catalog about berry fruits and plants. B. F. Smith, 1847 Haskell St., Lawrence, Kan.

ONION SEED for sale. Yellow Globe \$1.00 pound (small lots \$1.10 delivered). John B. Quirk, North Madison, Ohio.

SEED CORN—Hildreth Yellow Dent "Early ranked best, Bulletin 123." Originator, C. E. Hildreth, Altamont, Kan.

CHOICE FRUIT TREES, forest seedlings, berry plants, vines, shrubbery, evergreens. Christie & Solenberger, Waverly, Kan.

ASPARAGUS PLANTS—1 year old, 200 \$1; 1,000 \$3.50. 2 years old, 100 \$1; 1,000 \$5. Discount large lots. Circular free. R. W. Weaver Co., R. 9, Wichita, Kan.

WANTED—Everybody who is interested in first class seeds of any kind to write for our new catalog, which is sent out free of charge. The Barteldes Seed Co., Lawrence, Kan.

"THE FINEST CORN in the world"—12,000 show ears purchased at the great National Corn Exposition at Omaha. For sale by TenEyck Co., Concordia, Kan.

WHITE KAFIR SEED—Pure, re-cleaned. Has been bred ten years for yield and earliness. Not one head smut in field. Two cents per lb. Frank York, Dunlap, Morris county, Kan.

WANTED—Alfalfa, red clover, timothy, English blue grass, millet, cane, milo maize, Jerusalem corn, brown dourha and other seeds. If anything to offer, please correspond with us. The Barteldes Seed Co., Lawrence, Kan.

FOR \$1 I will send you 20 apple or peach or 10 pear or plum or 8 cherry trees, all budded grafted, or 250 strawberry or 75 raspberry or blackberry or 100 asparagus or 20 grapes or gooseberry or currant or rhubarb plants. A. J. Nicholson, Manhattan, Kan.

PLANTS, BULBS, EVERGREENS, shrubs—Strawberries, 100 40c; raspberries, Kansas, 75c 100; blackberries, Eldorado, 100 \$1.25; asparagus, 2-year, 100 50c, 1,000 \$3.50; currants, 10 50c; gooseberries, 10 75c; grapes, 3 to 5c; evergreens 10c up; rhubarb, 10 45c; peonies, white, pink red, 15c; hardy phlox, 10c. Price list free. H. H. Kern, Bonner Springs, Kan.

SEED CORN—Boone County, Reid, Bloody Butcher, Calico. Immense yield. High quality. Our corn took first and fourth in boys' county contest, first in boys' State contest, first, second and fourth at State Corn Show; second, third, fourth, fifth and sixth at Omaha. Yield in 1908, 108 bushels per acre; in 1907, 114 bushels per acre. 1st. \$2.50 per bu.; 2d. \$2.00 and \$2. J. M. Gilman & Sons, R. R. 1, Leavenworth, Kan.

HORSES AND MULES.

FOR SALE—The best imported Percheron stallions in Kansas. Joe S. Williams, Edison, Kan.

SHORTHORNS—Bulls and females, pure Scotch, for sale. Bargains, \$40 to \$125. H. M. Bolltho, Alden, Iowa.

FOR SALE—Stallion and jack. Both 6 years, black, registered. Weights 1,800 and 1,000 pounds. Address H. L. Smith, Overbrook, Kan.

PERCHERON, Belgian and Shire stallions. New importations. Imp. horses \$1,000. Home bred draft stallions \$200 to \$650. Hart Bros., Osceola, Iowa.

PERCHERON stud colts coming 2 years old, fine ones, \$400 to \$500. Recorded in government approved book. Blacks. H. M. Bolltho, Alden, Iowa.

REGISTERED CLYDEDALES for sale, 2 stallions and 3 mares. Two of the mares are in foal. Good stock. Prices reasonable. Come and see them. John Sparrowhawk, Wakefield, Kan.

Classified Advertising 3 cents a word

The rate for advertising in this department is low, only three cents per word each insertion. There is no more popular advertising than classified advertising. Every one reads classified ads, and just because they are classified. You can reach 50,000 farmers in Kansas and adjoining States, the best farmers on earth, through this page. All ads set in uniform style, no display. Initials and address count as words. Terms, invariably cash with order.

ORSES AND MULES.

FOR SALE—Registered Percheron stallion, 5 years old. Also Mammoth jack 6 years old, 15½ hands high. Good stuff, no trading stock. Jas. B. Haley, Hope, Kan.

FOR SALE—One black pedigree standard bred stallion, Patriotta 41836, weight 1250 lbs.; best breeding, two crosses with Wilkes and two with Nutwood. I will trade for Percheron stallion, jack or real estate. Address S. A. Baughman, Marysville, Kan.

FOR SALE—One road stallion, chestnut, weight 1200 lbs., fine individual, good breeder, sure foal getter. Colts to show. Want to sell horse on account of their illness. Three registered black Mammoth jacks coming 3 years old, 10 inch bone, smallest place below hock. H. T. Hineman, Dighton, Kan.

CATTLE.

ALYSDALE SHORTHORNS—3 young bulls from 12 to 15 months old and 10 cows and heifers, bred or with calves at side. All finely bred. Priced right. Come and see them. C. W. Merriam, Columbian Bldg., Topeka, Kan.

SHORTHORNS, POLAND CHINAS, B. P. Rocks. Will clean up spring boars and open gilts \$12 to \$15. Bred sows and gilts, fall pigs at living prices. B. P. Rock eggs \$2 per 100. A. M. Jordan, Alma, Kan.

FOR SALE—20 Hereford bulls in age from 10 to 20 months. Sired by Improver Jr. and out of Anxiety 4th and Hesiod cows. Would also spare a few heifers or cows to make out a load. Stock are good individuals and in fine breeding condition. Must be sold within 30 days. Write W. A. McVey, Trenton, Mo.

SWINE.

FOR SALE—Choice 5 months Chester White boar. Henry Murr, Tonganoxie, Kan.

FOR SALE—Fine Duroc Jersey fall pigs. Rose Comb Rhode Island Red eggs \$1 per 15. L. W. Poulton, Medora, Kan.

TWO SNAPS—Two Berkshire yearling boars, choice in quality and breeding. Must get them out of the way. H. B. Cowles, Topeka, Kan.

FOR SALE—A fine 2-year-old boar sired by the great Meddler 2d, a splendid breeder of large, uniform litters; price \$40, or will trade him for two choice early spring gilts bred. Address W. A. Hull, Grand View, Mo.

POULTRY.

BARRED ROCKS, stock and eggs. A. H. Duff, Larned, Kan.

INDIAN RUNNER DUCKS—13 eggs \$1. Anna Pratt, Beaver Crossing, Neb.

EGGS—Barred Plymouth Rocks. Mrs. Henry Gilbert, Sharon Springs, Kan.

S. C. BROWN LEGHORN EGGS—\$0 for \$1, 100 for \$3. Mrs. F. E. Town, Haven, Kan.

TOULOUSE GEESSE and White Wyandotte chickens. Mrs. Harry Adams, R. 8, Wichita, Kan.

S. C. B. L. EGGS from prize winners \$1.25 per 12, Frederick P. Johnson, St. Marys, Kan.

HOUDANS—American and English strains. Eggs for sale. No more stock till fall. O. E. Henning, Wahoo, Neb.

BARRED ROCK EGGS from prize winning stock, \$1.50 per 15; \$5 per 100. Express prepaid. L. D. Peak, Logan, Kan.

RHODE ISLAND REDS—Winners of 40 premiums at State show. Send for egg circular. R. E. Steele, Topeka, Kan.

PURE BRED BUFF ROCKS exclusively. Eggs \$4.00 per 100; \$2.50 for 50; \$1.00 for 15. Mrs. W. Lovelace, Muscotah, Kan.

ORPINGTONS (S. C. Buff) winter laying strain. Baby chicks and eggs for sale. Free catalog. Prewitt, Route 12, Onawa, Iowa.

ROSE AND SINGLE COMB Brown Leghorn eggs, Prize winners. Mrs. Ida Standiford, Reading, Kan., "Up-To-Date" Farm.

R. C. RHODE ISLAND REDS—Eggs \$1 per 15. Good stock. Healthy free range fowls. Ella Kirkpatrick, Westphalia, Kan.

BARRED PLYMOUTH ROCKS—Superior winter laying strain; \$1 per sitting, two sittings \$1.75. E. J. Evans, Route 4, Fort Scott, Kan.

NATURE'S RIVAL BROODER—"Best by Test." 10,000 in use. Costs \$1.05. Write for particulars. Searle, Box 223, Fremont, Neb.

PARTRIDGE WYANDOTTES—Eggs from prize winners \$1.50 per 15. Run of farm, \$1 per 15. Address S. S. Jackson, Scranton, Kan.

EGGS—Barred Rocks exclusively, \$2 per 15, \$5 per 50, from laying strain, winners of 86 premiums. Write today. Chris Bearman, Ottawa, Kan.

W. F. HOLCOMB, Mgr., Nebraska Poultry Company. Low prices on cockerels, stock and eggs. All leading varieties of standard poultry. Clay Center, Neb.

POULTRY.

S. C. BROWN LEGHORN eggs \$0 for \$1, 100 for \$3. J. Caudwell, Wakefield, Kan.

SILVER SPANGLED HAMBURG eggs \$2 per 15. C. A. Johnson, R. 2, Whiting, Kan.

BUFF ROCKS—Eggs pure-bred \$1 per 15, \$5 per 100. Mrs. John Bell, Ackerland, Kan.

BUFF COCHINS exclusively. Eggs from prize winning birds \$1.50 and \$2 per sitting. J. C. Baughman, Topeka, Kan.

S. C. WHITE LEGHORNS—Wyckoff strain. Eggs \$1 per 15, \$5 per 50 until July 1. Mrs. E. O. Fuller, R. 2, Clyde, Kan.

WHITE WYANDOTTES—Keeler strain. Eggs \$2 and \$2.50 setting. R. C. White Leghorns. Eggs \$1.50 setting. J. M. Wible, Chanute, Kan. Box X.

R. C. RHODE ISLAND REDS—Best winter layers. 5 pens of high class scoring stock. Eggs \$1 per 15, \$5 per 100. Mrs. A. J. Nicholson, Manhattan, Kan.

WHITE PLYMOUTH ROCKS exclusively, large birds, good layers, farm range. Eggs \$4 per 100, \$2.50 per 50. Etta L. Willett, R. D. 1, Lawrence, Kan.

SINGLE COMB BLACK MINORCAS—Eggs booked for sitting to 1st of April \$1 per 15, \$5 per 100. Mention Kansas Farmer. Fred Kelm, Seneca, Kan.

FOR SALE—S. C. White Leghorn cockerels, \$1 each to close them out. From prize winning stock. Eggs in season \$1 per 15. L. E. Osborn, R. 3, Emporia, Kan.

FARMERS within five miles of Topeka who are interested in pure-bred poultry can get Buff Orpingtons to raise on shares by addressing W. M., care this paper.

EGGS FOR SALE of Mammoth Pekin ducks, Imperial strain, extra large, \$1.50. Mammoth Bronze turkeys, large boned and fine markings, 20 cents an egg. W. P. Rocks, pure white. Mrs. Walter Bowen, R. D. 17, Box 8, Richland, Kan.

MISCELLANEOUS.

FOR SALE—A car load of Osage posts, 7 feet long, good ones. Wm. Roe, Vinland, Kan.

MAYNE EMPLOYMENT AGENCY will furnish help in large or small number. 511 Winne Bldg., Wichita, Kan.

SQUAB BREEDING HOMERS—100 pairs at \$1 per pair. Special prices on large quantities. I. S. Sheets, North Topeka, Kan.

FOR SALE OR TRADE—A good machine shop doing a nice business, in a good town. Reese and Co., 218 E. Douglas Ave., Wichita, Kan.

JUST YOU write for prices on cherry trees, you will be surprised and pleased when you see them. Lost Springs Nurseries, Lost Springs, Kan.

WANTED—A traction gasoline engine from 10 to 20 H. P. for which I will trade good blacksmith shop and well drill. Also want experienced drillers for partners to run drill in western South Dakota. Grant Ewing, Blue Rapids, Kan.

FOR SALE—PURE LEAF TOBACCO. All who use store tobacco are taxed to death by the infernal tobacco trust. You will save money to write for prices on fine leaf tobacco of my own raising that is fine and untaxed. Free samples for one postage stamp. Address W. L. Parks, R. D. No. 1, Adams, Tenn.

BEE SUPPLIES—Everything in bee supplies at lowest prices. Pure Italian bees \$6 per colony; Italian Queens \$1 and up. I have a few 2d hand 8-frame hives good condition, new frames with starters 80c each; supers with new sections and starters ready for the bees 60c each. O. A. Keene, Topeka, Kan.

REAL ESTATE.

FOR SALE—640 acres well improved black soil. Dallam Co., Texas. Thos. F. O'Brien, Conlen, Texas.

FIFTY quarter and half sections and some larger tracts of good farming land for sale in Edwards and Ford counties, Kansas. Thomas Darcey, Real Estate Agent, Offerle, Kan.

KANSAS FARMS AND RANCHES—Ottawa, county. Wheat, corn, and alfalfa lands; no crop failures, soft water. Write for bargain list. Mention Kansas Farmer. A. W. Loomis, Minneapolis, Kan.

SPECIAL BARGAINS—80 acres 3 miles from Clyde, second bottom, \$50 per acre. 160 acres near Green in Clay Co., 90 under plow, well improved, \$50 per acre. 160 acres pasture near town, \$3,500. Write for fine large list. Walter Nelson, Clyde, Kan.

117 ACRES FOR SALE OR TRADE—4 roomed house, poultry house, cave, small barn, 5 acres hog tight, good orchard, 45 under cultivation, spring, well and windmill, route and telephone, 4½ miles to town. Price \$2,000. \$1,000 cash will buy it. Garrison & Studebaker, McPherson, Kan.

REAL ESTATE.

NEFF REALTY COMPANY, the swappers. Trades a specialty. Trade anything, anywhere at any time and any price. Olathe, Kan.

FARM LOANS made in any amount from \$500 up, at lowest rates and on most favorable terms. Betzer Realty & Loan Co., Columbian Bldg., Topeka, Kan.

FOR SALE OR TRADE—160 acres of fine wheat land in Seward county, Kan. Will consider good city property or horses in exchange. Lock Box 9, Bendena, Kan.

LARGE and small tracts; improved and unimproved; \$5 to \$25 per acre; easy terms. For full information write Davis & Henry, Richland, Paluski County, Mo.

CENTRAL MISSOURI FARMS—For farms and homes that will prove both satisfactory and profitable, write for new illustrated list; 100 farms described and priced. G. W. Hamilton & Son, Fulton, Mo.

160 ACRES of upland, 60 acres in cultivation, four room house and new barn, at \$2,500, \$1,500 cash, balance on time. Some of the best bargains in the Solomon Valley. J. S. Boyle, Bennington, Kan.

FOR SALE—480 acres all level land, 1 mile from town, school and churches, 8 room house with cellar, barn 33x50, 4,000 bushel granary room, 2 wells, all under fence, 335 acres in cultivation. Lorin Ferrell, Utica, Kan.

IF YOU WANT your farm traded or sold, or your stock of goods of any kind traded or sold, or want to buy a farm or trade for one, or want to buy a good stock of goods or trade for one, address James Walls, the land man, Bigelow, Kan.

80 ACRES of rich creek bottom, four miles from the center of Emporia, with fine improvements, five acres grass, good timber, splendid orchard and water. One of the best homes in Lyon county for \$6,200. Hurley & Jennings, Emporia, Kan.

DO YOU WANT A HOME?—We have 100 of the best farms in southeastern Kansas on the easiest terms of any land sold in the State. Send for copy of the Southeastern Kansas Homeseeker, the best monthly land paper published—it is free. Address, The Allen County Investment Co., Longton, Kan.

FREE HOMES for everybody under the homestead and desert acts. Sulphur Springs Valley, Arizona, is fast settling. Water obtained at a depth as shallow as four and one-half feet. As fine alfalfa land as there is in the world. For further information address the McCall Realty Company, Cochise, Ariz.

ALFALFA AND SUGAR BEET FARM—80 acres, improved, two and one-half miles from Syracuse, county seat, and railroad town. 20 acres alfalfa, 60 acres in cultivation, all under irrigation. Land is especially adapted to raising alfalfa and sugar beets. Price \$60 per acre. Terms. Write Frank A. Rees, Syracuse, Kan.

CALIFORNIA LAND, \$1 acre, cash payment; balance, entire purchase 90c month per acre; close San Francisco; no taxes; no interest; 5-acre tracts; level, rich, clear; ready to plow; under irrigation; perpetual water right; immediate possession given; particulars, maps, photographs free. Stevenson Colony, 1414 Market St., San Francisco.

230 a. 3 miles from good town, 6 room dwelling, barn for 6 head, well and mill, some orchard, 140 a. under plow, 90 a. pasture, entire farm fenced hog tight, crib and granary 32x24, new chicken house 12x23, 12x18 cellar, granary 12x24. Price \$12,000. \$4,600 mtg. runs 4 years at 5 per cent. Nordstrom-Boyd Realty Co., Clay Center, Kan.

FOR SALE—\$1 to \$4 per acre, Texas school land in different counties. More than 2,000,000 acres to be sold before June 30. One-fourth cash and balance in 40 years. You can buy 320 acres of the best; pay \$32 cash and no more for 40 years, but 3 per cent interest on the balance. As good land as Kansas, Missouri or Illinois at \$50 per acre, and better climate. Write us for further information. Include 6c to insure reply. Investor Publishing Co., Amarillo, Texas.

IF YOU WANT to invest come to Wakeeney, Trego Co., Kan., located near the center of the famous Golden Belt country, with best church and school privileges, fine town, good court house, no county debt. A healthful climate without the extremes. Prices range from \$12 to \$30 per acre. A farm of 465 acres joining town, pleasant home, only one-half mile to town school and one of the best county high schools in State. Over 800 acres in cultivation, good orchard, garden and hog lot; rest in pasture. Good buildings, abundance of water. Improved farm of 160 acres joining town. Others short distances out. Choice bargains in improved and unimproved farms, ranches and town property. If you desire it, 36 years acquaintance in this and other parts of the State are at your disposal. Will endeavor to be worthy of your confidence. Address E. D. Wheeler, Wakeeney, Kan.

LAWYERS.

A. A. GRAHAM, attorney at law, Topeka, Kan.

SCOTCH COLLIES.

CATTLE DOGS—Pure pedigree Scotch Collie pups, farm raised. Champion bred and natural heelers. \$8 to \$12. Express paid. H. M. Bolltho, Alden, Iowa.

SCOTCH COLLIES—Pups and young dogs from the best blood in Scotland and America now for sale. All of my brood bitches and stud dogs are registered, well trained and natural workers. Emporia Kennels, Emporia, Kan. W. H. Richard.

COLLIES of all ages for sale. They are stock drivers, pets and home protectors. 260 head sold last year. Write for illustrated circular and prices. Would like to buy a few ferrets. Address Harvey's Dog Farm, Clay Center, Nebraska.

TOO LATE TO CLASSIFY.

FULL BLOOD BERKSHIRE pigs for sale. Mill Krebs, Avery, Okla.

EGGS from prize winning Golden Wyandottes. A. Grant, Emporia, Kan.

BARRER ROCK EGGS—\$1.00 for 15, \$4.00 for 50. Mrs. Sam Drybread, Elk City, Kan.

15 S. C. BUFF LEGHORN eggs \$1.50 per 100. Emma J. Locke, Blue Mound, Kan.

MAPLE SYRUP—Pure rock maple, \$1.00 per gallon. J. B. Quirk, North Madison, Ohio.

20 DUROC bred sows out of a son of Kant Beut, cheap. Chas. Dorr, Osage City, Kan.

SINGLE COMB Brown Leghorn eggs \$3.00 per 100. Mrs. G. Montague, Wakefield, Kan.

PURE BRED unrelated Buff Orpington eggs \$4.00 per 100. W. W. Patterson, Preston, Kan.

SILVER LACED WYANDOTTES—Eggs from gilt edged stock. H. L. Brunner, Newton, Kan.

FOR SALE—Two of the best restaurants in the State of Kansas. Address Box 555, Holton, Kan.

ROSE COMB Brown Leghorn eggs \$1.50 per 30, \$3.50 per 100. Mrs. Henry Rogler, Bazaar, Kan.

40 ACRES 40 miles Kansas City, 4 miles Paola, fair improvements, \$50 per acre. H. A. Floyd, Paola, Kan.

I WILL SELL your farm or buy you a home. Write me your wants. George Manville, Holton, Kan.

CONKEY'S ROUP CURE—Poultry supplies of all kinds for sale. G. H. Harries, 210 W. 14th St., Topeka, Kan.

FOR SALE—French Coach stallion, 5 years old, 16 1/4 hands high, sure and good breeder. Must be sold soon. O. N. Wilson, Silver Lake, Kan.

FOR SALE—Span bay driving horses, a 4-year-old McHenry and 6-year-old Gambrel; 10 1/4, weight 1100, 16 hands. L. C. Horst, Newton, Kan.

WATERMELON—Send 25c for sack of the earliest watermelon seed known. Guarantee satisfaction or money back. Crowson (Seedsmen), Linden, Texas.

THREE livery barns, farms, ranches, city residences, large printing plant, merchandise for sale and exchange; can match anything. J. C. Kelm, Iola, Kan.

SILVERMINE SEED CORN—Grown from Kansas Agricultural College breeding stock. Heavy yielder. Maple Hill Farms, R. D. 6, Box 71, Lawrence, Kan.

SINGLE COMB Brown Leghorn hens and pullets \$1 each. Most noted laying strains in this country. Eggs 26 for \$1; \$3.50 per 100. Col. Warren Russell, Odessa Farm, Winfield, Kan.

FOR SALE—Registered Percheron colt, 13 months old, black with star in forehead, weight 1,225 lbs., first premium colt at local fairs; extra good and will be priced worth the money. A. Boughen, Green, Kan.

FOR SALE—Good clean stock of hardware and harness, located in fine farming community in north central part of State. On account of poor health must sell at once. Can reduce stock to about \$3,000. Address V., near Kansas Farmer.

BARRER PLYMOUTH ROCK eggs carefully selected and packed for shipment from large range, pure bred stock, \$1 per 15 or \$5 per 100. W. H. Molyneux, Route 1, Palmer, Kan.

CHEAP FOR THE MONEY—240 acres good grain and stock farm, fair improvements. Price \$8,500. 200 acres well improved, close to town. Fine stock and dairy farm. A bargain. Price \$5,800. Write for lists and maps. GARRISON & STUDEBAKER, McPherson, Kan.

Can Your Own Fruit and Vegetables. Keep profits at home. We'll show you how. CANNERS' SUPPLY CO., DETROIT, MICH.

Big Farm Specials

150 a. ne. 21-14-1 Dickinson Co., Kan., all smooth, in cult., 7 r. house, barn 24x48, 80 a. wheat; price \$10,000. 240 a. 6 1/2 mi. Topeka postoffice, 100 a. extra fine orchard, 40 a. alfalfa, 100 a. timothy and clover, good house, new basement barn 40x60, \$100 per acre. If you want something that's all cream, write us. A. J. White, Farm Salesman, Wingett Land Co., 109 West 6th, Topeka, Kan.

2.25 INVESTED--SAVED \$100.00

Le Skaasheim, Turtle Lake, N. D., writes: "Used on my farm last summer three boxes of the famous **Mickelson's Kill-Em-Quick Gopher Poison** and got rid of the gophers. It has benefited me to the extent of \$100.00. I recommend it to farmers whose fields are over-run with these pests. **Kill-Em-Quick** kills gophers and prairie dogs. Ready to use when mixed with soaked grain; odor attracts; eaten greedily and results certain. Guaranteed as represented or money refunded. 75c and \$1.25, full directions. **Kill-Em-Quick Rat Poison.** Kills rats, mice, pocket gophers, squirrels, field mice, ground hogs and bird pests. Gets them all and rid worst infested places. Powder form. To be mixed with any food; smallest particle kills; 15c and 25c sizes. Full directions on packages. Either poison or size sent upon receipt of price. **MICKELSON CHEMICAL CO.,** 402 Washington Ave. No., Minneapolis, Minn.

The time is coming and it is almost here when the intelligent farmer will look upon his land as the most valuable of earthly possessions. When he does this thoroughly then will he make it such a home that no "Country Farm Commission" will be asking, "What's the reason why farming is so badly in need of an uplift?"—Home-Head.

Hard Wheat Deterioration. (Continued from page 1.) by improving the soil through proper rotation of crops, by manuring, and by proper cultivation.

Second. Deterioration in a variety of wheat, which, while it appears to be uniform, really contains within itself several strains or sub-varieties of different value, and of which certain ones of an inferior quality may get the upper hand under given conditions of soil and climate. The remedy for this form of "running out" lies in the selective breeding of superior strains, beginning with single superior plants as starting points, and the progeny of which have been tested for a sufficient number of generations. This is a very different thing from beginning with a mass of superior-looking grain, whether foreign or domestic, for seeding purposes.

Third. Deterioration may be due to an accidental mixture of different varieties, in which one of the varieties in the mixture, the less desirable one, may supplant the other. This case is similar to the preceding, but more pronounced in character, as when there is an original mixture of soft and hard wheat. Practically all

maintain a seed wheat plot, grown in a place by itself, and should in this way breed his own wheat.

Fourth. Deterioration in the hardness of wheat, where the wheat appears to become softer from year to year, is due, if not to the gradual increase of soft wheat originally present in the seed, then to the presence of "yellow berry," the appearance of soft, starchy grains in hard wheat, and which occurs even in our pure-bred strains coming from single mother plants. The yellow berry appears to be partly due to climatic and seasonal conditions. We have worked this out to some extent in a bulletin which has just appeared from the Experiment Station, and we shall keep at it until we discover the exact cause of the difficulty. To the extent that the yellow berry depends upon climatic factors it is as liable to appear in the hardest imported wheat, brought from Russia or Hungary, as in those wheats that have been growing here for twenty years.

To a considerable extent, however, as we have discovered, the tendency to produce yellow berry seems to be a hereditary racial character. . . . We find that our strains of pure-bred,



Morris Wright, eight years old, the junior member of the Wrightwood farm. Morris knows every hog on the farm and can give their name and breeding. He is exceptionally bright for a boy of his age.

wheat "varieties" so-called, from whatever source, consist of such mixtures, and imported wheat from Russia is no exception. Wheat is often mixed through the fact that traveling separators at thrashing time, carry different varieties from farm to farm. Such mixtures can be avoided by any farmer by saving and planting a pure strain of the desired variety by itself for seed in the best part of the field, and which is thrashed after the wheat of the general field has been run through the separator. In this way the danger of introducing other wheat from neighbors' fields is avoided, since whatever outside seed may have been brought over from elsewhere, will have passed out of the separator before the thrashing of the seed-wheat plot is reached. Every farmer should

pedigree wheat which were absolutely free from yellow berry in 1906, had but 4 per cent of yellow berry in 1907; while those strains which had from 75 to 100 per cent of yellow berry in 1906, had 24 per cent in 1907. Is it not clear that the yellow berry is to a very large extent an hereditary race character which can be eliminated by breeding? I think there is no doubt whatever of this fact.—Prof. F. H. Roberts, Kansas Experiment Station.

Oats Following Kafir.

I have a piece of land that was double listed last spring and planted to Kafir corn, cultivated four times, and laid by in August. Now I want to sow this field to oats. Intended to double disk, harrow, and sow with disk drill. The ground is loose and mellow now.

BE PROGRESSIVE. OWN A CAR



The day has gone by when a motor was a luxury, and an expensive one at that. Nowadays a car—large or small—is an absolute necessity. It's both a sign of being well off and being up-to-date. We can sell you a car for \$150 up. We are the largest dealers in new and used autos in the world. Get our big cut-rate bargain list. Deal with a responsible firm. References: Dun's, Bradstreet's or Metropolitan bank, New York; National Newark Banking Co., Newark, N. J.; Foreman Bros. Banking Co., Chicago, Ill. Write today. **TIMES SQUARE AUTOMOBILE CO.,** 1597 B'way & 215-17 W. 48th St., New York. 1832-34 Michigan Ave., Chicago.

My neighbors tell me that oats can not be grown successfully following Kafir corn. I would thank you to advise me within the premises what the results of your experiments have been with this rotation. I have most of your bulletins but none on oats.—John P. Fengel, Lost Springs, Kan.

As a rule oats do not follow Kafir corn well because the Kafir corn grows late in the fall and leaves the soil exhausted of soil moisture and plant food, hence any early crop is placed at a disadvantage in following Kafir corn. Some later crops, sorghum, corn, or Kafir corn itself may succeed better on this land than oats or other early spring grain crops. Again, there is likely to be some volunteer Kafir corn which may interfere with the growth of the oats. Oats follow corn better than Kafir corn. However, it will depend upon the season and the fertility of this soil as to whether you can produce a crop of oats on this field. If the soil is originally fertile, with a plentiful supply of moisture, you may produce a good crop of oats. But if you have other land, corn stalk land or fall plowing, I would advise that you sow such fields to oats and plant some later crop on the Kafir land.

For further information on the subject I have mailed you bulletin 144 on small grains, including oats, and bulletin 127 on the study of the roots of plants in which you will find some discussion of the root development of Kafir-corn, the growth of the crop, its effect on the soil, etc.

As a feed-stuff, particularly its leafy portions, alfalfa is estimated to have a value closely approximating that of wheat bran. It is proven far superior to the justly prized red clover as a soil restorer, and its annual hay yield per acre is from two to three times greater. Besides one to three cuttings of hay in the same season, a seed crop harvested is often found a source of greater profit than if hay alone was the consideration.—Sec. F. D. Coburn.

The Old-Fashioned Kind. "Are you a competent washerwoman?" "Yes'm. I'm a professional laundress." "I'm afraid you won't do then. I want some one who won't rip off quite all the buttons."—Kansas City Star.



A group of Shorthorn calves sired by Captain Archer 205741, owned by J. F. Stodder, Burden, Kansas.

LIVE STOCK



Horses' Shoulders and Backs.

The hard spring work for the horse is at hand. The shoulders, neck, and back are tender, and are liable to become bruised and sore.

Too much care cannot be exercised in seeing that the collar is a perfect fit. A collar which is too large is quite as likely to injure the horse as is one that is too small. The collar should be scraped each morning and carefully cleaned before it is again put on the horse. It is well to oil the harness, if this has not already been done, and have it soft and pliable. For the first few days of hard work on soft ground, the shoulders of the horse should be bathed in cold water every night after the harness is removed. The horse will be very sore and tired for a few days and should be given every kind of attention. Watch the hames to see that the draft is at right angles with the shoulders. If it is too low, the collar will be constantly "kicking up" at the top and the horse will soon have a sore neck. If the draft is too high, the collar will not rest securely on the lower part of the shoulder, where the horse is best prepared to throw his weight. If there are any calloused lumps on the horse's shoulders or back, they should have been carefully removed during the winter when his services were not much needed. If the collar is put on over one of those "sit fasts," it will have the same result as a man trying to walk with a button in his shoe or a bunion on his foot.

Sheep for the Farm.

W. F. BAIRD, LACYONE, KAN.

The most successful breeders of livestock, in common with the successful men in other pursuits, are those who have a well-defined idea of the object which they have in view. If one desires to raise draft horses he does not use a trotting horse as a sire. If he wishes to raise saddle horses he does not use a sire of the draft breeds. Or if one intends to raise beef cattle he does not employ a Jersey. To raise sheep most profitably, one should take into consideration his environments, climate, soil, kind of pasturage and feeds available, and the market requirements, and select the kind of sheep best suited for the object which he has in view.

In considering the kind of sheep for

the general farm flock, I shall confine my remarks to the breeds of sheep mostly raised in our country. As Great Britain, the original home of most all the great mutton breeds, has found it not only possible, but wise and profitable, to develop a number of breeds adapted to a variety of locations, feeds, and market demands, so we, with a diversity of local and market conditions, can profitably produce a number of kinds. In giving you my conclusions I wish it distinctly understood that I wish to cast no reflections upon the merits of the favorite breed of any other sheepmen present. Most men, having carefully considered the matter and selected the breed or type, suitable for his purposes, will generally succeed best with the breed of his choice just as a sensible man can better select a wife that will please him than to let some one else do the choosing.

MERINOS.

Were I to engage in sheep-raising on an extensive scale, where early maturity was not an object, but rather the raising of large numbers as cheaply as possible, with sometimes scant pasturage and little more than natural protection from storms, I would raise some strain of Merino sheep. Or else I would use Merino ewes as a foundation and cross with rams of the mutton breeds, to give a larger and more quick-maturing lamb for mutton purposes. No other breed of sheep will stand crowding and running in such large bands or will herd as well as the Merino, and its short, close, oily fleece is a much better protection against storms than the fleece of the more open woolled breeds. This breed has adapted itself to a great variety of conditions and is noted for its longevity and hardiness. However, for quick growth and best mutton qualities, there are other breeds that are its superior.

DORSET HORN.

Where one lives near a good market for hot house lambs at a fancy price, he can profitably engage in this branch of the sheep business. Nature's time for the birth of lambs is late in the winter or during the spring, and most breeds will drop lambs at no other time of the year. However, there are some exceptions to this habit by a few breeds, chief among which is the Dorset Horn, which is a white-faced sheep having a short, close fleece, a broad back and short legs. Both sexes have horns. Their most prominent characteristic is their prolificacy and they will breed out of the usual season, dropping lambs during the autumn and early winter. Hence ewes of this breed are favorites as mothers of hot-house lambs. Some breeders prefer a sire of dwarf-faced breeds. To succeed in this business, one must have comfortable and commodious buildings and the lambs must be taught to eat concentrated feeds as young as possible, and made to put on flesh rapidly, all of which takes more care and expense than the rearing of spring lambs.

A breeder's customers must belong to that class of people who care but little for cost, but want something rare and out of season. Baby mutton, string beans, and strawberries in winter, as the demand is limited at present for this product most of us will follow nature's plan and our lambs will be dropped in the springtime.

Not only has there been a constantly growing market demand for younger animals for meat, but the producer finds it no longer profitable to keep steers or hogs as long as formerly before fitting for market. So it is found to be much more profitable to sell a good sized lamb upon the market than an aged wether, especially when raised upon the farm, where wool production is not the first consideration. A lamb that is large enough to be sold directly after taking off its dam, at any time from June until September, while the price is good (when there are no western lambs to speak of coming upon the market) will usually sell for as much as mature wethers and not only has the producer escaped keeping the lamb during the period when it will make slower gains, but

the ewes are easily dried off during the warm, dry weather which usually occurs during late summer, and can be easily kept until breeding season on pasture where lambs would fail to maintain their weight.

THE LINCOLNS, COTSWOLDS, AND LEICESTERS.

The Lincolns, Cotswolds, and Leicesters are good mutton sheep and are large. They produce a long, lustrous fleece in demand for certain lines of manufactures. They rear very good lambs. I have had no personal experience with Lincolns or Leicesters but have raised some excellent Cotswolds, but I found that their long, open fleeces were easily filled full of dust and dirt during dry, windy weather, and that they were easily wet to the backbone if caught out in storms. My experience has been that they laid on a great deal of fat, inside and outside, and consequently did not produce as nicely a marbled carcass as the dark-faced, medium-wooled breeds. They are a favorite breed, however, with some.

I have had the most experience with South-downs, Shropshires, Hampshires, and Oxford-downs.

Where one is not anxious to produce heavy weights at an early age, the South-down is a most excellent sheep. No other breed excels it in quality of its flesh, and as all the other down breeds had a South-down as one of its original parents in the formation of these breeds. They owe many of their good qualities to this breed with however more size. I would like the South-down better if it had more size, and its fleece is lighter than I like.

The Shropshire has more size and heavier fleece.

The Hampshire has plenty of size and is one of the most early-maturing of any. The Oxford is the largest sheep and the heaviest fleeced of all the down breeds. It is not always advisable or possible to start with pure-bred sheep, as only 6 per cent of the sheep in the United States are pure-bred the supply is limited, and it would cost too much to found flocks where the object is to raise sheep for the markets only. A good plan is to start with the best grades obtainable. Then use a good pure-bred ram of the breed one prefers. Select the best ewe lambs and use another pure-bred ram and so on, always grading up, never down.

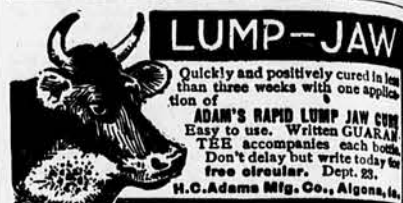
IMPORTANCE OF THE RAM.

The ram is always one-half the flock, and in case the ewes are grades he is more than one-half the flock, for being of one line breeding he is of the strongest blood and his influence upon the offspring will be the greatest. It is the very poorest kind of economy to use a grade ram. One can not expect uniformity because he is of mixed blood. However, it is sometimes advisable to cross breed. For instance

LAMENESS from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone or any other trouble can be stopped with

ABSORBINE

Full directions in pamphlet with each bottle. \$2.00 a bottle at dealers or delivered. Horse Book 9 D free. ABSORBINE, J. R., for manking, a bottle, removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Old Sores, Allays Pain. W. F. YOUNG, P. O. F., 211 Temple St., Springfield, Mass.



LUMP-JAW

Quickly and positively cured in less than three weeks with one application of ADAM'S RAPID LUMP-JAW CURE. Easy to use. Written GUARANTEE accompanies each bottle. Don't delay but write today for free circular. Dept. 23. H. C. Adams Mfg. Co., Algona, Ia.

KRESO DIP

"KRESO" KILLS ALL KINDS OF LICE.

KRESO DIP CURES MANGE & SCAB. CUTS WOUNDS, SORES, RINGWORM ETC. KILLS ALL GERMS.

EASY & SAFE TO USE. TRY IT

FOR ALL LIVE STOCK

HARMLESS. EFFECTIVE. INEXPENSIVE.

STANDARDIZED

SEND FOR FREE BOOKLET ON CATTLE HORSES HOGS SHEEP POULTRY DOGS

For sale at all drug stores.

PARKE, DAVIS & CO.
Home Offices and Laboratories, DETROIT, MICHIGAN.



GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

JACKS JUST ARRIVED

And best lot of Mammoth Black Mo., Ky. and Tenn. bred jacks from 14 1/2 to 16 hands, ever brought to Kansas. I am pricing them to move them quick. The bargain seeker will find me ready for a deal.

AL E. SMITH, Lawrence, Kansas. On main line U.P. & Santa Fe, 40 miles west of K. C.



ANSWER This Ad. Save Dealer, Jobber, Catalog House Profit.

Buy direct from the biggest spreader factory in the world. My price has made it—No such price as I make on this high grade spreader has ever been made before in all manure spreader history. I save you \$50. Here's the secret and reason: I make you a price on one based on a 25,000 quantity and pay the freight right to your station. You only pay for actual material, labor and one small profit, based on this enormous quantity on a

GALLOWAY

Get my brand new proposition with proof—lowest price ever made on a first class spreader. With my agreement to pay you back your money after you try it 12 months if it's not a paying investment. How's that for a proposition? If I did not have best spreader I would not dare make such an offer. 20,000 farmers have stamped their O. K. on it. They all tried it 30 days free just like I ask you to try it—30 DAYS FREE. Drop me a postal, and say—"Galloway, send me your new proposition and Big Spreader BOOK FREE with low prices direct from your factory." I also make a new complete steel gear Spreader—70-bu size. H. Gutherson, Gladbrook, Iowa. "Works fine. Spreads all kinds of manure better than any spreader I ever saw. So simple, nothing to get out of repair as compared with other spreaders." T. F. Stice, Oswego, Kans. "Often pull it with my small buggy team. Does good work. Have always used the — before. Galloway much the best. If going to buy a dozen they would all be Galloways."

WM. GALLOWAY COMPANY, 389 Galloway Station, WATERLOO, IOWA



Clip Your Horses in the Spring

It Pays—Clipped horses look better, feel better and do better work—Clip With the Stewart Ball Bearing Clipping Machine

The only ball bearing clipping machine made. Do not buy a frail, cheaply constructed clipping machine that will last you only a season or two, and give trouble all the time. Every gear in this machine is cut from solid steel bar and made file hard. They all run in an oil bath, so friction and wear are practically done away with. It turns easier, clips faster, and lasts longer than any other clipping machine made.

We Guarantee it for Twenty-Five Years

Price all complete, only \$7.50. Get it from your dealer or send \$2.00 and we will ship C.O.D. for balance. Write for our big free catalog. Try this machine out side by side with any other machine on the market, at any price, if this is not worth three times as much, send it back at our expense both ways, we will refund every cent you paid. Send today.

CHICAGO FLEXIBLE SHAFT COMPANY. 306 Ontario St. Chicago



one has Merino ewes and desires to produce white-faced lambs of larger size at an early age. If a Cotswold sire is used the lambs should grow to be large sheep and produce a longer but more open fleece than their dams. If one wants more size where he has been using South-down or Shropshire rams he can get it by using a Hampshire or Oxford-down sire, but in crossing breeds it should be for a certain purpose. If one uses an Oxford, then Cotswold, next Shropshire, Merino, or something else his flock will have no type, character, or uniformity. And right here I want to correct an erroneous idea that some people have. If a large ram is coupled with small ewes it will result in difficulty at lambing time.

Notwithstanding I was aware of the theory that the dam governs the size of the unborn lamb and the fact that the sire imparts the ability to develop size after birth. I first mated large rams with small ewes with a degree of fear and trembling, but I can truthfully say that my fears were groundless. If a properly formed ram is used and the ewe has difficulty at such a time, it is the result of improper feeding, lack of exercise, or faulty conformation of the ewe. It would be impractical to give an exact description of the ram to be used from the fact that breed type is always to be taken into consideration.

However, I will give you a general description of my idea of a ram of the mutton breeds. He should be of good, general appearance, bold and vigorous; eyes bright and bold; he should be well covered with a good even fleece and our Shropshire friends would say extending well down to his nose, but we of the other down breeds care but little for the wool below the eyes; he should be wide and straight on top of shoulders, back, loins, and rump; well sprung ribs, legs short, straight, and well apart; good heart girth, and full brisket; neck of medium length, strong and full, tapering from shoulders to head, which should be of medium length and width; he should not be too coarse, rough, or overgrown, but of good medium size of the breed which he represents. If the butcher had his way there would not be much to a sheep but back and hind quarters and these constitute the choicest cuts, but nature has decreed that an animal must have fore quarters and a good heart girth to provide a good digestion and vigorous constitution. He should not be starved nor overfed. In purchasing one should avoid those in too high condition. Fat often hides defects.

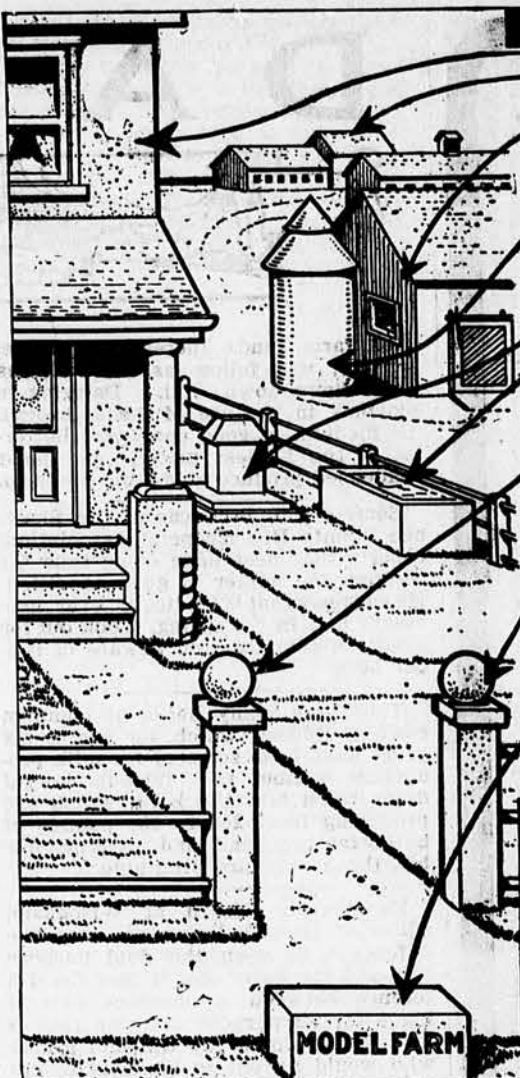
In conclusion I would say, if you do not already know, inform yourself in regard to the best time of the year to sell the kind of sheep you desire to produce, then select the breed that you like best and that you are convinced are the best for you to raise. Give them plenty of good, wholesome feed, pure water, a dry shed during storms. Give them all the freedom and sunshine you can and you will be on the highway to success. Speaking for myself I have been trying to raise a sheep that would yield a fleece that would pay for the ewe's keeping and a lamb that would weigh 75 to 100 pounds by July, which would be practically clear gain and I have been very successful.

VETERINARY

Ans.—Sweeney, in this case, is the result of favoring the leg from some lameness below the shoulder or sweeney. It may be at the point of shoulder, elbow, or in the foot. Examine her very closely and report if no qualified veterinarian can be employed to examine her.

Horse Runs Nail in His Foot.—About three months ago I had a horse run a nail in his foot. I put turpentine on it at once and then for a long time I used peroxide of hydrogen, washing it out every day and filling with cotton. The horse is not well yet. The sore in the foot seems well but of course the hole in the foot is there yet. He still limps. Could you tell me why he does? What might be the cause? What can I do?—A. C. K., Rice county.

Ans.—Poultice the foot for twenty-four hours with flaxseed-meal. Keep it hot while on, and wash off clean. Take a good hook knife and trim off all the loose sole. Turn up the foot well and fill opening full of nitric acid. Repeat again in two days. Keep the foot covered and clean.



NONE JUST AS GOOD

All Built of Concrete

For almost every construction purpose—from hitching-posts to dwelling houses—concrete takes the place of lumber or brick.

ATLAS PORTLAND CEMENT

Makes The Best Concrete

Cement is the heart of concrete, and the quality of the concrete construction depends on the quality of the cement used. The United States Government—has ordered 4,500,000 barrels of **ATLAS** Portland Cement for use in construction work on the Panama Canal. That shows what expert judges think of **ATLAS**. When you buy a bag or a barrel of **ATLAS** Portland Cement you get the same quality that the United States Government has purchased.

Concrete Buildings Need No Repairs

When you put up a concrete building, or a concrete fence or watering trough, it is there to stay as long as the land stays. It cannot burn or wear out—and it is the most economical building material for the farmer.

FREE BOOK We have written an instructive book called "Concrete Construction About the Home and on the Farm." It will show you how to use this handy material in a hundred different ways. We will send you this book free.

If your local dealer does not carry **ATLAS**, write us.

THE ATLAS PORTLAND CEMENT COMPANY,

Department 107 30 Broad Street, New York.

Daily Productive Capacity Over 40,000 Barrels, the Largest in the World.

Built in the Careful Old-Time Way

Thousands of farmers would willingly pay more money for their wagons or other farm implements if they were sure that they were **made as they used to be**. They are tired and sick of wagons made of inferior material and put together

carelessly with the one object to sell them—regardless of how long they last. If you like the ways of the olden times, when farm wagons were built to see **how long they'd last** instead of merely to **SELL**, then we want to tell you all about

The Old Reliable Peter Schuttler Farm Wagon

For 66 Years the Standard of Wagon Excellence

If you could go through the immense "Schuttler" factory—see with your own eyes the thorough way in which every part of the "Peter Schuttler" wagon is made—you would then know why it is that "Schuttler" wagons cost more and are acknowledged to be the strongest, most durable and lightest running wagons in the world. You would see nothing but the highest grade of hickory and white oak as it receives its natural air-dried seasoning—an enormous blacksmith shop filled with old-fashioned blacksmiths, who fit all irons on the gears, hot—the only way of obtaining a perfect fit that will stay and preserve the wood—how the wheels are specially made, in the re-turning of the hubs, driving of the spokes, putting on of the felloes and shrinking on of the tires hot, in the old-fashioned way,

the reason "Schuttler" wheels are strong and the tires never become loose—how the gears are assembled and laid out separately for each wagon, the only way of knowing a wagon will run true—how the boxes and bottoms of uniformly choice and extra heavy material are carefully put together to last—how the seats are specially constructed for comfort with extra long seat springs—how the paint is ground in oil and put on by the brush, not dipped—the reason for its lasting so long. These are some of the many reasons why the "Schuttler" is not only the best, but positively the cheapest wagon, in the long run. There is no more profit in a "Schuttler" than in other wagons—they simply cost that much more to make, and the user gets the benefit.

Be Sure to Write for Free Facts TODAY Before You Forget



Don't think of deciding on any wagon until you have investigated. You'll do yourself an injustice if you do.

The Old Reliable Peter Schuttler Wagon is Sold Through Dealers Only—usually the best dealer in a town. If your dealer doesn't carry this "one Best" wagon, send us his name and we'll arrange to supply you through him or some other dealer in your vicinity.

Be Sure, Though, to Write TODAY

PETER SCHUTTLE COMPANY, AGENCY.

ROCK ISLAND IMPLEMENT CO., Kansas City, Mo.



BUY A RANGE

Figure it out—one-third less fuel year after year—it will more than pay for the range, and leave a big profit besides. And in addition you get a perfect baker and work-saver.

ARCADIAN MALLEABLE NON-BREAKABLE RANGE

THAT ACTUALLY REDUCES FUEL 1/3 BILLS 1/3

Make Your Grounds Neat and Trim

The cost will be small and the increase in the value of your property great. At the same time you can make your home one of the show places of the community if you enclose your lawn and gardens with

Cyclone Ornamental Fence

Cyclone Fences are made in many beautiful patterns. They are strong—they are durable—they last a lifetime. They add to the appearance. They need little or no attention and never fail to please and satisfy.

Cyclone Double Top Ornamental Fence Fabrics are made of the best Bessemer steel wires, heavily and thoroughly galvanized. The corrugated pickets add greatly to the strength and long life of the fencing, and at the same time are much more beautiful than plain pickets. The two heavy cables at the top and the double pickets give

Strength Where Strength Is Needed

The Cyclone Farm Gate is light, strong and the high carbon structural steel tubing used in its construction makes it absolutely rigid and enables us to guarantee that it will never sag. It costs less than one wooden gate and will outlast a dozen. Our large output enables us to sell this gate for less money than the prices asked for inferior iron gates.

Send for our Free Pattern Book of Cyclone Fences, Gates, Tree Guards, Trellises, etc.

CYCLONE FENCE COMPANY, Dept. 121, WAUKEGAN, ILLINOIS.

No Discarded or Abandoned Inventions of its Beaten Competitors are used in

THE IMPROVED UNITED STATES SEPARATORS

THEY ARE IN A CLASS BY THEMSELVES

The United States use inventions of their own exclusively.

The United States do not utilize any type of separator ever developed by their "Would-be Competitors."

These "Would-be Competitors" claim the earth, but "word claims" do not give them the title.

These "Would-be Competitors" claim that Dr. DeLaval was the inventor of "the first practical continuous flow centrifugal Cream Separator," his application being filed "July 31, 1879, Patent issued, No. 247,804, Oct. 4, 1881." This statement is not true as shown by the records in the Patent Office. Messrs. Houston & Thomson (who afterward became famous in the electrical line) were the first to be awarded a patent on such an apparatus. Application filed Oct. 29, 1877. Patent issued April 5, 1881, No. 239,659.

This Houston & Thomson Separator was also of the "Bevel Gear" type and was for either hand or power, therefore the claim of our "Would-be Competitors" on this point is not correct.

The above are "Rock-of-Gibraltar-like" facts against which mere "word claims" by "Would-be Competitors" fade away like the mist of night before the rays of the morning sun."

We could enumerate a lot of things these "Would-be Competitors" claim, that are not in accordance with the facts or the records, "that fade away like the mists of night before the rays of the morning sun" of truth, but this is sufficient on this point for the present, we think, to convince all thoughtful readers that "word claims" do not have any weight in face of the facts.

These same "Would-be Competitors" claim their Separator is the Standard Cream Separator of the World, but they are not entitled to that "word claim," as the records show that the United States Separator beat them in the greatest contests ever held by any National or International Exposition.

In other advertisements they claim that "99 1/2 per cent of all expert creamery men, butter manufacturers, and real separator authorities living today use DeLaval Separators exclusively for they have learned by experience that the DeLaval is the only separator that will save all the cream all the time under all conditions."

Now every reader of intelligence knows that is another "word claim" and is not true, because a very large percentage of the leading breeders, separator authorities, creamerymen and dairymen, use and recommend the United States Separator because it proved in the great contest with the DeLaval and others, that it excelled everything in fifty (50) consecutive runs lasting over one month on ten different breeds of cows; also in every day use it has maintained its superiority.

Please read the following letter and see for yourselves if this looks as though the "99 1/2 per cent word claim" is correct

Poughkeepsie, N. Y., May 27, 1908.

In 1899 we introduced farm separators in our cream gathering system. Although we are within six miles of the DeLaval Separator's main works where all of their Separators are made, our patrons, after thorough investigation, preferred and purchased the U. S. Separators. There are about three U. S. Separators to every one of the DeLaval Separators used. Since we have started we have steadily increased our output. We get good prices for our butter and feel proud of the record.

LaGRANGE CREAMERY,
H. R. Hoyt, President.

Just think of it, Three United States Separators to every one of the DeLaval right under the shadow of their factory. Why? Because the United States is superior to all others in every feature of separator practicability. It is made stronger, runs easier, wears longer, skims closer.

Send for Catalog No. 91.

VERMONT FARM MACHINE CO.

BELLOWS FALLS, VT.

Warehouses in every dairy section of the United States and Canada

DAIRY



As farm lands increase in value, dairying will follow as naturally as water flows down hill. Dairying is economy in the use of feeds through the medium of good cows, and butter-fat is the highest priced and most condensed produce sold from the farm.

Secretary J. P. Lucas of the Shawnee County Bee Keepers' Association, reports that bees have come thus far through the winter in good condition. He suggests that if feeding is ever necessary it is in the spring. Look out for destitute colonies, and beware of robber bees.

There are many herds of common cows in Kansas, which, for five or six years have been selected for milk production without the introduction of dairy blood into the herd, which are producing from 200 to 250 pounds of butter-fat per year, and, unquestionably, these cows are profitable.

Ex-Governor Hoard of Wisconsin, editor of Hoard's Dairyman, says the difference between the dual purpose cow and the dairy cow is just the difference between a machine that is made for its purpose and one that is not. What would you think of a man who would go out to his field to cut grass with a sewing machine?

Scours in calves fed on skim-milk is caused by indigestion brought on, as a rule, by overfeeding, but also by feeding skim-milk in poor condition and from dirty pails. Every feeder of skim-milk to calves must sooner or later learn this lesson. He must learn that if the calf has the scours the feeder is not doing his work right.

The silo and silage unquestionably provide economy in milk production. This is so because the green corn of the field is preserved in nearly its natural state. It has the palatability of June grass and has the required succulence. Fifteen pounds of corn silage per day and what alfalfa the cow will eat will give the cow practically June feed in winter.

The cheapest way to get a herd of dairy cows is to select the best common cows from the present herd, buy a good sire of some dairy breeding, and select and keep in the herd the best heifer calves from this cross. In five years, if the breeding, selection, and feeding has been done as it should have been, the farmer will have a profitable dairy herd.

The time to produce butter fat at the least cost and the greatest profit is during the winter months, providing the farmer is properly equipped. In the winter, the farmer can best devote his time to dairying. The price for butter-fat is highest during the winter, and this season of the year, if the cow is made comfortable and properly fed, is most favorable for large production.

The highest priced farming lands in the world are devoted to gardening and dairying. In Denmark, Holland, and Channel Islands, where dairying has reached the highest degree of perfection, land is worth from \$500 to \$2,000 per acre, and nothing is grown but feed for dairy cows. This feed, however, is not fed to poor cows. It is fed to the best cows, which cows are the result of long years of breeding and selection.

To what animal may alfalfa and corn be fed which will produce a product as valuable as butter-fat? It is claimed by the best posted dairymen, that through the medium of a good cow, they can produce a 25 cent per pound of butter-fat as cheap as the feeder can produce a 6 cent per pound of beef. If this is so, then, the profit resulting from a pound of butter-fat is far in excess of the profit resulting from a pound of beef.

A good cow will not yield an abundance of milk without good care. She need not be housed in an expensive barn, but must be made comfortable.

The cow produces the largest quantity of milk in the month of June. If the cow is to produce a large quantity of milk in the winter time she must be kept under June conditions as nearly as possible. In June, she is comfortable and has an abundance of succulent feed. She will produce just as much milk in January if the same degree of comfort and the same excellent feed is given her in the month of June. Alfalfa hay comes nearer equaling June grass than any other feed, except silage. In addition to the alfalfa hay the cow must have something to maintain the heat of the body and this is provided through feeding cornmeal. Under winter conditions the cow requires more feed to maintain the fires of the body than in summer.

How Many Cows?

Hoard's Dairyman prints the following comment:

The Farmer's Guide has started this inquiry on its rounds: "How many cows can be maintained on 100 acres?" The paper confesses to a feeling of disappointment at the low average of the reports, which is only about twelve cows. It would look as if only those answered in the main, who were dairying in a small way.

The late Hiram Smith, the noted Wisconsin dairyman, carried for several years 100 cows on a 200-acre farm. He made butter for a private market and calculated to raise all his roughage and some of the grain fed. He always claimed that he made the skim-milk pay for extra grain feed that he bought.

H. D. Griswold of West Salem, Wis., makes a 50-acre farm with about 30 acres of rented pasture support 25 cows that earn over \$100 apiece annually at the pail, besides the value of their calves. But few farmers in the land have really set out to see how much they could make one hundred acres support when managed in an intensive way. By the aid of the silo it is not a very difficult thing to keep one cow to every two acres of tillable and pasture land. But such a farm must be thoroughly well organized to that purpose.

Dairying Profit Depends on Cow Feed and Care.

Does it pay to sell cream? How much should a cow's cream be worth a year? I am thinking of getting Jersey cattle.—N. H. Mendenhall, Haviland, Kan.

There are forty thousand farmers in Kansas selling cream, and it would seem that these farmers have decided that it pays to sell cream. In practically every State in the Union a large part of the farmers are selling either milk or cream to the creameries. In some States, particularly in the eastern States, the principal industry of the farm is the sale of dairy products.

It is undisputed, that dairying pays when properly conducted. The profitability of dairying depends almost entirely upon the kind of cows consuming the feed. If the cow does not have the ability to convert feed into profit, then she is an unprofitable cow. But, because one cow, or even a herd of cows, refuse to convert feed into dairy

FOR THIS

—NEW LOW DOWN—

AMERICAN CREAM

SEPARATOR

Guaranteed to skim closer than any separator in the world. Sold direct from the factory. We are the oldest exclusive manufacturers of hand separators in America. You save all agents', dealers', and even mail order house profits. We have the most liberal 30 DAYS' TRIAL—freight prepaid offer. Write for it today. Our new low down, waist high separator is the finest, highest quality machine on the market; no other separator compares with it in close skimming, ease of cleaning, easy running, simplicity, strength or quality. Our own (the manufacturer's) guarantee protects you on every AMERICAN machine. We can ship immediately. Write for our free catalogue on our new waist high model. Address: **AMERICAN SEPARATOR CO.** Bainbridge, N. Y.

\$33⁵⁰ Galloway
Only **33⁵⁰ AND UP**

"BATH IN OIL"
High Grade Separator—Direct
Save \$25 to \$50 direct at my factory price—freight prepaid. Get the only Separator that runs in "Bath of Oil," like a \$5,000 automobile. This alone is worth \$50 extra, but costs you nothing extra.

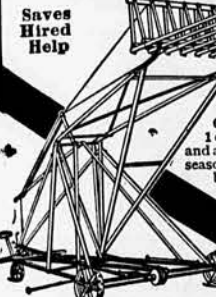
90 Days' Farm Test—Freight Prepaid
Why pay \$35 to \$110 to dealers or agents who cannot sell you a separator equal to the Galloway—closest skimmer—easiest run—easiest cleaned—10-yr. guarantee. Send for **BOOK FREE** WM. GALLOWAY CO., 883 Galloway St., Waterloo, Ia.



The Jayhawk STACKER
Stacks hay faster—better, cheaper—and with less help than any other stacker made. Goes where rakes dump—elevates and drops hay exactly where you want it. It is the only stacker that works perfectly on windy days. See your dealer—and write for free Folder today. You will be interested.

F. WYATT MFG. CO.,
13 Fifth St., Salina, Kans.

Saves Hired Help



Big Spring, Neb., July 20, 1908.
F. Wyatt Mfg. Co., Salina, Kans.
Gentlemen:—We bought 10 of your Jayhawk stackers and after using it through two seasons we can say there is no better made. We are entirely satisfied with it. We save labor.
Yours very truly,
H. E. Fairchild, L.F. Fairchild.

INDIANA PITLESS
NO PIT TO DIG
HEAVY, SOLID STEEL FRAME AND JOISTS

Place a reliable scale on your farm, establish a market at home, save shrinkage, get full value for your product and live stock. The man who owns a scale gets a "square deal" from the grain and stock buyer.



The most substantial in construction, containing 300 to 500 pounds more material, which insures correct weights under a heavy load. High carbon tool steel bearings. \$6 or \$7 will represent the cost to erect ready for service, being shipped complete excepting the planks for flooring.

WE SAVE YOU \$40 TO \$50
Every scale guaranteed absolutely U. S. Standard for 10 years. For catalog and prices, write to nearest factory.

INDIANA PITLESS SCALE CO.
NEW CASTLE, IND., or
KANSAS CITY, MO., Station A.

Easy Hauling on Soft Ground

Your wagon won't mire—pile on the load—soft soil or sand—it's all the same when you have the

Empire "Good-Roads" Steel Wheels

The wide tires, plain or grooved, sink down. Haul 60 per cent more than with the ordinary wagon. A set of these wheels for your old wagon will pay big profits in labor-saving. Made any size. Will last a lifetime. Send for Free Wheel and Wagon Book, "Good-Roads" Steel Wheels Make All Roads Good." Empire Mfg. Co., Box 420 Quincy, Ill.




Unlimited Wealth May Be Yours

below the surface of the ground in deposits of coal, oil, gas, ores or metals. The surest and most economical way to determine what the ground contains is by means of the

"American" Coring Machine
—which will remove a core of any size, any depth, thru any kind of shale or rock formation cheaper than by any other method. Our new catalog describes every method of well sinking and mineral prospecting—**FREE**.

The American Well Works, Office & Works, Aurora, Ill.
First Nat. Bank Bldg., Chicago.
The American Pump Co., 118 W. 5th St. Joplin, Mo.



\$29⁵⁰ Buys the Best

Improved Illinois Low Down Cream Separator

Direct from the maker to you. We are the only western factory selling direct to the consumer. We ship on 60 days' terms. Write for free catalogue.

American Mfg. Co., Dept. 152, Ottawa, Ill.



products at a profit, is no argument that dairying does not pay.

Because you buy Jerseys is no assurance that you will be able to conduct dairying on a profitable basis. If you were to buy a herd of some other breed of cows the same conditions would exist. The breed is no guarantee of the profitability of the cow. There are poor cows in every breed. The proportion of good cows, however, among the dairy breeds is far in excess of the proportion of good cows among animals of mixed or beef breeding.

The matter of feed and care enter fully as much into profitability of production as does the kind of cow.

You will not have a great deal of trouble in finding cows which will produce 250 pounds of butter fat per year and these will be highly profitable cows, but you will have to pay more money for these cows than the average price of cow stock in your locality. The average cow in Kansas is producing 75 pounds per year of butter fat. You can well afford to pay for the 250 to 300-pound cow four or five times as much money as the average cow will cost.

How He Makes High-Priced Butter.

An Iowa buttermaker gives his method of making gilt-edged butter, as follows: I strain the milk through a fine cloth into dry, cool crocks that have been well washed, then scalded with boiling water in which is some lye or lime to sweeten them, then rinse and dry. I skim the milk when it is twenty-four hours old, taking cream only and stirring the cream well after each skimming. I let the cream ripen before churning. No new skimmed cream should be put in for a night and a day before the churning. I churn when I have a gallon or two gallons of cream, according to the coolness of the weather and the length of time I have been gathering the cream, which should not be more than four or five days, and at most not over a week.

The cream should be churned at 62 degrees. The churn should be scalded and rinsed before putting in the cream. I churn fast, with a dash churn, lifting the dash only to the top of the cream. The butter will usually break in five minutes, and as soon as it does I pour in a half pint of cold water every little while and still churn. As soon as the butter gathers in pieces as large as a pin-head, rinse down the sides of the churn and the dasher and take off the lid and pour in a pail of cold water, let stand a few minutes, then skim off the butter into a crock; empty the buttermilk, rinse the churn in cold water, return the butter, then pour in cold water until the churn is two-thirds full, put in the dash and churn a half minute. Take out dash, pour in water to raise the butter to the top of churn, take off and wash again if the water is milky. The last washing the water should be perfectly clear and the butter cool.

Salt it with an ounce of salt to a pound of butter, work it in well or you will have streaky butter. Let stand in a cool place and work it over in twenty-four hours, then pack in a jar in which there is a little salt sprinkled over the bottom, making it smooth over the top. Then lay over it four thicknesses of clean, old bleached muslin and on this place an inch of wet salt and one-half pint of cold water. Keep this so there are no air puffs under the cloth, by putting salt on where the puffs come and carefully pressing it out to the edge.

This butter will keep sweet and is the best than can be made. Handled in this way it is always firm, never greasy. Each time a new churning is added to the jar, take up the cloth, keeping the salt in it, and pour off the brine, pack in the new butter and replace the cloth and salt and brine. When the jar is full enough, that is within two inches of the top of the jar, and the cloth, salt and brine replaced, set in a cave or cellar, looking at it every few days to see that no air bubbles get under the cloth. If they do they must be pressed out and another inch of salt should be placed over the top. I always get the highest price for butter treated in this way.

The Sure Hatch Incubator.

The Sure Hatch Incubator Company has a new ad on page 3 of this issue. This is one of the big incubator companies of the country. You can buy a Sure Hatch incubator at a right price, with the freight prepaid. It will make money for you after you get it. Don't miss getting the Sure Hatch book. Write for it to Sure Hatch Incubator Company. Box 143, Fremont, Neb.

TRADE IN YOUR INFERIOR SEPARATORS

15,000 American users of poor or worn-out separators traded them in last year on account of new

DE LAVAL CREAM SEPARATORS

and there are doubtless many more owners of such machines who will be glad to know that while such old machines have no actual value the DE LAVAL Company continues to make liberal "trade" allowances for them because of the opportunity such exchanges afford for the most practical illustration possible of the difference between good and poor separators and putting a stop to the sale of others like them in the same neighborhood. Nobody is injured through the re-sale of these old machines as they are simply broken up and "scrapped" for their old metal value.

Then there are many thousands of DE LAVAL users who should know that they may exchange their out-of-date machines of from 10 to 25 years ago for the much improved, closer skimming, easier running and larger capacity machines of today.

Write in a description of your old machine—name size and serial number—or see your DE LAVAL agent.

THE DE LAVAL SEPARATOR CO.

42 E. Madison Street CHICAGO
1213-1215 Filbert Street PHILADELPHIA
Drum & Sacramento SAN FRANCISCO

General Offices:
165-167 BROADWAY NEW YORK

173-177 William Street MONTREAL
14 & 16 Princess Street WINNIPEG
167 First Street PORTLAND, ORE.

Be the Most Critical in Buying a Cream Separator

IT WILL PAY YOU to most carefully consider more points in deciding upon the Cream Separator that you buy than in any other piece of farm or dairy machinery. First see the Great Western Dealer in your locality and examine our machines in every detail. Accept no substitute; if he won't show you a Great Western, he can get one by fast freight to show you if you insist. If he won't do it, write us.

Don't Try or Buy a Separator Until You Have Read Our \$1,000,000.00-5-Year-Guarantee, Which Insures You of "The World's Best"—a Machine Far Superior To Any Other Separator Made.

The Great Western in workmanship, material, simplicity and efficiency is unquestionably the finest cream separator built in the world. Carefully consider the following points and compare our machine point by point, test by test, with any other separator and we will let you be the judge.

"The World's Best" Great Western Cream Separator

- Please consider these facts and judge for yourself before you buy any cream separator—draining bowl. Skims either warm or cold milk in any weather.
- Five points (which by words you will find claimed for even the cheapest separators) are "Closest Skimmers"—"Easiest to Run"—"Easiest to Clean"—"Most Durable"—"Most Simple."
 - Then ask your dealer to show you a Great Western—of capacity from 300 to 900 pounds per hour, whichever you need for three or more cows—Test it to prove all of the above claims which we truly make. Have him take the machine apart and show you the following points as compared with any other separator made.
 - See our original "Low Tank and High Crank"—the lowest lift to pour milk—the highest crank to turn easily. Tank swings back out of way of bowl which is close up to the frame and not in the way, yet high enough to set cans for cream and skimmed milk under spouts.
 - The test for close skimming and most profit on more and higher quality cream is found in our machine, because ours is the shortest bowl and the cream remains there the shortest time so no churning or lumps—Follows the Laws of Nature—Cream up; milk down. Self-flushing and self-
 - Easiest to run as we use the most expensive imported Ball Bearings and the Great Western oils itself by spray of oil on all parts—No exposed gears to catch dresses or hands of user or children. No dust can get in cogs or gears. Sanitary everywhere, including bottom to wash underneath (not flat on floor for sour milk to accumulate.)
 - Simple to take apart with twist of screw to clean—easy to wash; smooth surfaces permit water to rinse clean and sweet. The machine that every good housewife loves and admires.
 - Handsome in design and finished by six processes, like a \$5,000 automobile—Every part interchangeable, made perfect to fraction of an inch down to 1-10,000th. The very highest quality materials proved best for each purpose are used and most expert workmen operate the highest priced special made machinery in our factory to be found in any separator factory in the world for the purpose.

PROVE FOR YOURSELF

We promise you and our dealers in our Iron-clad 5-year-\$1,000,000.00-Guarantee on each machine to stand back of every Great Western during all its service. Our dealer in your locality and we, ourselves, are always ready "to meet you face to face." You make no "long distance deal" when you buy a Great Western. If your dealer won't let you see and test our machine, write to our nearest office. Our catalog in itself will convince you to get only our make for all practical reasons—including highest quality and service.

SMITH MANUFACTURING COMPANY, CHICAGO, ILL.

Omaha, Neb. Kansas City, Mo. Minneapolis, Minn. Columbus, O. Indianapolis, Ind.

Make Your Grounds Neat and Trim

The cost will be small and the increase in the value of your property great. At the same time you can make your home one of the show places of the community if you enclose your lawn and gardens with

Cyclone Ornamental Fence

Cyclone Fences are made in many beautiful patterns. They are strong—they are durable—they last a lifetime. They add to the appearance. They need little or no attention and never fail to please and satisfy. Cyclone Double Top Ornamental Fence Fabrics are made of the best Bessemer steel wires, heavily and thoroughly galvanized. The corrugated pickets add greatly to the strength and long life of the fencing, and at the same time are much more beautiful than plain pickets. The two heavy cables at the top and the doubled pickets give

Strength Where Strength Is Needed

The Cyclone Farm Gate is light, strong and the high carbon structural steel tubing used in its construction makes it absolutely rigid and enables us to guarantee that it will never sag. It costs less than one wooden gate and will outlast a dozen. Our large output enables us to sell this gate for less money than the prices asked for inferior iron gates.

Send for our Free Pattern Book of Cyclone Fences, Gates, Tree Guards, Trellises, etc.

CYCLONE FENCE COMPANY, Dept. 131, WAUKEGAN, ILLINOIS.

HORTICULTURE



For grapes select an open, sunny exposure, preferably sloping slightly to the south or east. Such an exposure has a tendency to guard off mildew and rot to which many of our best varieties are subject.

Experiments covering three years in three great apple growing counties of Western New York show that pasturing the orchards with hogs gave larger returns than where sheep or cattle were pastured.

An investigation of the trend of the market for apple trees disclosed the fact that the Ben Davis is at last slowly losing its leading position while sales of Johnathan, Winesap and Grimes are on the increase. This appears to be a rational change from the view point of the consumer.

When the Colorado potato beetles first make their appearance remember that they are very susceptible to poison. They are easily destroyed by spraying the potato plants with paris green (1 pound paris green, 2 pounds lime, to 100 gallons water), or arsenate of lead (1 pound arsenate of lead to 50 gallons of water); or the plants may be dusted with paris green and lime dust. Spray in time, so that the beetles will not get the start of you.

Poisoned bait for cut worms and its use may be described as follows: Clear off all vegetation, leaving the worms no other food. Mix a pound of paris green or white arsenic with forty pounds of cornmeal, moisten with water to a rather stiff mash, and sweeten with two quarts of common molasses. Apply this bait at sundown in little heaps near the plants to be protected. No poisoned bait should be used if chickens have access to the field.

Major Frank Holsinger suggests that this is a good time to look over the peach orchard for borers. Dig around trees forming a basin, and if borers are found pour one-half gallon soap suds (quite hot) around tree and fill up at once so as to retain heat. This will rid you of the pest. Strong lye is as effectual. Five pounds soap will do for 100 trees. Soap suds is also an excellent wash for trees. It cleans them nicely and destroys many insects.

Before trees are in leaf look over the twigs and small limbs and if you find small rough places having a scurvy looking deposit resembling flakes of ashes you may suspect that the San Jose Scale is there. On crushing or scraping these deposits a yellow, greasy substance will be seen. Sometimes it has a reddish color. The San Jose Scale is much smaller than the other kinds that affect trees—not larger than a pin head. They are very destructive and must be destroyed.

Two reasons are given why the old single stake method is to be preferred to a trellis or arbor. One is, that where ground is not too sloping, it admits of cultivation both ways with a horse, thus saving the slow and tedious work with the hoe, and furthermore the cultivator does better work. The other is, that by the stake system, the amateur is not so liable to injure his vines by leaving too much fruiting wood, thus allowing the vines to overbear.

Illustrations of the rapidity of growth of some forest trees are furnished by A. H. Griesa, who made planting in 1881 in his lawn near Lawrence, Kan. Some of the largest were measured recently at a distance of 18 inches above the ground and diameters found to be as follows. White pine 22 inches, Catalpa speciosa 18 inches, sugar maple 10 inches, white birch 12 inches, white elm 22 inches, coffee bean 20 inches, Linden 12 inches, hackberry 22 inches. A cypress planted three years later measured 24 inches.

How to Save Trees That Have Been Girdled by Mice.

Following are the directions of an experienced orchardist: Take some small apple sprouts, about the size of a lead pencil, and long enough to reach from the firm lower bark to the sound bark above the girdle. Make a sloping cut on each end of these sprouts and graft it into the bark above and below, being careful not to cut further than through the bark of the tree and fitting it nicely, the cut side of the sprout on the smooth wood of the tree beneath the bark. Cover with grafting wax made of two parts of resin, one part of beeswax, and tallow enough to make it about the consistency of shoemaker's wax; melt all of this together. Three or four grafts should be put in each tree. Wrap a string tightly around either end of the grafts to hold them in place. If sprouts come out below the graft keep them pulled off. It is rather a nice job to do, but it can be done successfully if the trees are worth the bother.

Grapes and Frost.

The French have a method of producing artificial cloud for the protection of vineyards from frost.

The process consists in filling small wooden boxes, open at top, with an inflammable composition consisting of a mixture of equal parts of resinous with earthy matters (clay, terra alba, and the like) reduced to a fine powder. In the center a wick extends through the compound and serves to kindle it. The wick, however, may be dispensed with and the composition ignited by pouring a few drops of alcohol, petroleum, or other inflammable oil over the mass and applying a match. These boxes, about 8 inches long by 6 wide, made of pine wood ordinarily, are placed in line, about 30 feet apart, around the vineyard.

For grapevines, the most dangerous period of the year is in April, when the young shoots are showing some vigor and the juices running freely. Then a slight frost may mean disaster unless the plants are protected in some way. There is but little danger when a dark or cloudy morning follows a cold night. The trouble comes when the first rays of the morning sun strike the almost frozen and unprotected plant. By this process a dense cloud of smoke is produced, hanging over the vineyard long enough to protect the plants from the sun's rays and give them a chance to recuperate from the dangerous effects of the frost.

The composition in the boxes to windward only is ignited, the thick, black, heavy smoke hanging over the field forming a shield against the sun's rays. If it is desired to extinguish the fires it is only necessary to have an open box a trifle larger than the others, by means of which the flames are quickly smothered. It is claimed that the protection of 50 acres by this method of producing smudges can be achieved at an expenditure of \$2.

About Asparagus.

Editor Kansas Farmer:—If properly located, market grass growing is a safe proposition for \$400.00 per acre yearly, and in some instances double this amount. We well remember the abnormally warm spell here in March, 1907, (which caused orchardists to lose thousands of dollars) which was a bonanza for grass growers. We reaped a harvest never before equalled, as we had Palmetto asparagus, one year from planting that yielded over \$600.00 per acre.

A market plantation requiring no more labor to plant and cultivate than a crop of potatoes, remains productive for fifteen to twenty years. Any good soil is suitable, for main crop we haven't any particular choice, sandy soils are earlier. Our acreage, which is large, comprises a variety of soils, from light sands to heavy gumbo.

In planting, plow ground same as for potatoes, furrow out rows, north and south, 3½ feet apart, with plow, throwing furrow each way. Drop plants, crown up, one foot apart in

POTASH

Sugar Beets

are grown, not alone for quantity, or weight, but for quality, or sugar content. This is why the grower of beets for the sugar factory realizes that

POTASH IS PROFIT

Potash not only produces a full stand and maximum tonnage per acre, it secures highest scale of prices on the test. No beet fertilizer is complete without 10 per cent. of Potash. To increase the total one per cent., add two pounds of Sulphate of Potash to each 100 pounds of fertilizer.

Valuable Literature, Free, on Growing and Fertilizing Beets and All Other Crops.

GERMAN KALI WORKS
Monadnock Block, Chicago
New York—93 Nassau St.
Atlanta, Ga.—
1224 Candler Building



FRESH
Write for
Catalog
today
ITS
FREE
TESTED
SEED

Tested Seed

THE KIND TO PLANT
I want everybody who plants seed to have a copy of **MY NEW SEED BOOK**

It is an elegant book, by far the best I have ever issued, giving complete and accurate descriptions of my **TESTED SEED**. Over 1000 Varieties, 800 fine illustrations of Vegetables, Field and Flower Seeds, Roses, Plants, Shrubs, Poultry and Bee Supplies. You need this book. Shall I send it to you? **IT'S FREE!**

Zimmerman Seed Co.
623 Quincy St., TOPEKA, KANSAS

Quality Seeds

are the result—First, of years of experience; Second, of honesty; Third, of painstaking methods. Now we have had 42 years of practical experience growing and selling western seeds. That we are honest is shown by customers who have bought from us for over 35 years. And as a sample of our careful methods—we educated two of our men at our expense in the Government Seed Laboratory at Washington, D.C. We send out only fresh, clean critically tested and carefully selected seeds of highest germination. Give us a trial order. Send for our 1908 **FREE** Catalog H and see in it the premiums we are giving with orders received this month. Get our prices for Alfalfa and Grass Seeds. **THE BARTEDES SEED CO., Lawrence, Kans.** Branches at Denver, Colorado, and Oklahoma City, Oklahoma

You will be satisfied with the products of

Burpee's "Seeds that Grow"

Shall we mail you our New Complete Catalog?

W. ATLEE BURPEE & CO., Burpee Building, Philadelphia.

VANSANT'S SEED CORN IS THE FINEST MONEY WILL BUY

at the LOWEST PRICE POSSIBLE. You can't afford to risk your crop of corn by planting inferior seed corn nor buying it from seed jobbers. Buy direct from the oldest and most successful breeders. Raise 100 bushel an acre. We grow every bushel on the world's greatest seed corn farm—500 acres—in true type growing section of corn belt. Thousands regular praising customers.

LARGE, BEAUTIFUL CATALOGUE AND SAMPLES FREE
We won 1st Premium Iowa Exhibit World's Fair. Start right with the best seed you can get—that's Vansant's.

You can't afford to miss it—Just give us your name and address
W.W.Vansant & Sons Seed Corn Breeders & Growers
Box FARRAGUT, IOWA

SEED CORN

ALFALFA SEED

Write Us. **GEORGE T. FIELDING & SONS, Manhattan, Kans.**

Don't Give the Trusts Your Hog Profits

Don't sell your hogs for 5 or 6 cents a pound and buy them back in the form of poorly smoked hams and bacon from the **Beef Trust** for 15 and 20 cents a pound. You can smoke the meat you need and what's over sell to local stores for 3 or 4 times what you now receive from hog buyers. You can make money—save money—have better meat; you don't need fire or smokehouse. All you need is a 75-cent quart bottle of

Wright's Smoke

(CONDENSED)

One bottle smokes a barrel of meat. Simply apply with a brush. It is a liquid made of hickory wood and imparts the rich aroma and delicate flavor of hickory smoke to the meat. Keeps the meat sound and sweet indefinitely and free from insects. **FREE SAMPLE BOTTLE** Ask your druggist; if he cannot supply you, send us the names of five who smoke meat and 10 cents for mailing and we will send you enough to smoke 10 pounds of meat. Sold only in 75-cent, square quart bottles by all druggists. Free Booklet on curing meats. Be sure you get Wright's Smoke. Made by

THE E. H. WRIGHT CO., Ltd.
625 Broadway Kansas City, Mo.



FREE CATALOG OF SEEDS—1 cent and 50¢ per packet. Send name and address to H. Gardner (Seed Grower), Marengo, Neb.

SILVER MINE OATS.
75c per bu. NORTHERN GROWN, no weeds, test 40 lbs., medium early bush variety. Also prime clover seed, no weed seed, 47¢ per bushel, sacks 20c. J. B. Armstrong, Box 1, Shenandoah, Ia.

ALFALFA SEED
Western Kansas grown. Write for prices and sample
GEO. H. MACK & CO.,
Garden City, -1- Kansas

Trees of Quality

The Winfield Nursery Co. grow such trees by the million. Special sale on 100,000 one year apple, 30,000 cherry and one-half million Osage Hedge. Address
THE WINFIELD NURSERY CO.,
Dept. K. Winfield, Kan.

Buy Your SEED CORN
OF BILL BROOK FARM.

3,000 bushels of well matured, well selected MOONE COUNTY WHITE, the great feeding corn. Send for sample and prices to H. O. DUDOR, Holton, Kan.

CALIFORNIA ALFALFA SEED.

Re-cleaned and guaranteed free from dodger and all weeds. Strictly pure seed. Price 5 cents per pound, delivered free west of the Mississippi river. Address,
SMITH-GENTRY CO.,
Corcoran, Cal.

Strawberry Plants that Pay to Plant.

are the kind we grow. All our fields were under mulch early and our plants are in first class condition and we are sure they will prove entirely satisfactory to our customers. We have over 12,000,000 plants of all the leading varieties. We also grow raspberry, blackberry and all other small fruit plants. Large quantities of asparagus and rhubarb. Our catalog is different from any you have ever read. It tells the truth about the behavior of all the varieties on our farm. It will pay you to have it. It is free. Address, F. W. DIXON, Holton, Kan.

FREE 6 TREES
To prove that our Blizard and Belt Evergreens will grow in all parts of the country we offer to send 6 Fine Spruces 1/2 to 3/4 ft. tall free to property owners. Wholesale value and mailing expense over 30 cents. To help, send 5 cents or not as you please. A postal will bring the trees and our catalog containing many colored photo plates of our choice Blizard Belt Fruits. Write today. The Gardner Nursery Co., Box 22, Osage, Ia.

HURST SPRAYER ON FREE TRIAL
No money in advance—pay us out of extra profits. Sprays anything—trees, potatoes, vineyards, truck, etc. Pushes easy—high pressure. Guaranteed 5 Years. Pay when you can—at wholesale price. We pay 1/2 freight. Catalog and Spraying Guide free. Free Sprayer for first 100 in your locality. H. E. Hurst, Inc., Box 771, North Street, Canton, O.

WANTED
500 young men to learn Telegraphy and Station accounting and earn from \$53 to \$125 per month. We have railroad wires giving actual experiences, making it a practical school. In dorsed by A. T. & S. F. Ry. Write for illustrated catalog.
Santa Fe Railway and Telegraph School, Desk F, Topeka, Kansas.

SELF SETTING PLAN
A child can set it. 223 in use at the Kansas Agricultural College at Manhattan. Sent on 30 days trial as per circular. A carpenter's pencil free if names of ten farmers are sent in. Gage Tool Co., Vineland, N. J.

PATENTS TRADE-MARKS AND COPYRIGHTS
Notice in "Inventive Age." FREE Look "How to Obtain Patents" FREE
E. G. SIGGERS, 701 7th St., Washington, D. C.

ACORN BRAND
Contains the essential quality necessary to produce profitable crops.
Ross Brothers Seed House

SEED CORN
CORN
SEED CORN Sold on approval. You decide whether satisfactory. Ten days to test any way you please. We grow our seed corn from the choicest pure-bred stock seed. All seed sold carefully hand selected, tipped and butted, graded and tested. Guaranteed to lease or money refunded. Write to-day for free samples of large yielding varieties adapted to your section. Prices low; quality best. Write now for 100-page descriptive catalog.
A. A. BERRY SEED COMPANY, Box 505, CLARENDA, IOWA.

row, taking ten thousand per acre, cover lightly at first with cultivator, when subsequent cultivation will level ground, when crowns should be four to six inches below surface. Thorough cultivation is more necessary than manure for the first few years. Apply all manure on surface lightly, so as not to interfere with cultivation. The first spring from planting the crop can be harvested.

For home use culture, never plant less than 100 roots, which is ample for bed 5x20 feet. Plow or spade up ground, take common garden hoe and furrow out rows one foot apart 4 to 6 inches deep. Prune roots to six inches in length, and place foot apart in rows, crown up cover lightly till growth starts, when hoeing will level bed. Surface dress with stable manure each winter. Roots can be planted at any time during dormant season that ground can be worked, from November 1 till May 15, inclusive.

Forget the old ways, as above methods will yield treble over the trenching system. Consumers today demand a green, brittle product, which does not necessitate the expense of producing that the former bleached product did. Asparagus growing is a success in all sections of United States.—R. W. Weaver, Wichita, Kan.

The Iris.

This flower was named from Iris, a radiant goddess, arrayed in garments of surpassing splendor, a personification of the rainbow, which is a concentration of all tints, rays and coloring of beauty.

This is one of the four great perennials, the peony, Iris, phlox and columbine. There is a large family of these exquisite flowers. They range in time of blooming from early spring until the middle of July.

Here at our experiment station in York we keep 125 kinds and it is wonderful how a patch of somber earth, in a short time, can be glorified with such indescribable splendor. It is as if the rainbow were taken to pieces and remade into forms of loveliness the parent bow never saw before.

Their hardiness, rapidity of increase, marvelous tracery, and interweaving of harmonious tints and coloring should make them favorites of every home.

They are of three sorts. The bulbous, those with hirsomes or spreading tubers and the tufted rooted ones.

The English and Spanish sorts have bulbs like tulips. They are rather tender and for the most part insignificant and we have discarded them.

The German sorts are very numerous, hardy, and beautiful and are called the garden Orchids. These increase by rhizomes which spread out like potatoes. We sometimes get thirty from one in two years.

The tufted ones are the Siberian and Japanese.

SOME OF THE LEADING SORTS.
Without going into the higher priced ones, I give the following. Florentine Alba, large, white, early and fragrant flower, the plant producing the oris root of commerce, so much prized in the manufacture of delicate toilet articles. Sans Souci, standards of the flower vivid yellow, the falls or dropping petals yellow, delicately veined with chocolate. Queen of May, soft, rosy lilac of delicate beauty. Pansies, a robust plant with large flowers of deep velvety blue with purple falls. Innocenzo, a fine tissue paper white, with large flowers. Very early. Madame Chereau. Is of most exquisite loveliness. Petals pearly white, fringed with lavender, exceedingly delicate and almost ethereal in loveliness.

THE SIBERIAN FAMILY.
These are all very hardy and multiply rapidly. Siberian Blue, has one

of the most intense, clear, and vivid blue flowers in existence. Much prized by florists, easy to ship and the color blends harmoniously with other flowers. White Siberian, this is a lovely flower and is much prized for cut flowers. Snow Queen, is yet rare, a flower in great demand and not enough to go around.

THE JAPANESE IRIS.
These are very large, often eight to ten inches across, with almost every conceivable blending and interweaving of color. In the West they must have wet feet in blooming time and shelter from the hot south winds.

These flowers are cheap. Most dealers can send you an assortment by mail, prepaid, for \$2.00 per dozen and from these, in five years, you will have hundreds of charming flowers in great masses of loveliness. Getting acquainted with these, you will want some of the higher priced ones. Plant German and Siberian on good rich, well drained, ground. Put the bud about two inches below the surface. Japanese will do best on moist ground, but must not stand in water in winter.—C. S. Harrison, York, Neb.

Hedge Fence.

I have a quarter of a mile hedge heavy enough for fence posts, which I wish to remove, as I need the posts and consider the hedge in field a nuisance. Do you know of a practical way to kill stumps after I cut hedge on ground and prevent them from further growing?—KARL SCHUELE, Atchison, Kan.

There is a difference of opinion as to the value of hedge as fence, and both sides of the question seem to have many advocates. We receive numerous letters asking how to grow good hedge fences, and many more from men desirous of getting rid of them.

A good hedge fence is one of the best and safest of farm fences, and many more from men desirous of getting rid of them.

A good hedge fence is one of the best and safest of farm fences, and the amount of time necessary to keep it in good condition is probably not much greater, if taken for a number of years, than the cost of maintaining wire fences of the same efficiency. If some care is taken while the hedge is young in placing and tying the shoots, a large amount of labor in the future is avoided. This is not pleasant work, but with heavy gloves may be done without injury if done before the thorns get hard and woody.

Hedge that is kept trimmed to four or five feet, never allowing it to grow much above that height, will not grow a root system that will be likely to injure the crops at a reasonable distance from the hedge. The amount of time required to keep a hedge trimmed will vary, of course, with the workman, but the work should not be considered prohibitive when the appearance of the hedge and the certainty of keeping in stock without injury is considered. The depreciation in price of one good colt caused by a wire cut, will pay for trimming a mile of hedge for several seasons.

There are many miles of hedge in Kansas, that, with no care, have paid large returns for all the land used in the production of posts and poles. A crop of posts and poles every ten or fifteen years will pay good rent for all the land that is affected by the hedge. This is, of course, an extravagant way to grow post timber, but even then it gives fair returns.

The vitality of hedge is one of its valuable characteristics as a forest tree, but this asset becomes a liability when the destruction of the hedge is desired. Even when a stump puller has been used, the crop of sprouts for several years will usually require considerable attention. If the brush is piled upon the row, after the posts and poles have been removed, and allowed to remain there until the hedge has made its spring growth, about the middle of June or the first of July, and then burned, it sometimes—especially if the burning is followed by a dry, hot weather—reduces the crop of sprouts to a minimum. The stumps decay so slowly that they are likely to interfere with farming for a long time. The durability of the wood becomes another liability when the destruction of the hedge is demanded.

It is well to think several times before destroying a good hedge fence.—ALBERT DICKENS, Kansas Experiment Station.

GOOD SEEDS
BEST IN THE WORLD
PRICES BELOW ALL OTHERS
I give a lot of new sorts for trial with every order I fill. A Grand Big Catalog FREE illustrated with over 700 engravings of vegetables and flowers. Send yours and your neighbors' addresses.
R. H. SHUMWAY, Rockford, Illinois

Onion Seed 60 cts. a lb.
See Salzer's catalog page 129. Largest growers of onion and vegetable seeds in the world. Big catalog free: or, send 10c in stamps and receive catalog and 1000 kernels each of onions, carrots, celery, radishes, 1500 each lettuce, rutabaga, turnips, 100 parsley, 100 tomatoes, 100 melons, 1900 charming flower seeds, in all 10,000 kernels, easily worth \$1.00 of any man's money. Or, send 20c and we will add one pkg. of Earliest Peep O'Day Sweet Corn.
THE SALZER SEED CO., LaCrosse, Wis.

Packets Assorted 10 Seeds 13
1 Cabbage, 1 Lettuce, 1 Radish, 1 Celery, 1 Sweet Corn, 1 Tomato, 1 Peas, 1 Portulaca, 1 Aster, 1 Marigold. These are not small packages or samples. They retail everywhere for 5c per package. We make this low price to introduce ourselves and convince you that our seeds are the finest on earth. We are a young concern and wait for your trade. For a starter send 10c for the above collection. After that you will order everything you need from us because we'll treat you right. With your order, we will send our big new catalog FREE, so you can compare our prices with others and satisfy yourself that we give you more for your money than you can get elsewhere.
Guthrie-Lorenz Seed Co., Dept. F, Des Moines, Ia.

\$1.15 FOR THIS BIG COLLECTION
The biggest bargain ever offered in guaranteed nursery stock—36 Grape Vines, 1 year old, No. 1; 2 Roses, 3 Rhubarb, 3 Tuberoses, 1 Spirea, 1 Snowball, all for \$1.15, shipping charges prepaid. Send your order now; get this bargain. Remember, the quality of this stock is the best; true to name; sure to grow.
IOWA NURSERY CO., Dept. 54, DES MOINES, IOWA.

Prolific Seed
Our Hailseed Yellow seed corn yielded 90 bushels per acre and our Gray County White 50 bushels even during this last unfavorable year. We can supply you with Alfalfa, Clover, and other seeds adapted to your soil. Write for large Free Catalog No. 25.
MISSOURI SEED CO., Kansas City, Mo.

40 CONCORD GRAPE VINES \$1
Well rooted, hardy, good bearers, healthy. All are true-to-name. Order grape-vines here, also 20 budded peach trees for \$1; 8 budded cherry trees for \$1. With free catalog we enclose due-bill for 25c.
FAIRBURY NURSERIES, Box 1, Fairbury, Nebr.

TESTED SEEDS
The kind that produce results. Field, Garden and Flower, Northern Grown and true to name. Special prices on Onion Sets, and Onion Seed. Poultry Supplies of all kinds. Orchard Spray Pumps, Arsenate of Lead for spraying. Write for our Catalog No. 12.
Missouri Valley Seed Co., St. Joseph, Mo.

10 PEACH FREE
or other trees of equal value. We save you 50%. Write today for our FREE OFFERS. BIG BARGAIN LIST AND CATALOG. ESTABLISHED 66 YEARS
THE PHOENIX NURSERY COMPANY, Dept. D, Chicago, Ill.

For 12 Cents
and the name of this paper we will send you 6 packets choice flower seeds, including one packet KRAMER'S 20th CENTURY GIANT PANSIES. Illustrated Catalogue for 1909 free.
I. N. KRAMER & SON, CEDAR RAPIDS IOWA

MODERN SILAGE METHODS
Send for this new 224-page book on Silos and Silage. 1908 edition—size 5 1/2 x 7 1/4 in.—indexed—over 40 illus. Used as a text book in many Agricultural Colleges. Contents by chapters follow: "Advantages of Silo," 25 pages; "Silos: How to Build," 76 pp.; "Concrete or Cement Silos," 10 pp.; "Silage Crops," 16 pp.; "How to Make Silage," 19 pp.; "How to Feed Silage," 22 pp.; "Feeder's Guide," etc., 56 pp. A vast amount of knowledge boiled down—nothing so complete ever published—answers every silage question. Mailed for 10c, coin or stamps, if you mention this paper.
SILVER MINE CO., Salem, Ohio
10c

THE FARM



All pruning done to grapevines should be finished while they are dormant. Any time after the shedding of leaves in the fall and before the swelling of buds in the spring is good. Generally speaking one may say the sooner the better.

Good seed and good cultivation are important factors in the production of large yields of corn, yet soil fertility stands first in importance. A fertile soil is not only essential to the production of maximum crops, but is the very foundation to successful farming. Protect the fertility of the soil.

Oscar Hoyt, Goodrich, Kan., reports that last April he planted a quarter of an acre of Texas gooseneck cane on sandstone land that was very rocky and underlaid with a tough clay only five or six inches from the surface. It ripened before frost and was an immense crop, from which he had over 50 gallons of excellent molasses and 12 bushels of plump heavy seed.

Oregon stockmen, claiming to lose more than \$1,000,000 annually by the depredations of coyotes, propose to kill 10,000 of the animals this year. The Oregon Wool Growers' Association, including sheepmen and others interested in the livestock industry, is at the head of the movement. Traps, poisons, and other methods will be used, the ranchers rapidly becoming desperate. Coyotes have caused heavy losses in various parts of Washington and Oregon and while 10,000 were killed last year the number seems as large as ever. The coyote problem is a big one in many parts of Kansas. The only good coyotes are dead coyotes.

The following is quoted as the conclusion of a man who was raised on a farm, had staid by it and is still there: "We have been driven to business methods by the new conditions, and now we are blessing the causes that forced us. We have found that the most effective farm implement that we can buy is the roll-top desk. It regulates our crops, indicates those that are profitable, eliminates those that are not, sells to advantage, and is making fortunes for us. It has established itself on the farm, and is here to stay. Those who adopted it first have now added an automobile. Those without it are being eliminated from the calculation, for profitable farming these days requires a business method of procedure."

Can the Wheat Yield Be Increased? It has been estimated that before the next half-century mark shall have been reached the population of the

United States will be not less than 200,000,000. To supply these people with bread, he says, will require 1,000,000,000 bushels of wheat. Our present total product is a little over half that much. The bulk of the wheat producing area is now devoted to the growing of wheat, and there is no chance for the wheat acreage to be doubled. The supply, therefore, must be secured by increasing the yield.

The average yield of wheat in this country is now a little less than 14 bushels per acre. The yield has been around this for many years. The strenuous efforts of the schools, the institutes, the expositions and the press, have failed to add much to the average yield per acre, and if the past rate of increase be not exceeded, the United States will be compelled, in less than fifty years, to import wheat, or find some substitute for wheat bread.

Can the yield be increased? Judging from what has been accomplished in the past, one would be almost ready to say, no. But we have too many examples before us to accept that answer. The average yield in England in 1790 was 14 bushels. England then became an importing nation, and there was a steady demand for all the wheat that populous island could produce. The growers then took the matter of production in their own hands. They stimulated every acre, fertilized it permanently, made the soil richer and deeper. In 1840 the yield was 25 bushels to the acre, and in 1908 it was over 30.

Grain in Farmers' Hands March 1. The Crop Reporting Board of the Bureau of Statistics, United States Department of Agriculture, estimates, from the reports of correspondents and agents of the Bureau, that the quantity of wheat in farmers' hands on March 1, 1909, was about 21.6 per cent, equivalent to 143,692,000 bushels, of last year's crop, as compared with 23.5 per cent (148,721,000 bushels) of the 1907 crop on hand March 1, 1908, and 24.6 per cent (158,800,000 bushels), the average for the past ten years of the quantity on hand on March 1. It is estimated that about 59.2 percent of the crop will be shipped out of the counties where grown, as compared with 58.0 per cent of the 1907 crop, and 56.6 per cent, the average for the past ten years, so shipped out.

The quantity of corn in farmers' hands on March 1, 1909, is estimated as 39.3 per cent, equivalent to 1,047,763,000 bushels, of last year's crop, as compared with 37.1 per cent (962,429,000 bushels) of the 1907 crop on hand March 1, 1908, and 39.0 per cent (90,663,000 bushels), the average for the past ten years of the quantity of the crop on hand March 1. It is estimated that about 21.3 per cent of the crop will be shipped out of the counties where grown, as compared with 18.0 per cent of the 1907 crop, and 20.0 per cent, the average for the past ten years, so shipped out. The proportion of the total crop which is merchantable is estimated as 88.2 per cent of the 1908 crop, as compared with 77.7 per cent of the 1907 crop, and 83.4 per cent the average of the past ten years.

The quantity of oats in farmers' hands on March 1, 1909, is estimated as 34.6 per cent, equivalent to 278,847,000 bushels, of last year's crop, as compared with 35.5 per cent (267,476,000 bushels) of the 1907 crop on hand March 1, 1908, and 37.0 per cent (311,199,000 bushels), the average of the past ten years of the quantity of the crop on March 1. It is estimated that 30.3 per cent of the crop will be shipped out of the counties where grown, as compared with 28.0 per cent of the 1907 crop, and 27.3 per cent, the average for the past ten years so shipped out.

Silos.

Here are a few gleanings from Bulletin No. 100 of the Iowa Experiment Station.

GALLOWAY SAVES YOU \$50 to \$300

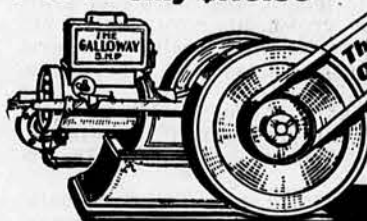
SAVE from \$50 to \$300 by buying your gasoline engine of 2 to 22-horse-power from a real engine factory. Save dealer, jobber and catalogue house profit. No such offer as I make on the class of engine I sell has ever been made before in all Gasoline Engine history. Here is the secret and reason: I turn them out all alike by the thousands in my enormous modern factory, equipped with automatic machinery. I sell them direct to you for less money than some factories can make them at actual shop cost.

All you pay me for is actual raw material, labor and one small profit (and I buy my material in enormous quantities).

Anybody can afford and might just as well have a high grade engine when he can get in on a wholesale deal of this kind. I'm doing something that never was done before. Think of it! A price to you that is lower than dealers and jobbers can buy similar engines for, in carload lots, for spot cash.

An engine that is made so good in the factory that I will send it out anywhere in the U. S. without an expert to any inexperienced user, on 30 days' free trial, to test against any engine made of similar horse-power that sells for twice as much, and let him be the judge. Sell your poorest horse and buy a

5-H.-P. Only \$119.50



Get Galloway's Biggest and Best FREE GASOLINE BOOK

Write today for my beautiful new 50-page Engine Book in four colors, nothing like it ever printed before, full of valuable information, showing how I make them and how you can make more money with a gasoline engine on the farm. Write me—

Wm. Galloway, Pres., Wm. Galloway Co., 385 Galloway Station, Waterloo, Iowa

1. Location should be outside of all buildings.
2. The fundamental principle in the preservation of green forage when placed in a silo is the exclusion of air.
3. To prevent the air from reaching the silage, all silos must have airtight walls.
4. A vertical, smooth wall is the only satisfactory wall to use.
5. Best results are got by distributing the silage uniformly throughout the silo, and packing it carefully near the walls and doors.
6. Prevent freezing of silage as far as possible.
7. A double wall concrete silo is most nearly frost proof.
8. It is dangerous to feed frozen silage.
9. The depth of the silo ought not to be less than 30 feet.
10. Two inches should be fed from the surface each day.
11. The pressure of silage is about 11 pounds per square foot for each foot of depth.
12. Stave silos should be anchored to prevent blowing over.
13. The building of a square silo can seldom if ever be profitable or desirable.

The stave silo is a thoroughly established success.

15. The life of a stave-silo varies from 5 to 25 years.

16. Concrete is one of the best building materials from which to construct permanent silos.

Care of Milk in the House.

The first prize essay at the New York State fair, by M. B. Publow on the care of milk by the consumer, contains some helpful hints.

1. Bottle milk is practically free from outside contamination and is the preferable form for purchasing it.
2. Can milk is liable to contamination from dust, from heat, and from strong-smelling substances in the refrigerator.
3. The top and outside of the bottle should be rinsed off with warm water before being opened, as the milkman usually carries the bottles by the top or neck, and more or less dirt and bacteria are certain to be transferred to the outside of the bottles.
4. Place the milk at once in a refrigerator, in cold water or in a cellar. Keep the covers on the bottles as it prevents material falling in, and also prevents absorption of odors.
5. Wash and scald the bottle as soon as empty.
6. Clean vessels only should be used for holding milk sold by measure. These should have tight-fitting covers.
7. Never mix fresh and stale milk, as all becomes tainted or sour in a short time.
8. Milk slightly sour can be sweetened by the addition of a small amount of lime water. Pasteurization will add to its keeping quality. This latter is not good policy, but is a remedy for a common evil.
9. Do not buy milk because it is cheap, for usually it is dearest in the end.

Before the use of the Babcock became so widespread, physicians used to recommend the giving of one cow's milk to infants or those who had to subsist on a milk diet. When the Babcock came into use, it showed that the milk of one cow showed greater variation in fat than the milk of a herd or dairy, and for that reason the latter was to be preferred for infant feeding, as it did not tax the

10 DAYS FREE TRIAL

We ship on approval, without a deposit, freight prepaid. DON'T PAY A CENT if you are not satisfied after using the bicycle 10 days.

DO NOT BUY a bicycle or a pair of tires from anyone at any price until you receive our latest art catalogs illustrating every kind of bicycle, and have learned our unexcelled prices and marvelous new offers.

ONE CENT is all it will cost you to have a free postal order for a bicycle or a pair of tires. You will get much valuable information. Do not wait, write it now.

TIRES, Coaster-Brakes, Hub-up-Wheels and all sundries at half usual prices.

HEAD CYCLE CO., Dept. 5284 CHICAGO

I Make the Best Scale on Earth

And I can prove it. Forty-five years ago I commenced selling scales to the user letting him have a free trial and never asking a cent in return until he had found that my scale was exactly as represented. I have patented the only reliable **PITLESS STOCK SCALE**, complete with steel frame, compound beam and beam box without extra charge, sold at a fair price. My scale is not cheapest, but **BEST**. I will send you full information, a scale on approval or book, "Reasons for Owning a Scale" if you address 60 C. St., BINGHAMTON, N. Y.

digestion of the child so much as one cow's milk.

Colorado is now the first sugar beet producing State in the Union, with 16 beet sugar factories and 127,678 acres in sugar beets. A news bulletin from the Colorado Agricultural College states that this industry has brought the price of tens of thousands of acres of land up the best producing sections up to \$150 to \$400 an acre.

The first annual announcement of the TenEyck Co., growers and distributors of well bred seeds of standard farm crops, with farms and headquarters near Concordia, Cloud county, Kan., has made its appearance. This company consists of the father, brother, and sister of Prof. A. M. TenEyck of the Kansas Agricultural College, whose letters published in KANSAS FARMER for the last several years have displayed a rational grasp of situations and level-headedness as to improvements in plants, conditions, and methods which have made his name a household word throughout the State. If the ability used by Professor TenEyck in initiating and carrying forward improvements in the experimental way shall characterize the other TenEycks in the production and distribution of improved seeds in the large way their services to agriculture will deserve and receive generous patronage.

The early settlers of the plains and other grazing countries made relentless war upon the skunks. Nobody blames them, for the skunk was a disagreeable neighbor possessed of a great appetite for chicken, and a low grade of scruples about appropriating them. Before the settler came with his chickens the skunk fed on prairie dogs and other rodents of the plains. When nature's balance was destroyed by the removal of the skunks the prairie dogs increased mightily to the detriment of pastures and crops. In cooperation with the stockmen, the United States Forest Service has begun an active campaign against prairie dogs on the infested ranges within the National Forests. A teaspoonful of poisoned wheat is dropped near the entrance of the holes. The action of the poison is almost instantaneous. Most of the prairie dogs in a town are dead within an hour or two after the bait is dropped.

YOU WILL DO WELL

TO WRITE US

REGARDING PRINTING MATTERS STATIONERY PAMPHLETS FOLDERS CATALOGS CALENDARS

SPECIAL DESIGNING & ART WORK

Let us help make your printed matter attractive

PRINTING DEPARTMENT OF KANSAS FARMER

We're now particularly equipped to print Stock Catalogs & save you money.

TOPEKA KANSAS

Fine Plowing

Deere Books

Tell How—



You can get them and a 16-page illustrated farm paper free

Don't miss this chance

If interested in farming, get our farm paper. You can have it one year absolutely FREE. This paper will give you some new ideas. No other paper like it. We will also send you three mighty nice booklets which show all kinds of plows at work in the field. There are plows from many foreign lands, also pictures of modern walking plows, sulkies, gangs and immense steam plows that turn forty acres a day. Get posted.

Hired Help Costs Big Money

Your land is high priced and hired help expensive. There is only one way to make big money—use implements that cut down the cost of your crops. Isn't it true that when you break something on a plow it is nearly always a cast part? Wherever strain comes on a JOHN DEERE PLOW there you will find steel—tool steel. Take any plow that has had hard work for five years, put it along side of a JOHN DEERE which has been in service that long—and see the difference. Then there is no paint to cover up poor material. You can see the wear and the defects. The JOHN DEERE will be solid, staunch and ready for the hardest job. Then you begin to know that quality counts.

There is comfort and profit in having good plows. You can take pride in owning a JOHN DEERE—the standard plow of the world for two generations.



We will send you the farm paper and the three booklets free. All you have to do is to write us a postal card and ask for

Package No. 15

Mention the number of the package then you will get exactly the right stuff.

DEERE & COMPANY, MOLINE, ILL.

FOR OUT DOOR WORK

IN THE WETTEST WEATHER

NOTHING EQUALS

TOWER'S

FISH BRAND

WATERPROOF
OILED
GARMENTS

THEY LOOK WELL—WEAR WELL

AND WILL NOT LEAK

LONG COATS—\$3.00—\$3.50

SUITS \$3.00

SOLD EVERYWHERE

CATALOG FREE

A. J. TOWER CO. BOSTON, U.S.A.

TOWER CANADIAN CO. LIMITED—TORONTO, CAN.

Seed Selection and Breeding.

(Continued from page 1.)

Ga., is a striking example, however, of the use of crossing as a means for securing a new and improved variety of corn. In 1904 Mr. Whelchel secured one bushel of seed of four distinct varieties of white dent corn and mixed the seed of these four strains of corn together before planting. He planted the mixed seed in a 50-acre field isolated from all other corn. In 1905 he selected a new type which he found among the plants grown from the crossed seed. This new type came comparatively true to seed in 1906 and again in 1907. It possesses certain characters different from any of the parent varieties, is a very high-yielding variety, and is more profitable than any of the parent varieties in the regions to which it is adapted for growing.

NECESSITY FOR CONTINUED EFFORT. The discovery of mutations, or sports, and desirable plants for propagation may be made at any time by the trained breeder. Unfavorable conditions of season for the growth of the crop may be most favorable for finding the best plant for breeding purposes. The propagation of the

seed borne by these plants and their testing under different conditions in order to determine their comparative value for commercial production frequently require years of untiring and painstaking effort. It was more than a quarter of a century after the Reid's Yellow Dent, the Boone County White, or the Leaming varieties of corn were developed by the breeders that these varieties began to come into general use in those sections of the cornbelt to which they were adapted.

THE PROPAGATION AND DISTRIBUTION OF NEW AND IMPROVED VARIETIES.

The difficulty in securing reliable and pure seed of the variety of crop desired has been the chief barrier in the way of the more extensive use of improved seed by farmers. This is especially true with regard to varieties of corn, cotton, tobacco, and other general farm crops subject to cross-fertilization. The production of seed crops free from cross-fertilization with other varieties necessitates the growing of these crops in isolated fields or protecting the fields in some manner from the pollen of other varieties grown in adjoining fields. In addition to cross-pollination from different varieties the seed ears should be protected from pollination by inferior plants in the same field. This can be done by detasseling the inferior corn plants before the pollen falls, pulling out the inferior plants before they bloom in the seed-cotton fields, and covering the seed heads of tobacco seed plants with light but strong paper bags before the blossoms open. In the case of wheat, oats, rye, and other self-fertilized crops there is no danger of crossing, but there is danger in mixing the improved seed with other or inferior seed in thrashing or handling the crops. Cotton seed is usually taken by the grower direct from the gin, and may contain a considerable amount of seed left over from previous ginings of other varieties. The breeder and distributor of improved seed must adopt the best precautions available, such as the use of seed separators and cleaners, so that the seed sent to growers will be unmixed and true to type.

It is not probable that all corn growers, for example, can arrange to grow seed free from crossing with neighboring varieties or that all cotton growers can protect their seed fields fully from other varieties, and in this fact lies the commercial opportunity of the seed breeder. The supplying of uniform and pure seed to the growers who do not have the opportunity or conditions for keeping their varieties free from crossing and who must of necessity go to the breeder for fresh seed frequently is the most important and profitable field for the work of the breeder.

ORGANIZED EFFORT.

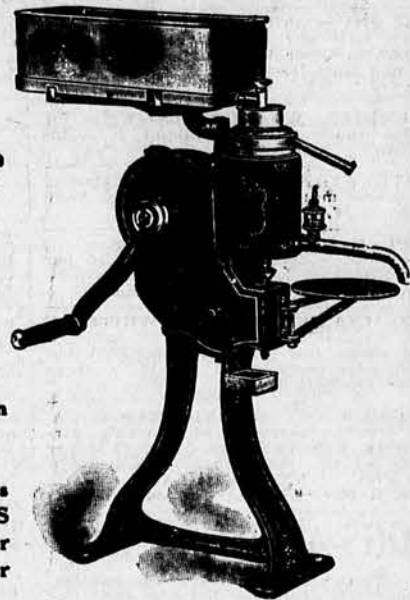
The importance of breeders' associations for promoting the work of livestock breeders has been demonstrated by their associations. The organization of plant breeders along the same lines has just begun, but results indicate that their work will have an important bearing on the future of the industry.

In 1900 the writer suggested the organization of the corn breeders of Illinois, which was carried out and a permanent organization effected, called the Illinois Corn Breeders' Association. The object of this association is to encourage the growing of improved breeds of corn, the adoption of improved methods of corn breeding, and to provide that the members of the organization sell only such seed corn as meets the standard set by the organization. The most important step was taken when it was agreed that seed corn must be sent to the producer on the ear, thus enabling the grower to judge more definitely than heretofore of the character and value of the seed purchased. Varietal standards were adopted, so that corn growers buying the seed corn from the breeders could more nearly judge of the adaptability of these varieties to their conditions. Provision was made for a careful test of all seed corn sold, so that only seed of strong vitality could be distributed.

This organization had the effect of stimulating the breeding of improved varieties of corn in Illinois, of establishing confidence in the minds of corn growers in the quality and value of the improved varieties, and of encouraging the use of improved seed over the entire State. Similar organizations have now been effected in all of the leading corn-growing States, and there is no doubt of the value of

Please examine this

Cream Separator Frame



It is cast in one solid piece.

No bolts to shake loose.

Extreme simplicity of construction combined with great strength.

Smaller diameter of bowls.

These are some of the reasons that make the UNITED STATES CREAMSEPARATORS run easier and wear longer than any other make of Separators.

The perfect mechanical construction of the frame and the scientific construction of the separating bowl, make UNITED STATES CREAMSEPARATORS the Cheapest Separators on the market for any dairyman to purchase.

Other Separator frames are made of two or more pieces bolted together. The daily use soon makes the bolts become loose and the frame unsteady.

The United States holds the World's Record for most perfect skimming. This record was made in tests with the leading Cream Separators of this Country and Europe.

No other separator can compare favorably with the UNITED STATES.

Selling agents in nearly every dairy town in the Country, if none in your town, write us and we will be pleased to quote prices. Ask for our Catalogue No. and it will be mailed to you, together with a beautiful lithographed hanger in colors.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.



NITRO CLUB SHOT SHELLS

They steady your nerve. Confidence in your shells, steadies your aim. You know U.M.C. Nitro Club Shells will reach "way out there" and hit hard. Loaded with any standard powder by mechanically exact machines. They have the famous 33 primer and are steel lined.

Send for Free Game Laws.

THE UNION METALLIC CARTRIDGE CO., Bridgeport, Conn.
Agency, 318 Broadway, New York, N. Y.

Here's Something New From KALAMAZOO

Cash or Credit
Take Your Choice

YOU have known for years that Kalamazoo stands for all that is best—most desirable—most economical in stoves and ranges—that prices on any Kalamazoo in our catalog will save you from \$10 to \$20. More than 100,000 satisfied users, all over the world, are ready to tell you that this is true. Our new feature in the Selling Plan of the Kalamazoo ought to meet with the approval of everybody. It is—

Cash or Time Payments

We make it easy and convenient for responsible people to own the best stove or range in the world. It costs you less than you can buy a good stove or range for anywhere else—on any terms.

We Pay The Freight

We are the manufacturers of the Kalamazoo. You get lowest factory prices. Write for Catalog No. 125 and special terms. Prove for yourself—by comparing our prices with others—how much you save in buying a Kalamazoo for cash or on time.

360 Days' Approval Test and Guarantee Safe Delivery

KALAMAZOO STOVE COMPANY
Kalamazoo, Michigan

"A Kalamazoo
Direct to You"

the work of these organizations both to the corn breeders and the corn growers, as shown by the increase in yield in these States. The organizations of active breeders' associations of this character for all the leading

crops would be one of the most important steps in the work of improving the existing varieties of these crops and would encourage efforts for the production of new and valuable varieties.

WYANDOTTES.

EGGS—W. Wyandottes, \$1 per 15, \$5 per 100. W. H. turkeys \$1.50 per 9. Baby chicks 10c each. A. F. Hutley, Maple Hill, Kan.

EGGS that hatch from stock that lay, win and pay, \$1.50 per 15. Special matings \$2 and \$3.50. In Silver Laced and White Wyandottes and Buff Rocks. D. A. Chacey, P. J. Leavenworth, Kan.

COLUMBIAN WYANDOTTES—Write for free egg circular. G. D. Williams, R. 3, Inman, Kan.

WHITE WYANDOTTE eggs for hatching from choice matings. \$1.50 per 15; \$5.00 per 100. S. W. Artz, Larned, Kan.

PURE WHITE WYANDOTTES. Eggs \$1.00. Incubator chicks \$12.50 per 100, week old. A. L. DRUMMOND, Norton, Kan.

WHITE WYANDOTTES AND WHITE H. TURKEYS. Farm range, fine laying strains. Book orders for eggs early. \$1.50 per 15; turkeys \$3.50 per 11. E. C. EWING, Parsons, Kan.

PARTRIDGE WYANDOTTES. Eggs from birds scoring 92% to 93%, correct shape, fine mahogany color. \$1.50 per 15, \$4.00 per 50. Birds have farm range. MRS. MINNIE K. CLARK, Box 4, R. 9, Lawrence, Kan.

EGGS—\$5.00 for 100

Buff, White, and Partridge Wyandottes, rose and single comb; R. I. Reds; Buff Orpingtons; Barred and White Plymouth Rocks; rose and single comb Brown Leghorns; single comb Black Minorcas. Pekin duck eggs \$1.00 per 11. Satisfaction guaranteed or money back. WALTER HOGUE, Fairfield, Neb.

BUFF WYANDOTTES

Six years line bred. Foundation stock from the famous Pleser & Riddell strain. High scoring birds only in breeding pens. Eggs \$1.50 per 15. G. C. WHEELER, 303 N. 14th St., Manhattan, Kan.

RHODE ISLAND REDS.

FOR SALE—Rose Comb Rhode Island Reds. Geo. T. Nelson, Ft. Scott, Kan.

15 S. C. RHODE ISLAND RED eggs \$1.00 and up. Harry Cure, Atchison, Kan.

PURE BRED, undefeated single comb Reds 15—\$2.00, 100—\$6.00. Belle Tyler, Haven, Kan.

R. C. R. I. REDS exclusively, fine layers; eggs from selected pens \$1.50 for 15 eggs; from utility flock \$4.50 per hundred. J. H. Cannon, Preston, Kan.

R. C. R. I. REDS exclusively for four years. Better than ever. Eggs 75c per 15, \$2 per 50, \$4 per 100. D. B. Huff, Route 1, Preston, Kan.

R. I. REDS in both combs. Write for free egg circular. G. D. Williams, R. 3, Inman, Kan.

S. C. RHODE ISLAND REDS. The best strains. Eggs at reasonable prices from best pens guaranteed. DELOS CHAPIN, Green, Kan.

R. C. R. I. REDS. Eggs for hatching from the Kansas champion winners. Send for price and mating list and list of winners. FRANK H. FOSTER, Topeka, Kansas.

ROSE AND SINGLE COMB RHODE ISLAND REDS. In the last 6 years I have built up a flock of heavy weight, vigorous, all the year round laying Reds. Have 200 females in 10 yards, mated to males scoring 90 to 94, to furnish eggs for hatching. Prices within the reach of all wanting fancy or utility stock. Illustrated catalog free. All stock sold I can spare this spring. H. A. SIBLEY, Lawrence, Kansas.

LEGHORNS.

15 BUFF OR WHITE LEGHORN eggs, \$1.00. Harry Cure, Atchison, Kan.

S. C. W. LEGHORN eggs, \$3 per 50, \$5 per 100. Mrs. Elsie Thompson, R. 5, Mankato, Ka.

S. C. B. LEGHORN EGGS—1st pen \$1.50, 2d pen \$1, per sitting. Range \$5 per 100. F. C. WILSON, Galva, Kan.

JOHNSON'S LAYING STRAIN rose comb Brown Leghorns. Eggs \$1 for 15, 30 for \$1.75, 50 for \$2.50, 100 for \$4. Write H. M. JOHNSON, Formosa, Kan.

GALVA POULTRY YARDS—Breeder of R. C. W. Leghorns and White Wyandottes. Some Leghorn pullets to sell. Eggs in season. JOHN DITCH, Prop., Galva, Kan.

S. C. BUFF LEGHORNS—No stock. Eggs from prize winners. Pen No. 1, \$2.00 per 15; No. 2, \$1.50 per 15. Incubator lots, \$5.00 per 10. Mike Klein, Clay Center, Kan.

R. C. B. LEGHORNS and M. P. duck eggs \$1.00 per 15. M. B. turkey eggs \$1.50 per 9. Also baby chicks 15c each. Hen eggs in incubator lots. Mrs. J. E. Wright, Wilmore, Kansas.

S. C. BROWN LEGHORNS. Prize winning, egg laying, money making kind. Pure standard bred. Eggs for hatching only \$1 per 15 or \$1.50 per 30. L. T. HASTINGS, Quincy, Kan.

S. C. W Leghorns and R. C. Reds Bred from heaviest laying and winning strains. Eggs for hatching; baby chicks a specialty. Write for circular to Prosperity Poultry Farm, R. No. 1, Barnes, Kan.

HAMBURG AND WYANDOTTES. EGGS FROM STATE WINNERS.

S. S. Hamburgs, White Wyandottes and Mammoth Pekin Ducks. \$1.50 per sitting. W. S. BINKLEY, Clay Center, Kan.

BLACK LANGSHAN.

STANDARD BRED Black Langshan eggs from pen \$2 per 15, \$3 per 30. Free range, \$1 per 15, \$1.50 per 30, \$5 per 100. MRS. D. A. SWANK, Blue Mound, Kan.

POULTRY



While nearly all the incubators that are made these days, will give good results, there are some fundamental principles that must be adhered to when running them or failure will ensue. If the eggs are not properly fertilized and from sound and healthy stock not all the incubators of the earth will hatch them. If the ventilation is not just right or the heat not at the proper temperature, failure is liable to occur. Care should be taken to air the eggs two or three times a day and the incubators should have a proper location. Failure to provide these essentials means failure of the hatch. It takes intelligent care and attention to properly run an incubator and while the directions sent with each incubator are generally sufficiently clear if followed implicitly to secure success, yet you cannot use too much of that rather rare commodity, good common sense.

In Chicago the wholesale egg-dealers assert that the retailers are demanding extortionate prices from the public. Prevailing conditions they say, warrant a big reduction in prices to consumers, and they have issued the following notice: "The press-committee of the Chicago Butter and Egg Board wishes to announce to the public that the price of new-laid eggs has declined seven cents in a week, so that the consumer should buy the best eggs from retailers for 27 cents per dozen." As a rule it is the wholesalers that keep up the prices of commodities and the retailers have to follow suite. But in this instance the retailers had loaded up with eggs before the present slump started and were caught with large quantities unsold. Naturally they were anxious to keep up prices so as not to lose too much money. The old hen upset the calculations of both wholesalers and retailers.

The hatching season is upon us and many a sitting of pure-bred eggs will be bought and set. Occasionally we hear a complaint about eggs for hatching being too high in price, but the complaints are not near so numerous as they were a few years ago. People are getting to understand that a fancier who has fowls in his yards worth from five to twenty-five dollars each, cannot afford to sell pure-bred eggs at market prices for common eggs. It is only those who are buying pure-bred eggs for the first time that now complain, and when they are asked two or three dollars per sitting for eggs they stand aghast and exclaim, "What! two dollars per sitting for eggs? Why, we are glad to get twenty-five cents a dozen for our eggs." They forget that it is not mere eggs, fit for cooking purposes, that they are after, but that they are buying stock, pure-bred stock. The stock is in the embryo as yet, but it is there, and if proper care and attention is given to the hatching of the eggs and the raising of the chicks, you will have fancy fowls next season that will produce eggs that can be sold for two or three dollars per sitting.

Eggs that are intended for hatching

purposes should be gathered from the nests several times a day. If this is not done, the eggs very frequently get chilled and are not in fit condition for hatching. This of course, applies in very cold weather when it warms up this danger is avoided, but there is another objection to allowing the eggs to remain too long in the nests and that is the danger of incubation setting in. It has been demonstrated that if an egg is subjected to 100 degrees of heat that incubation commences at once and in four hour's time evidence of that fact can be seen by the naked eye. If eggs are left in the nest box where a number of hens are laying, it often happens that when one hen has laid, another hen gets on the nest and her warmth commences to incubate the egg; and if this is done by two or three more hens, the process of incubation has advanced so far that an embryo chick is formed. When the eggs are taken out of the nest at night they become cold and the embryo dies. The result is you have infertile eggs. The remedy of course is to gather the eggs several times a day and on no account allow a sitting hen to occupy the boxes where the hens lay their daily quota of eggs.

The Continental Creamery Co., of this city have condensed buttermilk for sale that makes an excellent chicken feed. The writer has been using it lately as part of his chicken rations and finds it a valuable addition to the same. His chickens never laid so many eggs at this season of the year as they have done lately and the cold weather did not seem to have any effect on the egg supply. All poultrymen know that skim-milk is good for chickens, but this condensed buttermilk seems to be better still, as it has a certain element of acidity connected with it that makes it better for the fowls. It can be diluted with water and made of the ordinary consistency of buttermilk, or it can be fed in its present concentrated form and mixed with corn-meal and form and mixed with cornmeal and manner it takes the place of animal food, which is a very difficult product for the poultry man to procure. At one cent per pound it makes a very cheap food, especially at the present time when all poultry food is so very high in price.

Rose Comb Rhode Island Reds. There seems to be no breed of poultry that is more in demand at this season than the Rhode Island Reds, and while there has hitherto existed a somewhat prevalent belief that the Single Combs bred uniformly a better color, it is now pretty generally conceded that in this characteristic the Rose Combs have now improved, so that they breed uniformly as well as to color as the Single Combs, so that the comparative merits of the Rose Combs and the Single Combs now rests upon the particular fancy of the breeder. Many think the Single Combs present a more stylish appearance, while it is claimed by the advocates of the Rose Comb variety that there is less liability to injury by frost.

Mr. Frank H. Foster, a prominent



First Prize Rose Comb Rhode Island Red Pen at the Kansas State Show, January, 1909. Owned by Frank H. Foster, Topeka, Kan.

PLYMOUTH ROCKS.

15 WHITE OR BARRED ROCK eggs \$1.00 and up. Harry Cure, Atchison, Kan.

40 WHITE PLYMOUTH ROCK pullets for sale, \$1.50 each. Eggs 1.50 per 15, \$2.50 per 30. J. C. Bostwick, Hoyt, Kan.

BUFF ROCKS—Vigorous farm raised prize winners. Eggs by the sitting or 100. Circular free. W. T. & C. V. Ferria, Effingham, Kan.

EGGS, EGGS, EGGS.

B. P. Rocks, White Wyandottes & R. C. Rhode Island Reds, \$1.50 per 15 from scored birds. J. S. McClelland, Clay Center, Kan.

RIVERDALE POULTRY YARDS—Barred Rocks exclusively. Eggs from high scoring stock, both cockers and pullet mating, \$2 per 15. Range flock \$1 per 15 or \$5 per 100. MRS. D. L. DAWDY, Atchison Co., Arrington, Kan.

BARRED ROCKS—Raise your own cockers! Eggs \$1.50 per 15, \$7 per 100. Duroc Jersey bred sow sale, March 19. R. W. GOODMAN, St. John, Kansas. EGGS \$5.00 FOR 100.

BARRED ROCKS—Blue winners, \$1 premiums at Clay Center. Eggs from double matings \$2 for 15, \$3.50 for 30; utility flock, \$1 for 15, \$5 for 100. Address Mrs. D. M. Gillespie, Clay Center, Kan.

WHITE P. ROCKS

If you want eggs from State Show winning White Rocks, Light Brahmas, and White and Brown Leghorns at right prices, write GEO. F. MUELLER, St. John, Kan.

WINNERS AND LAYERS.

Send for 1909 mating and price list for our superb strains of Barred and White Plymouth Rocks. SMITH & KNOPF, Mayetta, Kan.

EVERGREEN POULTRY FARM.

E. Leighton, Prop. Breeder of Barred Plymouth Rocks exclusively. Choice stock for sale. Cockerels \$1.50 to \$3, hens \$1 to \$2. Eggs from yards \$2 per 15. Farm range \$5 per 100. Effingham, Kansas.

Lindenwood Barred Rocks

Win in best class in show room. My utility flock unsurpassed for eggs and market fowls. Prices for eggs from pens \$2 to \$3; from flock \$4 per 100. Send for circular. C. C. LINDAMOOD, Walton, Harvey Co., Kan.

BARRED PLYMOUTH ROCKS.

Pen 1, cockerel, 93%; females 90-94%. Eggs \$2 per 15. Pen 2, cock, 90%; females, 90-95%. Eggs \$1.50 per 15. Range cockerels, 91%-92%. Eggs \$1 per 15, \$5 per 100. MRS. CHAS. OSBORN, Eureka, Kansas.

Barred Rocks

with good color, large bone, and heavy layers. Eggs \$1 per 15. T. P. BOOMER, Holton, Kan.

BUFF ORPINGTONS.

15 S. C. BUFF ORPINGTON eggs, \$1.50 and \$2.00. Harry Cure, Atchison, Kan.

S. C. BUFF ORPINGTON EGGS—\$2 per 15. Seven choice cockerels for sale. Arthur Loveridge, Harrisonville, Mo.

S. C. BUFF ORPINGTONS—For eggs from the biggest winning strain in the West at low prices, write me. Infertiles replaced free. FRANK HILL, Sabetha, Kan.

BUFF ORPINGTONS—Cockerels, pens, baby chicks. More first prizes Topeka, State Fair, K. C. and Royal than all other breeders. Largest clean-legged breed. Best winter layers known. Best for farmers. Mature early, lay at 4 1/2 to 5 months. Get my catalog and Laying Record. W. H. Maxwell, 1996 McVicar Road, Topeka, Kan.

S. C. BUFF ORPINGTONS.

Write for free mating list with price of eggs. 5 pens. Guarantee fertility. B. D. Hungerford, Canton, Kan.

Eggs for Hatching

FROM VERY FINE STOCK.

NONE BETTER.

S. C. BUFF ORPINGTONS—Extra fine in shape and color. Good weight.

S. C. WHITE ORPINGTONS—Cook & Kellerstraus strain. The big white beauties.

WHITE PLYMOUTH ROCKS—Fishel stock, no brassy birds; as white as snow.

ROSE COMB RHODE ISLAND REDS—The kind that are all red. All mature stock.

Let me book your orders. Eggs from first pens \$2 per 15, \$5 per 50, \$9 per 100. Second pens, \$1 per 15, \$3 per 50, \$5 per 100. Baby chicks from any of above at 20c and 30c each.

MRS. LIZZIE B. GRIFFITH, R. F. D. No. 3, Emporia, Kansas.

TURKEYS.

MAMMOTH BRONZE TURKEYS. Birds scoring up to 97. 1st at Kan. and Mo. State Shows 1908-9. Old and young stock for sale. Eggs \$4 per 11. G. W. PERKINS, R. 4, Newton, Kan.

SUNNY CREST.

Stock, fruit and poultry farm. Eggs to sell from M. B. turkeys, R. I. Reds and Leghorns. Registered Jersey calves and Poland China hogs for sale. Write me. MRS. WM. BRITE, Pierce City, Mo.

BLUE RIBBON POULTRY FARM. Choice young birds, the tops of a successful hatch from 3,300 eggs, from high scoring State Show winning stock. We breed Blue

Andalusians, S. C. and R. C. Black Minorcas, S. C. White Minorcas, American Dominiques, Whiteface Black Spanish, Black Wyandottes, English Red Caps, Mottled Anconas, Silver Duckwing Leghorns, S. C. Black Leghorns, R. C. White Leghorns, S. C. and R. C. Buff Leghorns, R. C. Brown and White Leghorns. Eggs in season, prices reasonable, satisfaction guaranteed. Call on or write MR. & MRS. O. H. CROW, Hutchinson, Kan.

EGGS FOR HATCHING

Imperial White Indians, Cornish Indians (the best meat and best all purpose fowl for the farmer), White Laced Cornish, Columbian Wyandottes and Houdans.

At Kansas State Show, 1909, with 18 entries won 9 firsts, 4 seconds, 2 thirds, 1 fourth and 11 specials.

At Kansas City Show, greatest ever held in the West, with 16 entries won 16 prizes and 7 specials.

Over 100 first prizes in 1908.

ORCHARD GROVE POULTRY FARM

Box A., Chelsea, Okla.

EGGS! EGGS!

from Toulouse and Emden geese. Rowen and Pekin duck eggs, 18 for \$1.00. Colored Muscovy eggs, 12 for \$1.00. Bronze turkeys, Barred, White, and Buff Plymouth Rocks, Rose comb and Single comb White, Brown, and Buff Leghorns, Houdans, Buff Cochins, Cornish Indian Games, Partridge Cochins, Silver Spangled Hamburgs, Black Langshans, Rhode Island Reds, Buff White, and Silver Laced Wyandottes, Buff Orpingtons, Pearl and White guineas, Seabrights Buff Cochins and Black Breasted Game Bantams, Rabbits, Dogs of all kinds, and all kinds of fancy pigeons. Poultry eggs, 15 for \$1.00, and eggs by the hundred. Write for free circular. D. L. BRUEN, Platte Center, Neb.

Buck Bros.

Guthrie, Okla.,

have prize winners for sale in Rocks, Reds, Wyandottes, Cochins, Leghorns, and Minorcas. Write for prices. Satisfaction guaranteed.

\$7.55 Buys the Best
140-Egg Incubator
Ever Made

We ship quick from St. Paul, Kansas City, Buffalo or Racine.

\$4.50 Buys the Best Brooder
Both incubator and brooder, ordered together, cost but \$11.50. Freight prepaid. The Belle City Incubator has double walls and dead air space all over, copper tank, hot-water heat, self-regulator, thermometer, egg tester, safety lamp, nursery, high legs, double door. The Belle City Brooder is the only double-walled brooder made, hot-water heat, platform, metal lamp. No machines at any price are better. Write for our book today, or send the price now under our guarantee and save waiting.

Satisfaction Guaranteed
Box 18, Racine, Wis.

To get right down to a workable MONEY basis in YOUR Poultry Work — to stop YOUR loss in spoiled eggs and dead chicks — to get YOU such chicks as will reach the MONEY-LINE, this is the mission of

The New Method Incubator

—the New Automatic, Fire Proof, Steel Lined, Open Nest incubator, that cannot be over-heated—that is as automatic in moisture and pure air as a live hen. Such is the New Method—the incubator that is "different."

Why continue to hatch incubator chicks that are weakly, and that cannot be raised without such great loss in the brooders? Investigate our OPEN NEST SYSTEM. You owe this much to yourself.

I have a special proposition to make every reader of the Kansas Farmer that will enable you to own a New Method Incubator. I want to send you this Proposition, also our Free Catalog, which deals in facts that are of vital interest to you. This book is free if you mention the Kansas Farmer when writing.

Drop me a postal today for the book, and let's get acquainted. It might do us both good. Address

J. U. MOORE, Gen. Mgr., NEW METHOD INCUBATOR
208 W. Main St., Morrow Ohio

125 Egg Incubator and Brooder Both \$10

If ordered together we send both for \$10 and pay freight. Well made, hot water, copper tanks, double walls, double glass doors. Free catalog describes them.

Wisconsin Incubator Co., Box 90, Racine, Wis.

Send Us a Postal for a Price

Put your name and address on postal large prices on all sizes.

Racine Incubators
and Brooders—guaranteed to hatch highest percentage of eggs. General Free Trial Plan. Best Incubator Proposition on the market. Postal brings all printed matter and prices at once. Address Racine Hatcher Company, Box 88, Racine, Wis.

lawyer of Topeka, who has taken up the breeding of the Rose Combs as a matter of amusement, has by careful study developed as good a lot of this variety as can be found in Kansas. At least his winnings at the three largest shows in this vicinity this season seems to entitle him to that claim. He took second on pen and third on pullet and third on hen at the Missouri State Show at Trenton; second on pen, third on hen, fourth on cock, and fifth on pullet at Kansas City; and first and third on pen, first, second, and third on cockerel, third on cock, second, fourth, and fifth on hen, and fifth on pullet and the silver cup for the largest and best display at the State Show at Newton, Kan.

Such men as Mr. Foster, who give careful and scientific attention to breeding up the popular varieties, bestow incalculable benefits upon the poultry industry of the State.

Pleasures of Raising Chickens in Town.

Did you ever see a prettier sight than a lot of little yellow chickens? asks the Oregon, Mo., Sentinel. What beautiful soft fluffy balls they are. Very few of my neighbors raise chickens and I wonder why they do not; however, that gives more room in the neighborhood for mine. One neighbor has such a nice large barn, my chickens enjoy it so much, and go over there for a while every day to pick up the grain that falls in the hallway and carriage room. They like to climb over the carriage, too, and once when I went there to look for them, they were all roosting on the seats. Another neighbor has such a beautiful lawn and my chickens go there quite often, and what a lovely picture they do present as they pick about here and there, mingling their soft coloring with the brighter hues of the flower beds. When it gets too warm, they dig little hollows under the sweet peas or nasturtiums.

Pure-Bred Poultry Versus Mongrels.

Why do not more farmers raise pure-bred poultry? If they knew how pleasant it was to see a flock of poultry all of one size, color, and form they would try to get a start by buying some eggs, or preferably some good stock.

I began by buying a sitting of eggs in 1907. I chose the R. C. Buff Orpingtons. They are nice looking, good size, good layers, and good foragers. They are practically the same as the Single Comb Orpington, except in the comb, a point in their favor, where they are not properly housed, as their combs do not freeze so readily. More farmers should raise rose comb poultry. From my first sitting I hatched six healthy chicks and succeeded in raising two fair specimens, both pullets, and sent to a reliable breeder for a cockerel, paying him about the price of a dozen ordinary cockerels but got a fine specimen, and penned the trio which laid exceedingly well. Every egg that I set hatched a healthy chick, but on account of varmint I only raised a few, but now have a fine pen for this summer which I expect will soon displace all of my mongrels.

Running the Incubator.

I get numerous letters asking questions regarding the running of the incubator, so I will tell you as nearly as I can just how I care for mine.

I always thoroughly clean and fill the tank with boiling water, clean and fill the lamp and place in position, then I place a newspaper in each tray and place the thermometer on this. When the temperature reaches 102° I adjust the regulator, take out the newspapers and fill the trays with eggs, all I can put in without crowding them. I watch very closely to see that the eggs do not get too warm, but with a good incubator there is but little danger of this. After they are at the right heat I leave them alone for 24 hours, then I turn them and from this on I turn the eggs from two to three times each day. After the eighth day I leave them out to air from 10 to 15 minutes once or twice each day. The time of airing depends on how warm the weather is. In a warm room, say of about 70° to 75°, I leave them out 30 minutes each day, but if the room is cooler I reduce the time. On the twelfth day I test and take out all infertile eggs, and after the twelfth up to the eighteenth day I lightly sprinkle the eggs, about every third day, with lukewarm water. This helps the little chick to break the shell, by making it brittle. I do not bother the eggs after the evening of

White Plymouth Rocks Exclusively

For seventeen years I have bred White Plymouth Rocks exclusively and have some fine specimens of the breed. I refer to Judge C. H. Rhodes and Judge J. J. Atherton as to the quality of my stock. I sell eggs at reasonable prices and those I ship are from the same fowls that I hatch from myself. Eggs \$2 per 15, \$5 per 45, and I pay expressage to any express office in the United States. THOMAS OWEN, Sta. B, Topeka, Kan.



Write Today For My Special Proposition on The Fairfield

Let me tell you about my new plan which will not only save you money on an incubator and brooder but will help you get a Fairfield partly or entirely free. Just write me for my catalog and get my special offer at the same time. It's the greatest offer ever made on an incubator. Get it today.

FAIRFIELD INCUBATORS AND BROODERS

Are sold direct from our factory to you at a saving of 50% to 60%. In construction they can't be beat. Steam and water forced circulation heating system, giving a uniform, steady temperature and insuring a perfect hatch of all hatchable eggs. A positive regulator and non-explosive lamp. Beautiful finish—California Red-wood throughout. Easy to operate—easy to understand. The best incubator made today. Send for one on this guarantee—if not satisfied, return it and I will refund your money and pay freight both ways. Write today for special offer and catalog.

S. C. Thompson, Manager, Nebraska Incubator Company, 177 Main Street, Fairfield, Nebraska.



Makes Chicks Grow

3 lbs. at 7 weeks

"Have fed Lee's Egg Maker and Chick Grower to my little chicks for a number of years, always giving it to them after they were three weeks old, and when they are seven weeks old have them weighing two pounds each and they are only scrubs. It is also a great feed for laying hens. I would not think of raising poultry without it."

JAS. E. MCGIE,
Easton, Kansas

Don't overlook the important part of chick feeding—to keep them healthy, make bone and muscle, and bring them to maturity at the earliest possible moment. Lee's Egg Maker and Chick Grower contains those elements in proper proportion that insure this result.

Lee's Egg Maker

and Chick Grower can be profitably fed every month in the year, to the exclusion of all other forms of meat food, at less feeding cost and with better results from every standpoint. We offer it on that guarantee.

Of equal value as a food for little chicks, for all penned-up poultry, and for the laying stock.

Fifty feeds for one cent proves its low feeding cost; our Guaranty proves its great value.

2 1/4 lb. 25c; 25 lb. \$2.00; 100 lb. \$6.50

GEO. H. LEE CO., Sole Mfrs., 1165 Harney St., Omaha, Nebr.

Ask your dealer or send to us direct.

Send for free books—"Mandy's Poultry School," "20 Years with Poultry," "Incubator Hygiene," or 1909 Catalog Mandy Lee Incubators and Brooders.

GENERAL AGENTS: Boston, Mass.—Fiske Seed Co.; Philadelphia, Pa.—Howard L. Davis, 45 N. 13th St.; Tampa, Fla.—Cresshaw Bros. Seed Co.; Salt Lake City, Utah—Porter-Walton Co.; Dallas, Tex.—Robinson Plant and Seed Co.; Los Angeles, Calif.—Henry Albert Co.; Portland, Oregon—Portland Seed Co.



HEALTHY CHICKS

Don't expose chicks to rain, snow, wind, rats and lice. Insure their lives by using the famous

"Top Notch" Metal Brood Coop

Sanitary easily cleaned, lasts forever. Made of galvanized steel. Can be folded up and stored away. Send for catalog and low factory prices.

K. C. PHELPS MFG. CO., 1805 Central St., Kansas City, Mo.

the eighteenth day until the hatch is about one-half off. Then I remove all chicks that are dry and spray to boxes or baskets lined with cloth, placing 18 to 20 in each box. I have the brooder warmed to about 80° to 85° and place an old piece of straw mat or old carpet on the brooder floor. This makes the brooder easily cleaned.

When the chicks are about 36 to 48 hours old I feed sparingly of rolled oats and keep plenty of sand and water before them at all times. This is where so many people make the fatal mistake in raising little chicks. They omit the sand altogether. It is just as essential that a little chick have grit as the grown up hen. This neglect very often causes the death of the whole flock and where chicks are raised in great numbers it is impossible for the baby chick to find enough grit to supply its need unless we provide it.—Mrs. Lizzie B. Griffith, Emporia, Kan.

If you have not yet sent off for that sitting of pure-bred eggs that you were thinking of, you had better do so at once and get a start in pure-bred poultry. They will not only pay you better than scrub chickens, but will always be a source of pleasure as well as of profit to you.

White Faced Black Spanish

Exclusively for 13 years, winning at Kan. and Neb. state fairs, Kansas City and World's fair. Eggs \$1 per 15, \$5 per 100. H. W. CHESTNUT, Centuria, Kan.

World's Record

for hatching, and 648 first prizes won by the **Reliable Incubator**. Perfect ventilating, double heating system, inside heater, and automatic regulator—a great fuel-saver. Send today for FREE Poultry Book—valuable information on poultry raising and incubators. Reliable Incubator & Brooder Co., Box D, Quincy, Ill.

This Incubator Increases Poultry Profits Amazingly

No ordinary incubator could possibly show a record of success to compare with this wonderful machine. It has added enormous sums to the profits of Poultry Raisers. It stands in a class by itself.

Sure Hatch Incubator BOOK FREE

This book tells the secret of its marvelous success as a hatcher. It tells some startling facts about incubators—facts you should know before buying. Practically turns all makes of incubators inside out. Shows why many that sell at "bargain" prices hatch more trouble than chicks. Explains the correct principles of incubator construction. Don't buy an incubator at any price until you read this great book.

SURE HATCH INCUBATOR CO.

Box 42, Fremont, Neb., or Dept. 42, Indianapolis, Ind.

Greider's Book On Poultry

Concise, practical. How to make money with poultry; information as to buildings, treatment of diseases, etc. Fifteen attractive chromos; sixty prominent varieties. 100 postpaid. Fine, pure-bred stock and eggs at low prices. GREIDER'S GERMICIDE—a sure preventive and an excellent disinfectant. B. H. GREIDER, Rhoads, Pa.

Here She Is and My Big Book Too

I've come here this time to tell you "Better hurry up and send me your name this year."

You know about Johnson and "Old Trusty" Incubators and when I say My Big Poultry Book is better than ever—every page of 200 and every photograph out of over 1200 a poultry lesson, I know you'll believe me and write to learn about my new

OLD TRUSTY INCUBATOR

Over 100,000 in use—most certain and simple and sure for beginners or experienced chicken raisers—perfect inside and out for hatching the most chicks—California Redwood encased in metal. Sent on

40, 60 or 90 Days' Trial—For 3 Hatches. 10-Year Guarantee. 75 Per Cent Better Hatches Guaranteed

Don't pay two prices—my price is lower than ever this year—under \$10 complete, ready to hatch—sent promptly to you anywhere, with all Freight Prepaid east of the Rockies. Send your name and get my Big Free Poultry Book. Now is the time—Sure.

M. M. Johnson, Incubator Man
Clay Center, Neb.

When writing advertisers please mention this paper.

HOME CIRCLE



OUR ENGLISH.

We'll begin with a box, and the plural is boxes. But the plural of ox should be oxen, not oxes. Then one fowl is a goose, but two are called geese. Yet the plural of moose should never be meese. You may find a lone mouse or a whole nest of mice. But the plural of house is houses, not hices. If the plural of man is always called men, why shouldn't the plural of pan be called pan? The cow in the plural may be cows or kine. But a cow, if repeated, is never called kine. And the plural of vow is vows, never vine. If I speak of a foot and you show me your feet, And I give you a boot would a pair be called beest? If one is a tooth, and a whole set are teeth, Why shouldn't the plural of booth be called beeth? If the singular's this and the plural is these, Should the plural of kiss ever be nicknamed keese? Then one would be that and three would be those. Yet hat in the plural would never be hose, And the plural of cat is cats, not cose. We speak of a brother and also of brethren. But though we say mother, we never say methren. Then the masculine pronouns are he, his and him. But imagine the feminine she, shis and shim. So the English, I think, you will all agree, Is the queerest language you ever did see.

The School Children.

[The following article upon a very important subject has several practical suggestions. I hope that this matter of schools, school-teaching, and school children will be fully discussed in these columns. I should be glad if every mother and every father who feel an interest in the welfare of their children during school-days, would write to me about the schools in the country. For the country boy needs just as good training as his cousin in the city, and deserves it, but he often does not get it. It is a good thing that parents are thinking on the matter.—H. C.]

Children who carry their dinner to school should be provided with substantial ones, for it is said that the stupidity of a dull child might better be traced to its stomach than to its brains, as is usually done. If children have a long way to walk to school, they should be provided with good overshoes and instead of many heavy skirts, make them a pair of knickerbockers of flannel, large and loose, or they can be made of the same material as the dress, and with them one good lined skirt will be sufficient. Physicians tell us that children's stockings should be changed in winter-time twice as often as in warm weather, as the perspiration absorbed by the thick hose keep the feet cold, and if the feet are not comfortable, the whole body seems out of order. Among the very necessary school privileges for the child, at this season of the year, should be a goodly supply of handkerchiefs so they can have a clean one every day, and the best way to clean these small articles is to put them to soak over night in warm water in which a teaspoonful of borax is dissolved, as the borax not only renders the water soft and efficacious in removing dirt, but it is a destroyer of germs, and whitens without injuring the fabric.—M. H.

Helps for the Housewife.

[Some one has sent in the following optimistic letter which is interesting, even though some of the improvements it mentions are very seldom to be found as yet in the kitchen of the average farmer's wife. But may the day soon come when extreme and exhausting overwork is not necessary!—R. C.]

How often we hear women on the farm complaining that while the farmer's work has been lightened by inventors of improved machinery, the work of the household remains just about as heavy as in the days of scythes and flails.

"A man may work from sun to sun, but woman's work is never done." This despairing wall may be true of some homes, but it is unnecessary.

Until recent years it was true that inventors directed their energies chiefly to perfecting labor-saving devices for men, probably on the theory that men would more readily appreciate and buy improved machinery than women.

Perhaps this may be true in a general way, but shrewd manufacturers have discovered that the modern farmer is beginning to realize that his wife is more than a cook, housekeeper, or mother—she is his business partner. It is just as profitable to save her time and energy as his own. So from a strictly commercial point of view, and aside from the husband's desire to ease the burdens of the wife, the farmer and his wife are both in the market for means of saving time, energy, and money in the house, as well as in the field.

The measure permitting the manufacture of cheap denatured alcohol was passed at the instance and for the benefit of the farmer's wife.

It provides cheap fuel for heating, enables her to light the home safely, economically, and brilliantly, makes ironing possible without a torrid kitchen, and even heats water for washing right in the tub of her washing machine, providing it is one of those made of galvanized steel.

The first washing machines were merely wooden washtubs equipped with some device to replace the rubboard. Although crude and cumbersome, they marked the beginning of the effort of inventors to release the housewife from the back-breaking drudgery of washing. It is a long step from the first wooden washer, with its wheels and gears, to the simple, scientific, and sanitary steel washer of today, but it proves conclusively that the farmer's business partner does appreciate and will buy labor saving utilities.

Cream separators and rotary churns are other splendid illustrations of progress in the household. And then we pass from broom to carpet sweeper and from carpet sweeper to the modern vacuum cleaner.

The home-made tallow candle gave way to the oil lamp, and now the reign of that mellow but mussy illuminant is being threatened by the more brilliant alcohol and acetylene lamps.

So we see that the farmer's wife need not be a slave to work, and that her business partner is valiently aiding her to lighten her labors, and make the home happier, not only because he wants to but also because it is for the best interests of the firm and of the farm.

Helps in Housework.

Silver should not be kept in a white cloth as it may be tarnished by the sulfur used in bleaching the cloth.

Brushing with a feather duster or dry cloth stirs up the dust and scatters it from one place to another. It is better to wipe off the dust with a slightly dampened cloth.

The invisible particles of dust include bacteria, and are both troublesome and dangerous. The bacteria (microscopic plants) that give good flavor to butter are friends of the housewife, but these are sure to be overpowered by bacterial enemies, producing objectionable flavors, if the air and utensils are not free from dust and dirt. Bacteria and mold cause decay and communicate disease. They thrive in warmth, moisture and a still air. Sunlight kills bacteria, and good ventilation, diluting the air, makes it less harmful.

Sal soda or washing soda is of endless value, to "break the water" to "cut the grease" in dish water, in laundering or in the sink and drain. Dissolve one pound in one quart of water; put it in a can and label the can. One tablespoon of this in the boiler or dish pan is sufficient. Utensils which are burned or otherwise stained are easily cleaned by boiling them in a solution of one tablespoon of this liquid soda to one quart of water. One pound of the soda dissolved in three gallons of water is suitable for cleaning the sink pipes and the drain in the ice-box. The sink is nicely cleaned with kerosene; occasionally muriatic acid may be used to remove the stain from the mineral in the water.

Whiting is another inexpensive and have to make it in a mad rush just when the fruit must be put up. valuable cleaning agent, which constitutes the greater part of silver polishes. When sifted through cheese cloth to remove any gritty substance, we know it is harmless. This we do not know of the prepared polishes. The whiting may be moistened with alcohol, ammonia, or water and applied with a soft cloth.

Monday may be the most convenient day for one woman to wash, while Tuesday is better for another. Every one should have some regular time for doing different things or the work will pile up, making it necessary to wash, scrub, bake, and churn all the same day. This is worse than drudgery; it is intemperance. If one has been no planning, one may suddenly find that a dress is needed immediately, and

A mixture of rotten stone and oil, which are the main constituents of putz pomade, is good to use in cleaning copper and brass, and to remove spots from woodwork. A white spot caused by heat, an ink spot, or a scratch, may be gently but persistently rubbed with the rotten stone and oil and then treated with an equal mixture of turpentine and boiled linseed oil, and rubbed well. The appearance of furniture is greatly improved by the occasional application of turpentine and oil followed by a good rubbing. A little kerosene or crude oil in the water used for cleaning painted surfaces is less injurious to the paint than soap.—Miss Helen M. Pincomb, Household Science Department, University of Illinois.

THE YOUNG FOLKS

A Mud-Pie Dinner—A Story for Very Little People.

RUTH COWGILL.

Mattie and George were very busy. "George, we're going to have company for dinner," said Mattie, excitedly. "You'll have to kill another chicken and I must make three more mud-pies."

She went to work with a will, patting the nice clean mud into splendid-looking pies and cakes. George brought a soft feather from the barn, and they had it for the chicken.

Mattie selected a smooth place on the ground for the table, used some dried leaves for plates, and some old acorn-cups for cups and glasses.

At last the table was set. The pies looked very tempting and the make-believe chicken was placed at the head of the table, ready to be carved.

"Who is the company?" asked George.

"Why, it is Carlo," said Mattie. "Here Carlo."

Carlo came up, sniffed around the table, then turned away.

"Why, Carlo," said Mattie. "You impolite dog!"

But Carlo did not care. He wandered farther and farther away.

"Let's make him come," said George.

"All right," said Mattie, and straightway ran after him. George followed, and Carlo, thinking it a game of some sort, ran gaily ahead. He stopped every minute or two and waited until the children had almost caught him, then dodged, and skipped out of their reach, with a funny, dog-gish grin.

They raced through the orchard and down to the wood, and there Carlo scared up a rabbit out of the bushes, and away he scampered faster than ever. There was Carlo after the rabbit, Mattie after Carlo, and George after Mattie! It looked very funny. Then one of the colts saw them coming and he turned and raced away ahead of them. A crow in the tree-tops began to flit about ahead of them, shrieking and scolding in his cross voice. It looked very comical, and Mattie and George began to laugh and then they could not run. They had forgotten all about their mud-pies and chicken. They had gone far without knowing it. Suddenly it began to rain in big drops. The children forgot the colt and the crow, the rabbit, and even Carlo. They turned and ran back to the house, as fast as they had been running away before. Carlo trotted along behind them, his tongue out. They all took refuge in the porch. They could look out to where the mud-pie dinner was set. It was fast disappearing before the rain and wind.

Just then Carlo, feeling frisky, scampered across the place which they had called their table. He put one big paw directly in one dilapidated mud-pie, another in a leaf-plate, and picked up the feather in his mouth.

"There," said George, "Carlo did come to our dinner, after all. See, he is eating the chicken!"

"Goody! goody!" said Mattie, clapping her hands and laughing. "So we did have our party after all."

They patted Carlo on his shaggy, wet head, and he wagged his wet tail as if to say he had enjoyed it. I really think he had.

An Interesting Old City.

An interesting old city is San Antonio.

tonio. It is different from most cities. It has an individuality of its own. The San Antonio river, a beautiful stream rises in a small mountain just outside the city and winds in and out, back and forth through the city and it is said that every street crosses it. There are seventeen bridges over it and its high banks lined with tropical plants to its water's edge give it a very picturesque appearance.

I had the pleasure of sojourning a few weeks here this winter and I was impressed with its lack of system or plan. I think, like Topsy, it "just grew." There seems never to have been any laying out of streets but everyone seems to have built where he happened to be. There is nothing straight about it. They do say, however, that the post office is the one building that is square with the world. The streets are of various kinds, long short, straight, crooked. Many of them are no wider than an ordinary alley and may be only two or three blocks long. The street cars wind around through these narrow streets, in some instances leaving only a footpath by the side of the car track, crowding the pedestrian close to the little low plastered buildings that come up close on either side. The new part of the city is different. The streets are of good width and the buildings are modern and new. Many of the little Mexican houses are being replaced by new and modern ones but the narrow cut up streets must remain. There are ever so many little squares, and triangles over the city, beautifully green, and ornamented with flowers and foliage, fountains and monuments. These are called plazas and are ever inviting the sojourners to rest awhile. It is a lazy old city. No one seems to be in a hurry. The rush and rustle that characterize most American cities is not apparent but every one seems to be a person of leisure and the streets are like a show day every day and Sunday too. There is no Sunday law there and Sunday is a little more a gala day than the others. One is impressed with the number of men and boys in uniform. The United States Military Post consisting of three forts is here and there are many military schools for boys. This is a city of

A WOMAN CAN \$5000 A YEAR

LESSONS BY MAIL

Learn Dressmaking At Home. We will teach you to your own satisfaction, and equip you to command a good income. Or you can start in business for yourself. Many women nowadays are earning \$100 a week—\$5,000 a year. One woman, the head designer of Chicago's largest retail dry goods house, is said to receive \$10,000 a year. Salaries of \$25,000 to \$50,000 a year are common. **Become a Graduate Dressmaker.** The regular Diploma of this College is issued to all who complete this course of lessons. These Lessons will teach you how to make your own clothing and enable you to dress far better at one-third the usual cost. They teach you how to DESIGN, DRAFT, CUT, FIT, MAKE, DRAPE and TRIM any garment, including children's clothing. This College is endorsed by leading Fashion Magazines—McCall's, Pictorial Review, etc., etc.

FREE This book will be sent to you free. At an expense of thousands of dollars this College has published 100,000 of these copyrighted books to advertise the AMERICAN SYSTEM OF DRESS-MAKING, and while they last—will send you a copy FREE. Write for it today. One copy only to each woman. Requests filled in the order received.

American College of Dressmaking
791 Reliance Bldg.,
Kansas City, Mo.

over a hundred thousand inhabitants who are of many kinds of people, but the Jews are large property owners. The lower classes are largely made up of Mexicans and negroes. The negro is honored with separate seats in the street cars and separate waiting rooms and drinking fountains but the greasy Mexican sits, and drinks where he pleases. "Oh consistency thou art a jewel." More than one time I made a joke of myself by sitting in these seats until a smile and a knowing look from the passengers would remind me that I was not in Topeka. I saw one day a "white man attempt to sit on one of these reserved seats which was occupied by one negro. The car was full and even standing room was taken. The negro asserted his rights by crowding the man to the very edge of the seat and it was only by holding to the back of the seat that he kept his position.

There are some old landmarks here that point back to its past history which is thrilling and they proclaim the struggle for liberty and existence. About these I will tell you another time. The city was first settled in 1689 and has existed under eight different flags, Spanish, French, Mexican, Mexican Charter, Texas, Federal Union, United States until the civil war, then Confederate until after the civil war and peace was restored, when it took the United States flag.—R. H. C.

A Good Rule to Go By.

In one of his speeches during the Mississippi Valley trip, President Roosevelt told this little anecdote about the old days when he lived out West on a ranch in the cow country.

There were no fences, he said, and every calf was branded with the same brand the mother had, so that the increase of the calves could be totaled. There used to be a ranch law known as the Maverick law, according to which any calf overlooked in branding would be branded with the brand of the ranch where it was found. I was once riding across the country with one of my cow punchers, when we found a stray calf on another man's ranch.

The cow puncher wanted to brand it with the Roosevelt brand, but I told him I would not stand for it.

The cow puncher: "Hold on, old man, I know my business. I always put on the boss's brand."

All right, I said, you go back to the camp and get your time.

"What are you doing that for?" he asked.

Well, I answered, if you will steal for me you will steal from me.

Making the application of the story, the president continued.

And that is a good rule in public and private life.

If a man does something dishonorable in your behalf he is only going to wait for an opportunity to do something unjust toward you. You want to stand by the honest man.

If a man wants only justice and wants you to do the just thing by him, stick to him.

It is an absolutely safe rule to keep in mind all the time. It is unerring.

If a man will steal for you, he will steal from you.

If a man will lie for you, he will lie to you.

If a man will do anything dishonorable for you, he will be dishonorable to you, and he is not to be trusted.

Games.

Choose up sides as if for regular spelling, and spell words backwards. I was especially honored by having "incomprehensibility" and "metempsychosis" given out to me.

Pass a sheet of paper to each one, on which he is to write his own initials, as "C. B. N." Then each passes the card to the next, who looks at the initials at the top and writes out characteristics of that person (imaginary or otherwise), below, as "Cross, but nice," and then it is passed on to the next. Since each one has put his own initials on, and they are all passed at once, each fellow has a card about himself when they get through.

"PROGRESSIVE GEOGRAPHY."

Sit in a circle and let some one begin by giving a name in geography as "Mississippi." The player at his right

names a word beginning with the last letter of the preceding word, as "Iowa," and then it might go on "Adirondack," "Kentucky," etc. This can also be used in animals instead of geography.

In the next game you need a lot of letters. The letters can be made out of pasteboard, and they can be used over and over again. Then there should be little cards, on which are written something like this, "Articles in a Dry Goods Store," "Animals," "Cities," "Flowers," "Famous Authors," "Names of Streets." The players sit in a circle around the table and the cards are in a pile. One is turned over, and this decides what the game will be about. If it is articles in a dry goods store, then you go on, something like this: The first player turns over a letter, so every one can see at once, and the first person that can think of anything in a dry goods store beginning with that letter shouts it out and gets the letter, and the one with the most letters gets the game, or the partners with the most. That's lots of fun, and one makes pretty funny mistakes in trying to think up the right thing.

It is noteworthy, if not significant, that Kansas' present era of unprecedented prosperity dates from about the time alfalfa was first shown proper appreciation by her farmers.—Sec. F. D. Coburn.

You will be interested in the ad of the Plymouth Cordage Company, on page 24. Ask your dealer for Plymouth twine.

J. C. Bostwick, Hoyt, Kan., is a leading breeder of White Plymouth Rock poultry. He has stock and eggs for sale. Get his prices.

The finest seed corn catalog we have seen is that of W. W. Vansant & Sons, Box K29, Farragut, Iowa. It is more than a mere catalog. It tells how to raise larger and better crops of corn. No investment pays better than the purchase of first class seed corn. Better send a postal to the above address asking for the fine illustrated catalog.

Rubberoid, the great roofing material is on sale all over the territory where Kansas Farmer circulates. Its a great roofing material, and stands the test. The makers have a free book on roofing. It gives reliable information. See the offer on page 20. For a copy of this book address the Standard Paint Company, Dept. 59, 10 Williams St., New York.

The Age of Concrete. No one doubts that the age of concrete is coming. Its use is increasing very rapidly. The government is using cement on the Panama canal, and has ordered 4,500,000 barrels of Atlas Portland cement. We have just been reading a beautiful book on "Concrete Construction About the House and on the Farm." You ought to get this book. Read more about it in the ad of the Atlas Portland Cement Company, Dept. 107, 30 Broad St., New York. Read carefully also the article on pages five and six of this issue.

Read What Mrs. Stuart's New Fairfield Incubator Did on the First New 1909 Hatch. It's a Good One. Nebraska Incubator Co., Fairfield, Neb. Dear Sirs: I ordered a 150 egg incubator from you about the middle of January and set it the 3d of February. It is the first incubator I ever had anything to do with. I put 148 eggs into it, and have 120 fine chickens and only five dead chicks in the shell. The balance were infertile eggs. The machine ran just perfectly. I never had any trouble in any way with it.—Mrs. H. A. Stuart, Nevada, Mo., March 1, 1909. Have you written off a catalog of this incubator company? Write to S. C. Thompson, 177 Main St., Fairfield, Neb.

Who Will Read This? Every reader of this paper who will send his name and address to the American Plow Company of Madison, Wis., will receive a special price proposition direct from the factory—freight prepaid—on any American implement shown in the company's big free color illustrated catalog. Prompt shipments are guaranteed and freight paid to your station with safe delivery guaranteed anywhere you live. You also get 20 days free field test with satisfaction guaranteed or your money back when you order of this company. You'll be interested particularly in the American gang and sulkey plows and the American harrowing attachment with which you can harrow while you plow and save half your time and labor. Be sure to write for this big free book. Address The American Plow Co., 2338 Fair Oaks Ave., Madison, Wis.

Good Roads Suggestion. We see considerable discussion regarding needed country road legislation. Reliable data shows the cost of hauling per ton per mile over roads in the United States to be from twenty to twenty-five cents; in Europe, seven to twelve. The day of macadam roads in Kansas has not arrived but our dirt roads can be greatly improved.

We have men who never drag a road, yet they always hitch up and strike out for town the instant the roads become muddy; therefore if the track adjoining their premises be maintained in passable shape it must be cared for by a public-spirited fellow who will drag said track simply for the pleasure of having a good route to town. Now why not have a law providing that any man may drag any piece of road not to exceed twenty times and draw recompense not to exceed forty cents a mile irrespective of orders from the road overseer? This would insure well kept dirt roads along every main thoroughfare. One condition of the above is that the person dragging the road is not required to wait orders or consent of the road overseer.—L. E. Hansen, Centralia, Kan.

FASHIONS



A Charming Dress Model for the Little Miss to Wear at Home or at School. No. 8382. The long revers and Gibson plaits on this design are especially attractive and pleasing. Checked woolen in blue and white was combined with plain blue material; soutache braid was used for trimming. The back is arranged in box plaits. The sleeve is cut in bishop style, with straight cuff. The skirt is straight and gathered. The pattern is cut in four sizes, 6, 8, 10 and 12 years. A pattern of this illustration will be mailed to any address on receipt of 10 cents in silver or stamps.



A Practical Apron Model. No. 8400. What woman will not appreciate the value of an apron that is fitted out with a capacious pocket for holding clothes pins on wash day or dust cloths on cleaning days? This apron may be made of oil cloth, jean, or gingham. It is cut in one piece, and the pocket covers its entire width. The pattern is cut in three sizes: small, medium and large. It requires 3 1/2 yards of 36-inch material. A pattern of this illustration will be mailed to any address on receipt of 10 cents in silver or stamps.

A Model for School or General Wear, Equally Desirable for Silk, Velvet or Cloth. No. 8383. Girls' dress. Cut on simple lines, this model is nevertheless graceful

and attractive, and will appeal to the home dressmakers. It may be developed in blue flannel, and finished with machine stitching, or in red cashmere, with trimming of soutache braid. A linen collar, plain or embroidered with bow or Windsor tie, may serve to relieve the plainness of the design. The pattern is cut in four sizes: 8, 10, 12 and 14 years. A pattern of this illustration will be mailed to any address on receipt of 10 cents in silver or stamps.



A Pleasing Home Gown. No. 8364-8339. Gray voile, with braiding and velvet in green are here shown. The model was developed from ladies' waist pattern No. 8364, which is cut in six sizes: 33, 34, 36, 38, 40 and 42 inches bust measure, and ladies' nine gore skirt pattern No. 8339, cut in five sizes: 22, 24, 26, 28 and 30 inches waist measure. The fulness of the waist is tucked under a shaped yoke; the sleeves are in shirtwaist style, with band cuff. The back of the waist is laid in a cluster of tucks. Brown and white checked suiting relieved with plain brown cloth for trimming, or braided in white would be effective for this model. The patterns for this gown will be mailed to any address on receipt of 10 cents in silver or stamps, for each pattern.



The Kansas Farmer, Topeka, Kan.

Each pattern 10 cents.

Please find enclosed cents for which send pattern as follows:

Size Number

Name

P. O. R. D. State

How To Test Any Roofing



FIRE



WATER

Don't pay out good money for roofing until you first test the roofing you're going to buy. This applies to Vulcanite as well as to all other roofings. We want you to test it against heat, fire, cold, acid, water and anything else you like. Bend it—twist it—try to tear it. Compare it with any other. You will know absolutely then, there is none as good as Vulcanite.



HEAT



ICE

Has Stood the Tests for 60 Yrs.

Vulcanite ROOFING

Best by Any Test

is coated with a mineral product that does not freeze nor crack in winter, nor crumble and peel off in dry weather; it is absolutely water, wind, acid, weather and fireproof. For farm buildings and outhouses Vulcanite Roofing is the favorite of the farmer who figures cost by years of service and not by the first cost. Any handy man can lay Vulcanite Roofing. Caps and Cement come with every roll—so all you need is a hammer. Once on, Vulcanite stays on for good.

It will pay you to learn more about Vulcanite—the roofing with 60 years' experience in every roll. A postal will bring you a sample with which you can make the tests—also our free book which gives interesting facts about roofing. Write today. Sold by dealers. If yours can't supply you write us.

PATENT VULCANITE ROOFING CO.,
Dept. 87, 628-658 S. Campbell Ave.,
CHICAGO, ILL.

Dare You Throw Burning Coals On Your Roof?

Burning coals thrown on a roof of Ruberoid harmlessly sputter away—and die out.

They do not set fire to the Ruberoid. They do not set fire to the timbers underneath.

Yet a roof of Ruberoid is more than mere protection against fire.

It is protection against the cold of winter. Being a perfect non-conductor of heat, it keeps the warmth of the house in.

It is protection against the heat of summer. It keeps the building cool by keeping the sun's heat out.

Seventeen Years of Test

And it is more. It is wind proof, rain proof, snow proof. It resists acids, gases and fumes. Because of its great flexibility, it is proof against contraction, expansion and the twisting strains which every roof must bear.

A roof of Ruberoid is practically a one-piece roof.

For with every roll comes the Ruberine cement with which you seal the seams and edges—seal them against the weather and against leaks. You will find many roofings which look like Ruberoid—but none which wear like Ruberoid.

For the first buildings ever roofed with Ruberoid—more than seventeen years ago—are still waterproof and weather-tight.

RUBEROID

(TRADEMARK REGISTERED)
Be sure to look for this registered trademark which is stamped every four feet on the under side of all genuine Ruberoid. This is your protection against substitutes which many dealers brazenly sell as Ruberoid. Ruberoid is usually sold by but one dealer in a town. We will tell you the name of your Ruberoid dealer when you send for our free book.

THE STANDARD PAINT COMPANY, Bound Brook, N. J.

New York, Chicago, Kansas City, Boston, Philadelphia, Atlanta, Memphis, Denver, San Francisco, Montreal, London, Paris, Hamburg

We will give \$100.00 for the 5 best ears of seed corn

sent us before Nov. 1st, 1909 by users of

THE APPLETON MANURE SPREADER



bought in 1909. Write today for full particulars, and ask for our FREE SPREADER BOOK, which proves that the Appleton Manure Spreader is as strong as steel and oak can make it; so simple that any boy who can drive a team can run it as well as any man; and so effective in operation that it never bounces the manure, but pulverizes thoroughly and distributes evenly from the beginning to the end of the load.

APPLETON MFG. CO.
19 Fargo St. Batavia, Ill., U. S. A.

PUBLISHERS' NEWS

It is time to look into the cultivator question. The Dictator Cultivator is advertised on another page. Write to Rock Island Implement Co., Dept. L, Kansas City, Mo.

Mr. A. R. Enos of Lost Springs, Kan., has for immediate sale two red well bred Short-horn bulls that he will price worth the money. See advertisement in this issue and write him about them.

Kansas Farmer is carrying in this issue and in other issues a fine line of cream separator ads. If you milk cows look into the hand separator question. Send for the separator catalogs, mentioning Kansas Farmer.

The Breese Bros. Co. prepay freight on their rubber roofing. Prices are quoted and terms given. This roofing is sold on a long time guarantee. Write today to The Breese Bros. Company, Roofing Dept. 47, Cincinnati, Ohio.

The J. D. Tower and Sons Company, 14th St., Mendota, Ill., make and sell fine machinery for corn growers. The Tower cultivators and the Tower pulverizer are unexcelled in their line. Better write to above address for free illustrated literature.

Great Western manure spreaders are on sale by dealers nearly everywhere in the central West. It's a great spreader. Go and see it at your dealer. If he doesn't handle it write to the manufacturers, the Smith Mfg. Co., 154-168 E. Harrison St., Chicago.

Van Sant and Sons say their catalog is "beautiful." It is so and no mistake. These gentlemen breed, raise and sell Van Sant's seed corn, as good as the best. Send for samples to W. W. Van Sant and Sons, Box K29, Faragut, Iowa. See ad on another page.

Style, comfort and wear are found in the well known Sunflower shoes, now being advertised in Kansas Farmer. Dealers in Kansas and other western States sell them. They are made for all purposes and in 300 styles. Better send off the Sunflower stock pin. Address Noyes-Norman Shoe Co., Dept. B, St. Joseph, Mo.

In seeds of about every kind Henry Field is in the front rank. He grows and sells as good seeds as can be found anywhere. He has a free book on gardening which it will pay you to get. Don't forget either that he is one of the leaders as a seed corn specialist. Send for his fine catalog. Address Henry Field, Box 55, Shenandoah, Iowa.

Mr. W. A. McVay of Trenton, Mo., is advertising in our farmer's classified page, 20 head of young serviceable Hereford bulls of the very best strains. He will also sell a few cows or heifers. He is prepared to make very low prices in this stuff as it must be sold within the next 30 days. When writing him please mention Kansas Farmer.

S. G. Trent, Hlawatha, Kan., the well known seed corn expert, has a new ad on another page. He offers the two popular varieties Reids Yellow Dent and Boone County White. Mr. Trent is reliable and his seed corn way up in quality. Prices reasonable. Mr. Trent was a first prize winner at the National Show at Omaha. Write to above address for free corn catalog.

J. H. Harter, breeder of Barred Plymouth Rock chickens, whose sale of bred sows was reported last week, states that he has kept a fine lot of sows in his herd for his next sale. Among these are Lady You Tell 4th, Silver Beauty by Silver Chief, Minnie Faultless by Overchief, Big Lucy and others of the same quality. With this kind of breeding he surely ought to be heard from at his next sale.

The Success Manure Spreader is 31 years old. That will be a surprise to some, who did not know that manure spreaders have been on the market that long. The Success Spreader is good all through. It is made right and of best materials. A special feature is the fact that it has roller bearings. The advantage of this is apparent. The Success is the original spreader. Write for free catalog to Kemp and Burpee Mfg. Co., Syracuse, N. Y.

Have You a Good Sheep Shearing Machine? Before you shear your sheep, why not investigate the merits of the hand power shearing machine? The Stewart machine has a reputation of doing the work extremely well, and getting enough extra wool from a small flock to pay for itself. Ask your dealer to get one for you, or write direct to the manufacturers, the Chicago Flexible Shaft Company, 206 Ontario St., Chicago.

How Salesmen Make Money. The fact that several of Carnegie's millionaires began their business careers with him as traveling salesmen has often been referred to as an evidence of the manner in which drummers can come to the front. Any one with intelligence, perseverance, and tact can make money as a salesman. The National Salesman Training Association is sending out a book with hints on the subject, a copy of which will be sent to any reader of Kansas Farmer who will write to the association, addressing it at any one of its offices, either at New York, Chicago, Kansas City, Minneapolis, or San Francisco. In asking for the book, write to Department 234 of the association and mention this paper.

5,000 Anti-Trust Offers. Read the whole ad of Gordon-Van Tine Company on page 2 of last issue. It makes the claim that this company can save you 50 per cent on lumber, millwork and roofing. It is a great ad, and makes surprising low price offers in this day of high priced lumber. Kansas Farmer knows this firm well, and knows what a hard, brave, honest fight Gordon-Van Tine Company have made against the most powerful and unscrupulous opposition. If you are going to build now or in the near future you should get the catalog. It will pay you to get the catalog for reference. This company will sell you everything you need for building a house or barn. Won't you write and request, saying: "Send me your grand 1909 catalog." Use the coupon. Address Gordon-Van Tine Company, 1680 Case St., Davenport, Iowa.

The Galloway Line of Manure Spreaders. Mr. Galloway tells you on another page why you ought to buy one of his Wagon Box spreaders. Mr. Galloway is nothing if not persistent. He has been putting his proposition before our readers for a long time. Many of them have already bought spreaders. We have not received a single complaint from them, but have on the contrary received letters from Kansas Farmer readers telling

the satisfaction received from the use of the Galloway spreader. You owe it to yourself surely to let Mr. Galloway send you a copy of his big free book. It is a great one. Please remember that the Galloway spreader is always sold freight prepaid on a guarantee and on a free trial. Nothing could be fairer. You can afford a manure spreader at the price quoted in the ad. Write for the big free book to Wm. Galloway Company, 383 Galloway Station, Waterloo, Iowa.

Results Tell the Story. The problem confronting poultry breeders is to select a complete ration for their birds, from the time they are hatched, until, and after maturity. Reports from all over the country indicate that Chamberlain's Perfect Chick Feed, and other of your Poultry Foods, fill all the requirements. Note the following letter, see the card in the advertising columns, and improve the profit side of your poultry business.

Valley Park, Mo.
Gentlemen: I have used your Perfect Chick Feed for several years with excellent results, rarely losing a chick once it leaves the shell. It is surely "Perfect," and in a class by itself. Your Hen Feed, Mash Egg Feed, and other of your products are equally satisfactory. Brother breeders should not overlook any of your feeds, is my advice.—F. C. Kobusch. "Rhode Island Red."

From the New York Times, March 3, 1909. The influence of the Sportsman Show and the universal interest in President Roosevelt's coming hunting expedition to Africa, have brought the hunters of big game out in force with their trophies of the forest and hunting field. So far the advantage seems to lie with Bill Hillis, who has claimed for the bear hunters' championship of the great Northwest. To support his contention he sends in two splendid mounted bear skins of remarkable proportions. One is the skin of a giant grizzly, shot when its heavy fur was in its prime. Its claws offer extraordinary proof of the grizzly's vicious fighting equipment. The second skin is that of a polar bear bagged by Hillis in Northern Alaska, and is of such size that it fills the large Broadway window of the M. Hartley Company, where these trophies are displayed. Both these huge brutes were brought down by a .35 Remington auto-loading rifle, one of the powerful arms which have an important place in President Roosevelt's African hunting kit.

A Good Book for Poultrymen. A big book full of information and value for poultry raisers is the new 1909 catalog just issued by the Des Moines Incubator Company. This company, now generally recognized as one of the largest manufacturers of incubators and brooders, has been foremost for years in the perfection of machines and supplies, and it would be difficult to conceive of a greater line of proven worth. The days of doubtful experimenting are long past, so far as the Des Moines Incubator Company is concerned. Its incubators and brooders, made in a great variety of sizes and styles though all following the same general design, are known the world over for their excellent results. There are so many features of interest regarding the Successful and Eclipse incubators and brooders, the sanitary metal brood coop and other products of this company that space does not permit us to speak of them in detail at this time, but we want to urge our readers to write Des Moines Incubator Company, 156 2nd St., Des Moines, Iowa, now while the season is early, for their most interesting poultry book and catalog.

Avoid Complications in Descents and Distributions.

A., a widower with two children, married B., a widow with two children, and to their union three children are born. They buy a farm, going in debt considerably on it. A few years later B. receives her first husband's pension money to the extent of several thousand dollars. Her two children also receive pensions. With her money B. pays indebtedness on farm and makes improvements on same. If A. should die without making a will, what share of the property would the children get? Could A. make a will leaving the entire property to B. for her lifetime? If B. should die first what disposal would be made of it?—Inquirer, A. Kan.

If the farm and other property stand in A.'s name at the time of his death, his wife surviving him and there is no will, one-half of all the property will go to the wife and the other half will be divided equally among the husband's children. These children of the husband will share and share alike without reference to which wife bore them. The children of the wife by her former husband will inherit no share of the property that stands in their step-father's name.

On the death of the wife, if she have not married again and leaves no will, her half of the property received on the death of her second husband will be divided equally among her children without reference to which husband was their father. The husband's children by the former marriage will not share in this distribution.

If the wife should die first her children by her first husband would get none of the property. The husband may, in a will, direct such disposition of his estate as he desires, but the widow's right to half of the estate is not affected by such will unless she chooses to accept the provisions of the will rather than to receive the half which the law allows her.

In cases where the wife's money has bought property or has contributed to its purchase or improvement, or to the extinguishment of debt upon it, the proper way is to have the wife's interest appear in the ownership of the property. In cases in which large amounts are involved and the usual course of discounts and distribution would result in great injustice to heirs of the mother, it may be possible to show in a court of equity that the real ownership was in the wife and not in the husband, as per the record, and that the intent of the law should give the wife and her children by her former marriage their dues as they would have received them had the apparent ownership of the property been made to conform to the real ownership. But the courts are very loth to go back of the record as it appears at the time of the death of either party.

Complications and uncertainties are best avoided against while the parties live and have good health and clear minds.

THE

Enid Fine Stock Show and Sale

MARCH 25 TO APRIL 3

Grand Opening of the New Live Stock Pavilion

This building is the largest concrete live stock show and sales building in the world. It is 40 feet longer than any other building of like character. When completed it will have stalls for one thousand head of stock, seats for 5,000 people, electric lights, steam heat, and all other modern conveniences. Fine stock shows and sales can be held here regardless of the weather, as it is all under one roof.

Entries for the stock show close March 18th; more than one thousand head of registered stock has already been entered.

The Champion Horses, Cattle and Hogs of America will be at the Enid Fine Stock Show

It is the chance of a lifetime to see the champions.

There will be stock on exhibition and for sale, from Kentucky, Ohio, Indiana, Illinois, Iowa, Missouri, Nebraska, Colorado, Kansas, Texas, and Oklahoma. We will sell Percherons, Sires, Belgians, French Draft, German and French Coach, Hackneys, and Standard-bred horses. Shorthorns, Herefords, Galloways Aberdeen-Angus, Red Polled, Polled Herefords, Polled Durhams, and Jerseys.

Poland-Chinas, Duroc-Jerseys, Berkshires, Chester Whites, and O. I. C. hogs.

Many of the most prominent breeders in the United States are represented in this sale. No better stock can be bought anywhere than will be sold in this sale.

The Oklahoma Improved Live Stock Breeders' Association have a committee to inspect each animal offered for sale and examine their pedigree. No stock will be sold that is not as represented in the catalogue. Every live stock breeders' organization in Oklahoma will hold their annual convention during this show.

Everybody is invited to attend and help make Oklahoma the greatest live stock State in the Union.

debtedness, from the date when the money was received until the present, add this interest to the original amount, and then let the husband give to the wife an interest bearing note for the amount now due.

Chicago House Wrecking Co.

Five hundred page merchandise catalog just off the press, free to every reader of this paper. Positively the greatest bargain catalog of its kind ever published. It illustrates and describes thousands of wonderful bargains in merchandise of every kind including furniture, rugs, stoves, carpets, linoleum, machinery, hardware, steel, cable, rope, building material, lumber, roofing, electrical fixtures and goods, safes, vaults, vault doors, heating apparatus, tanks, pipe, fittings, fencing, plumbing material, etc. The Chicago House Wrecking Company's plant occupies a site of over 40 acres in area and has 31 separate and distinct departments. This concern does not purchase goods by regular methods. It depends upon sheriffs', receivers' sales for the stocks they secure. By taking advantage of business depressions, commercial disasters, bankers' sales, they are able to frequently secure the very finest, costliest and highest grade, brand new merchandise at less than actual cost of manufacture. They are universally recognized as the world's greatest bargain center. To fully appreciate the astonishingly low prices they quote on high grade merchandise, it is only necessary to compare their goods and prices with what regular retail concerns ask. The saving you will be able to effect if you buy from them will be tremendous, considering what you would ordinarily pay for the same grade of merchandise elsewhere. This concern issues a special 250 page bargain catalog of furniture, rugs, carpets, linoleum and stoves. This special catalog illustrates floor coverings in natural colors with reproductions so faithful and true to life that the articles appear almost real as far as color and pattern are considered. It is one of the finest, as well as costliest catalogs of its kind ever issued. We advise every reader of this paper to write to the Chicago House Wrecking Company at once and get both of these catalogs. They will be mailed free on request. Ask for catalogs No. 61. Address Chicago House Wrecking Co., 25th and Iron Sts., Chicago. See their advertisement on another page of this issue and read about the wonderful bargains they offer. This is the same concern that wrecked the Columbian World's Fair at Chicago, 1893, and the St. Louis World's Fair, 1904, as well as the Pan-American Exposition at Buffalo in 1902. If you contemplate erecting a home, barn, or building of any kind, write for their special plan book, which is mailed free if requested when writing for the other catalogs described above. They quote prices on houses complete, including everything required to build and furnish the home complete, excluding only the land and the labor. See ad on back page. Write for catalog 61 to Chicago House Wrecking Company, 35th and Iron streets, Chicago.

Improvements in Amattite Ready Roofing. Amattite roofing, which has for several years been growing rapidly in popularity among our readers on account of its no-paint mineral surface, is now being made with several little improvements designed to make it easier to lay. One of these is the smooth lap, left along the edge of the roll, about three inches wide, where the mineral surface is omitted. This smooth lap makes a

closer and tighter joint possible. The adhesive cement which is supplied with each roll now comes in liquid form and does not require heating before use. Instead of supplying nails and caps, the nails themselves have extra large heads, thus saving considerable bother in putting down the roofing. Readers who are unfamiliar with Amattite roofing should send for a sample to nearest office of the Barrett Manufacturing Company, New York, Chicago, Cleveland, Boston, Pittsburg, Kansas City, St. Louis, Minneapolis, Philadelphia, New Orleans and Cincinnati. See ad on another page.

The Man Who Keeps Cows

cannot fail to be interested in the handsome catalog issued by the American Separator Company, Bainbridge, N. Y. It is the finest work of its kind that we have seen put out by a separator company, containing over 75 excellent illustrations, which are both interesting and instructive. The working parts of the separator are shown in detail and convey clearly to the mind the extreme simplicity of the low down American Cream Separator, and the reason for its ease of operation, quick cleaning and ability to separate either hot or cold milk; milk from fresh cows or "strikers." Their system of selling, wonderfully low prices, liberal term of trial and attractive purchasing terms, are all fully explained in this catalog, while the general information on the separator subject is such that, whether you have a separator or not, you should have a copy of this catalog. You can receive one postpaid by addressing American Separator Company, Box 1119, Bainbridge, N. Y. See ad on another page.

A Kansas Man Likes His Galloway Spreader.

Wm. Galloway Co., Waterloo, Ia.—Dear Sirs: I received your wagon box spreader in good condition. Everything was all O. K. Must say that I am well pleased with it. I had no trouble in putting it together. Everything is so plainly outlined in your catalog and it works like a charm. I have tried it in all kinds of manure and it does all that is required of it, and all that you claim for it. The draft is light. I have been using a pair of little mules. They weigh about nineteen cwt. and they handle it nicely. I think this machine is just the thing for the average farmer, all things considered. Wishing you success in your business, I am D. B. Priest, Sabetha, Kan., May 21, 1908.

Plow With an Engine.

The large farmer can plow easily and profitably with such a gasoline plowing engine as that made by the Hart-Parr Engine Company, 216 Lawler St., Charles City, Iowa. Read what this company says in its ad on page 18. Write to the above address for a free illustrated catalog. We have seen the catalog. It is a great one. If you are at all interested in engine plowing, don't fail to get a copy of it. If you want complete information on this question you will get it from this fine free book.

Over 100,000 Old Trusty Incubators are now in use, made, as you know, by M. M. Johnson, Incubator Man, Clay Center, Neb. It's a splendid incubator, made by a man who knows all about incubators. Mr. Johnson's catalog is different from any you ever saw. Read Mr. Johnson's ad on page 17. Mr. Johnson pays the freight. Don't delay getting the catalog.

We Want Every Farmer to Send for Our Morecorn Sorter and Try It 3 Days Absolutely Free.

There is not a condition, not a hitch, not a single string tied to this remarkable offer. We just want every responsible farmer to let us prove to you that by grading and sorting your seed corn for planting with a "Morecorn Sorter" this season, you can

Increase Your Corn Yield 5 to 15 Bus. Per Acre.

Other farmers are doing this and making \$5 to \$10 more per acre. Just read this letter for proof: "The Corn Sorter I got of you last spring proved all right. Where I planted sorted corn the yield was about eight bushels more to the acre."

Think of it. It took just about three acres to pay for the machine. All the rest was profit. Can you beat it? Can you afford to be without it? Thousands in use. Highly endorsed by all the leading corn experts and agricultural papers.

Morecorn Sorter and Grader

The Only Guaranteed Corn Sorter Made.

"We guarantee the Morecorn Sorter to sort the seed corn so perfectly that any planter will drop three kernels to a hill ninety-five times out of every hundred." Do you know what that would mean if every farmer in Iowa alone had one? It would mean more than double the corn crop. The average corn stalks to a hill is only about one when it should be at least two. Think of it. Can you afford to be without a machine that means so much for your corn yield?

Take us at our word. Just send in your order today and let us ship you a machine, on 3 days' trial at our risk. We will trust you to treat us fair. Write for our booklet, "More Corn and How to Get It."

Monarch Self Feeder Co.,
110 Bridge Street,
Cedar Falls, Iowa.

"More Corn and How to Get It" is the title of a book we want to send you.

WRITE FOR IT TODAY.



The Morecorn sorts perfectly into four different grades.



Buy Your Harness Direct From Factory

You get a better grade and save all middlemen's profits. Finest quality of leather and workmanship. You've never had harness equal to ours—a one set trial will convince you. We have thousands of highly pleased customers in every western state and guarantee to please you.

Send Your Name and Address For **CATALOG FREE**
164 Page Complete Illustrated
Don't think of buying harness goods of any kind until you get this catalog—you can't afford to. Send right now and save 25 to 35 per cent.
H. & M. MARKET HARNESS SHOP, Box K South St. Joseph, Mo.



GET BUSY.

Sawing your summer's wood with the **DIAMOND SAW FRAME AND SAW.** The very best made. FULLY GUARANTEED. All styles of frames. All sizes of Saw Blades. Ask your nearest dealer, or write direct to the factory. Printed matter free.

NEW WINONA MFG. CO.
104 W. Fifth Street, WINONA, MINNESOTA



ARTIFICIAL

MARE IMPREGNATORS

For getting from 1 to 6 mares in foal from one service of a stallion, \$3.50 to \$6.00. Safety Impregnating Outfit for barren and irregular breeders, \$7.50. Serving Hobbles, Stallion Bridges, Shields, Supports, Service Books, etc., prepaid and guaranteed. Stallion Goods Catalog FREE. **CRITTENDEN & CO. Dept. 32 Cleveland, Ohio.**

Kansas Farmer Advertisers Get Results

FIELD NOTES

FIELD MEN.

O. W. Devine.....Topeka, Kan.
 Jesse R. Johnson.....Clay Center, Kan.
 J. W. Johnson.....Beloit, Kan.

PURE BRED STOCK SALES.

Shorthorns.
 Apr. 24—Brown County Shorthorn Breeders' Association, Everett Hayes, Mgr., Hiawatha, Kan.
 June 10—C. S. Nevius, Chiles, Kan.
Herefords.
 Apr. 27—Samuel Drybread, Elk City, Kan.
Poland Chinas.
 Mar. 26—Geo. M. Hebbard, Peck, Kan. Sale at Clearwater, Kan.
 Apr. 10—H. M. Stacy, Iuka, Kan.
 Sept. 30—Mrs. Wm. Britte, Pierce City, Mo.
Duroc Jerseys.
 Mar. 26—Stock Show and combination sale, F. S. Kirk, Mgr., Enid, Okla.
Draft Horses.
 Mar. 24—North & Robinson, Grand Island, Neb.
Aberdeen-Angus.
 Mar. 23—Combination sale at State Fair grounds, Lincoln, Neb. T. A. Gierens, Manager.

O. N. Wilson of Silver Lake, Kan. is advertising a pure bred French draft stallion at a bargain. He is a sure breeder, 5 years old and over 16 hands high. Write Mr. Wilson about him and mention Kansas Farmer.

W. H. Molyneux, breeder of choice Barred Rocks at Palmer, Kan., has an advertisement in the poultry department this week. He is offering eggs from birds of the kind that he has been improving for the past ten years.

Mrs. Fred Finuf, Single Comb Brown Leghorns specialist at Olsburg, Kan., starts an advertisement in Kansas Farmer this week. Mrs. Finuf has a fine flock of farm range birds and is pricing eggs at bargain prices. Write and mention this paper.

At the David G. Page Berkshire sale W. B. & J. M. Rogers of Beloit, Kan., were the lucky purchasers of Betsy by Speculation by Masterpiece and out of Alice Majestic by Woodlawn Premier 85175. She was sired by Woodlawn of a \$3,000 boar and her dam was the champion of the American Royal. She was the best gilt in the sale and her purchase price was only exceeded by a mature sow.

Maple Ridge Stock Farm, breeders of choice Poland Chinas and owned by W. A. Hill, Grand View, Mo., reports the sale of Meddler Boy who had been advertised in Kansas Farmer to E. E. Watkins, Opeka, Kan. This is good luck for Kansas as Meddler Boy is of the kind we want here. Mr. Hill still has one of Meddler Boy's sons and also a son of the great show boar The Captain, for sale. There are some splendid fall pigs of both sexes at Maple Ridge farm. They are of the kind you want. Write Mr. Hill and he will tell you about them.

Volume 71 of the American Shorthorn Herd book which contains 20,000 pedigrees, is just off the press. In this book will be found the pedigrees of 9,000 bulls numbered from 282001 to 291000 inclusive and of 11,000 females numbered 12001 to 23000 inclusive. Secretary John W. Groves announces that volume No. 72 containing 20,000 pedigrees is about half off the press. Vol. 73 has been closed and his office force is now filling pedigrees for Vol. 74. The American Shorthorn Breeders Association has its headquarters office at the Stock Yards Station, Chicago, where its very efficient secretary is always to be found on duty.

R. H. Sollenbarger, owner of the Peerless Stock Farm, Route 2, Woodston, Kan., is a breeder of high class poultry as well as choice Duroc Jersey hogs. Mr. Sollenbarger's Durocs have been long and favorably known throughout the country and now he is offering eggs for hatching from a very choice lot of Single Comb Brown Leghorn hens. He has 200 of these hens which he has carefully culled and mated with high scoring males that are from laying strains. Brown Leghorns are noted for their ability as layers and when they have been specially bred for egg production under the careful management of as skillful a breeder as Mr. Sollenbarger the results ought to be right. Try some of these eggs and report results to Kansas Farmer.

The South Mound herd of Poland Chinas is composed of 20 sows that will actually average 550 pounds and 15 gilts from these sows. All of these are bred to extra good boars such as Michael's Wonder, Orphan Chief, John Long, First National, Logan You Tell, Mammoth Ex. and Logan Ex. Anyone wanting first class breeding stock will know this is the place to get it. With their array of good boars and with sows sired by Blain's Wonder, Expansion, Expander, Logan B. Prince You Tell, Prince Wonder, Hutch, Hull's Hadley, Grand Look, Columbia Chief 2d, Sampson and Mammoth Ex., the young stuff surely should be good. Mr. Johnston has 62 spring pigs now and more than 20 sows yet to farrow. He can supply your wants in the early pig line before long or he can sell you some choice fall pigs right away and at reasonable prices. Everything Mr. Johnston sells is guaranteed to be just as represented or you get your money back. Just say to him that Kansas Farmer advised you to write your wants and get the prices.

Col. Burger Busy.

Col. L. F. Burger, the well known auctioneer, writes that he has been very busy the past two months; but can now spare a few dates for April and May sales. If you need an auctioneer write Col. Burger at Wellington, Kan.

A Car Load of Jacks.

Do not fail to read the new ad of Al. E. Smith of Lawrence, Kan., offering special prices on a car load of Kentucky and Tennessee black Mammoth Jacks. Write today for prices if you want to buy. Kindly mention Kansas Farmer.

North & Robinson Change Date of Sale.

The date of the spring sale of draft horses which was advertised by North & Robinson of Grand Island, Neb., to be held March 24 has been changed to April 7, 1909, on account of their importation of Belgian and Shire mares having been shipped later than expected. These imported mares will now arrive at their stables about March 20 and will be immediately entered in their sale catalog which will be ready for distribution about April 1. This sale will be the event

of the season in the horse line as North & Robinson have a large stock of imported and home bred registered stallions and mares on hand which will be sold in addition to those about to arrive. Send for catalog.

The Kanwaka Jack Farm.

A fieldman for Kansas Farmer had a pleasant visit recently with Mr. Al. E. Smith, the proprietor of the Kanwaka Jack farm at Lawrence, Kan. Mr. Smith has just received a car load of very high class Jacks, and is pricing them very low for quick sale. The readers of Kansas Farmer are invited to look up Mr. Smith's ad on another page and write for description. But a better way if you want to buy is to go look them over, then when they are priced you will buy. Mr. Smith's specialties are the large Mammoth black Jacks, and any visitor will find on this farm a clean lot of Jacks ranging in age from large 2-year-olds to 8-year-olds, with plenty of size, big bone, excellent feet, good head and ears, with style and finish to spare. Kindly mention Kansas Farmer when writing.

Last Call for the Powell Hereford Sale.

Bargains are always to be had at dispersion sales and the wise man will keep in mind the date of W. S. Powell's Hereford sale which will be held at Moline, Kan., on Wednesday, March 24. The herd bull Chief Louis 75990 who is a blue ribbon winner and who was sweepstakes bull at the Greenwood county fair will be sold. His steers have always been winners. There will be 35 cows by such bulls as Stanley 12941, Royal Boy winner at the 1900 Royal and brother to Wood's Principal the International grand champion steer of 1901, Jurymen 30273, Judge Victor 62246 and Lord Saxon. Also four young bulls and 16 yearlings and 2-year-old heifers, not bred. Everything goes and there will surely be some snaps for the lucky buyers who attend this sale.

Annual Sale of 60 Head of High Class Registered Angus Cattle.

This great sale will be held on March 23, at the State Fair pavilion, Lincoln, Neb. These cattle will be consigned from several prominent Nebraska herds, the pick of the flock from each herd. There will be about 25 bulls and 35 females offered. Every animal is in breeding shape and many of the cows will have fine calves at foot. The bull consignment is also choice, consisting of yearling and 2-year-old bulls. These cattle embrace the following Aberdeen-Angus families: The Queen Mothers, Prides, Blackbirds, Duchess, Verberna, Baiwillo, Jaquennetta, Sweethearts, Haddo, Juno, and others. The consignors to this sale are S. W. Young, North Bend, Neb.; A. B. Christian, York, Neb.; M. H. Krabberger, Gothenburg, Neb.; W. H. Kirtley, T. A. Gierens, and D. N. Syford, Lincoln, Neb., any of whom will send catalogs on request, or persons wishing other information can apply to D. N. Syford, secretary, Lincoln, Neb. Now take a day off and come to Lincoln and buy some of the market topping kind, "for the Daddies are winning the laurels" and driving all horns from the land.

A Great Sale of Percheron Horses.

During the Oklahoma Improved Live Stock Breeders show and sale which will be held at Enid during the week of March 29 to April 3 and to which more than 1,000 animals have been consigned for sale. One day will be devoted entirely to the sale of draft horses. This will be April 2 and will probably be the greatest sale of draft horses ever held in Oklahoma. J. C. Robison of Towanda, Kan., who has for several years broken records at his annual sales and who has got the habit of doing it, will consign 20 head and will exhibit Casino, the reserve champion at the St. Louis World's Fair. The Agricultural Mechanic College, Oklahoma, has consigned Kessler, a son of Casino, which they have used and will now sell. J. C. McCarty of Enid will consign his entire stud of Percherons including a number of colts by Casino and two mares that were in the show herd of Mr. Robison where they were both prize winners. Frank Watson of Clearwater, Kan., consigns four Percherons, two of which are imported. W. H. Cottingham of McPherson, Kan., with some other parties have consigned a car load of stallions and mares. The names of these breeders a sufficient guarantee of the offering of the sale.

Postponement of Pilcher Sale.

Because of the worst snow storm of the season Chas. Pilcher of Glasco, Kan., was compelled to postpone his sale of Poland China bred sows to March 26. There were a few there a few there but not enough to justify Mr. Pilcher starting the sale. Several breeders succeeded in getting there and a few of Mr. Pilcher's nearest neighbors. It was the opinion of those who did come that this was the toughest offering of Poland that Mr. Pilcher has ever made. The fieldmen and auctioneers agreed that it was the best offering of bred sows they had seen on offer this season. Fortunately almost all of the sows are bred to farrow in April with a few that are due the last of March. They are the big roomy kind with the finish and quality that Charlie always insists on. They are many of them out of old Glasco Chief, considered by many the best producing Poland China sire ever owned on the Solomon. All are safe to the service this old hero or Winning Granitum or Conqueror. All have immense size with the desired quality as well. This may strike you as a very busy time but you will never regret it if you attend this sale. J. W. Johnson of Kansas Farmer will be there and you can send your bids to him with perfect safety if you cannot attend. Remember the date, Friday, March 26, at the farm near Glasco, Kan.

Last Call for Hendershot's Great Stallion, Jack and Brood Mare Sale.

Mr. Hendershot writes us to say to prospective buyers that his stock are in good breeding condition, but not a fat animal in the entire offering. The entire lot of 50 head are of the best types of the breed and will certainly not sell high owing to their thin condition. We all realize the fact that a brood mare or a stallion to do the best good for the purchaser, should not be over fat. I reserved the mares in this sale for my own use and had not fed them an ounce of grain until after Feb. 1, when I decided to make my second sale. If my judgment was good in selecting for my personal use in the breeding herd, you will get the best of all I had, for they are included in this sale. Many of our very best judges of draft horses said of my last sale "They are the best boned lot of Percherons we ever saw." Mark Woods said, "O. P., I don't see but what your horses are just as good as are produced in France." H. G. McMillan, president of the Percheron Society of America, said, "They are as good as can be found in America or in France." Mr. A. L. Sullivan of the Lincoln Importing Co. said, "Mr. Hendershot, I have been importing Percheron and Belgian horses for twenty-five years, and I want to say that I am more than ever convinced that we can produce just as good horses in America as

in the old world," adding to the above remarks: "I never saw a better boned lot of stallions and mares in France." Any person that will take the time to think will realize the fact that we have the same blood lines that are produced in France in our horses that are produced in France. Our horses are no better than the imported horses if the imported horse has the same individuality and is as good in every other particular. I have both to offer you at my sale and I want you to be the judge. Write for catalog and mention this paper. Sale at Lincoln, Neb., March 26, 1909.

The Springfield Sale of Berkshires.

On Friday, March 12, at Springfield Farm near North Topeka, Mr. David G. Page held his first annual sale of big boned Berkshire bred sows and gilts under the most discouraging circumstances. The several storms of the past few days had rendered the roads well high impassable and this, together with the fact that Mr. Page had been compelled to change his sale date so that buyers were a little uncertain as to when the sale would be held, served to give him but a small crowd as compared with what he should have had. The hogs offered were in excellent breeding condition and were presented in fair condition. All of the bred sows sold with fair promptness but there was not so good a market for open gilts. The sale was handled by Col. Chas. Crews assisted by Col. Joe Pollock. The top of the sale was \$50 brought by Robin Hoods Black Girl 2d, who went to J. S. Moore, Fairfield, Neb., though many men at the ringside considered the young sow Betsy to be the best thing offered. This lot went to W. B. & J. M. Rogers, Beloit, Kan., who now owns a sow that was sired by the sire of a \$3,000 boar and whose dam was the champion at the American Royal. Representative sales are given:

1—W. B. & J. M. Rogers, Beloit, Kan. \$35.00
 2—Nels Holm, Menoken, Kan. 25.00
 3—J. S. Moore, Fairfield, Neb. 27.50
 4—J. M. Priddy, Elmont, Kan. 40.00
 5—Wm. Hotchkiss, Berryton, Kan. 30.00
 6—A. J. Schuler, Chapman, Kan. 37.50
 7—Dr. H. U. McCurdy, Hutchinson. 30.00
 8—J. S. Moore, 30.00
 8 1/2—Wm. Hotchkiss 30.00
 9—J. S. Moore 50.00
 10—Dr. H. U. McCurdy 30.00
 11—A. J. Schuler 30.00
 11a—Dr. H. U. McCurdy 32.50
 12—Dr. H. U. McCurdy 27.50
 42—J. M. Priddy 27.50

F. M. Gifford Makes His Usual Good Sale.

Fred Gifford's 25th annual sale of Short-horns held at Clay Center, Kan., attracted a big crowd in spite of bad weather. Although there were no sensational prices paid the demand and the bidding quite brisk throughout the sale. The offering was just right as to condition and statements regarding their particular merit made by Mr. Gifford were received eagerly by the crowd and in nearly every instance stimulated the bidding. The top price paid for bull was \$195 for Senator Charming, the great yearling bull by Senator Bruce. He went to H. C. H. Borgmann of Smith Center. A young Mary 2-year-old heifer by Senator Bruce topped the female division, T. S. Rowland of Palmer, Kan., buying her at \$235. Col. Sparks and McCulloch were the auctioneers assisted by Harry Little of Manchester and Chas. Haganbach of Morganville. The entire offering averaged \$128 per head, the bulls, of which there were 16, making an average of \$134.60. A list of sales follows:

MALES.
 1—Orange Blossom 33d, S. B. Amcoats, Clay Center, Kan. 165.00
 2—Queen Victoria 6th, P. M. Borland 175.00
 3—Princess Butterfly, C. G. Cochran & Sons, Plainville, Kan. 120.00
 4—Verberna 6th, P. M. Borland 85.00
 5—Senator Mary, J. D. Shepherd 80.00
 6—Modest Mary, T. S. Rowland, Palmer, Kan. 130.00
 7—Rose Bruce, J. D. Shepherd 120.00
 8—Grand Mary, T. S. Rowland 235.00
 9—Cordelia Bruce, O. G. Rowland 117.50
 10—Ruby Clark, J. D. Shepherd 80.00
 11—Nora's Belle, E. L. Linden, Clay Center, Kan. 105.00
 12—Helen, T. S. Rowland 152.50
 13—Conqueror's Wapsie, E. U. Woods 107.50
 14—Mary, J. D. Shepherd 112.50
 15—Lady Sueham, J. D. Shepherd 107.50
 16—Mary Clark, J. W. Molyneux, Palmer, Kan. 80.00
 17—Springdale Mary 19th, H. C. H. Borgmann 150.00
 18—Lady Mary 11th, Fred Chayer, Morganville, Kan. 150.00
 19—Jaqueline, J. W. Molyneux 80.00
 20—Orinda 2d, A. Michaelson 130.00
 21—Justina, J. D. Shepherd 120.00
 22—Weston Belle 6th, C. C. Moore, Idana, Kan. 72.50
 24—Mary Knight, Lloyd Hansen 95.00

FEMALES.
 1—Orange Blossom 33d, S. B. Amcoats, Clay Center, Kan. 175.00
 2—Bampton Senator, C. H. Jewell, Concordia, Kan. 140.00
 3—Victor Butterfly, E. U. Woods, Wakefield, Kan. 170.00
 4—Baron Bruce, Louis Wetzel, Junction City, Kan. 105.00
 5—Senator Charming, H. C. H. Borgmann, Smith Center, Kan. 195.00
 6—Marius, A. Michaelson, Clay Center, Kan. 150.00
 7—Valerius, W. C. Hyde, Beloit, Kan. 115.00
 8—Golden Marquis, Lloyd Hansen, Clifton, Kan. 185.00
 9—Lord Bruce, Peter Eagan, Junction City, Kan. 100.00
 10—Golden Duke, J. Z. Sterrett, Morganville, Kan. 100.00
 11—Judge B., A. Amthauer, Junction City, Kan. 90.00
 12—Victor Bruce, T. P. Jones, Riley, Kan. 185.00
 13—Beulah's Champion, Gus Fronhart, Wakefield, Kan. 140.00
 14—Jim Reed, Oscar Hiltz, Clay Center, Kan. 135.00
 15—Champion 2d, J. D. Shepherd, Clay Center, Kan. 125.00
 16—Rocket, John Holcomb, Morganville, Kan. 95.00

Kansas Farmer has just received a very handsome calendar from the Spring Hill Breeding Farm owned by C. G. Cochran & Sons, Plainville, Kan. Spring Hill Breeding Farm is the home of the largest herd of Shorthorns in Kansas. Their specialty is the supplying of bulls in large lots for the big breeders and in this they have been remarkably successful. The good old Bates blood, than which there is nothing better, can be found in great quantity and purity in this herd and bulls of different ages are always on hand and for sale. If you want an out cross or if you want to grade up your herd go to the Spring Hill Breeding Farm where there are 300 head to select from.

The Wrightwood Sale.

March 10 was the day for the Wrightwood sale. Notwithstanding the bad storm and snow blockade, an average of \$30.86 was made on the entire offering. There were several real bargains passed through the ring

and the breeders and farmers present were not slow to pick them up. Col. L. F. Burger and Col. John D. Snyder did the selling and handled the sale in a very able manner. Mr. Wright realized that his average was not as large as he expected, but Mr. Wright is one of those good natured fellows that never complains, and had not the local snow storm arrived it would have been easy to have obtained a \$35 to \$37 average on the whole offering. Following is report in full:

1—G. Niles & Son, Goddard, Kan. \$39.00
 2—C. B. Palmer, Peabody, Kan. 45.00
 3—Perry Smith, Valley Center, Kan. 24.00
 4—Waldo Haas, Lyons, Kan. 34.00
 5—A. K. Snyder, Winfield, Kan. 21.00
 6—W. L. Reineau, Valley Center, Kan. 20.00
 7—S. P. Prince, Moundridge, Kan. 25.00
 8—A. K. Snyder 23.00
 9—John Herman, Wichita, Kan. 30.00
 10—W. R. Shearer, Hennessey, Okla. 37.00
 11—Geo. Haas, Lyons, Kan. 36.00
 12—E. H. Smith, Valley Center, Kan. 20.00
 13—C. B. Palmer 32.00
 14—C. B. Palmer, Valley Center, Kan. 22.00
 15—J. W. Sparks, Conway Springs, Kan. 27.00
 16—W. R. Shearer 28.00
 17—A. K. Snyder 22.00
 18—Geo. Haas 22.00
 19—W. L. Reineau, Valley Center, Kan. 25.00
 20—Boar, Edward Smith 15.00
 21—A. K. Snyder 22.00
 22—Boar, C. F. Wright, Valley Center, Kan. 15.00
 23—L. W. Clark, Conway Springs, Kan. 34.00
 24—H. C. Stacy, Pratt, Kan. 22.00
 25—H. C. Stacy 30.00
 26—C. B. Palmer 45.00
 27—L. B. Barryman, Franklin, Ill. 35.00
 28—E. L. Spore, Valley Center, Kan. 50.00
 29—E. L. Spore 52.00
 30—Geo. Haas 44.00
 The total of sale for the 31 head sold was \$926 or an average of \$30.86. This was a little below the real value.

Reber's Two Successful Sales.

D. E. Reber & Sons' Percheron and Short-horn sales held at Hiawatha, Kan., on Friday and Saturday of last week were events that will be remembered for some time by those that were fortunate enough to be present. The horses were sold the first day and one of the biggest crowds ever seen at a ringside in the State faced Col. Bellows when he opened the sale. Deep snow and a probability of colder weather had no terrors for the progressive farmers and breeders that had read Messrs. Reber's announcement in the different farm and live stock papers that circulate in Kansas and adjoining States. The offering was certainly a great one and fully appreciated by the audience. The great herd stallion imp. Botin topped the sale at \$1,750, breaking the sale record on stallions for the year. He went to H. M. Meyers of Hiawatha. Eight stallions sold at an average of \$793 and 23 mares averaged \$448.05, general average \$526. Following is a list of sales:

1—Imported Botin 42940 (\$1,750), H. M. Meyers, Hiawatha, Kan. \$1,750.00
 2—Imp. Gerandel 553777 (\$989.77), W. C. Meyers, Hamlin, Kan. 1,150.00
 3—Bodorin 54634, John Kilborn, Laredo, Mo. 830.00
 4—Miss Lilly 33815, Jas. Overfield, Hiawatha 490.00
 5—Lisa 52233, W. S. Cora, White Hall, Ill. 425.00
 6—Dora 42287, W. S. Cora 755.00
 7—Maude 45359, W. S. Cora 625.00
 8—A. J. Dodson, Mexico, Mo. 405.00
 9—Elouisa 50430, John I. Brown, Minneapolis, Kan. 300.00
 10—Valentine 33897, J. C. Robison, Towanda, Kan. 500.00
 11—Maude Casine 54533, W. S. Cora 675.00
 12—Jannette 41960, Jas. Overfield 410.00
 13—Val-Casine 54532, Lee Bros., Hiawatha, Kan. 450.00
 14—Reins 57340, John I. Brown 205.00
 15—Bovalin 58492, Jas. Overfield 465.00
 16—Valerius 58489, S. J. Miller, Kirksville, Mo. 295.00
 17—Maudine 58535, John I. Brown 225.00
 18—Miss Voyage, John Bollen, Leavenworth, Kan. 405.00
 19—May Swell 7289, Gus Aaron, Leavenworth, Kan. 500.00
 20—Queen Voyage 7288, J. H. Seld, Nemaha, Neb. 400.00
 21—Lorelle 6303, Wm. H. McIntosh, Heshumer, Neb. 380.00
 22—Lena 50255, J. H. Acker, Leoma, Kan. 530.00
 23—Brandon 2d 53493, A. J. Dodson 520.00
 24—Jewel 7307, G. Yost, Kaker, Kan. 390.00

MISSOURI
PACIFIC
IRON
MOUNTAIN

Through train service between Topeka and

Fort Scott
Pittsburg
Carthage
Webb City
Joplin

Leave Topeka 9
A. M.

J.G. PEPPARD BUYS AND SELLS
MILLET, CANE, KAFFIR, POPCORN, SEED CORN, ALFALFA, TIMOTHY, CLOVER
AND ALL KINDS OF **FIELD AND GRASS SEEDS**

SEED CORN \$1.50 BU.

Made from California Red Wood, will stand all kinds of weather without checking, warping and leaking; will last twice as long as pine; no knots or sap lumber used.
Send \$9.00 for a crate of five 8 fr. 1 1/2 story hives complete with sections and starters.
No. 1 snow white sections \$4.75 per 1,000.
All goods guaranteed to be first class.
Send for sample lot and you will use no other. Catalog free.

634 Quincy St. TOPEKA SUPPLY HOUSE, Topeka, Kansas

For thirty years the trotting-bred horse has been a decided favorite in and about Cawker City, Kan. At present between forty and fifty standard-bred mares and fillies are owned in the city or at adjoining farms. Since 1890 over twenty standard-bred stallions have stood for public service at this place, among the number several sires of good race horse trotters or pacers. Of record-breaking stallions, Cawker City has been the home of Myron McHenry, 2:15½; Eggleton, 2:16¾; Equity, 2:23¾; Borden, 2:24¾; Virgil K., 2:25; George Crossman, 2:25¾; Ed Sutherland, 2:29¾, and Melton, 2:30, while Alfred Moyer, 2:31¾, and France, 2:36, have made stud seasons at this place. Two speed-siring sons of Ashland Wilkes, 2:17¾, were owned here at the same time.—Western Horseman.

O. Z. Smith and Deed Tinker of Wichita Kan., have sold to Thomas Murphy, Poughkeepsie, N. Y., for \$2,600, the chestnut trotting mare Alice Roosevelt, 5:15 1/2, by The Searcher, (2) 2:17 1/4; dam, Pap Flaxen, (2) of Kappa Gamma, (2) 2:43 1/2, by Black Hawk McGregor, 2:25 son, of Robert McGreggor, 2:17 1/4; grandam Josephine Young by Joe Young 3:15. In many respects, Alice Roosevelt is the most remarkable trotting mare yet bred in Kansas, as after several campaigns she is as sound as any horse in the world—not a sign of racing to be found on her at any point; not a windpuff, scar or other trace of usage. And she is a handsome mare, thoroughly broken, afraid of nothing and absolutely safe for a woman to drive.—Western Horseman.

Protection From Lightning.
Real protection is what you want, and you get it with the Dodd and Strothers system of lightning rod construction. The firm is perfectly reliable and carries out its promises. Write for further information to Dodd and Strothers, Des Moines, Iowa.

Value of the Drill.
To place a value on the drill or the use of the drill is a very hard problem as regards it the farmer's friend, and almost invaluable to the wheat grower of any State. I believe I am safe in saying it will save from one-third to one-half to the crop or at least that has been my experience. I use a disk drill with press wheels as I find no grain comes up more even and will stand more drouth.—A. S. Steward, Kibby, Okla.

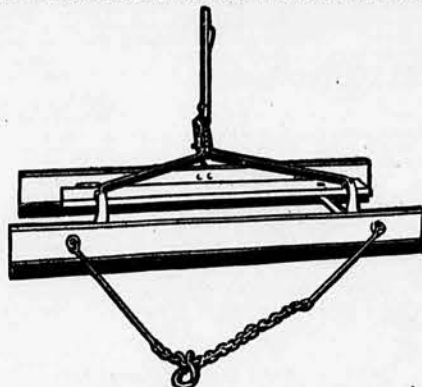
The Monarch Self Feeder Company has a corn sorter which it appropriately calls the "Morecorn Sorter and Grader." It is guaranteed and it sorts perfectly into four different grades. One of these graders and sorters will increase your corn yield. You can get one and try it three days absolutely free. A fee will be offered surely. See ad on another page of this paper. Write for booklet "More Corn as How to Get It." Address Monarch Self Feeder Company, 110 Bridge St., Cedar Falls, Iowa.

Accidents Are Liable to Happen.
You should always have handy a good li-
ment to cure bruises, strains, sore
pains, remove inflammation, burn a heal-
wire cut, wound or scar tissue and heal
hair on and leave no blemish. Absorbine
an antiseptic healing preparation, as well
a resolve and discentent. It will assist
healing about a dislocation of the bone
and in the under the skin, red

"A Kaleidoscope Direct to You"

The selling plan of the Kalamazoo Stove Company, from the factory to the user, is world famous and their slogan "A Kalamazoo direct to you" has become a household word. Kalamazoo records show that these stoves are represented now in every country on the globe. There surely is no more progressive stove company in the whole world than this. The advantages of their direct-from-factory-to-user method of selling are based upon economy. They make the price low and prepay the freight. One hundred thousand Kalamazoo stoves are now in use in this country. Mr. William Thompson, manager, is a man of strong personality and strong conviction an originator and new to a company. He knows stoves and ranges as an artist knows his pictures. He has confidence in his stoves and this makes him enthusiastic. Mr. Thompson also has confidence in human nature and he is going to make one change in his selling method. Beginning with this season, now, the Kalamazoo Stove Company will sell on credit where credit is desired. Responsible persons can open an account with the Kalamazoo Stove Company. This will be a convenience to many and will doubtless increase the sales of the Kalamazoo stoves. Merit alone has sold these stoves in the past and now they possess this added advantage of being purchasable on a charge account, which places them virtually within the reach of every one with a home and, of course, the field is limitless. In a recent conversation Mr. Thompson said, "If people have confidence in us to take our word for the quality of our stoves, then we will have confidence in them to take their word for that they will pay for them." And generous terms are, therefore, made wherever a customer asks for credit. If you haven't seen the Kalamazoo stove catalog, you ought to see it, for it is a beauty. It describes and illustrates every kind of a stove and tells about the terms, cash or credit, on which they are sold. The catalog will be sent free upon request to the Kalamazoo Stove Company, Kalamazoo, Mich. Ask for catalog No. 133 and say you saw the offer in Kansas Farmer.

The Best Road Drag.
The greatest improvement of any kind in road making machinery is shown in the split log drag. Everyone who is responsible for the making and maintenance of dirt roads, and especially everyone who uses dirt roads, is ready to admit the truth of this statement. All State and other good roads associations heartily endorse the drag, and every demonstration made with it has received the endorsement of the leading agricultural publications of the country. Some time ago professor at the Agricultural Experiment Station at Hays City conceived the idea of attaching the rear plank of his road drag in a slanting position, leaving the front



vertical. He found this was a decided advantage in some cases, though not in all. It remained for the Coffeyville Implement and Mfg. Co. of Coffeyville, Kan., to improve upon both the principle and the subsequent ideas in drag and build an adjustable drag that meets the requirements for all purposes. It weighs but 150 pounds, is easily handled by one team, is steel faced and leaves nothing to be desired. When set with both planks upright it has two cutting surfaces which make of it the best known implement for road building and for ditch cutting. When set at an angle by the lever it is the best possible machine for surfacing and finishing roads. The accompanying picture will give a very good idea of the implement which is to be placed on the market in the very near future by this enterprising manufacturing company.

The Big Hereford Sale at Kansas City.
The third annual combination sale of Hereford cattle made by the big breeders and managed by K. T. Thornhill at Kansas City on March 9 10 and 11. Good animals, good auctioneers a good crowd of buyers and fairly good weather combined to make a good sale. Although the animals came from 15 different herds they were remarkable for uniformity thus showing that all progressive breeders are aiming for the production of the same type. The prices were also uniform as was to be expected. Onward 71st contributed by the Funkhouser estate topped the sale at \$775 after some spirited bidding. He was bought by H. D. Conish, Osborn, Mo. A very large proportion of the entire offering was purchased by Kansas farmers and breeders thus showing that the Hereford business is on the up-grade in the Sunflower State. The sale was conducted by Col. Edmonson, Sparks, Brady and Zaun, which made about the strongest combination possible. The sales of \$85 or over were as follows:

BULLS.	
53—Dandy Andrew 16th, Meyer Land & Live Stock Co. Evanston, Wyo.	\$155.00
1—Onward 66th, D. B. Dubridge, Perry, Ia.	130.00
55—Majestic 10th, Wm. Henn, Kansas City, Mo.	125.00
14—Perry, Alex Bates, Laramie, Wyo.	85.00
54—Dandy Andrew 17th, R. T. Alexander, Canadian, Tex.	90.00
112—Columbus Rex, Wm. Henn.	85.00
32—Bell Boy, W. C. Tanner, Piper, Kan.	160.00
51—Gallant Lad 2d, N. T. Hunt, Garnett, Kan.	110.00
23—Forest King, H. M. Ramp.	100.00
62—Columbus H., Noah Butts.	195.00
104—Onward A. 6th, Dean Bros., Plainville, Kan.	800.00
125—Hill's Pride, Wm. Uhrig, Belvue, Kan.	130.00
51—Dandy Andrew 20th, J. S. Sifers, Hutchinson, Kan.	140.00
45—Happy Choice 19th, Wm. Uhrig.	185.00
53—Gallant Lad 7th, J. S. Sifers.	140.00
3—Onward 71st, H. D. Cornish, Osborn, Mo.	775.00
72—Prince Columbus, Dean Bros.	125.00
13—Billie Bryan, Henry Voegel, Berlin, Ia.	160.00
102—Forward, William Henn.	175.00
33—Alexandria, William Henn.	175.00
33—Gallant Lad 5th, Alex Bates.	90.00
50—Dandy Andrew, Jones Bros., Council Grove, Kan.	265.00
123—Veto B., Alex Bates.	85.00
119—Bert, William Henn.	105.00
40—Happy Choice 16th, Meyers Land & Live Stock Co.	100.00
4—Promoter 4th, J. L. Barrow, Savannah, Mo.	200.00
12—Captain, Fred Cottrell, Irving, Kan.	255.00
92—Paragon 13th, R. C. Brown, Ireton, Ia.	200.00
23—Commodore, C. I. Mullinaux, Princeton, Mo.	105.00
63—Columbus 18th, Dean Bros.	115.00
36—Majestic 16th, Meyers Land & Live Stock Co.	145.00
114—Alwarth, William Henn.	100.00
11—Meddler, Meyers Land & Live Stock Co.	125.00
21—Commander, Alex Bates.	90.00
51—Majestic 5th, William Henn.	110.00
74—Substitute Sunset Champion, Alex Bates.	125.00
23—Onward 68th, William Henn.	95.00
25—Elector, John B. Scheppers.	95.00
50—Columbus Prize 15th, J. J. Dimmitt	85.00
10—Armour Anxiety 1th, Meyers Land & Live Stock Co.	200.00

Chicago House Wrecking Co.,
Chicago, Ill.

Gentlemen: Kindly mail us your lowest price on the following lumber; also kindly mail us your latest catalogue.

You have already shipped us through F. R. Barrett, three (3) carloads, two (2) of which have arrived and been unloaded and everything is up to standard just as you represented. The mlooring has not as yet arrived.

(Signed) NORTON BROS.

Chicago House Wrecking Co.,
eneca, Kan., 9-21-08.

Gentlemen: We have our lumber used and have been trying to get up another load as we have been so well pleased with this one, which is a great inducement

Mr. ——— who is here now looking over
our lumber, is very well pleased with it.
Your lumber will stand looking at, and you
can use my name if you wish to.
(Signed) FRANK GOBACK

Hills Station, Ohio, Clement Co
Nov. 16, 1908
Chicago House Wrecking Co

Chicago, Ill.
Gentlemen: The car of lumber reached destination Tuesday night, was unloaded Wednesday and the men that unloaded say it is as fine a car of lumber as they ever saw.

I am well pleased and everything was fine condition.
Thanking you for the prompt shipment remain,
Respectfully,
(Signed) MRS. E. N. GRAY

Look up the advertisement of Chas. D. Osage City, Kan., in the want column this issue. He is offering at farmers' price 20 Duroc gilts. Their dams are out of 1,043 pound Ohio Chief Jr., and these gilts are sired by a son of Kant Be Beat and are in pig to a son of W. L. A.'s Choice Good. Can you get better breeding? Write at once they are going cheap.

At the Lincoln Horse Barns.
The Lincoln Importing Horse Company, Lincoln, Neb., say in their advertisement that there is big money in the stallion business. This is true, if one has the right kind of a stallion, and does not have to pay much for it. There is certainly big money in it for those who buy from this Lincoln firm, for they sell only the better sort of horses, and the fact that they sell so many of them is satisfactory proof that they sell them at right prices. The Lincoln Importing Horse Company handle both American

RICH MEN'S CHILDREN

By Geraldine Bonner

Copyright 1906 by the Bobbs-Merrill Company.

(Continued from last week.)

Cannon was speculating as to the merits of the likeness when he heard the silken rustling of skirts, and turned to greet his old friend. She came in smiling, with extended hand, richly clad, the gleam of a fastening jewel at her neck. Her hair was dressed with a shining, smooth elaboration, drawn up tightly at the sides and arranged over her forehead in careful curls. As she and her visitor exchanged the first sentences of greeting he noticed that she looked older and more worn than she had done the last time he had seen her, but her face was as full of pugnacious force as ever. While Della Ryan's body lived her spirit would hold its dominion. She had ruled all her life and would do so to the end.

They sat down on either side of the fire and the old man said:

"I don't know whether I ought to be in here. The Chinamen left me to my fate, and I had to nose about myself and find out where I belonged."

"Oh, that's Lee," she answered with a short laugh. "He waits on the door every other Sunday. We've had him ten years and no one's ever been able to make him show people into the parlor. He thinks it better to leave them standing in the hall till one of us sees the card. Then he'll go down and tell them as sociably as you please 'to go right in and sit down.' I asked him why he didn't do it at first, and he said 'they might steal something.'"

Cannon looked into the first with an amused eye.

"I guess he thought I was after the spoons. It's a dangerous habit, for I took the first turning to the right and butted into Cornelia and a young man who gave me to understand I'd come the wrong way around."

"What did they say?" said the mother, her face stiffening with sudden disapproving surprise.

"They didn't say anything. That was just it. They didn't even see me. But they certainly led me to believe that I'd got somewhere where I wasn't wanted. I may not be smart, but a hint doesn't have to be much harder than the kick of a mule for me to see it."

Mrs. Ryan looked at him consideringly.

"Yes," she said, nodding, "it's a case, I guess."

"It ought to be satisfactory," he answered. "Pat Duffy, the father of those boys, was one of the finest fellows I ever knew. He was shift boss on the Rey del Monte in seventy-one when I was the superintendent. He got out of Virginia with his pile, didn't lose it like the others. He had an easy three million when he came down here and bought the Bristol house on Pine Street. And Jack, the best of his children, Maggie, who married the English baronet, was a nice sort of girl, but she's never come back, and Terry's smart enough, but not the kind you can bank on. Jack's a good, straight boy. Cornelia couldn't do better."

"That's what I think," said the mother, who, however, looked grave and worried. "Cornelia's thirty. It's time for her to settle, and she'll make a good wife. They'll live here, too. There'll be no kicking up of their heels and going off to Europe or New York and thinking themselves too good to come back to California, like Maggie Duffy and her baronet. I want them here. I want to see some grandchildren round this house before I die. I want to know where Con's money is going to."

She sighed, and it was obvious that her heart was heavy.

"Yes," she said, "it's a good marriage and I'm pleased at it. Jack's a Roman Catholic but you can't have everything down here in this world."

The Ryans were Protestants, almost the only prominent Irish-American family in San Francisco which belonged to that church. Cornelius Ryan had been a North-country man, and went out with the Orange men when they paraded. He had been firm in his faith and so had his wife, and with the Hibernian's violent devotion to creed they had made public their antipathy to the Church of Rome and their hopes that their children would not make alliances with its members.

"Oh, well," said Cannon with a shrug of vague tolerance, "a man's beliefs don't matter. With a woman it's a different thing. She brings up the children and takes her religion hard. Jack won't interfere with Cornelia that way."

"Perhaps not," said the mother. There was a slight pause and then she said with a sigh:

"Well, thank God, one of my children's going to marry as I want."

She was gazing into the fire and did not notice the quick look, sly and piercing, that her companion shot at her. The conversation had suddenly, without any effort of his, fallen upon the subject to which he had intended directing it.

"Yes," he said, looking away from her, "you've had one disappointment. That's enough."

"Disappointment!" she echoed in a loud voice. "Disappointment? I've lost my son; lost him as if he was dead—worse than if he was dead, for then I'd know he was happy and safe somewhere."

It was a cry of pain, Rachel mourning for her child. The note of feeling in it checked the remark on Cannon's lips. He understood what her suffering was and respected it.

"Why, Bill Cannon," she went on, turning the perturbed fierceness of her face on him, "how often do you think I see my boy? What ties do you think he has with his home? He came up here after he'd got back from Antelope, but before that I'd only seen him once in six weeks."

"That's pretty hard," he commented, his elbow on the arm of the chair, his chin sunk in the cup of his up-curved hand.

"That's pretty tough. I didn't know it was as bad as that."

"Nobody knows anything about him. He won't let them. He won't let me. He's proud, and trying to hide it all. That's the reason he comes up here so seldom. He knows I can see into him, see through him, clear through him, and he don't want me to see how miserable he is."

"Oh!" said the old man, moving slightly and raising his eyes to look at her. The interjection was full of significance, pregnant with understanding, appreciation, and enlightenment. He was surprised himself. He had thought, and had understood from Dominick, that no one, especially no one of his own people, knew of the young man's domestic infelicities. Neither of them was shrewd enough to realize that the mother would guess, would know by instinct.

"And what do you suppose he came up for that once?" pursued Mrs. Ryan. "You could guess a lot of times but you'd never strike it. He came up here the night of

my ball to ask me to give him an invitation for his wife!"

She stared at her visitor with her face set in a stony hardness, a hardness reminiscent of that which had marked it when Dominick had asked for the invitation. Cannon saw it and checked the remark that rose to his lips. He was going to say, "Why didn't you give it to him?" and he saw that it was too light a comment for what had been a tragic occasion. All he did was to utter a grunt that might have meant anything and was consequently safe.

"That's what his marriage has done for him, and that's the state that woman has ground him down to. She'd worked on him till she'd got him to come up here and ask for it a few minutes before the people began to arrive! That's what she made him do."

"And you wouldn't give it?" he inquired mildly, inwardly surprised, as he had been often before, at the rancor displayed by women in their quarrels.

"Give it?" she exclaimed, "well, I guess not. I could have been my surrender. I'd have thrown up the fight for ever when I did that." And then as if she had read his thoughts: "It's not natural meanness, either. There's only one hope for me—for me and for Dominick, too. Divorce."

"I suppose that's the only thing."

"That's been my hope since the day then I first saw her. I didn't know then she'd been anything to Dominick before the marriage, but I knew the first look I had at her what she was. That long, mean nose and those sly eyes, and seven years older than the boy if she was a day. You didn't have to tell me any more. I saw then just like a flash in the dark what my son had let himself in for. And then, not a month later, I heard the rest about her, and I knew that Dominick had started in to ruin his life about the best way he knew how."

Cannon gave another grunt, and this time it contained a recognizable note of sympathy. She went on, absorbed in her recital, anxious to pour out her griefs, now that she had begun.

"Right there from the start I thought of divorce. I knew it was the only way out and was bound to come in time. The woman had married Dominick for money and position. I knew that, saw it in her face along with other things. There was no love in that face, just calculation, hard and sharp as a meat ax. I shut down on the money right there and then. Dominick had three thousand a year, so I knew he couldn't starve, but three thousand a year wasn't what she'd married him for."

"She's got along on it for over two years."

"That's it. She's beaten me so far. I'm the keeper of Con Ryan's fortune and I just closed my hand on it and said to her in so many words, 'Be a cent of this for you.' I thought she'd tire of struggling along in a flat with her one Chinaman and not a soul to come near her. But she's stood it and she's going to go on standing it. Wherever she's concerned, I did something the smartest men and women sometimes do—underrated the brains of my enemy."

"She's pretty smart, I guess," said Cannon, raising a gravely-commenting eye to his companion's face.

"That's what she is—smart and long-headed. She's more far-sighted than women of her kind usually are and she's got her eye on the future. She's not going to give us a chance for divorce. She's not going to make any breaks or mistakes. There's not a more respectable woman in San Francisco. She doesn't go with any one but her husband and her own sisters, two decent women that you can't believe have the same blood in them. She's the quietest, most domestic kind of a wife. It don't matter, and nobody knows, that she's making her husband the most miserable man in the country. That doesn't cut any ice. What does it that there's no ground for divorce against her. If she had the kind of husband that wouldn't put up with anything from a woman, all he could do would be to leave her and she'd go round then getting everybody's sympathies as a virtuous, deserted wife."

The old man gave his head an appreciative jerk, and murmured:

"A pretty smart woman, all right."

"She's all that—that and more. It's the future that she's banking on. I'm nearly seventy years of age, Bill Cannon, and this has broken me up more than anything that's gone before. I'm not the woman I was before my boy married. And what's going to happen when I die? I've only got two living children. Outside them there's nobody but distant relations that Con made settlements on before he died. If I left all I've got to Cornelia, or divided it up between Cornelia and charity, cutting off my son because he'd made a marriage I didn't like, would such a will as that stand? Why had I left nothing to my only son? Because he'd married a woman I didn't think good enough? And what was there against her? She'd been a typewriter and her husband's mistress for six months before he married her. The mistress part of it had been condoned by marriage and good conduct, and after all, how many families in San Francisco and other places were founded on just those beginnings? As for her being a typewriter, Della Ryan herself had been a washerwoman, washed for the miners with these hands,"—she held out her blunt, be-ringed hands with one of those dramatic gestures natural to the Irish—"when Con was working underground with his pick I was at the wash-tub, and I made money that way for him to run the mine. Where's the California jury that would hesitate to award Dominick, and through him, his wife her part of the fortune that Con and I made."

"Well, that's all possible," Cannon said slowly, "but it's so far off. It's all surmise. You may live twenty years yet. I fancy she'd find a twenty-years' wait under the present conditions rather wearying."

The old woman shook her head, looking very sad.

"I'm not the woman I was," she repeated, "this last thing's broken me more than anything that went before. I lost three children by death, and it wasn't as hard as losing my youngest boy the way I have."

"Have you any idea whether Dominick has ever thought of divorce?" he asked.

"I've the clearest kind of an idea that he hasn't. You don't know Dominick. He's the best boy in the world. He'll blame himself for everything that's gone wrong, not that woman. She's smart enough to let him, too. And suppose he was a different kind and did think of it? That's all the good it would do him. Men don't sue women for divorce except under the greatest provocation, and Dominick's got no provocation at all. My hopes were that the woman herself would sue—that we'd freeze her out with small means and cold shoulders—and you see that's just what she's determined not to do!"



FOR BOYS and GIRLS

"SPECIAL MERIT" SEAMLESS SCHOOL SHOES

SCHOOL SHOES without seams—think of it—seamless school shoes! They are strong and sturdy, have seamless uppers, tough soles and double leather toes. By far the most durable and lasting shoes obtainable.

"Special Merit" Seamless School Shoes "wear like iron." They wear just twice as long as ordinary shoes with seams.

Made in all styles and sizes, for every day and Sunday wear—for boys and girls. Your dealer will supply you; if not, write to us. Look for the Mayer Trade Mark on the sole.

FREE—If you will send us the name of a dealer who does not handle Special Merit School Shoes, we will send you free, post-paid, a beautiful picture of George or Martha Washington, size 15x28. State which picture you want.

We also make Leading Lady Shoes, Honorit Shoes, Martha Washington Comfort Shoes and Yerma Cushion Shoes.

F. Mayer Boot & Shoe Co.
MILWAUKEE, WISCONSIN

Plymouth Binder Twine

SAVES TIME AND GRAIN

Twine is a small item, but good twine saves a lot of expense in harvest time. Every time your machine is stopped the delay costs you money. Time in harvest season is always valuable, and sometimes extremely precious on account of the condition of weather or grain. Be sure you use the **best** twine,—PLYMOUTH TWINE. Then you will be safe from the annoyances, delays, expenses, which ordinary twine causes. Plymouth Twine works perfectly in every machine. More of it is made and used every year than any other kind, because it is known to be the best and has been for years. Binds more sheaves with less expense, no knots, no breaks, and is guaranteed full length and extra strength. Get Plymouth Twine from the local dealer. Look for the wheat-sheaf tag.

Use Plymouth Rope. It has the same high quality as our twine.

PLYMOUTH CORDAGE COMPANY

Largest Rope Makers in the world—Oldest in America
PLYMOUTH, MASS.

CORNISH From Factory to Home

On a Year's Free Trial

Two Years' Credit If Needed

Why Shouldn't You Buy As Low As Any Dealer?

Buy On The Cornish Plan which, in brief, places a strictly high grade piano or organ in your home, freight paid if you wish, at rock-bottom factory price, upon terms of your own choice, giving you 1 year to test the instrument before you need decide to keep it and we give you an ironclad Bond of indemnity which holds us to this offer and also insures instrument against defect for 25 years.

Send For The New CORNISH BOOK

The most beautiful piano and organ catalogue issued; it shows the choicest of our 50 latest styles and explains things you ought to know whether you buy from us or elsewhere. The book is yours for the asking. Write for it now.

CORNISH CO. Washington, N. J. Established Over 55 Years

We save you \$100 and more on the purchase of a piano.

Save one-third—on the Cornish plan.

Blacklegoids

Simplest, Safest, Surest Vaccination for the prevention of

BLACKLEG IN CATTLE

NO DOSE TO MEASURE. NO LIQUID TO SPILL. NO STRING TO ROT.

Just a little pill to be placed under the skin of the animal by a single thrust of the instrument. You cannot afford to let your cattle die of blackleg when a few dollars spent on Blacklegoids will save them. Write for circular.

PARKE, DAVIS & COMPANY
HOME OFFICES AND LABORATORIES, DETROIT, MICH.
NOTICE.—For a limited time we will give to any stockman an injector free with his first purchase of 100 vaccinations.

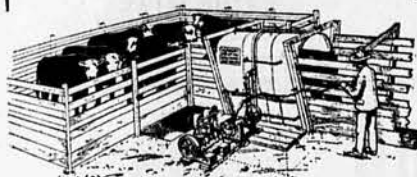
SPRAY

FOR YOUR

Cattle and Hogs

WITH A

SEABURY SPRAYING MACHINE



CLEAN CATTLE are worth several dollars per head more than cattle that are mangy or lousy or ticky.

CLEAN HOGS are thrifty.

You can spray your cattle in the Seabury Spraying Machine no matter how poor and weak they are.

They just walk through the machine and the medicine reaches every part.

You can spray pregnant cows in the Seabury Spraying Machine with absolutely no risk of injury.

Whether you have FEW CATTLE or MANY you can now install a Seabury Spraying Machine at a cost so low that you can repay yourself for the total outlay in a year's time.

Our latest Catalog gives prices on machines and complete information as to cost of installing.

We will send you Catalog FREE on your request.

Ask for Catalog No. 5.

The Seabury Live Stock Spraying Machine & Mfg. Co.

1410 Lawrence St.

Denver, Colo.



Steel Fountain Tanks

For watering all stock and poultry. Clean water for all. Keep stock healthy. No iron hoops to cause rust. Butler Rust Proof Steel Stock Tanks are guaranteed not to rust through in five years. Used by U. S. Government. No others "just as good." Also make B. M. C. Grain Bins and Culverts. If dealer does not handle, write us for circular.

BUTLER MANUFACTURING CO.,
1429 West 10th St. Kansas City, Mo.



More useful than an extra horse. Ride it or make it work.

If an ARMAC will run a CREAM SEPARATOR

What is the use of tiring yourself turning it by hand power? The Armac Motor-cycle can be adapted to many other uses on the farm which will save so much time and money that you will wonder how you have done without it. Drop us a postal asking us for our catalogue, and learn how you can actually save money.

ARMAC MOTOR CO.,
472 Carroll Ave., Chicago, Ill.

\$10.00 Sweep Feed Grinder.

\$14.00 Galvanized Steel Wind Mill.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO.,
Seventh St., Topeka, Kansas

Cannon dropped his supporting hand on the chair-arm and began to caress gently a large tassel that hung there.

"She could be approached in another way," he said with a suggestion of pondering deliberation.

"What way?"

"You say she married Dominick for money. Have you never thought of buying her off?"

He looked at Mrs. Ryan and met her eyes staring anxiously and, in a sort of way, shyly into his.

"Yes," she said in a low voice, "I have."

"Have you tried it?"

"No,—I—I don't think I dared," she said almost desperately. "It was my last trump."

He realized, and, though he was unmoved by it, felt the pathos of this admission from the proud and combative woman who had so long and so successfully dominated over her world.

"I suppose it is a sort of death-bed remedy," he said, "but it seems to me it's about time to try it. Your idea that she's going to wait till you die and then claim part of the estate as Dominick's wife is all very well, but she's not the kind of woman to be willing to wait patiently through the rolling years on three thousand dollars per annum. She's a good bit older than he is and it isn't making her any happier to see her best days passing with nothing doing. I should think you stood a pretty good chance of getting her to listen to reason."

"Offering her a sum down to leave him?" she said, looking at the fire, her brows knit.

"Exactly. Offer her a good sum on the stipulation that she leaves him and goes away to New York or Europe. Then in the course of time she can write him asking him to grant her a divorce on some such technical grounds as desertion, or incompatibility, or anything else that's respectable. He'll have to give it to her. He can't do anything else. And there you are!"

"What if she refuses?" she said in a low voice, and he saw that she was afraid of this refusal which would shatter her last hope.

"Raise your offer," he answered briskly. "She probably will refuse the first time."

She pondered, eying the fire with heavy immobility.

"Yes," she said, nodding. "It sounds reasonable. It's about the only thing left."

"If I can be of any assistance to you," he said, "you just call on me. I'm willing to help in this thing all I can. It goes against me to see Dominick caught in a trap this way just at the beginning of his life."

"A boy," said his mother, "that would have made some good girl so happy."

Cannon rose from his chair.

"That's just it!" he said, "and there are not so many of 'em round that we can afford to lose one of the best. I've always liked Dominick and getting to know him so well up at Antelope I grew downright fond of him. He's a fine boy."

He smiled at her with his most genial air, beaming with disinterested affection for Dominick and the desire to be helpful in a grievous strait. Mrs. Ryan looked brighter and more hopeful than she had done at the beginning of the interview.

"It's very good of you," she said, "to come and listen to an old woman's complaints. But as we get on, we seem to take them harder. And you know what my boy was to me?"

"About the same thing that my girl is to me," Cannon answered as he turned away to look on the table for his hat.

There was a little more talk, and then the set phrases of farewell brought the interview to a close. Though momentous, it had not lasted long. As he left the room, Cannon heard the single note of half-past three chime from the clock on the mantel-piece.

Outside he stood for a moment on the top of the marble steps, looking downward with absent eyes. He was completely engrossed with the just-ended conversation, parts of which repeated themselves in his mind as he stared unseeing down the wide, unnumbered vista of the street.

Carriages flashed past through strips of sunshine; automobiles whirled by, leaving dust and gasoline in their wake. On the sidewalks there were many foot passengers: lazily sauntering couples, lovers, family parties, and little groups bound for the cars which would whisk them over the dunes to the park. As he slowly began to descend, one of these groups, formed of three women, a man, and a child, approached the bottom of the steps. They were walking down the avenue in a close, talkative bunch. The descending magnate was apprised of their proximity by the high, cackling sound of the women's voices and an aura of perfume which extended from them into the surrounding ether. He paid no attention to them, his eye, with its look of inward brooding, passing indifferently over the faces turned eagerly toward him.

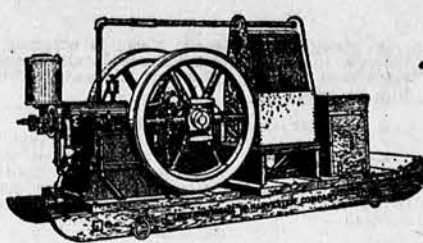
They were not so unmoved. Their glances were trained full on him, their eyes wide in the unblinking intensity of their scrutiny. Even the child, who was skipping along beside the eldest of the women, inspected him with solemn care. Brushing by in their gay Sunday raiment they drew together to discuss him, their heads in a cluster, their voices lowered. He was so used to being the object of such interest that he did not bother to look at them, and was therefore unaware that one of the women, quite pretty, with reddish hair and dark eyes, had turned as she moved away and surveyed him over her shoulder.

CHAPTER XII.

Berny Makes a Discovery.

It was near eleven o'clock on that same Sunday morning, when Berny, wrapped and heavy-eyed, emerged from her room. She shuffled down the passage to the dining-room, sending her voice before her in a shrill summons to the Chinaman. The morning papers were scattered over the table as Dominick had left them and she gathered them up, sitting down in her chair and running her eye down their columns, while the servant set out her breakfast. She was still sleepy and frequent yawns interrupted her perusal of the lines of print which interested her above all written matter. A kimono clothed her slim form and from beneath its hem her foot protruded, thrust bare into a furred slipper. She folded the paper over to bring the society column into a prominence easy of access, and, propping it up against a bowl of fruit, read as she ate her breakfast.

Toward the end of the meal she inquired of the servant at what time her husband had gone out, and received the reply that Mr. Ryan had had his breakfast and left the flat two hours earlier. There was nothing disconcerting or unusual about this, as Dominick always went for a walk on fine Sunday mornings, but her mind was far from easy and she immediately fell to wondering why he had departed so early, and the slight ferment of disquietude that was always with her stirred again and made her forget the society column and let her Spanish omelet grow cold.



Needed on Every Farm

How a Reliable Engine Economizes Labor

Of course, you, like other farmers, want to economize your time.

Think in how many places a power would be a help to you—would save time and work—if you had it in a handy form ready for use in a minute.

Think how much hard work it would save you in cutting feed—in sawing wood, posts or poles—in running the cream separator or churn—in operating shop or other machinery.

The I. H. C. gasoline engine is a power that is always ready at your hand. It is not necessarily stationary, like the windmill, and on that account adapted to doing only one kind of work.

The engine is built in many styles—there are portable engines on trucks and skidded engines which can be moved wherever the work is to be done. Then there are stationary engines, both vertical and horizontal, in sizes from 1 to 25-horse-power, air cooled and water cooled, and also gasoline traction engines 12, 15 and 20-horse-power. Besides, there are special sawing, spraying and pumping outfits from which you can select.

The engines are simple in design so that they can be easily understood.

They are strong and durable—constructed with a large factor of safety, inasmuch as they have greater strength than would ordinarily be required. Yet they are not clumsy or too heavy.

All parts are accessible and easily removed and reassembled. Every engine will develop a large per cent of power in excess of its rating—you get more power than you pay for.

They are absolutely reliable—you cannot find one inefficient detail. They are unusually economical in fuel consumption—less than a pint of gasoline per horse-power per hour. This means that a 2-horse power engine will produce full 2-horse power for five hours on only one gallon of gasoline.

Would it not be a wise plan for you to investigate and learn how an I. H. C. engine will save time and lighten the labor on your farm?

International local agents will supply you with catalogs. Call on them for particulars, or write the home office.

INTERNATIONAL HARVESTER COMPANY OF AMERICA

(Incorporated)

Chicago, U. S. A.

We Save You \$9 to \$19.50

No Freight to Pay

Our big free catalog tells you how. Our 20 days free trial plan protects you—you can't make \$9 to \$19.50 easier than by sending for our *Free Catalog* now.

Our Factory to Farm Plan

Cuts out useless selling expense. By selling direct and paying freight—we save the farmers money. Try any "American" implement 20 days—if you don't want the machine we take it away—and pay freight both ways—you do not risk a cent.

American All-Steel Sulky, Gang and Walking Plows—Harrow Attachments, Disc Harrows and Cultivators—all sold on this plan.

The Time to Harrow is While You Plow

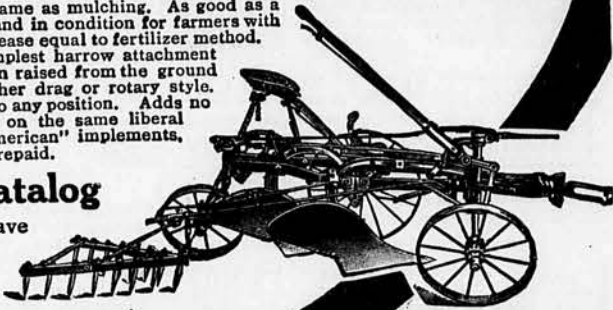
Progressive farmers know the advantage of "fining" the top soil at the time of plowing. The soil then has enough moisture to germinate seed and withstand drought if conserved. Immediate cultivation is same as mulching. As good as a second team. Will hold land in condition for farmers with one team only. Crop increase equal to fertilizer method. The American is the simplest harrow attachment made. No levers. When raised from the ground can't tip plow over. Either drag or rotary style. Either style adjustable to any position. Adds no perceptible draft. Sold on the same liberal terms and plans as all "American" implements, factory to farm—freight prepaid.

Send for Catalog

and printed matter. Save \$9 to \$19.50 and get 20 days' free trial. Write today—when you need it.

American Plow Co.,

2338 Fair Oaks Ave. Madison, Wis.



SAVE 20c PER SHEEP



NEW STEWART SHEARING MACHINE With 4 combs & \$9.75 4 cutters, only. If you have but five sheep it will pay you to own this wonderful shearing machine. It does not cut or hack sheeplike hand shears, and gets one pound and over more wool per head. It shears any kind of wool easily and quickly. **WE GUARANTEE IT FOR 25 YEARS.** All gears are cut from solid metal, not cast; all wearing parts are file hard; spindles are ground and polished, and the driving mechanism is enclosed from dust and dirt and runs in oil. 95 percent of all the shearing machines used in the world are Stewart patents. Send \$2.00 with your order and we will ship C.O.D. for the balance. Send for a copy of our free book "How to Shear Sheep," and our big new catalogue showing the largest line of shearing machines on earth. Write today.

GET IT GALLOWAY

My Great Buggy Proposition—IT'S NEW. Positively best ever made by any factory.

I Save You \$28.75 on this Job Free Trial

Saves You 23 1/2 to 50% lowest prices, best proposition ever made in buggy history. Get it before buying a buggy of any kind. It helps you pay for buggy. Also harness, wagons, implements, etc. **W. M. GALLOWAY CO.,** 836 Galloway Bldg. Waterloo, Ia.

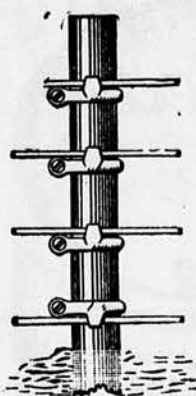


PAINT SILOS AND WOODWORK WITH

Avenarius Carbolineum Registered.

It preserves woodwork, stops decay. Doubles life of silos and all woodwork. Used for barns, roofs, windmills, fence posts, chicken coops (lice killer), etc. Easily applied. Freight prepaid. Beware of imitations. Circulars free. **Carbolineum Wood Preserving Co., Dep. 88, Milwaukee, Wis.**





Tubular Fence Posts

Our Fence Posts are made from iron pipe, and fitted with malleable iron clamps that will not break, will hold any kind of wire. They will last several times longer than wood posts, and we sell them just as cheap. Write for our Fence Post circular.

THE
M. K. FENCE CO.,
318 N. 3rd St.,
St. Joseph, Mo.

Warner Hog Fence

WHEN YOU USE this fence, with these barbed margins, you are sure there will be no rooting around your place. The bars are woven in the bottom and no other stock can touch



them. Money-back Guarantee with every rod. Catalog and handsome souvenir of Abraham Lincoln mailed free. Write us. The Warner Fence Co. Ottawa, Kan.

has barbed margins

Union Lock Poultry Fence



Square close mesh. Highest quality, superior lock, easily erected, strong, low priced.

Write for new catalog describing the Union Line of Field, Hog, Poultry and Lawn Fences.

Union Fence Co.
De Kalb, Ill.
Kansas City, Mo.

BALL BEARING AUTOMATIC GATE



IF NOT THE BEST AUTOMATIC GATE ON THE MARKET SEND IT BACK.

GUARANTEED THE SIMPLEST AND STRONGEST EASIEST OPERATED AUTOMATIC GATE ON THE MARKET.

Don't Look Near!

MONEY REFUNDED IF NOT SATISFACTORY IN EVERY WAY.

ADAMS GATE CO.,
1003 N. KAN. AVE., TOPEKA, KAN.

BROWN FENCE

For Horses, Cattle, Sheep, Hogs, Chickens, Lawns—A fence for every purpose. Big heavy No. 9 Galvanized Spring Wire thickly galvanized. 150 styles as 15 to 35c per rod—We pay freight. Free sample and catalog. The BROWN Fence & Wire Co. Dept. 28 Cleveland, Ohio.



SAMPLE FREE



48 IN. FENCE 29c



Best high carbon coiled steel wire. Easy to stretch over hills and hollows. FREE Catalog—fences, tools. Buy from factory at wholesale prices. Write today to Box 62, MASON FENCE CO., LEESBURG, O.



LAWN FENCE



Many Styles. Sold on trial at wholesale prices. Save 20 to 30 per cent. Illustrated Catalogue free. Write today. KITSelman Bros. Box 399 Muncie, Indiana.

THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY

In America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 41. Send for it now. It is FREE.

Austin Manufacturing Co., Chicago

FOR DRY FARMING USE THE TOPEKA PACKER

IT IS EQUAL TO AN INCH OF RAIN



Make Three Sizes Sell direct to the farmer. Ask us about it. Topeka Foundry Co. Topeka, Kans.



Kills Prairie Dogs and Gophers of all kinds. Endorsed by State Experimental Stations. 1,000 tablets prepaid for \$1.25. Warrented. Ratoid Tablets 25 cents. Ask druggist or send direct. Booklet free. F. D. Chemical Co., Fort Dodge, Ia.

A. Boughen of Green, Kan., is offering a bargain in a yearling Percheron stallion colt, registered, weight 1,225 and a dandy. Write him at once.

Hoosier the Best on the Market. February 22, 1909.

Kansas Farmer: I wish to write about my drills. I now have three different makes and of them all I believe the Hoosier drill to be the best. It is the best drill on the market.—W. E. Evans, Harper, Kan.

A Safe Investment.

The Lincoln Importing Horse Co. at Lincoln, Neb., in their ad in this paper lay stress upon the fact that it only pays to buy good stallions, that a good stallion is a safe investment. This firm has learned this to be a fact by long experience. Since 1886 they have been in the stallion business, they have handled only the better grades, it has paid them, and it has paid their customers. This spring this Lincoln firm is showing a grand lot of imported and home-bred stallions of the better sort. It is a mighty good place for anyone to go to buy who wants a stallion that is sure to prove a good investment.

Fairview Jack Farm.

A representative of Kansas Farmer called at the Fairview Jack farm, owned by Mr. J. C. Huckstep, Eolia, Pike county, Mo. It has been said by men of authority, that Pike county, Mo., raises and sells more jacks and jennetts than any other county in the State. We found at the Fairview farm about 25 jacks and jennetts ranging in age from four to eight years old. We made careful inquiry of the standing of Mr. J. S. Huckstep and we find him well recommended, and we believe a man that is reliable and his word as good as a Government bond. He is pricing jacks for quick sale well worth the money asked. You can make no mistake in dealing with this man; look up ad on another page and when writing kindly mention Kansas Farmer.

Powell's Dispersion Sale.

Having sold his farm Mr. W. S. Powell, owner of Lock Aerie Stock Farm at Moline, Kan., will disperse his entire herd of Hereford cattle and Poland China hogs on Wednesday, March 24. These herds have been in existence for 15 years and are well bred and cared for. Many of the cows are grand daughters of old Anxiety 4466, Hessler, 11975, Earl of Shadeland 41, and others. The herd bull, Chief Louis 75990 is a grandson of Anxiety 4th on his dam's side and his dam was a Cherry Boy cow whose mother was a Best Real cow. Another bull, Royal Boy 2820, is the sire of some extra good cows of just the type that are in demand and was a winner in the 1900 Royal. Some of the female attractions may be named. Genevieve Makin 73175 always produces high class stuff and her calves topped the market at the International sales. Beauty 4th 73174 by Stanley 4294 by old Hessler, Beauty 2d 218548 is very choice, Beauty 3d, Beauty 5th and Beauty 6th are fine, Lenora 209556 pronounced by the fieldmen to be as good as anybody's cow. There are always bargains at dispersion sales but here will be an extra chance as these cattle are only in farm condition and will surely be bargains for some one. They have the big bodies, short legs and feeding capacity and are just ready to go out and make you money. Read over the big advertisement and be sure to go.

Hendershot Offerings.

O. P. Hendershot, of Hebron, Neb., calls attention to his tenth sale of Percheron stallions and mare, Kentucky Mammoth, Tennessee and Spanish jacks, Belgian stallions and mares. Mr. Hendershot assures us that he has an extra strong offering of all the breeds he is advertising. They are in just good breeding conditions and guaranteed, full breeders, clean limbed, strong backed, full chested, high headed, extra heavy bones, good actions and as well bred as can be found in America. I wish to call special attention to the Belgian stallion "Frypon on Kat", four years old, weighing 2800 pounds and good at every point. The second premium two-year-old imported Percheron stallion, at Iowa State fair, 1909, included in this sale. This baby weighs 1900 pounds and a grand individual. The brood mares and fillies as the heavy draft type of good breeding families. I will pay your fare to the sale and home again if you don't find the best individuals you ever saw in any sale of this size. There is not an old animal, nor a finished one in the entire offering to the best of my knowledge. If you are wanting something to make the right kind of a foundation for a good herd, you can get it at Mr. Hendershot's sale at Lincoln, Nebraska. Thursday, March 25, 1909. Write for catalogs and mention this paper.

Hide and Fur Market.

[Quotations furnished by James C. Smith & Co., Topeka, St. Joseph, Wichita, Grand Island, Neb. Quotations are consignment prices corrected each week.]

Green salt cured No. 1, 9 1/4c; No. 2, 8 1/4c; green salt cured, side brands, 40 lbs. up, No. 2, 9c; green salt cured, side brands, 40 lbs. down, No. 2, 8c; green salt cured, bulls and stags, No. 2, 7c; green salt cured, glue, No. 1, 6c; green salt cured, deacons, No. 1, 50c; No. 2, 25c; slunks, No. 1, 20c; No. 2, 15c; horse hides, No. 1, \$2.50@3; No. 2, \$1.50@2; ponies and No. 3, 75c; dry horse, half price of green; green salt sheep pelts, 25c@50c; green uncured hides, 1 1/4c less than same grade cured. green half cured, 3/4c less than same grade cured. Dry flint, butchers' heavy, 14c; dry flint, fallen, heavy, 13c; dry flint, light, under 16 pounds, 13c; dry flint, culls, 9c; dry salt, heavy (18 lb. and up), 12c; dry salt, light (under 18 lb., 9c; dry sheep pelts, 7c@10c; No. 1 tallow, 5 1/4c; No. 2 tallow, 4 1/4c; bees wax, No. 1, 25c.

Prices, Wichita and Grand Island 1/4c less.

FURS.

These quotations are for Kansas and similar furs:

Raccoon—Large, prime, 75c@81; medium, 35c@75c; small and No. 2, 20c@35c.

Skunk—Black prime, \$1.35@1.75; short, 75c@1.25; narrow stripes, prime, 60c@81; broad prime, 20c@40c.

Mink—Extra large, dark, \$4@4.50; large, \$2.75@3.25; medium, \$1.75@2.50; small and No. 2, 60c@1.50.

Opossum—Large cased, 30c@50c; medium, 15c@25c; small, 5c@10c.

Muskrat—Winter, 10c@30c; spring, 20c@35c.

Kits—8c.

Civet—10c@40c.

House cat—5c@15c.

Fox—Gray, 25c@75c; red, prime, \$1@2.50.

Wolf—Prime mountain, \$1.25@3; prairie, 50c@81.

Wildcat—25c@81.

Beaver—Large, each, \$5@7; medium, \$4@6; small, \$3@5; others worthless.

Otter—Prime, large, \$7@10.



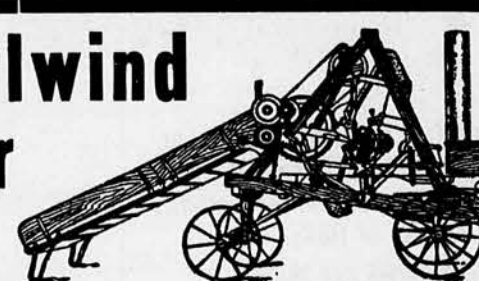
Hides and Furs

You cannot afford to ship to anyone but us. WHY? BECAUSE WE WILL MAKE YOUR SHIPMENTS NET YOU MORE THAN ANYONE. You will find our quotations in this paper. We give liberal selections, honest weights, and make returns for stock day it is received.

JAMES C. SMITH & CO.,
TOPEKA, KAN. ST. JOSEPH, MO.
WICHITA, KAN. GRAND ISLAND, NEB.

The Whirlwind Baler

THE LUEBBEN



The ONLY Baler which will bale ALFALFA taken direct from the windrow and keep the ALFALFA in perfect condition, free from mold. A HOLE runs through the center of the bale permitting air to circulate and thereby curing the alfalfa.

If you have Two Hundred Tons of Alfalfa this year, by baling it with the Luebben you will save the price of the Baler. Write us and we will show you.

Beatrice Rotary Baler Co., Beatrice, Neb.

Wouldn't You Like to Plow a Dozen Furrows at Once?



You can do that and more with Reeves Flexible Frame Steam Lift Engine Gang Plow

And you can procure it in sizes suitable for small or large power, small or large farms, and for use in connection with any make of Steam Traction Engine. The Reeves Engine Gang Plow is the only fully successful Engine Gang Plow—for it is the only one adapted to all conditions of land. It is equally satisfactory on rough or rolling land, as on level fields. Is suitable for use in large or small fields. You can not only do your own plowing, but the plowing of the entire community. Your plow is sure to prove a most profitable investment.

This Plow and the Reeves Plowing Traction Engine are fully described in a large catalog on plowing, which is sent free upon request. This catalog is full of illustrations of plowing scenes, and contains telling letters from users of both Plow and Engine. Send for it today.

REEVES & CO., 125 Fifth Street, Columbus, Ind.



ELKHART BUGGIES

are the best made, best grade and easiest riding buggies on earth for the money.

For Thirty-Six Years

we have been selling direct and are

The Largest Manufacturers in the World

selling to the consumer exclusively.

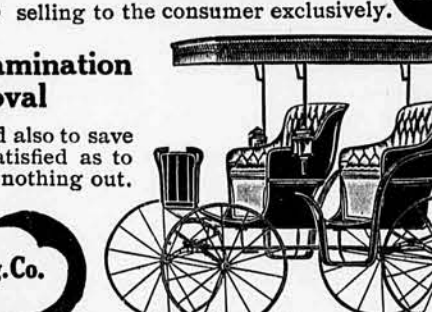
We Ship for Examination and Approval

guaranteeing safe delivery, and also to save you money. If you are not satisfied as to style, quality and price you are nothing out.

May We Send You Our Large Catalogue?

Elkhart Carriage & Harness Mfg. Co.

Elkhart, Indiana



WITTE ENGINES

USE GAS, GASOLINE OR KEROSENE

Are known by a superior standard of construction. 25 years of service has demonstrated their worth. Does work at lowest cost and is always ready to saw, grind, pump, shell or do any farm or shop work.

FIVE YEAR BOND GUARANTEE

We build all sizes in stationary or portable type. Hopper jacket or water tank cooling. Inducements to introduce in new localities. Write stating size wanted.

WITTE IRON WORKS CO.

527 West Fifth Street, KANSAS CITY, MO.



Don't Buy Any Manure Spreader Sight Unseen

wouldn't give up cash or sign notes for a horse you'd never seen—you'd expect to find a greater dollar for dollar value in the Litchfield than in the House Spreader—and not enough in price to run the risk of buying a picture.

field Wagon Box Manure Spreader. This is a manure spreader with a name. Litchfield's its father.

ALIN & ORENDORFF PLOW CO., Dept. 1, Kansas City, Mo.



is a manure spreader with a name. Litchfield's its father.

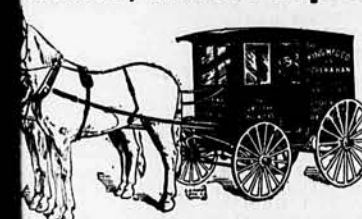
Automobile School

We teach automobile driving and repairing in six weeks. Now is the best time to learn. Send 25 cents in stamps for our catalogue.

K. C. Automobile School, 2108 E. 15th St., Kansas City, Mo.

HAVE YOU A TEAM AND RIG? THEN

Start in Business Yourself, without Capital



YOU PAY NO LICENSE

still have some vacant territory in Kansas. You need no cash or previous experience. You earn cash profits selling our line of coffees, extracts, toilet articles and many remedies on the plan of \$20 worth of goods for \$10.

REQUIREMENTS. The applicant must have a clear character and be willing to give names of two or more reliable responsible people as references.

THE K. F. KING CO., Kansas Avenue, Topeka, Kansas.

Save Your Meat

Worms, Bugs and Blowflies never touch meat that is sprinkled with

MEAT PRESERVER

enemy to all insects that meats are heir has never failed in its mission. It will keep meat many times over; it will keep fresh and sweet in any climate. No more trouble where this is used. A 70c can will preserve 2 barrels of meat. Price all 20c, 35c and 70c a can with sprinkle. If your druggists don't have it order from us, asking for free booklet and material.

RED CROSS DRUG CO.

Dept. K. F., LEWISTON, ILL.

Tel. 775. Office Tel. 192

L. M. PENWELL,

Funeral Director and Licensed Embalmer.

Quincy St. Topeka, Kan.

published in Kansas Farmer March 6, 1909.

PUBLICATION NOTICE.

State of Kansas, to George Strickler, F. S. Manly, and the unknown heirs, executors, administrators, and trustees of each of you, Greeting—

you and each of you are hereby notified that you have been sued in the district court of Shawnee county, and State of Kansas, in action therein pending wherein E. W. Rankin and you and each of you are defendants and that you must answer the petition filed herein on or before the day of April, 1909, or the said petition will be taken as true, and judgment will be rendered against you and each of you quieting the title of the plaintiffs in and to the following described real estate situated in the city of Topeka, county of Shawnee, and State of Kansas, to-wit: lot numbered four and sixteen (416) and the north and one-half (1/2) feet of lot numbered hundred and eighteen (418) on Clay street in King's Addition, and forever enjoining and foreclosing your and each of you ever asserting any right, title, interest in and to said premises.

FRANK H. FOSTER, Attorney for plaintiffs.

L. Thomas, Clerk District Court.

Frank L. Stream, of Creston, Iowa, writes that he will have twenty imported Percheron and Belgian stallions due to land at his barns March 18, and twenty imported Percheron and Belgian mares due to land March 22. Write Mr. Stream in regard to these importations.

Jacks for Sale.
If you are looking for a jack don't fail to read the ad of J. C. Huckstep at Holia, Pike county, Mo. There are several bargains left at the Fairview Jack farm. Write or go see them. Kindly mention Kansas Farmer.

Durocs at Out Prices.
Mr. H. E. Fisher, of Danville, Kan., is offering some valuable bargains in Durocs, prices on falls gilts and males. Trios for \$45.00, representing the blood lines of Tip Top Notcher, Buddy K 5th, Ohio Chief, King Col's. These are well grown out and have plenty of size and quality. They are real bargains. Kindly mention Kansas Farmer when writing.

Jacks.
This issue of Kansas Farmer contains the announcement of Yates Bros of Fauett, Mo. They are offering for quick sale, 14 Mammoth and Spanish jacks, all good ones and ranging in age from one to four years. They are out of very large strains and just the kind that should be sought after. The Yates Bros. also breed Hereford cattle and have on hand at the present time nine good bulls that are old enough for service. They will also sell a few good cows or heifers. Write them and mention Kansas Farmer.

Jacks and Jennets.
Mr. Philip Walker, of Moline, Kan., the "original Jack Man" of Southeastern Kansas, writes us that he has had splendid sales this fall and winter but has a few good jacks left yet for sale. Some very strong bone, well broken and well marked. They are of the Mammoth and Warrior breeds and are extra good individuals. Mr. Walker also has a few draft stallions that he will price at most satisfactory prices. If you need a jack or stallion, write Mr. Walker, he will sell them right. Kindly mention Kansas Farmer.

British Bond Comes to Kansas.

By a recent purchase Mr. D. C. Sigmund of the breeding firm of Hoadley and Sigmund, owners of the Selden Stock Farm at Selden, Kan., have secured the great bull British Bond 308623 to head his herd of Shorthorn cattle. British Bond is pure white in color, was sired by Imp. British Glory 180304 and was bred by Prof. C. F. Curtis of the Iowa Agricultural College. Mr. Sigmund states that he is a bull of great scale, substance and constitutional vigor. On very short legs and represents the regular feeders type. His dam was one of the most valuable cows in Professor Curtis herd and comes from a long line of imported stock that are heavy milkers. This bull is a most satisfactory one every used on Selden Stock Farm and his owners consider him one of the best animals that ever came to Kansas. He is certainly bred right and with the very promising young heifers which they have in their herd they ought to be able to show at the fair this fall and get inside the money every time. We shall hear more from the Selden herd in the near future.

The Cornish & Patton Hereford Sale.

On March 4 there was completed at Osborne, Mo., another page in Hereford history. This was the dispersion sale of the great Cornish & Patton herd, which has been recognized for very many years as one of the very choicest as well as one of the largest herds of this breed in the West. One hundred and 17 head were disposed of in order to settle the estate of the junior partner who died not long since. The reputation of this herd was such that buyers came from practically all of the cornbelt States and from Canada. The sale was spirited from the start and the prices realized were remarkable under present conditions. Indeed the sale was little short of wonderful, and will go a long way toward restoring confidence not only in the beef cattle industry but in the Hereford breed. The sale was under the direct management of H. B. Cornish, the senior member of the firm, and was undoubtedly one of the best managed sales of recent years. Col. Geo. P. Bellows and Col. L. R. Brady made the sale and each surely won new credit for his skill and ability. Herewith is given a report of the sales:

BULLS.

1—Weston Stamp 16th, Sherman	480.00
2—Tittle, Cedar Point, Kan.	295.00
3—Hesiod Stamp, L. M. Bolch, Kirksville, Mo.	295.00
4—Gomez Perfection, J. N. B. Miller, Prescott, Ia.	505.00
5—Gomez Stamp, C. M. Tinnin, Toyah, Texas	300.00
6—General Woolley, E. T. Lonk, St. Edwards, Neb.	400.00
7—Premier 2d, T. B. Yarnell, Cassville, Mo.	380.00
8—Western Anxiety 6th, J. B. Warde, Cameron, Mo.	150.00
9—Anxiety Stamp 4th, J. Z. Hartzler, East Lynne, Mo.	350.00
10—Premier 3d, C. C. Watters, Wells-ville, Kan.	150.00
11—Abe Weston, Frank Moffat, Weyburn, Saskatchewan, Can.	75.00
12—Roscoe, Delta Bros., Dixon, Mo.	100.00
13—Roderick, E. H. Gleason, Mechanicsville, Ia.	90.00
14—Premier Jr., E. W. Sloan, Cameron, Mo.	150.00
15—Elys Stamp, S. W. Kinnaman, Sylvia, Kan.	160.00
16—Grove Weston, J. G. Lloyd, Iowa City, Ia.	160.00
17—Young Boatman, S. W. Kinnaman, FFMales.	165.00
18—Beth, J. H. White, Granger, Mo.	70.00
19—Florence S. and bull calf, S. J. Gabbert, Dearborn, Mo.	265.00
20—Our Teresa, Sherman Tittle, Cedar Point, Kan.	200.00
21—Miss Beth and bull calf, J. H. White	165.00
22—Beck, J. Z. Hartzler, East Lynne, Mo.	100.00
23—Pattie Girl and bull calf, R. J. Mousel, Cambridge, Neb.	200.00
24—Jessie, J. S. Sample, Luray, Mo.	150.00
25—June and bull calf, William Hutcheon, Bolckow, Mo.	210.00
26—Grazia and bull calf, George R. Slocum, St. Paul, Minn.	210.00
27—Biddy, O. Harris, Harris, Mo.	150.00
28—Susie 2d, T. B. Yarnell, Cassville, Mo.	185.00
29—Pussie 2d, J. H. White	150.00
30—Attilla 3d and cow calf, William Reynolds, Lusk, Wyo.	200.00
31—Florence and bull calf, Schain & Keep, Atlantic, Ia.	290.00
32—Rosetta and bull calf, R. J. Mousel	300.00
33—Queen of All, R. J. Mousel	310.00
34—Lassie, T. B. Yarnell	180.00
35—Alberta, J. H. White	145.00

Bargains in Farms, Ranches, City Property

"WE CAN SELL your property, send description. Northwestern Business Agency, Minneapolis, Minn.

TOPEKA FARM—For sale, 85 acre farm 4 miles from Topeka, 45 acres under plow, 30 meadow, 10 acres pasture, living water, a bargain. Address Geo. A. Huron, Topeka, Kan.

CROOKED CREEK VALLEY LAND.
640 acres, 1/4 splendid alfalfa land, worth \$40 per acre; 100 acres in wheat; school house on land; 25 feet to water; \$20 will buy this within thirty days. Terms on part if desired. Address owner, Box 83, Fowler, Kan.

HARPER COUNTY BARGAINS.
Wheat, corn, alfalfa, fruit and grass land. Land from \$10 an acre up to \$60. Unimproved and fine improved farms and ranches. If you are going to buy, see or write for lists. Hilton and Garrison, Attica, Harper Co., Kan.

FARM BARGAINS.
240 acres 3 miles from McPherson, first class improvements all new, 10-room house, large barn and outbuildings, fenced and cross fenced, 205 acres plow land, balance pasture. Price \$71 per acre. Easy terms. McPherson Land & Loan Co., McPherson, Kan.

TOPEKA FARM FOR SALE—Good farm 245 acres 1/4 miles from Topeka, frame house 7 rooms and basement, new hay barn 40x45 feet, new barn 16x30 feet, stalls for 6 horses, corns and sheds for stock, family orchard, living water, 25 acres alfalfa, produced four crops last year; 160 acres for spring crops, balance pasture; a bargain for cash. Address Geo. A. Huron, Topeka, Kan.

HERE IS A BARGAIN.
160 acres of land in Rush county, Kansas, three miles from railroad station and market, close to school, about 45 acres under cultivation, no improvements, 100 acres of good plow land on the tract, balance quite rolling but good grass and pasture land. If sold quick can be bought for \$2,000. JAS. H. LITTLE, The Rush County Land Man, La Crosse, Kansas.

SCHUTTE AND SHINEY, the Rush county, Kan., real estate hustlers; 30 years in the same old place. Good farmers raised from 20 to 47 1/2 bushels of wheat per acre here last season. We can sell this land at from \$20 to \$35 per acre. Good improved ranch land, 1/2 good farm land, at \$15 per acre. Good bottom land not over 5 miles from market at \$25 to \$35 per acre. Well improved and running water, plenty of timber. See us or write us at La Crosse, Kan.

BIG FARM SPECIALS.
160 a. ne. 21-14-1 Dickinson Co., Kan., all smooth, in cult., 7 r. house, barn 24x48, 80 a. wheat; price \$10,000. 120 a. 4 miles Topeka postoffice, macadam road, good imps., 80 a. fine alfalfa, see it; \$14,000. 240 a. 6 1/2 mi. Topeka postoffice, 100 r. extra fine orchard, 40 a. alfalfa, 100 a. timothy and clover, good house, new basement barn 40x60, \$100 per acre. If you want something that's all cream, write us, A. J. White, Farm Salesman, Wingett Land Co., 109 West 6th, Topeka, Kan.

ARKANSAS—"Don't you wish you had bought when you were here before?" That is what they all say; and then, buy before it doubles up again. What have you got that half equals it? You can't find it in America. Think of the money bags being hauled in by a single farmer. Thrashing and hauling \$1,000 a day and more—getting the cash the same day. We have other propositions that will beat your best; besides, the best climate, best roads, best water and fine people, and anything else you want. I own the cheapest land on Grand Prairie and can make you terms—wont price you out. Also, fine timber lands. F. W. Houston, Stuttgart, Ark.

51—Lady Ruth, J. H. White	140.00
52—Lady Nora, J. H. Hartzler	130.00
53—Lady Perfection, Sherman Tittle	185.00
54—Dewdrop and cow calf, S. J. Gabbert	360.00
55—Lady Gomez, Taylor Bros., Mayaville, Mo.	80.00
56—Bliss Perfection, J. P. Cudahy, Kansas City, Mo.	150.00
57—Blossom and cow calf, George R. Slocum	200.00
58—Millie, J. S. Sample	150.00
59—Lettie, T. B. Yarnell	205.00
60—Pussie 3d and cow calf, S. J. Gabbert	300.00
61—Majalla 3d and bull calf, F. T. Wadsworth & Son, Monroe City, Mo.	300.00
62—Miss Marie and cow calf, R. J. Mousel	205.00
63—Josephine Weston and cow calf, T. B. Yarnell	220.00
64—Lettie 2d and cow calf, John B. Dowell, Bedford, Ia.	235.00
65—Darling, R. J. Mousel	185.00
66—Queen's Peach and cow calf, R. J. Mousel	530.00
67—Lella and cow calf, S. J. Gabbert	350.00
68—Dollie D., J. S. Baskett, Fayette, Mo.	140.00
69—Bright Eyes and cow calf, Wm. Hutcheon	245.00
70—Alminda, Jesse Engle & Son, Sheridan, Mo.	125.00
71—Capitola 29th and cow calf, A. L. Weston, Edgewater, Colo.	350.00
72—Cute Lady, J. P. Cudahy	160.00
73—Odella, J. P. Cudahy	190.00
74—Gladys Halbred, J. P. Cudahy	280.00
75—Dulcie Weston, S. J. Gabbert	240.00
76—Reba Weston, J. P. Cudahy	175.00
77—Beryl Weston, Jesse Engle & Son	115.00
78—Biddy Weston, F. H. Belton, Horton, Kan.	120.00
79—Bloom 3d, Jesse Engle & Son	195.00
80—Luella, Geo. R. Cogswell, Castleton, Kan.	145.00
81—Myrtle, R. J. Mousel	130.00
82—Grazie 2d, J. C. Allen, Bedford, Ia.	80.00
83—Moonse 5th, Taylor Bros.	110.00
84—Miss Premier, W. S. Ninnon, Sylvia, Kan.	160.00
85—Pattie, Wm. Reynolds, Lusk, Wyo.	85.00
86—Dewdrop 4th, W. E. Hastings, Iowa City, Ia.	100.00
87—Beckie, J. F. Mathews, Ewing, Mo.	100.00
88—Della Dean, Taylor Bros.	90.00
89—Ora Stamp, Ellis Bailey, Marshalltown, Ia.	100.00
90—Lady Stamp, Taylor Bros.	90.00
91—Miss Carlos, F. R. Sands, Ethan, S. D.	85.00

ARE YOU LOOKING FOR A HOME?

No farmer should think of buying a home before seeing a copy of THE FARM AND REAL ESTATE JOURNAL. It contains the largest list of farm lands, city property and stocks of goods of any paper published west of Chicago. It reaches 56,000 readers each issue, 85 per cent of which are farmers. Every one who has any property they wish to advertise will find this journal one of the best advertising mediums published. Advertising rates, 2c per word each insertion. Send 75c and we will mail you the Journal for one year, or for 10c in silver or stamps we will send it for two months on trial and stop it at the end of the two months unless you renew your subscription. FARM AND REAL ESTATE JOURNAL, TRAEER, IOWA.

H. C. SWEET, STOCKTON, KANSAS.

Great Bargains in Farms and Ranches. Write me for new list and particulars.

Zimmerman Irrigated Lands

The cream of the Pecos Valley. Now open. All river-front sections. The best alfalfa and fruit lands in America. Sold in 40-acre tracts, which will provide a permanent annual income of \$1,000 or more annually. Price \$35 to \$40 per acre on 5 years' time, without interest or taxes, including perpetual water-right, 50 cents per acre as first payment. Address

THE HEATH COMPANY, 100 West Seventh St. Topeka, Kan.

ROOKS COUNTY LAND

One Hundred Farms For Sale. Write For Lists.

C. H. DEWEY, Stockton, Kan.

H. R. LITTLE,

Live - Stock - Auctioneer

MANCHESTER, KANSAS.

Good services and reasonable charges.

Dickinson Co. Bargains.

We have many nice homes for sale at very reasonable prices. Write us for free list. Please mention this paper. Briney, Pautz and Danford, Abilene, Kan.

For Quick Sale.

160 acres in Trego county. 80 acres wheat. All goes \$1,600. Be quick. STEVENS & RUBY, Stockton, Kan.

MISSOURI FARMS for SALE.

Everman has a farm for every man. Write for description and price list.

JOHN W. EVERMAN, Gallatin, Mo.

OSBORNE COUNTY LAND.

A POSTAL CARD BRINGS BIG FREE PICTORIAL FARM LIST.

LAYTON BROS., Osborne, Kan.

For Sale or Rent

A splendid stock and grain farm. Selling price \$8,500. Rental price \$550.

W. P. MORRIS, Kansas.

Marion, Kansas.

A Good Farm Under Price.

240 acres of good corn and general farm land, every foot of it under cultivation, the soil is a black sandy loam, very rich, no broken land, 3 miles from good R. R. town of 3 R. R., 14 miles from Wichita, has good 5 room cottage, large new barn, hay fork, granary, corn crib, and other outbuildings, good orchard; farm is fenced and cross fenced. Price \$12,500 with terms.

The Nelson Real Estate & Img. Co.

137 N. Main, Wichita, Kan.

Western Canada the Pennant Winner

"The Last Best West"

The Government of Canada now gives to every Actual Settler 160 Acres of Wheat-Growing Land FREE and an additional 160 acres at only \$5.00 an acre.

Western Canada

give the best evidence of the superiority of that country. They are becoming rich, growing from 25 to 50 bushels wheat to the acre.

60 to 120 bushels oats and 45 to 60 bushels barley, besides having splendid herds of cattle raised on the prairie grass.

Dairying is an important industry. The crop of 1908 still keeps Western Canada in the lead. The world will soon look to it as its food-producer.

"The thing which most impressed us was the magnitude of the country that is available for agricultural purposes."—National Editorial Correspondence, 1908.

Low Railway Rates, good schools and churches, markets convenient, prices the highest, climate perfect. Lands are for sale by Railway and Land Companies. Descriptive pamphlets and maps sent free. For Railway Rates and other information apply to Sup't of Immigration, Ottawa, Canada, or to the authorized Canadian Government Agt.

J. S. CRAWFORD, 125 West 9th St., Kansas City, Mo.

AUCTIONEERS

COL. ESSIE CRAVEN, NORTH BRANCH, KAN.
Live Stock and General Auctioneer. Ask about him.

A. C. MANIFOLD, TARKIO, MO.

Live stock auctioneer. Selling for the best breeders in Western States. Still have a few open dates for fall.



L. A. BURGER,
Live Stock Auctioneer,
Write or wire me for date.
Wellington, Kansas.

Residence Phone 528. Office Phone 528.
Mutual 114; City 528. Mutual 134; City 626.
W. WEIDEMIER.

Experienced Live Stock Auctioneer.
Terms reasonable. Big tent free. Write
or wire me for dates. Cameron, Mo.

Jas. W. Sparks

Live Stock Auctioneer. Marshall, Mo.
Twenty Years Selling All Breeds.

COL. JUD MCGOWAN

CLINTON, ILL.
Is the man of the hour in conducting pure
bred stock sales. Booking western dates.
Terms moderate.

LIVE STOCK AUCTIONEER

Sales made everywhere. Terms
reasonable. Write for date.
ELLIS H. HUGHES. GAGE, OKLA.

COL. JOHN D. SNYDER, WINFIELD, KAN.,

Live Stock Auctioneer.
Sales made anywhere. Write or wire for
dates. Prices reasonable.

A. L. ALBRIGHT**Live Stock Auctioneer**

Waterville, Kansas

Write me for a date, then do the best there
is in you and we will have a successful sale.

SHORTHORNS

Two Shorthorn Bulls

I have two yearling Shorthorn bulls, both
red and in good condition that I will price
very cheap for 30 days.

A. R. ENOS, Lost Springs, Kan.

GREENDALE STOCK FARM.

25 YOUNG BULLS by Imp. Ardathian
Mystery and Best of All for sale at bed rock
prices. Can also offer some good Berkshire
swine and Shropshire rams. Correspondence
solicited.

COL. ED GREEN, Prop.,
Florence, Kan.

PROSPECT FARM SHORTHORNS.

The oldest Shorthorn breeders in Kansas.
The largest herd of Cruickshanks in Kansas.
Herd headed by Violet Prince 145647 and
Orange Commander 220590. Young stock of
both sexes and some cows for sale. Quality
and prices right.

H. W. McAFEE,
Bell Phone 59-2. Topeka, Kansas.

FOR SALE.**YEARLING BULLS.**

CAR LOAD BULL CALVES.
CAR LOAD 2-YEAR-OLD HEIFERS,
BRED.
Good colors, bred right, priced right. Will
sell in lots to suit.

C. W. TAYLOR, Pearl, Kan.

Address mail R. F. D. 2, Enterprise, Kan.

Spring Hill Shorthorns

300 Head Scotch and

Bates Pedigrees

C. G. COCHRAN & SONS,
PLAINVILLE, KANSAS.

SHORTHORNS

GOOD SHORTHORNS CHEAP—9 cows, 5
and 6 years old, and 4 two yr. old heifers.
All with calves at foot or will calve soon.
5 bulls of serviceable age. The best strains.
Must sell to make room. Will price them
very low. **J. E. Weller, Faucett, Mo.**

SHORTHORN BULLS.

From 3 to 24 months old. I will also sell
my herd bull, Odin 259623 by Imp. Lord
Banff, dam imp. Eldelweiss. Good individ-
uals. Prices reasonable.

JOHN REGIER,

Whitewater, Kansas.

**RENO HERD SHORT-
HORN CATTLE**

Bulls in service, Forest Knight 226084 and
Victor Archer 264156. Breeding stock for
sale.

Stewart & Downs, Hutchinson, Kan.

RED POLLS

FOR SALE—Red Poll bulls oldest herd in
Kansas. Address D. F. Van Buskirk, Blue
Mound, Kan.

SCHWAB & SONS RED POLLS.
Good for beef and milk. One of the most
noted show and breeding herds in Nebraska.
Over 100 head. Both sexes for sale in any
quantity. Can ship on roads direct to Kan-
sas and south. Prices low. Write or come.
Address W. F. SCHWAB, Clay Center, Neb.

COBURN HERD OF RED POLLS.
Choice young stock of both sexes for
sale; also a few cows.
GEO. GROENMILLER & SON,
Pomona, Kansas.

FOSTER'S RED POLLS.
15 choice young bulls, a few good females
and our 2,400 pound herd bull Dandy S. 9147
for sale at bottom prices. **CHAS. FOSTER
& SON, Eldorado, Kan.**

POLAND CHINA SWINE.
RED POLLED CATTLE.
Best of breeding. Write or come and see.
**CHAS. MORRISON & SON, R. 2, Phillips-
burg, Kan.**

GALLOWAYS

CAPITAL VIEW GALLOWAYS.

Choice lot of coming yearling bulls, and
one aged bull; represent the choicest strains
of the breed; they will please you.

G. E. CLARK,

2301 Van Buren St. Topeka, Kan.

SMOKY HILL RANCH

Galloway herd, headed by Pat Ryan of Red
Cloud 20038, Starlight 2d of Tarbreoch 24473
and Valarius 29088. Bulls and heifers for
sale from my herd of 180 registered Gallo-
ways.

E. J. GUILBERT,

Gill, Kansas.

POLLED DURHAMS

POLLED DURHAMS.

Young bulls, cows and heifers for sale.
Prices reasonable. Write for them. **C. J.
WOODS, Chiles, Kan.**

Polled Durhams**FOR SALE.**

A choice lot of young Double Standard
Polled Durham bulls by Kansas Boy X2585,
S-H197989, Senator X5940, 263005 and the
grand bull, Belvedere X2712, 195068. In-
spection invited.
D. C. VAN NICE, Richland, Kan.

JERSEYS

**LINSCOTT HERD
JERSEY CATTLE**

Established 1878. Registered in A. J. C. O.
For sale, tuberculin tested, 60 heifers un-
der 2 years old, 13 cows under 6 years, 5
yearling bulls.

R. J. LINSCOTT,

Holton, Kansas

HEREFORDS

ONION VALLEY HEREFORDS

Either sex for sale, single head or in car lots. Get of leading sires of the
and well grown out. 150 to select from. Also my farm of 260 acres, one of the best
the State, well improved. No trade considered. Will make interesting and easy
Home phone 151. **R. M. DOBSON,** Independence, Kansas.

SUNRISE HEREFORDS.

Cattle descendants of old Stannard herd.
Near descendants of Lord Wilton Stone
Mason, Cherry Boy and others. A grandson
of Imp. Lord Saxon in service. Poland
Chinas, big and growthy. Write or visit us.
J. W. TOLMAN, Hope, Kan.

MAPLEWOOD HEREFORDS.

We have a few topdy bulls of serviceable
age and a few choice females by the 2,400
pound Dale Duplicate, guaranteed and priced
to sell. **A. JOHNSON, Clearwater, Kan.**

HEREFORD BULLS.

Four 20 months, heavy boned. Grand sire
by Judge Spencer. Four 8 months, sired by
Chancellor 225612 a double Beau Brummel.
Also choice heifers by him and a few by an
excellent son of March On 6th. Prices right.
T. J. WOODDALL, Fair River, Kan.

SPRING CREEK HEREFORDS.

100 head in herd. Prairie Donald 3d by
Beau Donald 7th in service. Females repre-
sent Anxiety 4th, Lord Wilton, Garfield and
other families. Few good bulls 7 to 8 months
old at easy prices. Write or come. **T. A.
WALLACE, Barnes, Kan.**

O. I. C. SWINE

SUNNYSIDE O. I. C. HOGS.

Bargain prices on choice well grown stock,
either sex, sired by Jackson Chief 2d, out of
prolific dams. Call or write for description.
W. H. LYNCH, Reading, Kan.

MOSSE'S O. I. C.'s.

Am taking orders for March and April
pigs. Best blood-lines from Big Mary, Herr
Garnett, White Oak, etc.

ARTHUR MOSSE.

R. D. No. 5 Leavenworth, Kan.

SPECIAL PRICES ON BRED GILTS.
Orders booked for early spring pigs for the
next 60 days at the Andrew Carnegie herd
of high bred O. I. C. swine.

W. S. GODLOVE, Onaga, Kan.

BERKSHIRES

SUTTON'S BERKSHIRES

10 dandy boars at \$15 to \$35, all ready for
service. 2 fancy herd boars at \$50 each.
100 sows and gilts at \$25 to \$35. The above
are sired by Berrington Duke Jr., Premier
Longfellow and Beau Brummel. They have
short, fancy heads, extra bone and splendid
length. If you want the best we can please
you. Phone or write us.

SUTTON FARM, Lawrence, Kan.

RIDGEVIEW FARM BERKSHIRES.

FOR SALE—Yearling boar by Forest King.
Very few boars. Spring farrow. Good ones.
Few gilts. Prices reasonable. Get prices be-
fore buying. **MANWARING BROS., Law-
rence, Kan., R. D. 1.**

15 CHOICE SEPTEMBER PIGS.

Both sexes, cheap if taken before March 1.
We are going to move and must reduce the
herd. Pigs are sired by Col. Brady 67871,
sweepstakes winner at Clay Center fair, 1907.
T. S. LARROWE & CO., Miltonvale, Kan.

ROSEDALE FARM BERKSHIRES.
Herd headed by Premier Belle Duke.
Choice pigs of both sexes for season's trade.
Visit our herd or write for information.
J. W. OGLE, Ames, Iowa.

DUROC-JERSEYS

HUMPHREY'S DUROC JERSEYS.

Choice spring pigs either sex of early far-
row; Ohio Chief and Improver 2d blood lines.
Also Scotch Collies best breeding and quality.
J. S. HUMPHREY, Pratt, Kan., R. D. 1.

30 MARCH AND APRIL BOARS.

Special prices on these to sell quick. They
are sired by Lone Jack, Paul Junbo, Kan-
sas Buddy and others. Write for particu-
lars. **W. C. WHITNEY, Agra, Kan.**

SPRING BRANCH DUROC JERSEYS.
Am offering extra good boars sired by
First Quality 50699 and Model Top Notcher
66589. All have strong backs, great length
and good feet. Write for breeding, prices and
description. I can please you in breeding and
individuality. Come and inspect our herd.
JAS. L. COOK, Marysville, Kan.

DUROC JERSEY BOARS AND GILTS.
All my boars of popular strains such as
Ohio Chief, Kant Be Beat, Nelson's Model,
W. L. A's Choice Goods, etc. Pigs are well
grown and the price is right. Write quick.
H. R. GINGRICH, Wellsville, Kan.

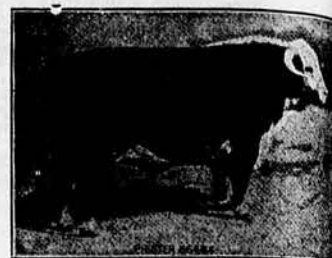
GET MY PRICES ON THESE.
Extra choice fall boars and spring pigs by
Colleg Boy, Golden Rule and Hio by Ohio
Chief. We can please you. Write us now.
BERT FINCH, Prairie View, Kan.

WILL BE JUST AS REPRESENTED.
My breeding stock are all direct descend-
ants of the most popular families. I sell
choice ones, but my prices are not high.
Write. **R. L. WILSON, Chester, Neb.**

DUROC PRICES SHOT TO PIECES.
Prices on fall pigs, trios for \$15 each
Ohio Chief, King Col's Buddy K. 6th, Tip
Top Notcher blood lines. West River Side
H. E. FISHER, Danville, Kan.

BEAUTY'S WONDER DUROCS.
Blood of Kant Be Beat and Ohio Chief
coupled with Beauty's Wonder has proved a
great cross. Good spring pigs at bargain
prices. **W. T. FITCH, Minneapolis, Kan.**

HEREFORDS

**HIGH-CLASS MODERN
HEREFORDS**

HERD BULLS—Printer 66684,
Protocol 2d 91715; Beau Beauty 19719,
Beau Brummel 10th 167719.

Robt. H. Hazlett,
Hazford Place. Eldorado, Kan.

DUROC-JERSEYS

EXTRA YEARLING HERD BOARS.
Sired by Improver 2d; also tops of
spring pigs. Two choice extra early ones
W. L. A's Choice Goods. I sell nothing but
good ones. **C. E. PRATT, Frankfort, Kan.**

BONNEY K. BOARS AND GILTS.
Bonney K. is unexcelled as a breeder
offering spring boars and gilts by him
cheap. Also pigs by Kant Be Beat and
R. G. SOLLENBERGER, Woodston, Kan.

LINDSEY RED HOG FARM.
March and April pigs out of queens of
breed. Keep and sell good ones. Wood-
stock 71993 heads herd. All stock
right. **L. E. BOYLE, Lindsey, Kan.**

CHAMPION CHIEF TATARRAL.
Tried sows and yearling gilts bred to
arrax at very low prices. Herd rich in
ham blood and prices reasonable. **GEO.
HAMMOND and K.S.A.C., Manhattan, Kan.**

FORCE'S ORION DUROC JERSEY.
Blood and conformation of some of the
best sires and dams of the breed combined
herd. Spring pigs by Orion F. and Potomac
mie Wonder. **W. E. FORCE, Blaine, Kan.**

140 EARLY SPRING PIGS.
Ohio Chief, Oom Paul, Buddy K., Mo. V.
der, and Kant Be Beat blood lines. Ex-
tra, reasonable prices. **W. R. COOK,
200 East Osborn St., Hutchinson, Kan.**

FARMINGTON HERD OF DUROCS.
Duroc Paragon 58923 and Kant Be Beat
Heir 74801 at head of herd. A fine lot
fall boars and gilts sired by the above.
Sows are of leading families.
G. F. KEESECKER, Washington, Kan.

CEDAR LAWN DUROC JERSEYS.
Choice spring and fall gilts and sows
sired by Long Wonder 21867 for sale at
some fall pigs of both sexes by Long W.
der. Fine individuals and prices right.
**F. M. BUCHHEIM,
Route 3, Lecompton, Kan.**

SUNNYSIDE DUROCS.
30 choice bred sows and some extra
Sept. pigs, both sexes, priced for immediate
sale. These are from our best prize
stock. Also trail hound pups for sale.
HAGUE & SON, Newton, Kan.

Bred Sows Februray

40 head of sows bred right, and right
individually. Sale as usual in
Burr Oak, Kansas.

E. M. MYERS, Burr Oak, Kan.

EXCEPTIONAL OFFER.
I have about twenty young sows and
bred and open of the very finest stock
I now offer at from one-half to one
regular price. All the \$50 stock at \$25.
out of the \$80 pen at \$35; two hour pigs
of "Redbud II" daughter of Van Paragon
"Rosebud Lady," the highest priced
sow in the world, at \$35 each or the
one address \$60 crated f. o. b. All fat.
Address **R. E. BUELL, Foreman, Wyo.**
LIAMS' RANCH, McAllister, Kansas.

College Hill Farm

Lamar, Mo.

Home of the large type Missouri Duroc
the kind that grow fast and feed right.
Popular families represented and custom-
treated right. Young stock for sale at all
times. Write us what you want.
right. **D. A. BEAMER, Lamar, Mo.**

HOLSTEIN-FRIESIANS

HOLSTEINS AND JERSEYS.

Choice young stock, heavy milking
strain. Some extra good bull
calves either breed.

HUGHES & JONES, Topeka, Kan.

BRAEBURN HOLSTEINS.

10,000 pounds of milk in a year is the
yield of some grade Holsteins. People who
ing cows that give but 2,000-4,000 pounds
had better get a bull calf, and grade
Those who know this already had better
a female, too. **H. B. COWLES, Topeka, Kan.**

Aberdeen-Angus Sale

BY NEBRASKA BREEDERS AT STATE FAIR GROUNDS

Lincoln, Neb., Tuesday, March 23

A useful lot of cattle consigned by T. A. Gierens, A. Christian, L. H.
Howe, and others. A great chance for bargains in the market topping,
money making breed of cattle. For particulars address

T. A. GIERENS, Mgr., Lincoln, Neb.

Kansas Farmer "Ads" Bring Results