

KANSAS FARMER

For the improvement of the Farm and Home

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THE successful farmer must be a good business man. It is important to have accurate knowledge of the fundamental principles of crop and live stock production, but farming is followed to make a living and is therefore a business and not a science.

The teachings of science are most helpful, but business methods are essential. Besides growing crops, the successful farmer must buy and sell and conduct other transactions, according to well established business principles.

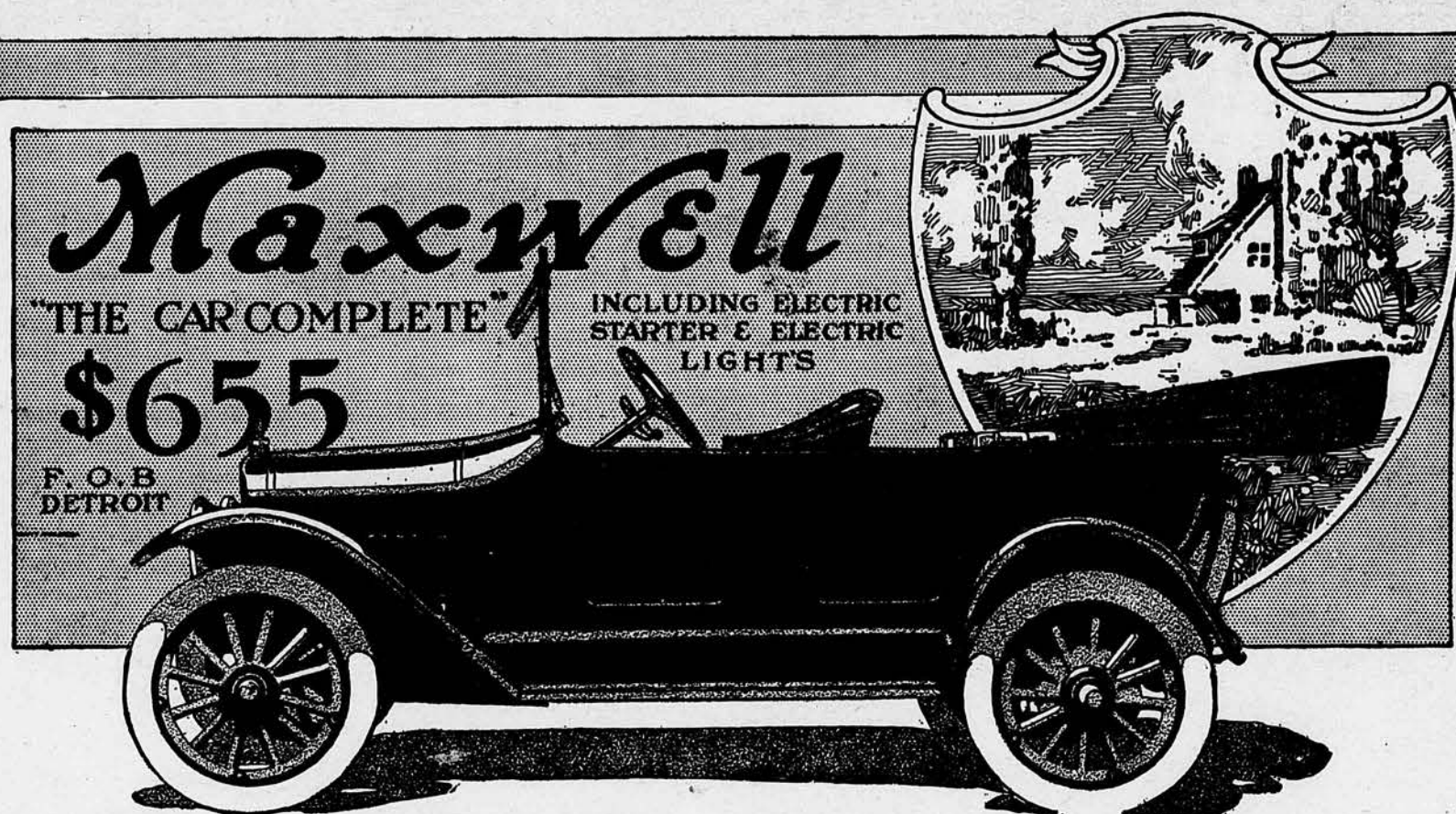
Although many farmers have investments of fifteen to twenty thousand dollars, few of them keep book accounts. They may jot down notes of their more important deals, but these are of little use in arriving at any conclusions regarding the business as a whole.

No other business, however small, is conducted without a system of books. It may be difficult to keep farm accounts, but the advantages are great enough to justify the effort.

The farmer should not be content to earn merely a laborer's wages, but should also strive to make himself an efficient manager of the capital he has invested. —G. C. W.



Business Methods Are Essential In Profitable Farming



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YOU never raise a barn without including the cost of a roof—to make it complete.

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ELECTRIC Starter and Electric Lights.
MOTOR—Four-cylinder, L-head type, cast en bloc. Bore $3\frac{1}{2}$ in.; stroke $4\frac{1}{4}$ in.; detachable head; oil reservoir of aluminum; valves completely enclosed.
MAGNETO—Simms high tension.
CLUTCH—Cone, faced with multibestos lining, runs in oil, takes hold smoothly and without grabbing.
TRANSMISSION—Selective sliding gear. Three speeds forward and one reverse.
CONTROL—Center, left side drive; foot ac-

celerator. 16 in. steering wheel; improved instrument dash board with all instruments set flush.

WHEEL BASE—103 inches; tread 56 in.; 60 in. optional for the South.

WHEELS—Artillery, of best grade hickory; 12 spokes in both front and rear; equipped with Stanweld demountable rims.

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AXLES—Front, drop-forged, I-beam section, complete with spring seats. Rear, floating type. No load carried on driving shafts.

BRAKES—Internal and external, actuated on 12 $\frac{1}{2}$ in. drums on rear wheels.

EQUIPMENT—Two electric head lights with dimmer, electric tail light, generator, storage battery, electric horn, speedometer, "one man" mohair top with envelope, and quick adjustable storm curtains, double ventilating rain-vision windshield, improved instrument board with all instruments set flush, demountable rims, spare tire carrier with extra demountable rim, jack, special wrenches and tools.

EVERY ROAD IS A *Maxwell* ROAD



KANSAS FARMER

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ALBERT T. REID, President
T. A. BORMAN, Editor-in-Chief

C. C. YOUNGGREEN, Advertising Manager
G. C. WHEELER, Live Stock Editor

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EXPERIMENTAL ROADS.

In Johnson County the commissioners are putting considerable money into the roads of the county. The latest piece of work they have taken up is that of trying out the oiling of the road between Olathe and Lenexa. Keeping water off the surface of the road is important, and this section has been very carefully brought to a proper grade, culverts have been put in, ditches opened, and every effort possible made to furnish adequate drainage. All of these things tend to good dirt roads, but this stretch has been oiled with road oil in addition, so that a layer two inches thick is thoroughly saturated. This is one of the most extensive tests of oiling that has been thus far made in Kansas. Oil has been used in a number of short experimental stretches of road, but in most cases these have been rock roads and the oil served mainly to lay the dust.

Other counties are awake on the road question. We noted recently that Cloud County had made plans to lay a quarter of a mile of concrete road, leading from the town of Glasco to the Solomon River. Geary County is also planning several miles of permanent road.

The past year road conditions have been worse than in many years. Permanent roads are expensive but so is the constant repairing of poor roads. A lot of money has been swallowed in this work, in many cases barely serving to keep the roads passable. The results of these trials in permanent road-making will be watched with much interest.

As in city paving work, getting a start will probably be the hard thing in permanent road construction. W. S. Gearhart, state highway engineer, recently made the statement that more Kansas cities have paved their streets during the last five years than is true of any other state. When these cities began their work they had a great deal of trouble in getting even a block or two paved. We are familiar with the starting of the work in quite a number of the cities of Kansas and this has been quite generally true. As soon as one or two blocks in the business sections were paved, however, the paving work progressed in some instances almost too rapidly.

Kansas has built and maintained during the last four or five years, many fine dirt roads, but when the bottoms of the dirt roads drop out, as they did last year, people generally begin to think much more seriously of the building of roads that can be used three hundred sixty-five days in the year. The various short stretches of permanent road now being built, such as those mentioned above, are the beginnings of a system of such roads radiating from the various market centers.

WATCHING THE CORNERS.

In farming, as in other occupations, it is possible to spend entirely too much time on jobs of minor importance. A man cannot afford to neglect the little things that need to be done, but he can do them so well that there will be little profit in the work. Not long since we heard a story which will serve as a splendid illustration.

In a certain hog lot cared for by a very busy man, was a long trough. In feeding the hogs he saw that the big ones were crowding the others away so that they were not getting their proper share of the feed. He kept saying to himself, "When I get time I'll nail some strips across that trough," but the time never came. The hogs went on with their crowding and when finished and marketed the bunch had cost ten or fifteen cents more for each hundred pounds of pork made, than if the trough had been so arranged that each hog could have had a fair chance. In another hog lot the man in charge had a high sense of order and neatness but failed to appreciate the value of time. He saw that his hogs were no different than others and were crowding each other at the trough. He straightway went to his shop, brought out his square, saw, hammer, some nails, and a few other things and spent an hour carefully fitting some cross-pieces to the trough. It served the purpose and in addition was a fine ap-

pearing job. All the time, however, his team had been standing idle and most important work in the field had been neglected. A third man saw the same trouble in his hog lot as he went to work in the morning and made a mental note that it would be given attention when he did his evening chores. At night he grabbed the hammer, some nails, picked up a few short pieces of board and in a few minutes had some strips nailed across the trough. This work served its purpose just as well as that so carefully and painstakingly done by the other man, and the more important jobs had not suffered in consequence.

The farmer, busy as he is at all times, must have a true sense of the importance of the various things he must do. There are many times when time is wasted in doing a job too well.

ACRE YIELDS AND PROFIT.

Yields per acre have usually been taken as the measure of profitable production in farming. On this basis a low yield would always mean a small profit or a loss, while a high yield would mean a large profit. This is not necessarily true. In a recent bulletin from the experimental sub-station at North Platte, Nebraska, the results given would indicate that the labor cost has considerable influence in determining profits in production. In a general way it appeared that the less expensive practices gave the greater net profit. One of the most important ways of increasing profits was by reducing operating expenses. In the regions having conditions similar to those prevailing at North Platte, the most profitable type of farming is that in which a reasonably large acreage is handled with a minimum of man labor and plenty of power.

Europe has developed a system of producing high acre yields but the yields per man are small. This is a thing to be avoided, if possible, as it is sure to mean a lowering of the standards of living on the farm.

It was found in the Nebraska work that as the yields per acre increased beyond a certain normal amount, the average cost per bushel was increased. In other words, performing such labor as was required to secure maximum yields tended to reduce profits. The production of the last bushel or two was obtained at too high a cost.

SORGHUM GRAIN PRODUCTION.

We trust many of our readers have noted that the State Board of Agriculture has now furnished us statistics on the grain production of sorghums. Heretofore these crops have been considered only as forage crops and the yields have been given in tons of fodder. It perhaps has come as a surprise to many to find that over thirty million bushels of kafir, milo and feterita were grown in the state the past year, and the year 1915 was a poor one for these crops on account of the unusually heavy rainfall.

In looking over the past year's grain business done in Kansas City, we find that four and a half million bushels of kafir, milo and feterita were marketed. This is over three times as much as came into that market in 1914. This increased production of these crops shows that they are being given more attention generally by farmers of the state.

There is no questioning the adaptability of the grain sorghums for the conditions prevailing over much of Kansas. There is great danger that the unusual success of corn the past year in the West, will lead many to discontinue the grain sorghums and increase their acreages of corn. We would urge our readers to carefully consider the history of corn growing as compared with the sorghums, for a number of years, before making this mistake of increasing their corn acreage because of the splendid crop of the past year.

ANOTHER FARMER TAX.

Kansas farmers cannot help feeling that the proposed federal tax on crude oil, kerosene, and gasoline, will mean the adding of another burden to the heavy load they are already carrying. Farmers are just as patriotic as any other class and are willing to bear their fair share

of governmental expense, but they frequently find themselves carrying more than their just proportion.

In Kansas fully 60 per cent of the automobiles and probably 90 per cent of the gasoline engines are owned by farmers. These consume large quantities of gasoline and oil. If the government places a tax on these products the price will be that much higher. There has been a remarkable increase in the consumption of crude oil products. Only last summer refiners were furnishing gasoline at the plants as low as five and a half cents a gallon. Crude oil at that time was costing but thirty cents a barrel. It has now advanced to \$1.20 a barrel, and independent refineries have to pay forty to sixty cents in advance of this, or \$1.75 a barrel. With this increase of 600 per cent in the cost of the crude material, the price of gasoline has advanced less than 300 per cent. The refiners are not responsible for the decrease in the production of crude oil nor the great increase in the consumption of gasoline. It would appear that they are trying to place the product on the market as cheaply as possible, but it has already increased greatly in price during the past few months.

If farmers do not want to have a tax added to the already high price of the gasoline they buy, they must let their representatives in Congress know their feelings in the matter.

COCHEL RECEIVES NEW HONOR.

The Society of Animal Production, one of the leading scientific organizations of the country, elected W. A. Cochel, professor of animal husbandry at the Kansas Agricultural College, as their president for the coming year. The last annual meeting was held at Manhattan just before the Christmas holidays.

While the work of this organization is technical in character, the things they are striving to accomplish will eventually be of practical value to farmers and stockgrowers.

FARM BUSINESS DEPARTMENT.

The greatest financial successes in the farm business are not necessarily made by the men most successful in growing crops or feeding and breeding live stock. There is a business aspect of farming often overlooked. The farmer must be a merchant as well as a producer. To be successful, his business must be considered from an economic standpoint. The organization of the different enterprises of the farm and their relation to each other, determines in a large measure the profits. As a business man, the farmer must plan and manage these various enterprises in accordance with well established principles.

It is our purpose to conduct in KANSAS FARMER this year, a department that will be specially helpful to the business side of farming. It is more important that the farm be profitable than that some unusual production records be made. These are but means to an end, and can easily be over-emphasized.

The total receipts for 1914 on farms typical of a large part of Eastern Nebraska averaged \$2,989 per farm. Of this total, \$874 came from the natural yearly increase in live stock, feed, and crops held for sale at the close of the year. The increase in the value of young stock constitutes about half of the annual receipts from this source. The fact that the cash receipts are often small discourages most of those who do not figure closely on their farm business. One farmer decided he was not making anything, so he sold out. The returns showed that he was getting ahead faster than he expected. Before he had time to move to town he was back to farming. This is an expensive way of taking an inventory. Total receipts are easily determined when farmers keep an annual inventory and a record of farm transactions.

In planning the crops to be grown, consider average conditions in your section and the crops best adapted to these. Then obtain as pure seed as possible, grown as near home as you can get it, and your chances for a crop will be reasonably good in a normal year.

LACK OF MARKETING SYSTEM.

There is room for great improvement in the marketing and handling of fruit and other farm produce. No one who has given a moment's thought to this question, can deny this statement. In most communities in our state the handling of fruit and vegetables in such manner as to reduce waste and get the products to the people who want them, is an unsolved problem. That it can be much more efficiently done is evidenced by the success of such organizations as the Wathena Fruit Growers' Association. No other similar organization in the United States is more efficiently carrying out its purpose than is this association made up of Doniphan County fruit growers. Their success shows that the problem is by no means impossible of solution.

The results of the lack of system in handling fruit and produce are apparent on every hand. The observations of a man who travels extensively in Kansas, recently came to us in the form of a letter. This man says:

"The thing that impressed me most in the small towns and country districts is the enormous waste of fruit. In many a town I found stores empty of fresh fruit or provided only with that of poor quality, while in the surrounding district apples were rotting on the trees or lying neglected on the ground. I repeatedly paid five cents for one or two fair specimens of apples, or the same price for ten poor, dirty, inferior windfalls. In the same places out in the country I picked up from the ground beneath a well-laden tree, tasty, well colored, large, juicy apples, as good as anyone could ask.

"On railroad switches I have seen cars of apples for sale, these cars usually coming from points several hundred miles away, while farmers having orchards nearby claimed they had no market. In one potato district I saw potatoes for sale that came from another state. In one apple district I saw boxed apples from a fruit-producing section outside the state, that had been shipped in by a wholesale house several hundred miles away. I am sure I am not the only man who wants good apples.

"The same thing is true of all kinds of produce for which many claim they cannot find a market."

We have traveled over the state enough to know that the statements made by this correspondent are true. The question of finding home markets for Kansas-grown fruit was taken up and discussed at the last meeting of the State Horticultural Society, and as a result a publicity committee was appointed to see if something could not be done to cut out a lot of the waste and market fruit at home.

HAZARDS OF FARMING.

Farmers sometimes feel that they have more things to contend with than do people engaged in any other business. It is true that farming does have many hazards. There is fire, frost, and floods; hail may come and destroy a crop when it is ready to harvest; hordes of insect pests and numerous plant diseases are continually at work, and many other things over which the farmer has no control, threaten his success. But with all these things, farming is perhaps the most staple and substantial business.

It is commonly reported that 90 per cent of the merchants fail in business. This seems like an excessively high percentage, but we seldom hear of a farmer being sold out at sheriff's sale or taking advantage of the bankruptcy law. There are few millionaire farmers but there is no starvation in the country and in few instances does charity have to be resorted to in caring for people living on the farm. Farmers do not have to lie awake nights worrying about the next month's rent or fearing that the next time there is a cut in the working force they will lose their jobs. With all its hazards, farming offers to those who will exercise their intelligence and who are industrious, a surer means of a comfortable living than is offered in many other walks of life.

FARMERS ARE CO-OPERATING

Bulk Buying of Farm and Household Supplies Effect Marked Saving

By ALFRED DOCKING

In Nineteenth Biennial Report Kansas State Board of Agriculture

"CO-OPERATION" has been the slogan of a strenuous campaign throughout the West, especially in the state of Kansas. The word itself has been much abused, and even where treated fairly has been worked overtime. George W. Perkins, of Morgan & Company, announced last year that "this is the age of co-operation." He referred to the alignment of business men and groups of business men, principally in the realm of "high finance," to secure larger ends beyond the reach of the individual or the single group. Dominating syndicates, interlocking directorates, etc., were the natural fruitage of the plan.

Railroads, in their "getting together" to establish rates and rules of transportation, assured us that they were co-operating to secure economy and efficiency of service. Their employees, in various organizations—unions and brotherhoods—might with equal justice assert that they, too, are co-operators. The presidents of railroads in their private cars; the hoboes on the rods; the builders of skyscrapers, the men who carry hods, those who later sweep the chimneys; shoe manufacturers with their enormous outputs; cobblers tacking on half-soles; even the shoeblacks polishing on the street corner—all have been organized a long time, and for the reason that in co-operation, the one with the other, they secure definite results that before were unattainable.

It remained for farmers to be the last to organize. This they are doing very rapidly, and with intelligent foresight and balanced judgment. The amount of reading matter, papers and periodicals, the fact that more thinking upon specific subjects is done, the mutual discussions at schoolhouse meetings, etc., have led to this. When upwards of seven hundred farmers' local organizations are talking over and debating the same line of subjects about their business as farmers, there is a moral certainty that something will result from it.

Organization—the getting together for definite purposes, has been hard to bring about among farmers as a class. By the very nature of his calling the farmer is an individualist. While he knows that every other class has made its advance in this way, and could not by any other method, yet he hesitates to follow the example. Mistrust and suspicion to some extent stand in the way. Education is necessary. The development of the get-together spirit must be accomplished.

Great economic changes are going on, especially in distribution, but farmers' co-operative concerns do not necessitate nearly so much readjustment as some others. While students are studying the economics of past centuries, let history remind us that another day has dawned, new problems confront us, a new economic is constructing itself right before our eyes and the reasons for its existence are rapid communication, speedy transportation, growing intelligence as to markets, and the dollar's purchasing power. They came with our twentieth century civilization; they will stay. We shall have to adjust.

Co-operation in buying is carried on all over Kansas in different forms. Co-operation in shipping out the products of the farm to the markets is carried on to only a very limited extent. There is no doubt that in the near future this latter form will see the most marked advance. In some places fruit growers, and in others grain producers, have this work well systematized. Truck farmers around several cities are enlisting in mutual enterprises. The fifty-three great co-operative truck concerns that are shipping from the Gulf coast and from the Atlantic seaboard, vast supplies of vegetables and fruit to the great cities of the country, are a stimulus to similar concerns in Kansas. The Wathena Fruit Growers' Association is the highest development of the kind in this state. Gradually, in connection with its shipping, it has worked out other plans of supplying the producers' needs. The very nature of the fruit industry, especially where small fruits are the product, is to unify and draw into a common bond the growers, much more than among those engaged in grain growing or meat production upon a larger and more independent basis.

The supplying of household needs, of machinery and of seed has been accomplished in two ways. At some points successful co-operative stores have been carried on and the farmer-consumer's wants have thus been provided. At other places, covering a wide area of the

WE labor for larger ends. The larger co-operation should be our consideration. Would we have the life upon the farm really worth while, would we give to our children what is their birthright, the betterment of every phase of country life must be our concern. The moral and spiritual must not be neglected. Home, school, and church must work hand in hand. The great principles of co-operation fell from the lips of the Great Co-Operator. Mutuality finds its deepest principles and its positive precepts in the Sermon on the Mount. We live not for ourselves alone.—ALFRED DOCKING.

state, carloads of the staple needs, such as binding twine, flour, shorts, bran, potatoes, coal, etc.—with corn added during the 1913 season of scarcity—have been shipped in and divided among co-operators, usually members of a local body. The Grange has favored the latter method more than the organization of stores, because each transaction is closed at once, the price paid, expenses footed up, and the whole pro rated among the members buying. The store requires, on the other hand, the best of management, and delay until the end of the half-year or year in the final adjustment of the discounted price.

The Grange has also emphasized that when a locality has made up its mind what it wants to buy in carload shipments, and for cash as an organization, and unload right from the car, it is a good plan to go to the local merchant and see what he can do under these conditions. It has been found that dealers at a number of points are glad to do this class of cash business, and there has been no necessity to ship in other than through them. Some counties reported at the last state Grange as high as fifty carloads each, as the summer's and fall's business, and a marked saving in prices. Without doubt the cash feature of these transactions cut considerable figure in the saving. Bulk shipments also had its relation to it. It goes without saying, that when we buy groceries of a credit retail store, whether we pay cash or not, we shall have to pay our part of the overhead expense necessitated by the credit feature—the possibly 15 per cent of bad debts, the bookkeeping, and any other waste.

The Farmers' Union and the Farmers' Equity Union are maintaining a large number of stores, especially in the northwestern and southwestern parts of Kansas. They have also elevators, coal and oil stations and cream stations. One county, Mitchell, will do a business of a million dollars this year, under the efficient management of Mr. Trumbull, of Beloit. A group of counties is organizing for shipping out products, with headquarters at Concordia. This is managed by Mr. Turner, former state lecturer of the Grange. Liberal and other points in the southwest evidence the Equity's activity. A number of expert business men are in its work. The aim in all these varied projects is to emphasize safe business, and systems of auditing that tend to eliminate waste, incompetency, and any possible dishonesty.

There are some essentials to the success of a co-operative venture, and people are beginning to recognize them. There must be sufficient cash capital, a territory that will maintain the business, good management, "cash" must be adhered to—absolutely no credit; prices must not be cut, for a war of prices is destructive to all. The saving must be in rebates at the end of a year or half-year. Care must be exercised not to exceed the buying power of the capital, thus getting the business into a tight place, and a co-operative spirit must prevail in the community.

Not every locality can maintain a co-operative store, and good managers are rather scarce. The congested condition of the population, the stern necessity for getting together in order to provide common needs of life, and the fact that toilers in the manufacturing industries can get together better than farm workers, have stimulated co-operation in the Old World. In Great Britain alone, one-fifth of the population are co-operators. In England alone, 380 million dol-

lars' worth of merchandise passed over the retail co-operative store counters last year, and more than one-third of that, or 130 million dollars' worth, was manufactured in co-operative mills and factories. The Continent is covered with co-operative organizations—productive, distributive, and financial. They are all managed and officered by a force of men and women entirely developed in the business itself—a force which we are only beginning to create in Kansas. The theoretical expert—whether of the government or of an institution—or the would-be survey specialist, finds no place in these very successful systems. They are intensely practical.

So complete is the scheme of co-operation in the older countries that one can buy all the needs of life, including materials to build his house and to furnish it, through co-operation, and these necessities are all manufactured co-operatively. He can even insure his life, and his wife's life, and secure medical care in the same way. The habit of uniting has grown in these countries until it is no trouble to organize men and women to reach definite object. In Denmark and several other countries a man will perhaps belong to a half dozen or more societies, each having its own special co-operative purpose and each different than the others.

The past has emphasized some lessons as to our Kansas co-operative work. All the ably written or brilliantly spoken dissertations upon co-operation do not help us unless we are stimulated to begin doing something together, however small. Some of these serve simply to bewilder and mystify. They paint a mental picture of some great undertaking upon which we hesitate to embark. We are past the time of urging the benefits of co-operative effort and suggesting that we need its results in this day of "high cost of living." An expert from Washington assured a large audience last winter, that we ought to begin a very thorough study of the rules of the game before we begin to co-operate. This comes late in the day for Kansas, with its Olathe and other similar and equally successful ventures.

For a community desirous of getting together to do some definite thing, the simpler the first step the better. Let subsequent steps grow out of plans that have been proved. Osage County, in its splendid carlot buying and selling, has proved the wisdom of this. Shawnee, Johnson, Anderson, Jackson, and others, have had like experience in starting. Not a great plan of doing everything at once, but the deciding upon some one commodity that a certain number are ready to buy together right now—that is the way to lay the foundation. Vast and comprehensive systems in Europe, like the "Boerenbund" with warehouses, literature of its own, dealing in every agricultural need and marketing every product of its members, with representatives in other countries, began in the smallest way. This institution owes its origin to the gift of twenty-five kilograms of chemical manure by a parish priest to a poor parishioner, and the consequent organizing of a Peasant's Guild of seven members. The doing of one thing together gives confidence, and another and larger work is undertaken.

We are too much inclined to make a great state plan, and often a national one, and advocate it, before we are ready to do things on the smaller and local plan. No organizations of this character have ever been developed to last

and do efficient work except as they grew naturally. One of our weakest points in the West is that we are not willing to make our local work strong and expand only as rapidly as we can safely. We want to run a state movement just as soon as we have dealt in a few cars. A lot of men have been saying they can make plans to handle all our shipments of hay and other produce in the way of feeds direct to consumers in other states. One or two heavy shipments for which it is difficult to collect, where the producer has to be the loss, will kill off that sort of co-operation for a decade. Not all men to whom these things are shipped have a rating, and even where they have, temporary failure has caused losses within the last year.

There is an elevator, owned by co-operators, which, while doing a very good business a short time ago, is closed today. A man could do no good talking co-operation in that community, and it is a live, wide-awake locality. Three carloads of corn were shipped to North Texas. By a singular coincidence, coupled with a lack of experience in that class of business, the collection was never made. The company stood the loss. Sending a man down did not clear it. Co-operative elevator interest died. To be a "good loser" is a necessary quality of successful business, but the co-operative organization is hardly educated up to that in Kansas as yet, and hence must see that there are very few losses. Natural growth prevents them.

When there can be a right understanding among the various state organizations of the national orders, the marketing of our long distance shipments can be facilitated with safety, and good profits will result. It is time that the co-operative committee chairmen and agents over a wide area were able to meet and discuss ways and means to bring the producing and consuming agencies in touch. For instance, there are members of the Grange in Kansas who have alfalfa for sale, and there are other members of the same organization in the Middle and Eastern states who need large amounts of it. They do not know of each other's existence and readiness to get together. Direct business conferences will do vastly more in bringing these together than will congresses where long addresses from theorists are the order of the day.

This year has already made history in co-operative effort, and the wide interest all over the state indicates that our people are ready for a forward movement along practical lines. No state government or state institution can foster this as it ought to be fostered. It can only be done by the farmers themselves. They must organize for this. There is no need to antagonize any existing agencies of production or of distribution. In a spirit of fairness toward all, farmers' organizations should go forward to make their calling a business proposition and adopt the means necessary to that end. In parts of the country where this has been done it has brought about a great change, and the entire community has bene benefited by it.

Plans are on foot now to secure a complete report of all the co-operative work being carried on in the state, and when that information is available it will be a source of encouragement to those communities just beginning to get together. This mutualization of interests should reach into every part of the life of a locality—social, educational, and economic. The Grange in its work carries on all-around co-operation, and each subordinate or Pomona—county—is strong in some one or another feature. In fact, whatever the organization, unless the whole is developed, the economic—mere buying and selling—will not continue to be a permanent success. The educational side is absolutely necessary, and that is to be developed in the meetings, very largely by mutual discussion.

In beginning the smallest venture, in the line of doing things together, we are shaping influences, or if you please, planting the seed that shall bring a harvest of results far beyond our dreams. Would that a panorama of the history of just such work in other parts of the world might unroll before you. It would effectually demonstrate what can be done, especially in Kansas, with her freedom of initiative, her less hampering restrictions, and the quality of her people. She should, as in some other things, set the pace for wise and effective co-operation.

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

WE have been asked whether the fall-bearing strawberries can be successfully grown in Kansas. These ever-bearing strawberries, as they are sometimes called, were exhibited at a number of fairs last fall and attracted considerable attention. O. F. Whitney, secretary of the State Horticultural Society, has the following to say on this new variety of strawberries:

"Last fall was an ideal one for this new strawberry. The weather was cool and we had plenty of moisture to keep the plants in thrifty condition. They bore fruit until the cold weather came. If July and August had been dry, the results would not have been so favorable. The fruit could not have matured and the plants would not have thrived or been able to reproduce by making runners. It is my opinion that the ever-bearing strawberry is here to stay, but we must not expect too much. They have their limitations, and if you permit them to bear fruit, commencing the first of June, until into October, those berries borne late will be small and inferior in quality. It would be better to prune off the blossoms until the first of July so that fruit of fine quality can be gathered later in the season. Irrigation will be necessary in many years in order to succeed with this fall-bearing variety. The tried varieties of strawberries should be relied upon to furnish fruit in their season."

Size of Pig Litters.

B. R., Morris County, asks if the tendency of brood sows to produce small litters of pigs is inherited.

Inheritance is one reason for small litters. If brood sows are selected year after year from small litters there can be no doubt the tendency will be for them to gradually decrease in prolificacy. This is a point that every hog grower should keep in mind. For this reason he should always mark his pigs so that they can be identified in the fall when it comes time to select the gilts to be saved for breeding purposes. If this is not done he is apt to select the gilts that look best at the time. These will quite often be from small litters.

There are other reasons for small litters, these having to do with the care and management. If brood sows are allowed to run with fattening hogs, they will not be properly nourished and the litters may be small and frequently so lacking in vigor that only a small number will be saved even when a good-sized litter is farrowed. At this season of the year this is a point that should be kept in mind. The brood sows should by all means be cared for separately and not with fattening hogs. As we have urged many times, they should be provided with plenty of good-quality alfalfa and the grain ration should not be too heavy. In the case of young sows, some additional protein concentrate, such as tankage or skim milk, must be supplied.

Occasionally the young sow will farrow a small litter as a result of bad management, but with proper feeding from then on may develop into a sow that will farrow litters of good size. For this reason it is not always wise to discard every gilt that fails to bring a big litter at her first farrowing.

Silage for Wintering Cattle.

L. M., Smith County, asks if silage can be used exclusively in wintering stock cattle.

Placing a crop of corn or kafir in the silo does not change its composition. This process of preserving makes it possible for the animal to utilize a larger proportion of the nutrients, but it will still be an unbalanced feed. Mature stock cattle might be wintered on silage alone, but better results will always follow the use of some other feed, and wherever possible this should be some legume roughage such as alfalfa hay. Silage and alfalfa will winter stock cattle in splendid shape without the feeding of any grain. The Missouri Experiment Station reports feeding some yearling cattle for 150 days on corn silage and clover hay without grain, the cattle gaining 200 pounds during this period, at a total cost of but 5½ cents a pound for the gain made. A similar lot of cattle fed clover hay as the only roughage and six pounds of shelled corn daily to the animal, made similar gains, but the cost was at the rate of 7.8 cents a pound.

At the Kansas station calves have been wintered satisfactorily on corn, kafir or cane silage with the addition of a pound

of cottonseed or linseed meal daily per calf. In one trial other cheap roughages were used most satisfactorily with silage. One lot of thirty calves was fed three and one-third pounds of wheat straw, two and one-third pounds of corn stover, three pounds of damaged alfalfa containing considerable foxtail, and about seven pounds of kafir silage, daily, per calf. In addition they were given about four-fifths of a pound of grain and made an average gain through the 144 days the trial continued, of forty-one pounds a head, and the daily cost of feed had been only 3.3 cents per calf. The total cost of wintering these calves was but \$5.72 a head, and from this, of course, should be deducted the value of the manure.

It is always best to use silage in connection with other feeds if possible. By limiting the amount of silage somewhat, it will go a great deal farther and will result in a more economical use of all the cheap feed on the farm. If the cattle are given all the silage they will eat early in the season, the supply may be

should, of course, be thoroughly healed before the hog is slaughtered. The Federal Department of Agriculture has made a ruling that two weeks must elapse between the time of injecting serum and the killing of hogs for food purposes.

How Much to Feed Milk Cow.

P. W., Johnson County, asks how he can tell whether or not he is feeding his milk cows enough.

A general rule is to feed all the cows will consume as long as they are responding with an increased milk flow. This will apply to cows of distinctly dairy temperament. Of course, it is always understood that the ration must be properly balanced for milk production. Unless a sufficient amount of protein is supplied the cow cannot increase her milk flow, even though consuming a heavy ration. In the interest of economy it is always important to use roughage to the fullest extent possible. Therefore, first of all, the cows should be given all the hay and silage they will consume. If the hay is clover or al-

difficult to head this Sudan, but it would seem to be the only way in which it can be put in shape so the threshing machine men will handle it. As in threshing kafir or milo, there is danger of cracking the seed unless part of the concave teeth are removed and the cylinder run at a slower speed than in ordinary threshing.

Creosoting Fence Posts.

W. R. L., Coffey County, asks if anything can be done to lengthen the life of fence posts.

This is getting to be quite a problem as to the cost of post material increases. It used to be possible to get posts for ten cents apiece, but almost any kind of post now costs two or three times this amount. This is leading to the introduction of iron and cement posts, but these have some objections. Railroad and telephone companies have been very successful in recent years in preserving their poles and ties by treating them with creosote. They use coal tar creosote of a grade that is not too heavy. This creosote is forced into the ties or the butts of the poles under hydraulic pressure in closed tanks. Of course, on the farm this is not practicable. It is possible, however, to treat posts with creosote in open vessels and greatly lengthen their life. This is done by boiling the butts of the posts in creosote for three or four hours and then letting them cool in the liquid. The heat forces a part of the air out of the wood, and as the posts cool the air still remaining contracts and this creation of a partial vacuum forces the creosote into the wood. Simply painting it on the outside is of little benefit.

This treating of fence posts can be made a winter job, and where there is to be considerable fencing the following spring, it will pay to make this effort to extend the life of the posts used.

Winter Fertilizing of Lawn.

R. L. N., Lyon County, asks how to improve the lawn around his house. He says the bluegrass is fairly well started but is not thickening as it should.

It requires considerable care and attention to keep a lawn in good condition. It not only requires care through the growing season, but should be looked after during the winter as well. The grass should never be cut or grazed closely late in the fall, but should always be left long for winter protection. Nearly always proper fertilization will strengthen the growth of the grass, and a top dressing will likewise furnish winter protection where the grass was cut too short in the fall. The best fertilizer to use is fine, well rotted stable manure. This should be applied about the time the ground freezes. It should be left on the lawn all winter. In the spring, as soon as the grass begins to start, the coarse part of the manure should be removed by raking. If there are any thin spots, more seed should be sown very early in the spring. In fact, the seed can quite often be sown with good results, when there is a light snow on the ground.

Curing Beef on Farm.

Farmers who do not produce and cure their own meat miss an opportunity to economize in the cost of living. The following is from a Missouri experiment station press bulletin:

"Any of the brine or dry mixtures which give good results in curing pork can be used satisfactorily for beef, but as beef is leaner than pork, it should not be allowed to remain in the brine or mixture quite as long, or it will become hard and salty."

"Dried beef should have the same cure as corned beef, care being taken not to let it get too salty. It should then be washed to remove the excess of the cure, and smoked if you like the smoke flavor. A very good country practice is to dry cure the beef with salt and brown sugar, using about a fifth as much sugar as salt, rubbing the meat very thoroughly with the cure every two or three days for about two weeks. It should then be washed, wiped, and hung up to dry in a warm place if you do not wish to smoke it, or transferred to the smoke house and given a light smoke."

"Corned beef is at its very best when it has been in the cure about ten days. If kept in the cure more than a month, it needs considerable freshening before cooking. If you wish to preserve the red color of the beef, you should use a small amount of saltpeter, not more than two ounces to each hundred pounds of the meat. This improves the color of the meat but is detrimental in that it tends to harden the lean fibers."



VIEW IN DAIRY BARN AT PANAMA-PACIFIC EXPOSITION.—COMFORT AND CLEANLINESS OF COWS MOST IMPORTANT FEATURE IN DAIRY FARMING

exhausted before spring and bad results will be sure to follow the change from the silage ration to one of dry roughage during the latter end of the season. For this reason it is always a good plan to estimate as closely as possible the amount of silage on hand, and so gauge the feeding as to make it last until the pasture season opens.

Treating Rooster's Frozen Wattles.

J. L., Wabaunsee County, asks what to do for roosters that have frozen wattles.

If the rooster can be taken in hand as soon as it is noted that his wattles or comb have been frosted, it is a good plan to thaw by rubbing with snow or bathing in cold water. The frozen part should then be anointed with carbolated vaseline or an ointment consisting of two grains of salicylic acid to the ounce of lard or vaseline. If taken in time, the comb or wattles can frequently be saved and the fowl will not be seriously affected.

Prevention is better than cure. Roosters usually freeze their wattles by getting them wet in the drinking vessels and then running out when the temperature is low. This can be avoided by providing the drinking water in vessels in which they can not get their wattles and also by keeping them in during spells of zero temperature.

Butchering Vaccinated Hogs.

E. R. S., Ottawa County, asks how soon hogs can be butchered after being vaccinated with serum alone, and if the meat is in any way affected by the serum.

Serum is unlike virus, and does not multiply or increase in the body, consequently it causes no diseased condition. It is eliminated very rapidly. Ordinarily there will be no traces of it after six weeks. If the hog was thoroughly healthy at the time it was vaccinated, and showed no abnormal symptoms or increased temperature at the time of slaughter, the meat should not be affected. The injection of the serum, however, does have an effect on the tissues locally, discoloring them to some extent, and occasionally abscesses form. These

alfalfa, the roughage part of the ration will be well balanced. In addition to this, good milk cows must be fed grain. A good rule to go by is to feed about a pound of concentrated feed to every four pounds of milk the cow is giving. A good grain mixture is one composed of four parts corn or kafir meal, two parts bran, and one part cottonseed meal. This is a standard grain mixture used by a good many dairymen with the best of results. It is always a good plan to do a little figuring on the cost of the ration, since it might not be profitable to feed for a maximum milk flow. In other words, the last pound or two of milk might cost so much that it would be more profitable to feed for the moderate flow.

Sudan in Eastern Colorado.

T. F., one of our Colorado readers, writes as follows regarding his experience with Sudan grass:

"Our climate is similar to that of Western Kansas. Every spring the wind is the source of much trouble, since our soil gets very loose and dry. Last spring we planted a patch of corn and next to it an acre of Sudan grass. The Sudan did not make a good stand, and was unthrifty. The hot winds which came early in the summer, made both the corn and Sudan brown and withered. The corn died and had to be replanted, but the Sudan came up later. It did not grow well until the middle of July, but from then on it grew as if by magic, and made a perfect stand. We got an excellent yield of both hay and seed, but we are having trouble to get it threshed. The threshers will not put it through the machine on the stalk and we are trying to thresh it by hand. We would be pleased to have any advice you can give us as to how to get the seed threshed. The stubble is so thick it holds the soil from blowing, and we consider it a good crop for this reason alone."

We can furnish little advice on the matter of threshing. Threshing machine men do not like to put heavy forage through their machines, consequently it is usually necessary to first head such of the grain sorghums as are to be threshed for seed purposes. It may be



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Keeping Farm Accounts

FARMING is a business, and as such it requires, as does every other well managed business, a certain amount of bookkeeping. The accounts kept on the farm should be only such as are needed. They should be simple, accurate, and concise, and must be thoroughly understood to be of the most service. If too much is attempted in the beginning there is danger that it will all be dropped when a rush of work comes on, and nothing will be gained. Farmers generally do not keep many accounts because when there is the most to record the farm work is so pushing that they drop it, even though they may have started out with the best of intentions. Farmers can not get away from the

ence in net worth of the two inventories is the gain or loss for the year. In taking this inventory, the various heads appearing in this summary must be itemized. For example, each individual horse on the farm will be given a value. Cattle, perhaps, can be given average values, but the inventory sheet should show the number of cattle of each kind, price per head, and the total value. So, with the other main heads.

Accounts with the important enterprises of the farm business must be kept in order to locate where the loss or gain has occurred. The inventory does not supply this information. Table 2 shows such an account as would be kept to learn the profit or loss of the hog end

Inventory	1914	1915
Real Estate	18000	18000
Horses	1450	1510
Cattle	2675	3110
Sheep	275	295
Hogs	210	265
Poultry	125	147
Machinery & Equipment	1215	1210
Household Effects	618	672
Feed	385	450
Seed	115	122
Bills & Accs. Receivable	200	185
Cash	417	653
Resources	25695	26619
Less Bills Payable	4176	3676
Net Worth	21519	22943
Net Gain	1424	
	22943	22943

THIS SAMPLE FARM INVENTORY SUMMARY SHOWS HOW COMPARISONS OF THE FARM BUSINESS ARE MADE FROM YEAR TO YEAR

Hogs	
1914	1915
Mar 1 Inventory	300
Apr 1 Feed - March	2250
" Labor "	525
" 20 Bought Boon	22
May 1 Feed - Apr	2175
" Labor "	450
June 1 Feed - May	1650
" Labor "	350
" Feed to Mar 1/15	275
" Labor "	35
Mar 1 Taxes	360
" Int. on Investment	15
" Bal (Gain)	33115
1915	105575
Mar 1 Inventory	275

THIS SAMPLE HOG ACCOUNT SHOWS LEDGER PAGE AS USED IN KEEPING ACCOUNT OF IMPORTANT FARM ENTERPRISES.—IT OPENS AND CLOSSES WITH INVENTORY.—ACCOUNT IS PROPERLY OPENED FOR ANOTHER YEAR

fact, however, that unless they keep some sort of accounts they have no means of knowing at the end of the year whether they have made any income or whether they have simply been living on the interest on their investment. Determining the owner's labor income for the year is one of the first things to learn from farm accounts. No one likes to work for nothing, and getting at the loss or gain is the first step leading to the keeping of such crop and live stock accounts as will show which enterprises are making money and which ones are losing money. Finding where a loss occurs is the first step in learning how to convert it into a gain.

Two weeks ago we urged the importance of the inventory. The taking of the inventory is the first procedure in starting a system of farm accounts. On this page is a simple inventory, two years' items appearing, so as to show the method of making the comparison between the business of two years. When summarized, as here shown, the differ-

of the business. Similar accounts should be kept with the leading enterprises of the farm. A general expense account will take care of other receipts and expenditures. These accounts, with a cash account, will be all that are necessary unless considerable business is done on a credit basis.

In future issues we will continue these suggestions on farm accounts and furnish other helpful information having to do with farm management problems.

The grape vines are full of dried grapes which contain the spores of the black rot; remove these, and rake or "scrape" them clean from the ground under the vines. Grapes do well in this county when properly pruned, but they need spraying three or four times during the season with Bordeaux mixture to control the disease. The "mummies" caused by brown rot on peaches and plums should also be destroyed this winter.

Every Kansas Farmer Should Read This Announcement

For it tells of a Great Land Opening that will enable a farmer at a glance to make up his mind whether or not this is an opportunity for him to build a Better Home—Earn a Better Living and Lead a Better Life than he is now doing.

When the United States Government throws open its lands for settlement, the people recognize the great opportunity; and filing applications often outnumber possible claims at the ratio of 100 to 1. There is a reason for this, and this reason is: "The American farmer knows the value of a new country and new land." This announcement is very similar to a Government enterprise in this respect.

Suppose you could transplant your farm, with the very surroundings amid which you have lived for so many years, to a newer climate where your acreage might produce for you three crops a year. Wouldn't you gladly embrace the opportunity? The land we want to tell you about is located in Beauregard Parish (County), Southwestern Louisiana. These lands lie high, are naturally well drained and are virgin in every sense of the word. No plow has ever pierced the breast of the acres we will soon throw open for settlement. No farmer has ever taken from this soil any of its pristine value. Beauregard Parish (County), around that great center known as the De Ridder, Ludington and Bonami District, enjoys all the sterling qualities of the famous state of Louisiana, without suffering from the drawbacks which have obtained in the past in other regions of this noble state. Beauregard Parish lies in the very heart of what is known as the Ozone Belt of Louisiana's famous highlands. Singularly free is this region from rigorous climate and the effects of stagnant water. There is no river overflow, nor backwater to create swamps. To the ordinary farmer of the state, except for new delightful foliage of trees, plants, etc., the contour of this section would remind him of his own land.

Corn has become Louisiana's staple product, in point of acreage devoted to it, quality produced and value. From a yield of 19,516,500 bushels in 1913, it has increased to more than 48,000,000 bushels in the year just passed. There is a reason for this enormous development—and that reason is the influx of Northern farmers into this wonderful state.

It is said that Louisiana has more miles of navigable streams than any other state in the Union. Its lands consist of 29,610,000 acres, which were once gigantic forests. Louisiana has been slower in developing, than those farm regions, where lumber was not necessary to remove, in order that such lands might be cultivated. The fame of Louisiana, the building of railroads through the heart of the forests, the ever increasing demand for its excellent lumber, has, year after year, thrown open for settlement great quantities of virgin farm land; and each year finds the total of taxation in the state sufficient to enable the great parishes—which are the same as Northern counties—to extend the work of improvement into all lines, such as roads, schools, extension work, etc. If you could go to De Ridder today, with some of your school commissioners, and see there what Beauregard Parish is doing in the matter of school work, you would surprise and even shame your own county in this regard.

The United States Government has established an Agricultural Field Agent in this section at De Ridder; the Parish (County) Commissioners and Principals of Schools are extending the work of agriculture to the school room. The children are gathered together from great distances by County conveyances, and thus carried to school. No condition of time, distance nor climate stands in the way of education in this great region.

THESE LANDS

Let us tell you briefly something of the lands, about which we want to focus your attention in this announcement. The timber from these lands has been removed by Long-Bell Lumber Company operations. Most of this timber has been cut off for a period of five years. It is a well known fact that, when land is exposed that has been tree-covered, and the trees taken from the soil, such land passes through a reconstruction period. It becomes sick, so to speak, and the chemical forces within it set to work to build up a newer, better soil. Gradually it turns itself over and over. It takes time to do this, and the great difficulty has been, with land of this character, that agriculture follows too closely behind the woodman's ax. In this region, however, sufficient time has passed to prepare the soil for the plow. Here, to this very spot, great transportation companies have been attracted by the traffic of lum-

ber. Three great railroads traverse this fertile Parish now, while lumber railroads form a network of lines between them. To the South, sixty-five miles "as the crow flies," lies the great Gulf of Mexico. Its winds temper the atmosphere to a point one hundred miles inland. At night this cooling Gulf wind enables one to sleep during the hottest part of the summer with comfort, and the same wind that acts as a shield in the summer throws a protecting blanket over this region during the fall and winter months. It is a sort of an air cushion that stands the buffeting of the air currents hurled upon it from the North, East and West.

LARGE CAPITAL AND FARMS

There is approximately from twelve to sixteen years' more work for the lumber mills in Louisiana. The railroads have followed the saw mill and logging camps. Great capital is soon to be shorn of its earning power derived from the products of the forest. Capital has realized this fact;

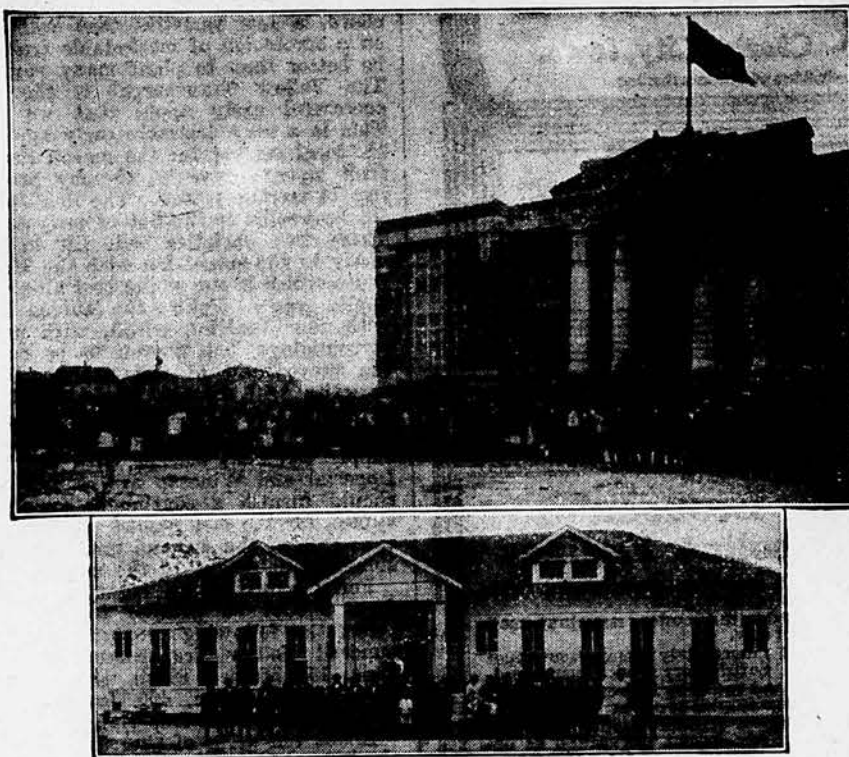
Such crops are oranges, kumquats, figs, grapes, pecans, vegetables, melons, ground fruits, etc., which will swell his opportunity to make a small acreage, with ordinary effort, yield tremendously.

This Company is a sister corporation to the Long-Bell Lumber Company, which concerns needs no introduction to the American people, as it has no superior in the lumber business of our land. Any financial institution—no matter where you are located—has the means at hand to determine the value of the Long-Bell Lumber Company's name. The same excellence which obtains with this company will be the steadfast rule of the Long-Bell Farm Land Corporation, whose lands we are now describing. This being an assured fact, that which is to follow should be of particular appeal to everyone.

OUR PLAN

It is our purpose to throw open for settlement 100,000 acres during the year 1916; 100,000 acres during the year 1917; to be followed by an additional 100,000 acres in 1918. The first block of land, 100,000 acres,

Here Is Prosperity Proof!



Upper photo illustrates High School Building at De Ridder, La.
Lower photo is a typical district school of the section.

the United States Government has realized it; the State of Louisiana has realized it. We then find that all the large influences and financial interests have really awakened to the necessity of placing crops where once stood the forest tree.

MIXED FARMING AND READY MONEY

The charm of this section lies in a great degree with the fact that the Northern farmer can grow corn, oats, hay, the clovers, velvet beans, cow peas and other legumes, and with less competition, than in almost any section of the North. There is need for the dairy cow; there is need for market cattle; there is a crying need for pork and sheep; and, while all these necessities await only the Man-quality to bring them into profitable being, there is the climate which makes possible the planting around a man's home of a few of the semi-tropical staples as by-products to his farm.

will be offered under our plan of settlement in about thirty days. We are today making this announcement in many sections of this country to the American farmer. We have so timed this publicity that the public will have identical opportunity for investigation at the same hour. In other words, the man who lives in the State of Washington will have the same opportunity, under our unique plan of selling, as the man in Ohio, Indiana, Illinois and Iowa. We have a UNIQUE plan, but because of the very fact stated above, we cannot unfold this plan in this publication, at this early date. All that we can do is to call your attention to our announcement in full, which will appear in the columns of this paper on the 29th day of January, 1916. It is our purpose to sell these lands in blocks of 40, 80, 120 and 160 acres. We will sell no land to any man unless we are assured that such an individual has the means to improve his land, and to cover his expenses for such a period until the farm can return to him a profit necessary to the work of making virgin

acres—a producing farm. We want no idlers, nor people fascinated with false dreams. We want men and women who are as good as the soil and climate. No matter how rich the land, science always finds that a certain proportion of mankind falls under any and all conditions. A great worker of this country, connected with the United States Agricultural Department, said of the Southern land: "Seventy-five per cent of the value of the South is climate; fifteen per cent soil, and ten per cent man; but if you do not give the soil and the climate the ten per cent man-quality, the South cannot take advantage of the remaining ninety per cent of its producing value."

We want to free this announcement of any glamor or imagining that will paint landscapes in the brain of the cool and collected man; and thus sway his judgment against his real duties to himself, his family and his future. On the other hand, we do not want stable, competent, equipped Northern farmers to confuse this project with some kind of colonization work that has been carried on in the South in the past—to a failure.

This Company reserves the right to know as much about its colonists as its colonists desire to know about it. This may sound like high-handedness, but we know the effect of "one bad apple in the barrel." We know that one failure among twenty or thirty strictly energetic settlers breeds discontent, and we do not intend to let a man who is not equipped for success, run headlong upon the rocks of his own ignorance.

This land will be sold at a remarkable figure, and upon very interesting terms. When you read the announcement of our plan you will be convinced that the Company has struck the very keynote to the needs of land development. The first requirement will be that the settler is allowed as much use of his money as is possible. Land payments will not be allowed to exhaust development funds. He will receive from the Company all the co-operation that may be expected, to bring about the successful tilling of his acres. The Company has a demonstration farm where the question of soil has already been proven, and where the Company's expert is equipped to illustrate his words by growing tests made over a period of eight years. You can see his success with your own eyes. Every need of the very acres and the very soil upon which a settler will locate has been solved already by this Company. Having accomplished these things to our own satisfaction, we are prepared to place the right kind of men and women on the land, at terms that will permit them to pay for the land out of its earnings. Possession will be granted at once after first payment. By reading our great announcement in this paper on the 29th day of January, 1916, you will learn exactly what these terms are, and no word of ours will be necessary to show you the value of your opportunity. You can see it at a glance.

You must rest assured that everything stated in this announcement is stated by a commercial enterprise whose influence, in the business world, is so well established that your own banker will prove to be as large a testimonial as anyone would care to offer. To the curiosity seeker, the sceptic, the pessimist or the idler, we have nothing to offer. To the man who knows farm conditions, whose judgment has led him to success in the past, and to hope of continuous success in the future, we do want to appeal—and we want to appeal as strongly as we may. This land will all be sold, and sold to the right kind of people; and these people will be successful. If you are one of such, then we want to call your attention particularly to the issue of this publication which will appear on the 29th day of January, 1916. We want you to read this issue and to act on it at once. It will have an offer that will be very attractive to everyone, provided he is alive to opportunity and takes time by the forelock. If, for any reason, you believe you will not see this issue, then by all means clip the coupon below and send to us NOW. We will place your name on our mailing list and send our literature to you. In this literature you will receive not only the same facts contained in our announcement, but you will obtain photographs and reproductions of the very sights you will view when you go down to visit the lands of this Company. We will keep your name and send this literature to you so that it will arrive, wherever you desire it to arrive, at approximately the same time as our announcement in this publication. In this way we will give you an equal advantage with the thousands of persons who will anxiously await the date pertaining to this New Land Opening in Louisiana.

No matter who you are, or where you live—whether you are a reader of this paper, or the friend of a reader of this paper—you cannot afford to miss the opening announcement of the Long-Bell Farm Lands located in the ozone belt of Louisiana's Famous Highlands.

SEND THIS COUPON TODAY AND BE SAFE

Long-Bell Farm Land Corporation

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KANSAS CITY, MISSOURI

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"LITTLE DEVIL" OIL TRACTOR POWERFUL & DEPENDABLE

15 H.P. AT THE DRAW BAR. PRICE OF 4 HORSES—DOES WORK OF 8

Thousands of Satisfied Owners—Hart-Parr Tractors Everywhere

Now is the time to investigate! Select the one you are interested in! Don't feed extra horses all winter. Be ready for fast work next spring.

One Man Outfits
"Old Reliable" . . . 60 BHP
"Road-Maker Special" . . . 45 BHP
"Steel King" . . . 40 BHP
"Oil King" . . . 35 BHP
"Crop-Maker" . . . 27 BHP
"LITTLE DEVIL" . . . 22 BHP

Operate the machinery you now own. Reports from owners mailed at your request.

Write today for our new circular, describing the 1916 Model of the "LITTLE DEVIL". It will help you to "play safe" in purchasing a tractor. Ask us to tell you about the "money maker" apparatus, if you are interested.

We wish you happiness and prosperity during 1916. Let us help you.

Hart-Parr Oil Tractors Are Guaranteed By Service

Plow Deeper - Operate Cheaper - Save More Money

Hart-Parr Tractors have fewer parts to wear out, fewer adjustments to make, greater accessibility if adjustments are required.

They are built rugged, with extra large bearings. All bearings and vital parts fully enclosed, with individual and steady supplies of clean, cool lubricants, automatically and positively fed.

The "LITTLE DEVIL," the sensation of 1915, has a non-freezing cooling solution. All the others of the blue ribbon family are oil cooled. No pumps or fan belts—no danger of freezing in cold weather—no draining of radiators.

Low grade kerosene is burned, with positive feed injection. Steel built, and sturdy, they have just the right weight to utilize the full power of their motors at the drawbar.

The drive wheels, developed thru years of study and experiment, do not pack the soil injuriously. All Hart-Parr Tractors are designed by that master tractor builder, C. W. Hart.

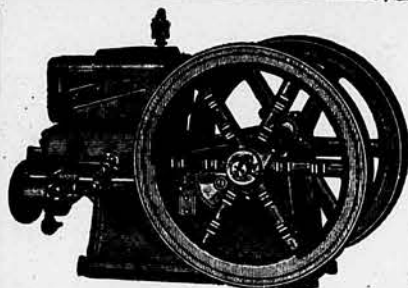
These facts mean low repair bills and operating costs. Long established Branches and Service Stations are back of every tractor.

Hart-Parr Co., 427 Lawler St., Charles City, Iowa.

Founders of the Tractor Industry—Builders of Tractors that last

A Warranty That Counts: All Hart-Parr Tractors are sold under a straight-to-the-point warranty. They are proved by the verdict of Father Time—the venerable and impartial Judge, before whom all claims of endurance must finally be decided. Father Time has applied the test to Hart-Parr Tractors. The verdict is: That of all Hart-Parr Tractors built fourteen years ago—the first oil tractor ever marketed in the world—over NINETY PER CENT of them are today doing full duty. The verdict of Father Time is a silent clause in every Hart-Parr warranty, that means more than a whole dictionary full of words. Do not experiment with claims—Cash in on SURETIES.

SEARS, ROEBUCK AND CO. CHICAGO.



Economy Gasoline Engines

Built to operate on gasoline, kerosene, natural or artificial gas. Equipped with Webster magneto at small additional cost.

Shipped immediately from a warehouse near you. Satisfactory service guaranteed. Tested and rated by University Experts, with a large surplus of power.

Don't buy a gasoline engine until you have seen our special proposition as explained below.

SPECIAL SALE ENGINES AND BUGGIES

We are making special inducements to early buyers during January and February that will enable you to make a bigger saving in the purchase of a gasoline engine or buggy than you can make at any other time of the year.

If you are interested in gasoline engines, write for our special January and February Engine Proposition No. 65K16.

If you are interested in buggies, write for our special January and February Proposition on American Beauty Buggies No. 65K16.

Don't buy a buggy or engine until you have seen this special proposition, as it means a big saving to you.

American Beauty Buggies

We are headquarters for American Beauty Buggies. We sell more buggies than any other two manufacturers in the country.

You will save twenty to thirty dollars if you buy an American Beauty Buggy from us. Because of our manufacturing facilities and tremendous output, we are able to give you better value in our American Beauty Buggies at lower prices than anyone else.

Our American Beauty Buggies have won the lead on account of high quality and low price. We ship them from a warehouse near you. Send for our Special Proposition during January and February, as explained above.



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FARM WAGONS

High or low wheels—steel or wood—wide or narrow tires. Steel or wood wheels to fit any running gear. Wagon parts of all kinds. Write today for free catalog illustrated in colors.

ELECTRIC WHEEL CO., 34 Elm Street, Quincy, Ill.

Starting Commercial Fruit Farm

By O. F. Whitney, Secretary State Horticultural Society

A COMMERCIAL fruit farm necessarily implies the selling of fruit from the time when the first fruit is ready for market in the spring, until the last apple is gathered in the fall. This being the case, the first fruit for us to consider is the strawberry. It is not best in this locality to plant the very earliest varieties because our early strawberries come in direct competition with berries from the South. A medium late, a late, and the ever-bearing or fall-bearing strawberries are the ones to put out for best market returns. The Dunlap, Aroma, and Gandy have done fairly well in this locality. Plant some of these varieties, although there may be some others that will suit the conditions as well.

In the raspberries, the most successful black one with us is the Cumberland. The red ones are more profitable, but require peculiar conditions and extra care; they have proven profitable only in a few instances. The best variety of gooseberries is the Downing. The Mercereau blackberry has proven itself one of the best all-around blackberries that we have at the present time. It will rust, to be sure, and the only way to be successful with this fruit is to dig out all affected plants and burn them—root and branch.

In planting a commercial apple orchard, a few varieties that will bring on a succession of marketable fruit will be better than to plant many varieties. The Yellow Transparent is the most successful early apple that we have. This is a very desirable early apple for the local market for the reason that its fruit ripens unevenly, thereby prolonging its market season. The Red June is the best seller in the line of early apples. These two varieties will fill in very nicely in the succession with the Maiden Blush which is one of the best all-around apples grown. Follow the Maiden Blush with the Wealthy, which, with proper surroundings, has proven to be one of the very finest of fall apples. These varieties will furnish apples until the Grimes Golden and Jonathan are on the market. These last two varieties will supply the local market until the York Imperial and Winesap are ready. This should furnish a continuous supply of apples, for the last named varieties will take care of the demand until the early summer apples are on the market.

Forty acres of an eighty-acre fruit farm should be planted to apples in about the following proportions: Two hundred Yellow Transparent, 100 Red June, 150 Maiden Blush, 150 Wealthy, 300 Grimes Golden, 400 Jonathan, 200 Winesap, 100 York Imperial.

About ten acres of cherries should be planted, consisting of eight acres of Early Richmond and two acres of Montmorency. It is more than likely the ten acres of cherries will give better returns, all things considered, than any other ten acres on the farm.

The cherry trees should be planted a little deeper than they were in the nursery row, but care should be exercised not to plant too deep or they will sprout from the cherry stock and the sprouts will be as hard to keep down as

if the cherry trees were grafted on their own stock.

Peaches can be set among the apple trees. Put these trees in the apple rows, one for each apple tree. The following varieties of peaches will afford a continuous picking from early to extreme late: Alexander, Greensborough, Carmen, Early Crawford, Eads, Champion, Elberta, Old Mixon, Old Mixon Cling, Smock and Salway.

Early peaches are not very satisfactory for Eastern Kansas. The aroma from a basket of early peaches is the most agreeable part of them. The time when the class of peaches to which the Champion and Mountain Rose belong, commence to ripen, is the time when we realize that peaches are a delicious fruit.

The peach trees should be cut and the wood removed as soon as they interfere with the growth of the apple trees.

Occasionally plums make the grower some real money, but as a whole, they are risky. Those who care to take the chance will find the safest plum is the America. Its greatest fault, when it does fruit, is over-bearing. This plum has a long marketing season, and when ripe is of good quality.

The market will also demand some crab apples. A few trees of the Whitney for an early crab will perhaps be a profitable venture. The Hyslop for a late will give you a very good succession.

I have said nothing about sweet apples. There is only a small demand for this class of fruit on our markets. The Sweetbough for early, and Bailey Sweet for late, will give as good returns as any of the sweet apples.

In grapes, plant Concord for the late and Moore for the early market. The market could take care of quite a few more early grapes. If eight acres of grapes are planted, three acres should be Moore. The grape crop is reasonably sure. Fruit has been known to set on the vines when the two previous crops of buds have been frozen by late spring frosts. In training the grape vines, allow for plenty of circulation of air under the fruit. This will prevent most of the fungous diseases.

The inter-cropping of this orchard must be done with care and judgment, so as not to interfere with the best development of the fruit trees. The crop grown between the rows is only a side issue, and must be such as will permit of thorough cultivation. A crop that takes too much fertility from the soil will rob the fruit trees and thus be a loss in the end. Grass and weeds allowed to mature in the orchard furnish a harbor for various enemies of the fruit trees, and also increase the danger from fire.

Statistics in Minnesota on a number of farms indicate that the horse is a costly item of equipment on the farm. Assuming average state yields of grain and hay for the last five years and considering the amount of feed fed annually to a horse it is apparent that the average farmer is giving close to 4.5 acres of his best land to each work horse. This is besides the straw consumed and the pasture, which also may be very productive land. Be sure the horse is giving you

Rainfall In Kansas, December, 1915

Report furnished by S. D. Flora, U. S. Weather Bureau.

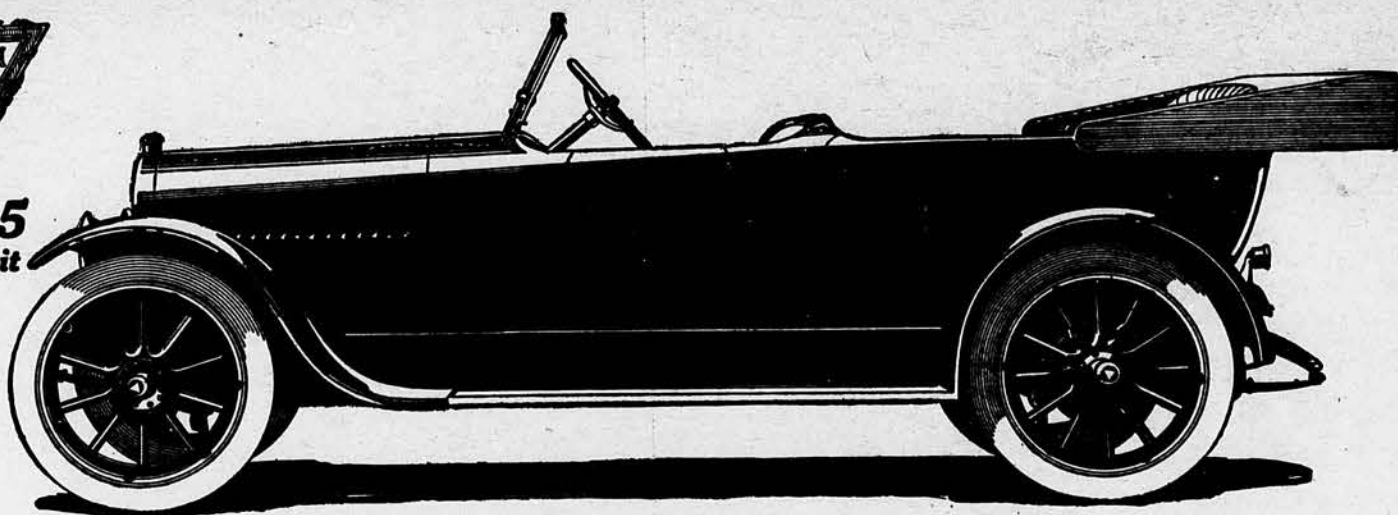
0.50	0.46	0.42	0.62	0.45	0.40	0.50	0.67	0.83	0.62	0.86	1.86
0.40	0.49	0.30	0.14	0.29	0.20	0.31	0.40	0.70	0.72	0.92	1.08
0.45	0.45	0.05	0.04	0.03	0.25	0.12	0.22	0.76	1.07	1.12	1.44
0.03	0.02	0.18	0.05	0.17	0.29	0.16	0.53	0.47	0.41	0.65	0.90
0.08	0.01	0.13	0.11	0.07	0.08	0.17	0.42	0.50	0.62	0.73	0.74
0.20	0.05	0.02	0.12	0.33	0.15	0.15	0.10	0.40	0.52	0.66	0.74
0.13	0.03	0.15	0.20	0.06	0.06	0.31	0.15	0.30	0.25	0.56	1.01
											2.18
											1.94

THE precipitation this month was deficient in nearly every county of Kansas, but there was sufficient moisture stored in the soil from the summer rains to prevent any damage to wheat. A large per cent of the month's moisture fell as snow on December 24 and 27, which covered the ground in most localities the last week but had melted by the last day.

With the usual amount of sunshine and temperatures mostly above normal, it was a fine month for gathering corn, hauling crops to market and caring for stock.



\$1375
at Detroit



7-Passenger Phaeton—\$1375 at Detroit

We Now Present the

Hudson Super-Six

76 Horsepower—an Added 80% Without Any Added Size

Patented by Hudson
December 28, 1915
Patent No. 1165861

These Stock Car Records Officially Broken

The Hudson Super-Six—7-passenger touring car model—at Sheepshead Bay Speedway in November, officially broke all stock car records up to 100 miles. Also all records for quick acceleration, under American Automobile Association supervision—as follows:

100 miles in 80 minutes, 21.4 seconds, averaging **74.67 miles per hour**, with driver and passenger.

The previous best record was made with driver only, with a larger motor and more cylinders.

75.69 miles in one hour with driver and passenger.

Standing start to 50 miles per hour in 16.2 seconds.

Mark what those records mean.

No other stock car in history has equalled that performance. No other like-size motor has ever developed such power.

The Super-Six has proved itself the greatest engine ever built. It has outrivaled Eights and Twelves. It has almost doubled the efficiency of Sixes.

And this motor is a Hudson patent, found in Hudsons only. So it means that Hudson cars hereafter hold the highest place in Motordom.

80 PER CENT MORE POWER

Let us compare it with the Hudson Six-40, long the leader among Sixes. That Six-40, by its matchless performance, in two years quadrupled Hudson sales.

The Super-Six is identical in size. No added cylinders, no extra complications. Lightness and economy remain.

But the Super-Six develops 76 horsepower. Best earlier type sixes of like size developed but 42 h. p.

And all that increase—that added 80 per cent—comes through wiping out vibration.

ADVANTAGES OF HIGH POWER

You ask why you need that 76 horsepower if you don't care for high speed.

You need it because it means vast reserve power, to mount hills without effort, to make 'hard roads easy, to avoid changing gears. Also it enables you to creep on high gear, and to pick up with record quickness.

And it all comes through lack of vibration. So it brings with it bird-like motion. The motor is so smooth that the car seems to move by magic.

OTHER TYPES DISCARDED

We stopped production on former Hudsons when the Super-Six proved this supremacy. Thus we lost over \$6,000,000 in sales last fall. We also stopped our experiments on Eights and Twelves.

Then we doubled our factory to meet a doubled demand. And we bought materials for \$42,000,000 worth of these new cars for this season.

All because the Super-Six is bound to dominate hereafter. Its performance is resistless. Any buyer of a high-grade car will choose it when he knows the facts. It will also win thousands from lower-grade cars to the Hudson.

A LUXURIOUS CAR

The Super-Six looks its supremacy. In every detail we attain luxury's limit, regardless of the cost. The new body lines are perfect. The finish is superb. In the upholstery we use a rare grade of grain leather. Each compartment of the Phaeton has a rounded, finished dash.

At no price is it possible to offer more of luxury and beauty. Yet our mammoth production brings the price to \$1375. That for a car which must be conceded the greatest car built today. Go see it at the nearest Hudson Showroom.

7-Passenger Phaeton, \$1375 at Detroit

Five Other Styles of Bodies

Ask for our Super-Six Catalog—just out.

HUDSON MOTOR CAR COMPANY
DETROIT, MICH.

We have dealers everywhere. These are a few in your vicinity:

KANSAS.

Hutchinson—Hutchinson Motor Car Co., 109-11 E. Sherman St.

Wichita—Hudson Sales Company, 231 S. Topeka Ave.

Is Your Car Short of Breath?

Pants up hills—lags on the level—eats up gasoline—always a tail-ender. That's a sign that the piston rings in the motor are worn out and the compression is weak. You can cure the trouble by installing

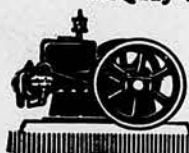
McQUAY-NORRIS LEAK-PROOF PISTON RINGS

Leak-Proof Rings will stop those compression losses and restore the full power of the motor. And they'll keep it free from carbon—make it run sweet and true. They save gasoline and oil, reduce motor wear and last as long as the motor.

Leak-Proof Piston Rings are made in all sizes—easily installed. You can get them from your supply dealer. If he hasn't them—write us, giving his name. We'll see that you are supplied.

McQuay-Norris Mfg. Co., 2816 Locust St., St. Louis, Mo.

Send for FREE booklet—"To Have and to Hold Power." It tells all about compression and what Leak-Proof efficiency means.



HARROW while you PLOW for 10 DAYS—FREE

—and you'll never waste any more time disking, harrowing and rolling. Do it all at once, with a—

KRAMER ROTARY HARROW.

Bolted on any plow quickly; light draft—no extra horses. Cuts all the lumps; levels and harrows right behind the plow while soil is soft. No tramping plowed ground. Prepares moist seed bed. No dry dirt—seed germinates quickly. Sure, even stands more than pay or harrow first season. Farmers everywhere delighted at money saved. Satisfaction Guaranteed. FREE illustrated folder tells all about our Free Trial Offer and how this Harrow does more work than disking and harrowing in old-fashioned way.

Agents, find out about our proposition. Write:

KRAMER ROTARY HARROW CO.,
120 Main St., MORTON, ILL.

For HORSE or TRACTOR PLOWS



The Wheat Yield Tells the Story

of Western Canada's Rapid Progress

The heavy crops in Western Canada have caused new records to be made in the handling of grains by railroads. For while the movement of these heavy shipments has been wonderfully rapid, the resources of the different roads, despite enlarged equipments and increased facilities, have been strained as never before, and previous records have thus been broken in all directions. The largest Canadian wheat shipments through New York ever known are reported for the period up to October 15th,

upwards of four and a quarter million bushels being exported in less than six weeks, and this was but the overflow of shipments to Montreal, through which point shipments were much larger than to New York.

Yields as high as 60 bushels of wheat per acre are reported from all parts of the country; while yields of 45 bushels per acre are common. Thousands of American farmers have taken part in this wonderful production. Land prices are still low and free homestead lands are easily secured in good localities, convenient to churches, schools, markets, railways, etc. There is no war tax on land and no conscription. Write for illustrated pamphlet, reduced railroad rates and other information to

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160 ACRE
FARMS IN
WESTERN
CANADA
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Stop Soil Blowing

You can effectively prevent soil blowing and conserve moisture with the Forkner Great Western Weeder.

Don't burn the straw—save the humus and incorporate it in the soil with this wonderful machine.

NO CLOGGING

—no soil blowing—newest and greatest success for summer-fallowing wheat land. Write for catalog and free book, "Modern Soil Tillage".

LIGHT DRAFT HARROW CO.
Dept. 406 Marshalltown, Iowa



BRAKE AND CLUTCH

Items of Every Day Interest About
The Automobile and for the Motorist

THE farm-owned automobile has a much greater utility value than the one used in the city. An automobile is really an asset on the farm. The farmer's auto on its homeward journey from town, frequently looks like a parcel post delivery car. It is no uncommon sight to see the back seat of the car piled high with all sorts of purchases, some of them of such character as to seriously injure the upholstery and finish. This is one of the ways in which the automobile is useful to the farmer and it effects a great saving in time, as well.

Occasionally a trailer is used for hauling such freight as cannot be conveniently placed in the car. Enterprising manufacturers have now designed trailers that can be hooked on behind and pulled over the road at a good speed. With a trailer a great variety of things can be hauled. We saw one over in Leavenworth County last fall, in which a large pure-bred boar in a crate was loaded. This use of the trailer makes it possible for the breeder to quickly haul such stock as he is shipping, to the express office.

It would seem that the trailer should come into more general use. The automobile is sure to be used for hauling produce of all kinds, and it does not take long to get the car looking decidedly the worse for wear. The purchase of a trailer would seem to be the next step in making the automobile even more useful on the farm than is now is.

Winter Use of Automobiles.

It used to be customary to lay by the automobile for the winter, but during the past two or three years conditions have changed. Many cars that were formerly put away with the approach of cold weather are now driven all through the winter. After people have become accustomed to getting around in a car, it is hard for them to forego its use during the winter season. The habit of laying them by seems to have been merely a custom. On the farms where so many cars are now owned, it would be quite a hardship to be compelled to go back to the horse and buggy for the winter season. Of course, there are times when it is impossible to use the automobile, but there is no questioning the fact that they are being used much more generally through the season than they were a few years ago.

Of course, it requires a little different management and perhaps there is more wear and tear on the car, but on the farm the automobile is such a time-saver that farmers generally are inclined to use them the year around if possible.

Another evidence of this increased winter use of cars is the fact that garages and auto supply houses are now doing a good business during the months when they formerly had little to do.

Headlight Glare Danger.

The danger from headlight glare is greater on much traveled country roads than on city streets. This, because frequently roads are narrow and winding and sometimes bordered with dangerous ditches. With the increased use of cars there is a tendency to regulate by legislation the use of the headlight. Dimming devices are now a part of the headlight equipment of many cars, but even these do not insure freedom from the danger because the driver frequently will neglect to use his dimmer.

New Jersey has in force a law requiring that the upper half of the headlight glass be frosted so as to cut out the glare of the higher rays of light. This law has been in operation several months and is giving very satisfactory results. This system, of course, takes the matter entirely out of the driver's hands so that the possibilities of error or neglect are eliminated. Other states that have not taken up this matter will probably have to do so in the near future.

Agricultural Engineers Talk Tractors.

During the recent annual meeting of the American Society of Agricultural Engineers, held in Chicago, considerable attention was paid to tractor development and the problems connected therewith. It seemed to be the opinion of the engineers present from all parts of the United States, that farmers are more and more realizing their need for mechanical power. The members of this organization have been studying closely the subject of tractor designing, tractor plows, and the economic effects of introducing such equipment on the farms.

F. A. Wirt, of the Kansas Agricultural College, is one of the members and was present at this meeting.

Your Car an Investment.

A few hundred feet or less is the distance your automobile will travel without lubrication. After that the pistons will bind, bearings will seize, engine will knock and finally come to a dead stop. It will go no further without lubricating oil.

The average motorist does not realize what the infinitely small oil film between metal surfaces saves him, until he faces the expense of renewing a burned-out bearing. He does not appreciate why his engine stays young until he pays the repair man who has been treating it for scored cylinder walls.

His indifference to this subject arises almost entirely from his lack of information. Once he appreciates the importance of lubrication, he will see to it that his car is well supplied with an oil of high lubricating efficiency and correct body for his motor.

The parts requiring lubrication are the main shaft bearings, crank pin bearings, wrist pin bearings, cam shaft bearings, timing gears, cam, cam lifter guides and cylinder walls.

To determine the correct lubricating oil for the automobile engine requires both scientific study and broad practical experience. It necessitates consideration of the requirements of each make of car, involving the construction of the engine; horizontal, vertical or V type cylinder arrangement; two or four stroke cycle; bore and stroke; valve construction and location; oiling system; number and fit of piston rings; piston clearance; condition of bearings; cooling system (air or water); engine speed and climatic conditions.

The value of an oil for winter use is not necessarily indicated by its cold test; i. e., its ability to flow freely at low temperature. Low cold test oils are necessary only when the feed pipes are exposed to low temperature.

In determining the correct oil for winter use, the construction and feed system of the engine must be considered. In cases, for example, where the oil feed pipes are so arranged as to get the benefit of the heat from the engine, low cold test oil is not required. An oil may withstand low temperature and still not be the ideal lubricant. In fact, many such oils lack the proper lubricating quality.

The correct oil for the automobile engine is an oil of the highest lubricating efficiency, whose body and fluidity in cold weather are suited best to the feed requirements of the engine, and of sufficient body and heat test to form a film that will separate the friction surfaces and prevent the escape of gases past the piston rings during the compression and power strokes.

A correct oil for the various kinds of cars is on the market. In purchasing lubricating oil it is not enough to simply buy oil without reference to the purpose for which it is to be used. It is important to learn from those who have made a scientific study of the subject, the particular kind of oil that will give the best results.

Cure for Slipping Belt.

The slipping of belts is a great annoyance, but it is not always remedied by tightening the belt. Often the slipping of a belt is due to the overload carried by it. There is economy in using wider belts than is the usual practice. Many a three-inch belt is made to do the work of a four-inch belt, much to the annoyance of the operator.

However, when an immediate remedy is needed, a small quantity of powdered whiting, sprinkled on the inside of the belt, is very good and is the least harmful of any similar application.

The use of beeswax, rubbed on the inside of the belt or on the pulley, is a very good remedy in cases of emergency.

Many people use powdered resin on a slipping belt but this is bad practice because it soon dries the leather and causes it to crack.—W. E. EDMONDSON, Colorado Agricultural College.

Batteries that are standing out in cold weather should be thoroughly warmed before starting the engine.

"I shall not run for office," said the eminent statesman, "unless there is an overwhelming popular demand for me."

"Well?"

"It is now up to me to get busy and create that overwhelming demand."

Draft Horse Future Bright

By WAYNE DINSMORE

DRRAFT horse producers have special reason to feel optimistic at the beginning of the new year. The marked improvement in the industrial world has brought transportation facilities again into active service, and all transportation agencies, railroads, motors, and teams, are being used more freely than for two years past. Draft geldings have been in good demand at higher prices, and the farm demand for useful draft horses is already so strong that horse dealers are being eliminated as buyers of good draft mares.

Pure-bred draft horses are also in keen demand. The stopping of imports in August, 1914, resulted in a marked stimulus to horse breeding in this country, and more satisfactory prices have been paid during the past year to the breeders and raisers of good American bred draft colts than at any time in our past history.

The total number of horses on farms, April 1, 1910, was 19,833,113 head, and the government estimates for January 1, 1915, credited this country with 21,195,000 head—an increase of 6.86 per cent over 1910.

The fifteen states on which we have definite data as to stallions in service are Illinois, Iowa, Kansas, Nebraska, Wisconsin, Minnesota, North and South Dakota, Michigan, Pennsylvania, New Jersey, California, Washington, Oregon and Montana. These states had, January 1, 1915, a total of approximately 11,085,352 horses, assuming the same rate of increase for these states as for the United States as a whole. They also had, according to the latest available stallion board reports, 47,697 stallions, all told, in service, 23,671 of which were pure-bred draft stallions.

If this proportion holds good throughout the United States, it would give us a total of 91,357 stallions in service, approximately half of which could be classed as pure-bred drafters. As a matter of fact, however, the number is probably somewhat less, as all the important horse producing states, except Indiana, Ohio and Texas, are included in our figures, and the proportion of stallions in use in other states is unquestionably lower, as less attention is given there to horse production. Assuming, for the sake of argument, that these percentages hold good, however, we have about 40,000 pure-bred draft stallions and approximately the same number of stallions of other kinds, most of which are grades and mongrels. Any well informed horse breeder will admit that at least 10 per cent of the stallions in service are annually being retired because of age, death, unsoundness, or other cause, and it therefore following that about 8,000 stallions are annually being retired from the breeding ranks. To make good this annual retirement alone, therefore, we must replace 4,000 pure-bred draft stallions annually, and as the other stallions, grade and otherwise, should, for the most part, be replaced by pure-bred draft sires, we actually need seven thousand good draft sires annually to fill the places of horses dropping out of service.

During the fiscal years of the various draft horse record associations ending in 1915, approximately 12,000 American bred draft horses were recorded. This includes both sexes and all ages of Percherons, Clydesdales, Belgians, Shires, French Draft and Suffolks. Less than half of these were stallions, so that we are producing annually now, less than 6,000 draft stallions. It is recognized by all horsemen that at least one-fifth of the stallions that are recorded are not good enough to be of any real service in improving the draft horse stock of the country. It therefore follows that we are really producing less than 5,000 good pure-bred draft sires annually, when we need at least 7,000 per year, at the lowest calculation.

Aside from the foregoing considerations, there are other factors which auger well for the draft horse industry. High priced land and labor have led our farmers to study methods of reducing costs in farm work. The advantages draft horses have over light horses in farm work are numerous. The tractive power horses can exert is governed by weight, strength and temperament. Under extraordinary pressure, horses can exert from four to six horse-power, but under conditions of daily work they exert a pull which is about one-tenth of their working weight. The horse power traction required to move farm implements depends on the soil, climatic conditions, and the condition of implements used. Under favorable conditions, five draft horses weighing 1,600 pounds or over, will pull a two-plow gang of 14-

inch plows a little more than twenty miles, averaging from five to five and a half acres per day. It will take seven horses that weigh from 1,100 to 1,300 pounds to do the same work, and it is not practicable to work seven horses on one gang-plow with the ordinary class of farm labor. It will, therefore, require two men on single plows, one with four and the other with three light horses, to do the same amount of work that one man will do with five draft horses. The same general ruling applies in seeding, discing and harvesting, for while one man can readily handle five draft horses on the implements needed, he can not advantageously nor safely use enough more light horses to give his equivalent power. The use of draft horses, therefore, increases the amount of work one man can do in the field; and in actual practice the work is better done when drafters are used. When to this we add the fact that less barn room is needed, and less labor required in handling the heavy horses, than is necessary where enough more light horses are used to make up equivalent power, the advantage becomes more marked.

Besides this, the heavy horses sell more readily and at higher prices, when surplus is to be sold. Light weight horses have been bought at prices ranging from \$110 to \$150, while draft horses have brought from \$200 to \$300 each. This is an important factor, for every well-managed farm has a few surplus horses to sell annually, and the reader sale, and higher prices realized for draft stock, are factors which must appeal strongly to all thinking farmers. Maximum cash returns are what we are interested in, and this we obtain from drafters used in farm work.

These are facts which thinking farmers will ponder well. Horse buyers have scoured the United States as never before. More than half a million horses and over one hundred thousand mules have gone for war purposes. Demands from abroad will continue as long as the war lasts, and will be strong for years afterward, for the battling nations must call on us for horses for industrial purposes. Country sales already reflect the feeling of conservative farmers, who are reported good buyers at strong prices, on first class mares weighing 1,000 pounds or over, whether grade or pure-bred.

The recent cable from President Aveline, Percheron Society of France, that the government there has agreed to allow the exportation of two hundred stallions, foaled in 1912 or earlier, only serves to emphasize the extent to which war has curtailed supplies abroad.

Good blood and liberal feeding will pay better in draft horses than in any other class of stock, always providing that a man buys no more mares than he needs in his farm operations, and exercises good management—essential to success in any line.

New Tillage Implement.

A patent has just been issued to W. I. Drummond, of Enid, Okla., on a harrow and soil mulcher of novel and original construction.

The principal features of this implement are a rigid but expansive central frame, to which is attached flexible wings, also capable of expansion and contraction. The objective is to stir the soil to a uniform depth, regardless of the contour.

Attached immediately behind a lister, the implement will make a soil mulch or blanket, thus sealing the moisture within the soil, and preventing its loss by evaporation, as is done on flat land with an ordinary harrow. After land has been listed, as in summer fallow where a lister is used, the entire surface of the ridges and furrows may be harrowed uniformly, the moisture conserved and the weeds killed, without destroying the contour of the listed surface. For shallow cultivation between rows of growing crops, the entire surface may be stirred to a uniform depth, regardless of whether the center be high, low or level.

The advantages claimed for the implement by its inventor are that these and other operations in practical soil culture and moisture conservation can be better accomplished with it than with any now in use, by reason of its flexibility and adaptability.

"Mr. Dooley," Finley Peter Dunne's famous humorous character, in commenting on the Paris fashions, says:

"Hogan says th' styles are shtarted in Paris be ladies well known to th' police, an' to keep in touch with the latest sty' a woman ought to do a few months' time ivery year."

Why Winter Oils?

When winter is as warm as summer, one grade of lubricating oil will suit all seasons. Until then, cold-test oils will have their place.

Some types of motors require in winter an oil that will flow freely at low temperatures. Otherwise the oil is likely to congeal either in the splash troughs, sight feed or in exposed oil piping and fail to reach all friction points.

In many leading cars the lubricating requirements of the motor demand the same oil in winter as in summer. In these cases Full Force Feed or Force Feed lubricating systems are employed. These two systems are now employed on many four and six cylinder cars and on all eight and twelve cylinder cars announced to October 1st.

In each of these lubricating systems, the splash troughs, sight feed and exposed oil piping are done away with and the oil is forced—usually by pump pressure—to the principal friction points.



On cars employing either system it is rarely necessary, and inadvisable, unless necessary, to change in winter to oils of lighter body or lower cold test. Such oils will not develop the maximum efficiency of motors lubricated by Full Force Feed or Force feed systems.

The grades of Gargoyle Mobiloils specified for summer and winter use in the cars listed below will develop the highest motor and lubrication efficiency. If your car is not listed, a complete copy of our lubrication Chart will be sent you on request.

Ford Owners: The oil which lubricates the Ford motor also lubricates the planetary transmission.

The high speed of the motor together with the lubricating system employed require an oil which will be readily atomized and distributed to all friction points under low temperature conditions. The planetary transmission requires an oil which will flow freely in cold weather. Otherwise the oil will congeal and cause the transmission to "drag." Gargoyle Mobiloil "E" exactly meets these winter lubrication requirements of the Ford Car.

In buying Gargoyle Mobiloils from your dealer, it is safest to purchase in original packages. Look for the red Gargoyle on the container. For information, kindly address any inquiry to our nearest office.

CORRECT AUTOMOBILE LUBRICATION

Explanation: The four grades of Gargoyle Mobiloils for gasoline motor lubrication, purified to remove free carbon, are:

Gargoyle Mobiloil "A" Gargoyle Mobiloil "B" Gargoyle Mobiloil "E" Gargoyle Mobiloil "Arctic"

In the Chart below, the letter opposite the car indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means Gargoyle Mobiloil "A," "Arc" means Gargoyle Mobiloil "Arctic," etc. The recommendations cover all models of both pleasure and commercial vehicles unless otherwise noted.

MODEL OF	1911	1912	1913	1914	1915
CARS	Summer	Winter	Summer	Winter	Summer
Abbott Detroit	A	A	A	A	A
American	A	A	A	A	A
Apperson	A	A	A	A	A
Auburn (4 cyl.)	A	A	A	A	A
Avery (6 cyl.)	A	A	A	A	A
Buick (Model C) 1 Ton	A	A	A	A	A
Cadillac (8 cyl.)	A	A	A	A	A
Case	A	A	A	A	A
Chalmers	A	A	A	A	A
Chandler	A	A	A	A	A
Chase (4 cyl.)	B	B	B	B	B
Chevrolet (water)	A	A	A	A	A
Cole	A	A	A	A	A
Detroit	A	A	A	A	A
Dodge (8 cyl.)	A	A	A	A	A
E. M. F.	A	A	A	A	A
Empire	A	A	A	A	A
Flanders (6 cyl.)	A	A	A	A	A
Ford	A	A	A	A	A
Franklin	A	A	A	A	A
Grant	A	A	A	A	A
Haynes	A	A	A	A	A
Hudson	A	A	A	A	A
Hupmobile (Model 20)	A	A	A	A	A
I. H. C. (4 cyl.)	A	A	A	A	A
International	A	A	A	A	A
Interstate	A	A	A	A	A
Jackson	A	A	A	A	A
Jeffery	A	A	A	A	A
King (8 cyl.)	A	A	A	A	A
Knight	A	A	A	A	A
Knight (Model 48)	A	A	A	A	A
Kris	A	A	A	A	A
Lozier	A	A	A	A	A
Marion	A	A	A	A	A
Maxwell	A	A	A	A	A
Mets	A	A	A	A	A
Mitchell	A	A	A	A	A

MODEL OF	1911	1912	1913	1914	1915
CARS	Summer	Winter	Summer	Winter	Summer
Moline	A	A	A	A	A
Moon (4 cyl.)	A	A	A	A	A
National (6 cyl.)	A	A	A	A	A
Oakland	A	A	A	A	A
Oldsmobile	A	A	A	A	A
Overland	A	A	A	A	A
Packard	A	A	A	A	A
Paige (6 cyl.)	A	A	A	A	A
Pathfinder	A	A	A	A	A
Premier	A	A	A	A	A
Rambler	A	A	A	A	A
Regal	A	A	A	A	A
Reo	A	A	A	A	A
Saxon	A	A	A	A	A
Studebaker	A	A	A	A	A
Stutz	A	A	A	A	A
Valley (4 cyl.)	A	A	A	A	A
White (6 cyl.)	A	A	A	A	A
Winton	A	A	A	A	A

TRACTORS

Model of Tractor	Summer	Winter
Aultman-Taylor (4 cyl. horizontal)	A	A
Avery	A	A
Big Four (20)	A	A
Bull	A	A
Bulley (Model A1)	A	A
Holt Caterpillar	A	A
C. O. D. (2 cyl. horizontal)	A	A
Denning (Models B & C)	A	A
Eagle	A	A
E. B. Farm	A	A
Emerson Brantingham (Model L—Big 4-20)	A	A
Fairbanks Morse	A	A
Farguhar	A	A
Flour City	A	A
" (Heavy Duty)	A	A
Gray	A	A
Hackney Auto Plow	A	A

Stationary and Portable Engines

Your oil must meet the heat conditions in your engine. Many oils thin out too much under engine-heat. Three troubles result: (1) Compression escapes and power is lost. (2) The cylinder walls are exposed to friction. (3) Excess carbon is deposited. The oils specified below will prove efficient.

Water-cooled engines—Use Gargoyle Mobiloil "A" in summer; use Gargoyle Mobiloil "Arctic" in winter. **Air-cooled engines**—Use Gargoyle Mobiloil "B" the year 'round.

Tractors

The design of your engine must determine the correct oil. Send for booklet containing Gargoyle Mobiloils Chart of Recommendations for tractors.

Mobilubricant—In the patented Handy Package. The correct grease for transmissions, differentials and compression cups of automobiles. The spout fits the filling plug opening of the Ford and all other cars. Mobilubricant is just the thing for farm machinery. Simply turn the key. No dirt, no waste, no trouble.

VACUUM OIL COMPANY, Rochester, N.Y., U. S. A.

Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world.

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Detroit

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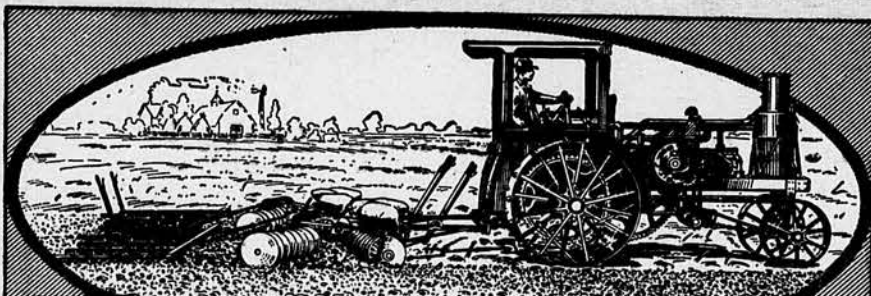
Minneapolis

Boston

Chicago

Indianapolis

Pittsburgh



There Is a Size Avery Tractor to Fit Your Size Farm

AVERY Tractors and Plows are built in sizes to fit any size farm—large, medium or small. We build Avery Tractors to pull any number from 2 to 10 mold board plows. By dealing with the Avery Company you can make your selection from the most complete line of tractors and plows built and can get a size outfit to exactly fit your size farm.

No Other Tractors Have Met Such Tests

Avery Tractors and Plows have met every test—were introduced by "sold-on-approval" policy—have been entered in every big public contest and demonstration ever held—and have been proved successful by thousands of owners. Avery outfits are built and backed by an established company owning a large factory and many branch houses, which insure your getting a well-built machine and having prompt and permanent service after you get it.

Six Reasons For Avery Tractor Success

Sliding frames, double drives, 2-speed gears, low-speed heavy-duty tractor motors, extra large crank-shafts, renewable inner cylinder walls, no pumps or fan. Sold at low prices: 3-Plow Tractor, \$760 cash; 4-Plow, \$1120 cash; 5-Plow, \$1680; 6-Plow, \$2145; 8-10-Plow, \$2475.

Avery "Self-Lift" Plows and "Yellow-Fellow" Thrashers are also built in sizes to fit any of the above size tractors. We also build a smaller size tractor for \$295 cash.

Start Tractor Farming Bigger Crops, Less Expense Easier Work

An Avery Tractor will give you the power to do your work at the right time and raise bigger crops—power that stops eating when it stops work—and power that you don't have to take care of when it is idle.

Write now for new free 1916 Avery Tractor, Plow and Thrasher Catalog and learn all the facts about Tractor Farming, Thrashing, Road Building, etc., with an Avery Outfit.

AVERY COMPANY, 1419 Iowa St., Peoria, Ill.
Ask for Address of Nearest Branch or Jobber



AVERY

"One Man Outfits" 6 Sizes Fit Any Size Farm

\$20.00 FREIGHT PREPAID



VAT is separate from furnace and is made of best grade No. 20 gauge galvanized metal, reinforced with heavy angle iron. Capacity 150 gallons—six feet long, 20 inches wide at bottom, 30 at top, 18 inches deep. Has extra perforated false bottom preventing feed sticking to bottom.

FURNACE is made of range steel, round bottom, reinforced with angle iron and has angle iron legs. Has heavy door with draft regulator. Burns anything: cobs, cinders, fence posts. Equipped with grates for burning coal. Six feet smoke stack furnished.

SMOKE YOUR OWN MEAT in a COLUMBIAN METAL SMOKE HOUSE. Give it that natural flavor which is lost when liquid smoke is employed. Why should you pay packing houses their profit and freight two ways on your meat. You can save enough on these two items alone to pay for a Columbian. It is made of best grade No. 24 gauge galvanized metal. Sectional easy to erect! Has revolving meat rack, making it easy to fill or empty.

SEND IN YOUR ORDER TODAY. Simply give us the name of your bank and we will make shipment draft attached to bill of lading. Think of it—a Smoke House for \$25.00 or a Cooker and Sealing Vat for \$20.00 delivered at your station. Pay for them when you get them. Also sold by most dealers. Order today.

COLUMBIAN STEEL TANK COMPANY 1623 West 12th St., Kansas City, Mo.

Manufacturers of "The Gold Medal Line of Tanks for the World"

Write for Circular giving delivered prices on hog raising equipment.

Most Profitable Farm Tool
Cooked feed fattens cattle, hogs, and poultry in less time and at a saving of 50 per cent over raw feed. It is more palatable, wholesome and easily digested, every particle going into meat making. Free of disease germs.

THE COLUMBIAN COMBINATION FEED COOKER AND SEALING VAT is used for cooking grain and vegetables for stock and poultry, scalding bogs, rendering lard, making soap, heating water, outfit buildings and a hundred other uses.

\$25.00



BARGAINS IN WHEAT LAND

This land has proven its ability to make 20 per cent net each year on the value asked. It is offered for sale, as the owner is ready to retire.

FARM NO. 1.

Harper County, Kansas, containing 160 acres; sandy loam with clay mixture; 90 acres in wheat, 20 acres ready for spring crops, 60 acres pasture. All fenced and cross-fenced. Running water, two wells. Four-room house, cave, etc. Stable for eight horses, cattle sheds and other outbuildings. Cash price, \$30 an acre.

FARM NO. 2.

480 Acres, Harper County, Kansas. 160 acres broke, 100 acres in wheat, 60 acres ready for spring crop, all good hard wheat land. \$25 an acre, cash.

WRITE TO H. N. HOVEY, CARE KANSAS FARMER, TOPEKA, KANSAS.

READ KANSAS FARMER'S CLASSIFIED ADVERTISING PAGE FOR READY BARGAINS

FALLOWING SUBSTITUTE

By G. K. Andrews, Agricultural Commissioner Missouri Pacific Ry.

Of recent years an interesting and successful experiment has been tried in the dry farming section of the Russian empire.

It consists in planting the corn in wide rows the first year, and planting the same field in wheat between the rows of corn in the fall, leaving the stalks standing in the field to catch and hold the snow from blowing away during the winter. There, as in America, it had been found expensive to summer fallow for wheat, as this involves extra labor and an idle field. Therefore, the above plan was tried as a make-shift for the summer fallow, and the peasant farmers of Russia were found to be more favorably disposed to it than to summer fallow.

At first glance this method looks like raising half a crop of corn in order to bring about a half-way summer fallow of doubtful efficiency, but, if corn is planted in rows seven feet apart with the stalks sixteen inches apart in the row, there are enough stalks for thirty bushels of corn an acre. In the dry farming region the acre yield of corn is limited by the rainfall. Ordinarily there will be no more than thirty bushels an acre, whether the rows are seven feet apart or three and a half feet apart. If the rows are forty-two inches apart, there would be 5,760 stalks, and half of these stalks would take both moisture and plant food from the soil in an amount sufficient for ten bushels of corn. Now, after the stalks are grown, there is no longer moisture to mature the thirty bushels an acre of corn, but only enough for twenty bushels. The result is a large preponderance of barren stalks. Barrenness in corn is the combined result of heredity, barren stalk parentage—the pollenation of the stalk by pollen from a barren stalk—and overcrowding; but principally the latter.

Over-crowding means planting more corn than the moisture and plant food in the soil can mature. With good seed and without over-crowding it is possible to have ears on 98.5 per cent of the stalks. This being so, it is reasonable in the semi-arid region to limit the number of stalks to the moisture capacity of the soil during the growing season. Planted in rows seven feet wide, there are 2,880 stalks to the acre, and, as above stated, it is possible to have a stand of 98.5 per cent, which would mean that 2,848 of the stalks would have ears on them. If the ears averaged but 5.8 ounces, the yield would be thirty bushels per acre.

In one case, therefore, we have 7-foot rows and the maximum bushels of corn per acre, and in the other we have 3½-foot rows with but two-thirds the maximum yield. It would seem to be good farming to raise thirty bushels on 2,848 stalks out of 2,880 instead of twenty bushels from 5,760 stalks.

The field planted in 7-foot rows will have been cultivated between the rows throughout the growing season. It will be in good tilth. The weeds will have been kept down. The moisture taken for plant growth will have been used for corn and not for weeds. The fall rains penetrate this cultivated ground rapidly and will be stored up for the wheat, which is sown later in the fall between the rows after the corn has been harvested. The stalks are left standing, as above described, for the purpose of catching and holding the snow instead of having it blown off the field as fast as it falls throughout the winter. The result has been a marked increase in the wheat yield despite the fact that the maximum yield of corn has been obtained.

While this may not be as good a way to get a maximum yield of wheat as a well-managed summer fallow, it is a better way than a poorly managed one, where the weeds are allowed to get a good start before being destroyed.

The Kansas agricultural college has been making some experiments like those above described for several years past with practically the same favorable results. It is quite natural, therefore, that the Kansas experimenters consider this development in dry farming, so far as it has proceeded, a Kansas plan and an American plan, instead of a Russian. Mr. Anderson, agricultural commissioner to the United States from Russia, followed this plan in Russia several years ago, and it is true that it was then known as the American plan. But, wherever it started, it has been more fully developed and more generally adopted in Russia than here.

Success depends upon business management. This is as true of farming as it is of any other business.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lamenesses from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunions 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 Co., Cleveland, O.

Get The Latest Modern Silage Methods Only 10c

Tells you all there is to know about present-day silage feeding—how to build silos. Gives reliable and unbiased facts (we do not sell silos) on every silo built—home made—stave, hoop and octagonal silos—pit, brick, tile, cement, concrete silos—all modifications. Also covers every crop used for silage—41 of them. Here's an entirely new book—264 pages—better than former copies used as text books in colleges. Copyrighted November, 1914. Ten page index. We send it for 10c coin or stamps. Send for this new copy today.

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Write for catalog and booklet "Silo Filler Logic" which we send free. Enclose 10c and we will send you "Modern Silage Methods" with them.

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Galloway Offers Great Bargains For 1916

1915 has proven a wonderful year. Bigger business, more customers, lower prices than ever before. Now comes 1916. Plans are all made. Factories will increase capacity and decrease manufacturing cost. Galloway customers will get the benefit. Will you be one of them—and

Save 25 to 50% On Your Purchases in 1916
Get a piece of the Galloway will divide. Cream separators, manure spreaders, gasoline engines, farm tools, farm implements. Everything for the farm and household. Sold direct from wholesale factory prices. Will make you our customer for life. Get 4-color catalog. Shipped from E. C. Galloway, Spokane, Waterloo, Ohio, or Omaha, Wm. Galloway Co., 217 Galloway St., Waterloo, Iowa.



Galloway's Engines, from 1 1/2 to 15 h.p. Galloway Spreaders, built right and work right. Galloway Separators, perfect in construction.

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FEDERAL SERUM TEST

MORE effective control over the production of hog-cholera serum is advocated by Secretary Houston in his annual report. To accomplish this purpose, a definite plan, involving the establishment by the federal government of a station for testing all serum intended for shipment in interstate commerce, is outlined for consideration.

"In round numbers," says the report, "there are produced annually in the United States 200,000,000 cubic centimeters of serum. Of this amount approximately 50,000,000 cubic centimeters, or about 25 per cent, are prepared by state governments. Serum is produced by the federal government for experimental purposes only. The remaining 150,000,000 cubic centimeters are manufactured by private establishments. It is probable that there are in operation in the United States between ninety and a hundred such establishments. Of these eighty-one have secured licenses from the Department of Agriculture under the virus-serum-toxin act of 1913, and thereby are enabled to carry on interstate business. Of the total quantity of serum privately prepared it is estimated that more than 90 per cent comes from plants holding licenses from the department.

"The statute prohibits the shipment from one state or territory to another state or territory of any virus, serum, toxin, or analogous product which has not been prepared at a plant holding an unsuspended and unrevoked license from the Department of Agriculture. It also is made unlawful to ship interstate any virus, serum, toxin, or analogous product which is worthless, contaminated, dangerous, or harmful.

"In carrying out the act the department has issued regulations designed to prevent the interstate shipment of worthless, contaminated, dangerous, or harmful hog-cholera serum, hog-cholera virus, and other products. Fifty-six trained inspectors are assigned to the work of inspecting the licensed plants and detecting violations of the law. A number of violations, particularly shipments of serum not prepared at establishments holding licenses, have been discovered and successfully prosecuted. Notwithstanding the efforts of the department, apparently there have been shipments of contaminated or worthless serum by licensed companies. These occurrences have resulted in part from the ignorance or carelessness of the owners. In some cases they have been due, perhaps, to cupidity; in others, to novel situations presented by the unexpected outbreak of foot-and-mouth disease.

"There seems to be a widespread belief that the products of a licensed establishment in some way are certified or guaranteed by the federal government. Under the existing system it has not been possible for the department to assure users of the quality of such articles. The business of serum production is such that supervisory inspection alone, without complete control, and with power to penalize violations of the law only by revocation of licenses or by prosecution, is not sufficient to warrant the assumption by the government of responsibility for the products.

CONTROL OF SERUM PRODUCTION.

"It has been suggested that effective control over serum production could be accomplished by government ownership. While there is much to be said in favor of such a plan, it seems doubtful whether it would be practicable. Certainly it would seem unwise for the government to produce the material unless it could control the entire output. Recent information shows that twenty-one states have established plants and now are engaged in the production of serum on a comparatively large scale. It is a question whether these states, with their active organizations, would wish or consent to discontinue the work. Aside from this, the purchase of the establishment now in existence and the erection of others by the federal government would necessitate a large outlay. Even though this expenditure were made, it must be remembered that government officials are liable to error, and that federal manufacture, though it secured honesty of methods, would not serve as a guaranty that no contaminated or worthless serum would be sold.

GOVERNMENT TEST STATION.

"As a substitute for government ownership, the following plan merits careful consideration:

"(1) Continue the inspection service as at present constituted under the act of 1913, maintaining a sufficient force of inspectors so that all important processes of licensed establishments may be carried out under the constant supervision of department employees; and require that all products after preparation

be securely locked up by employees of the department, whose duty it shall be to withdraw representative samples.

"(2) Provide by law for—

"(a) The establishment and maintenance of a 'government test station' for serum. The purpose of this station would be to receive official samples of all serum produced by licensed plants and to test them for purity and potency. Upon completion of the test the official in charge immediately would make known the results to the inspector at the plant from which the sample was derived, and the material, if found potent and pure, then would be released with proper markings or seals to show that it had been tested.

"(b) The prohibition of the interstate shipment of any product a sample of which had not been tested and found pure and potent.

"(c) The imposition of a tax upon all serum, samples of which have been tested, with adequate provision for the affixing of tax stamps and marks prior to sale or shipment.

CONTROL OF TESTS NECESSARY.

"The available methods for determin-

ing purity and potency are not scientifically exact. Tests, however, are a necessary and most important part of any system of control. They are now made by the commercial establishments themselves on animals procured by them and at all times under their care. It is impracticable for the government to make them within privately owned and operated plants. Furthermore, so long as the plants conduct the tests, it is manifest that the government can not select and know the complete history of the animals. In the preparation of the serum, the inspectors can see that the steps necessary to produce a good article are carried out. In this particular the inspection is adequate and effective. It appears, therefore, that the weak point at present is the inspection of the tests, and the department believes that these should be under government control. At the same time, not being absolute, they should be supplemented. Supervision at the producing plants of the methods of preparation and handling should be continued.

"It is probable that an adequate test station could be provided for about \$50,000. If several were found to be desirable, a suitable appropriation for each would have to be made. The cost of

maintaining a station capable of testing the entire output of commercial serum in the United States probably would not exceed \$150,000 annually.

"The suggestion is made that a tax sufficient to cover the cost of maintaining the station should be imposed. This tax should not operate to increase the cost of serum to the farmer, because manufacturers would be relieved of the expense of conducting their own tests. While the plan indicated contemplates control only of serum intended for shipment in interstate commerce, it is likely that the states would take similar action and apply similar rules to their own plants as well as to private establishments doing business wholly within the state. The plan probably would be effective and would require little additional expenditure of public funds."

The farmer with only a few animals can hardly afford to keep pure-bred males. Yet he can not afford to use scrubs. One solution of the problem is for several neighbors to club together and secure the pure-bred sires needed. This will really make the cost of the pure-bred sire less to each farmer than would be the cost of scrub sires if each owned one.

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STILL MORE roominess everywhere
STILL MORE refinement of mechanical design
The same POWERFUL motor
And the SAME sterling quality in every detail
at a REDUCED PRICE!



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40 h. p. \$845
7-passenger

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Commercial Cars

Panel Delivery Car . . . 875
Open Express Car . . . 850
Station Wagon . . . 875

Six Cylinder Models

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Roadster, 3-passenger . . . 1025
Landau-Roadster, 3-pass. . . 1350
Coupe, 4-passenger . . . 1600
Sedan, 7-passenger . . . 1675
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OLEO INTERESTS ACTIVE

PRESS accounts would indicate that strenuous efforts are being made by the oleomargarine interests of the country to remove the ten-cent tax on colored oleo. This would break down the present oleomargarine law which was enacted through the efforts of the National Dairy Union. If these interests are successful, oleo could masquerade as butter without interference. The law is being very vigorously enforced at the present time and this has made the manufacturers of oleo more anxious than ever to have it repealed.

If oleomargarine were sold on its own merits, dairymen could have no objection to it, but they are most vitally interested when it sells in the guise of butter. All the dairy interests ask is that a strong line of demarcation be made between butter and oleomargarine. This line is most easily established on the basis of color.

Breeders of dairy stock may think that this is a matter of little consequence to them. During the past few years there has been a very strong demand for stock of dairy breeding. The success of these breeders, however, depends largely upon the farmers who purchase young stock for building up producing herds. The real success of dairy-breeding depends upon the consumption of dairy products. If a cheap substitute can be put on the market to take the place of butter, the demand for dairy products would diminish and likewise the demand for stock of dairy breeding. No matter how good a breed of dairy cattle may be, it cannot compete successfully with offal fats from packing houses. If it is true that oleo can be manufactured at from eight to twelve cents a pound, the producers of butter most assuredly are facing a competition they cannot successfully meet unless this product is forced to sell on its merits by prohibiting its being colored in imitation of real butter. Every one interested in dairy-breeding—the producer most of all—will suffer if the oleo interests are successful in their present campaign.

The National Dairy Union is organized for the purpose of protecting dairy interests, and every producer should give this organization his strongest support in the work it is trying to do.

Cow Testing Associations.

According to B. H. Rawl, Chief of the Dairy Division of the Federal Department of Agriculture, cow testing associations are now on a firmer footing in the United States than they have been. The department has devoted considerable effort to getting these associations started. Early last fall five new men were appointed by the department to do field work along this line. The outbreak of foot and mouth disease interfered very seriously, all these men being detailed temporarily to take charge of quarantine work. If it had not been for the disease outbreak a great many more new associations would have been started. During the year eighty-one new ones were formed, while thirty-two ceased operations. This leaves a total of 210 active associations with 5,578 members, owning 105,526 cows. This is an increase of thirty per cent over the previous year.

In his report Mr. Rawl cites a few instances of the benefits to be derived from these organizations. Two in Maryland that have run three and four years respectively, show an average annual increase of 21 pounds of butter fat per cow in one, and 14 pounds in the other. This increase in butter fat was much more than was necessary to pay all the expense of the work. In a Maine herd the average quantity of milk produced annually per cow has increased in five years from 5,594 pounds to 8,649 pounds, or an average increase of 611 pounds a year. In this herd the fat increased on an average 16.6 pounds per year. The owner made the statement that the value of his herd had been doubled and that the net profit per cow had been increased fifty per cent.

This is right in line with what was reported regarding the Dickinson County Cow Testing Association at the recent meeting of the Kansas State Dairy Association. We cannot too strongly urge the advantages of this kind of neighborhood co-operation. We hope before this year ends several communities in Kansas will be organized for this kind of work.

Dairy Cow Contest.

The function of a dairy cow is to give milk, and this being the case, dairy cow competition should not be confined to the awarding of prizes in the ring on the basis of appearance alone. This sort of dairy cow showing has gone to such an extent that it is generally recognized that there is a show ring type that in some cases differs quite materially from the type that is giving the very best returns from a production standpoint. The kind of competition that counts in bringing about improvement is that which tests the cow's capacity for performing her chief function—that of giving large quantities of milk.

Through the efforts of Professor Will of Wisconsin, a state-wide dairy cow competition has been conducted in that state a few years ago on the basis of

Precipitation In Kansas During 1915

Reports furnished by S. D. Flora, U. S. Weather Bureau.
(The amounts by counties are given in inches and tenths.)

Adair	31.9	Barton	22.8	Beckham	32.6	Bell	33.0	Blaine	34.1	Boone	41.0	Bryant	45.2	Butler	43.4	Cherokee	40.0	Cherokee	39.9	Cherokee	45.5
Cherokee	30.9	Cherokee	31.9	Cherokee	36.4	Cherokee	33.5	Cherokee	32.7	Cherokee	37.5	Cherokee	37.5	Cherokee	44.9	Cherokee	44.9	Cherokee	44.9	Cherokee	44.9
Cherokee	28.3	Cherokee		Cherokee	31.4	Cherokee	34.1	Cherokee	39.0	Cherokee	35.0	Cherokee	43.6	Cherokee	43.6	Cherokee	43.6	Cherokee	43.6	Cherokee	43.6
Cherokee	33.4	Cherokee	28.9	Cherokee	29.5	Cherokee	32.1	Cherokee	32.1	Cherokee	44.1	Cherokee	45.6	Cherokee	45.6	Cherokee	45.6	Cherokee	45.6	Cherokee	45.6
Cherokee	23.1	Cherokee	18.9	Cherokee	28.1	Cherokee	32.1	Cherokee	39.6	Cherokee	33.9	Cherokee	42.6	Cherokee	42.6	Cherokee	42.6	Cherokee	42.6	Cherokee	42.6
Cherokee	26.2	Cherokee	22.4	Cherokee	28.8	Cherokee	31.3	Cherokee	32.3	Cherokee	44.4	Cherokee	44.4	Cherokee	44.4	Cherokee	44.4	Cherokee	44.4	Cherokee	44.4
Cherokee	31.6	Cherokee	22.1	Cherokee	32.4	Cherokee	34.8	Cherokee	31.0	Cherokee	35.3	Cherokee	47.4	Cherokee	47.1	Cherokee	44.5	Cherokee	56.6	Cherokee	52.7

THE year 1915 was the wettest one Kansas has experienced since the state-wide weather record was begun in 1887 and also broke the record for moisture at a great many stations, such as Lawrence and Manhattan, where individual weather observations were begun in the sixties and early seventies.

The state, as a whole, received 50 per cent more than the normal amount of precipitation and nearly twice the amount that has fallen in any one of the five previous years. The excess in moisture extended to every part of the state and all but a very few of the western counties received more than thirty inches.

The wettest month was May, with an average of 7.10 inches for the entire state. In June and July more than six inches fell. The last three months were the only ones with less than the normal precipitation.

In the counties where no figures appear the record for the year is either broken or missing entirely.



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production records. Over 500 cows were entered in the contest, all but 58 being pure-breeds. Fifty-six breeders and dairy farmers were represented. About one-half of these men had never had the cows in their herds tested for production before. Hoard's Dairymen had offered a special prize of \$25 a month for the cow having the highest monthly record. During the two years of the contest this monthly record was won by twenty-four different cows, owned by seventeen breeders. The average monthly production of these winning cows was 72.3 pounds of butter fat, equivalent to nearly three pounds of butter for each day of the month.

One of the important points brought out in this competition is that the large cows of the different breeds were as a general rule, the largest producers. They consumed heavy rations and made more economical use of their feed than did smaller cows. This is a point well worth noting by those interested in developing herds of high producing capacity. In this contest, as in others of its kind, the great differences in production and profitability were strongly emphasized.

Such contests have much higher educational value than does the judging of cows in the show ring. It sets many a farmer to thinking and considering to which class his own cows belong, and the inevitable result will be improvement.

Kansas may not be quite ready for a state-wide contest of this kind, but those interested in dairy development might well be considering the value of such work.

Silage Does Not Injure Teeth.

J. C. E., Kearney County, writes us that he is planning to have a silo next year in order to have plenty of good feed for his cows, but he has just recently been informed that silage causes the decay of cows' teeth. He says if this is so he will try to get along without the silo.

This story of silage injuring the teeth seems to bob up continually. There is absolutely nothing to it. We have seen cows that have eaten silage almost daily for ten or twelve years with no bad results. A few years ago Maid Henry, a cow owned by the Kansas Agricultural College, made an unusually high year's record in milk production, being thirteen years old at the time the record was made. This cow had always consumed silage and her teeth were in no wise effected.

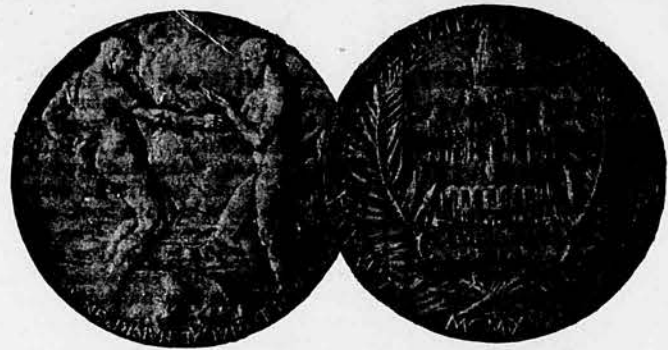
Our correspondent need have no fear whatever from this cause. He should by all means arrange for a silo, for in no other way can he be so sure of having an abundance of palatable feed for his milk cows. We would advise him to make arrangements to have silage enough to feed the year around. Pasture can be depended upon for only a comparatively short period of time each year, and if he would keep his cows up in milk production they must have feed of a palatable kind and plenty of it.

Dickinson County Testing Association.

The following is a record of the cows in the Dickinson County Cow Testing Association, which produced more than forty pounds of butter during the thirty-day period ending December 31, 1915. "J." stands for Jersey; "H." for Holstein; "S. H." for Shorthorn; "A." for Ayrshire; "R. P." for Red Polled.

Owner—	Pounds Milk	Per Cent Fat	Pounds Butter
J. F. Eisenhower, J....	498	6.5	40.46
J. F. Eisenhower, J....	777	5.2	50.5
J. F. Eisenhower, J....	498	6.9	42.95
J. F. Eisenhower, J....	789	5.2	51.28
J. F. Eisenhower, J....	654	6.2	50.68
J. F. Eisenhower, J....	555	5.8	40.23
A. B. Wilcox, H....	1,515	3.8	71.96
A. B. Wilcox, H....	1,506	4.0	75.30
A. B. Wilcox, H....	1,569	4.0	78.45
A. B. Wilcox, H....	816	4.5	45.90
Geo. Lenhart, H....	1,428	3.5	62.47
Geo. Lenhart, H....	1,161	3.1	44.98
Geo. Lenhart, H....	1,065	3.5	43.93
Geo. Lenhart, H....	937	3.5	41.86
Geo. Lenhart, H....	1,224	3.1	47.43
Geo. Lenhart, H....	1,065	3.7	40.37
Geo. Lenhart, H....	1,431	3.5	62.60
Hosteter Engle, H....	927	3.8	44.03
Hosteter Engle, H....	1,227	3.8	58.28
Hosteter Engle, H....	1,251	3.1	46.91
Hosteter Engle, S. H....	807	4.8	48.42
Hosteter Engle, H....	1,323	3.2	52.92
D. S. Engle, H....	1,086	4.0	54.30
D. S. Engle, H....	954	3.9	48.50
D. S. Engle, H....	1,233	3.8	58.56
D. S. Engle, H....	951	3.5	41.60
D. S. Engle, H....	909	3.6	40.9
L. L. Engle, H....	894	3.6	40.23
H. H. Hoffman, A....	846	5.1	52.87
H. H. Hoffman, A....	748	3.4	40.29
Dr. E. N. Farnham, J....	758	4.6	44.16
Henry Aultman, H....	744	4.6	42.78
Henry Aultman, S. H....	768	4.9	47.04
E. N. Stites, H....	900	4.1	45.
E. N. Stites, H....	918	3.9	44.75
W. H. House, S. H....	768	4.3	41.28
A. H. Diehl, R. P....	912	4.1	45.60
A. H. Diehl, S. H....	927	3.8	44.02
E. S. Engle & Son, H....	1,143	3.6	51.43
E. S. Engle & Son, H....	1,113	3.9	54.25
E. S. Engle & Son, H....	822	4.7	48.29
E. S. Engle & Son, H....	1,059	4.3	56.92
E. S. Engle & Son, H....	1,233	3.6	55.48
E. S. Engle & Son, H....	1,158	3.1	44.87
E. S. Engle & Son, H....	1,167	3.1	45.22
E. S. Engle & Son, H....	1,173	3.2	46.92
E. S. Engle & Son, H....	915	3.8	43.46
E. S. Engle & Son, H....	1,092	3.6	49.14
E. S. Engle & Son, H....	1,200	3.5	52.50
E. S. Engle & Son, H....	918	3.5	40.16
E. S. Engle & Son, H....	837	3.2	43.94
E. S. Engle & Son, H....	924	3.6	43.89

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Tells why chicks die

E. J. Reefer, the poultry expert, 9631 Farmer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

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Crescent Poultry Farms, Box 55, Des Moines, Iowa



Get Rid of the Poor Layers

"Prove all things; hold fast that which is good," is a sound scriptural injunction that could be applied to poultry matters with good results. Mr. E. B. Ale, who has a large egg farm south of town, told us of the great benefit he derived from the perusal of a certain book on a special line of poultry culture. The gist of the work is that the egg-laying type of hen can be told by her shape and formation, and so by selection and elimination, the workers can be retained and the drones eliminated in any flock of fowls. Mr. Ale said if he had had this book ten years ago it would have saved him hundreds of dollars by simply enabling him to pick out the undesirable or non-laying hens out of his flock.

That there may be reason and common sense in such a system is obvious, when we consider that a milk cow or a beef cow can be told by its type or shape. But the object of this piece was not to extol any book or system of poultry work, but to call attention to the fact that there are lots of good works on poultry culture that will bear perusal and deep study. Sometimes men appear with some very queer ideas, upsetting many of our preconceived notions, and we call them "cranks"; but the cranks of today oftentimes prove to be the sages of tomorrow, and we might profit by their teachings. It is reasonable to suppose that men who have devoted their lives to study and experimentation along a special line, know more about that subject than those who have not studied it. Many persons do not realize this, and say quite frequently of our experts in agricultural colleges that they are nothing but "book-farmers," or "poultrymen on paper." But if the "book-farmer" can teach the real farmer how to produce thirty bushels of wheat to the acre where he only produced twenty before; or if the "poultryman on paper" can teach the real poultryman how to make a hen lay 200 eggs per year where he only produced seventy-five before; are they not rather to be admired than to be derided? There are always plenty of men like Festus, who say to the learned and observant: "Thou are beside thyself, much learning hath made thee mad." This is very easily said, but not so readily proved. Let the doubting ones try the doctrines promulgated, before saying their authors are crazy. It may be, that on investigation, they would be found, not to be so terribly crazy after all.

In making up an egg ration, do not forget a liberal allowance of sunshine.

But remember also that it takes more than sunshine to produce eggs. It needs pure, solid grains and lots of them.

The poultryman who can make his hens lay eggs in the winter, when they bring the highest prices, is the one that shows his capacity. Anyone can make hens lay in the summer.

By keeping his eyes and ears open, a person attending a poultry show can gain much valuable information. With his eyes he can see the good qualities of the prize winners, and compare them with other birds and profit accordingly. With his ears he can garner the wisdom of the judges and veteran poultry breeders, who are always willing to impart what knowledge they have to those who are anxious to learn.

The experience of reliable breeders is worth a great deal to a beginner in the business. Take a look at your flock, and compare it with that of your more successful neighbor who has got an inkling into the ways and kind of stock to keep, and is making an effort to keep pace with the times. If you take advantage of the good advice of the older breeders it will save you lots of money and worry.

A correspondent wishes to know the proper weight of a dozen of eggs. By proper weight, we presume he means the correct weight a dozen eggs is required to be at an egg contest. The right weight of a dozen hen eggs should be between 24 and 28 ounces. For every ounce under 24 ounces or over 28 ounces they are cut one point in their score. At the egg contest at last year's state show at Wichita, there were several dozens of eggs that weighed over 30 ounces and some 32 ounces. We thought

large eggs a desirable thing to have, and expressed surprise to the judge when he cut them for overweight. He said that proper sized eggs had a commercial value because they could be shipped with less breakage than abnormal sized eggs. The crates or egg cases are made of a certain uniform size to hold thirty dozen eggs. If eggs are too large they won't go into the paper cartons inside the case, and if too small they shake around too much and are therefore liable to be broken. We saw a reason in this and the necessity for a uniformity in weight and size.

We have frequently called attention to the imperative need of cleanliness in the poultry houses and yards, and this is needed more in the winter than the summer. The houses being open in summer, the foul air from uncleanly conditions has a chance to escape, but if the filth is not removed in the winter time when doors and windows are closed, the odors arising are sure to produce disease among the flock. With sick chickens there can be no profit and certainly no pleasure. The litter on the poultry house floor should be cleaned out frequently. There can be no set rule about it, but as soon as there is an appearance of filth and the litter is all worked up to pieces, make a thorough cleaning and put in fresh scratching material. The dropping boards are breeding places for vermin unless carefully watched. If you permit an accumulation of manure you will soon have lice, as they multiply rapidly in the midst of filth. The proper thing to do is to keep cleaned out. It is better to remove the droppings every day, if possible, but if not, then be sure and clean out each week. Scrape off the dropping boards and clean out the nests and spray both with a good disinfecting solution. The side walls and the ceiling can be sprayed as well, and the place will receive a disinfecting that will help to keep things clean. When everything is kept pure and sanitary the chances of disease attacking your flock are almost entirely eliminated.

Why Chicks Die in the Shell.

"Why do my chicks die in the shell?" is a frequent inquiry, and a very pertinent one at this season of the year. A great many people blame their incubators, when the cause may come from half a dozen sources. There are many conditions surrounding the egg, before and after it is set, that may result in the germ dying before it has reached full development. Eggs that have been kept too long before setting, or in too warm or too cold a place may be the cause of a poor hatch. Frequently eggs are left in the nest so long as to commence to incubate, and then are kept some days before being put into the incubator. The embryo chick, in the meantime, has died. Of course nothing can ever resuscitate it. If eggs are too long exposed to extreme heat or extreme cold after incubation has started, it will cause a poor hatch, or if eggs are handled too roughly while on a long journey it will contribute to the same result. Too much moisture in the incubator will often cause the chicks to attain such a large size in the shell that it is impossible for them to move their heads or bills and peck their way out. There must be a certain amount of evaporation in the egg, so that there may be a large air cell, so that the chick may have room to move and to breathe, otherwise a failure is sure to occur. Of course, if the eggs are not properly turned and exposed to the air occasionally for ventilation, or if the heat is very irregular, good hatches cannot be expected.

Causes further back than these may affect the incubation of the egg. The breeding stock from which the eggs were obtained might not have been in proper condition. The feed, care and runs may be improper and not conducive to the good health and condition of the breeding stock. Improper or too abundant nourishment, the lack of exercise, and a failure to supply plenty of fresh air may also be another cause of poor eggs. Too old or too impotent males, or too old or too fat females or undeveloped breeding stock, all and any may tend to produce eggs that lack sufficient vitality to insure full incubation. In short, unless you have a perfectly good, fertile egg you cannot expect a fully developed chick. So don't blame the incubator for a fault of which it is perfectly innocent.

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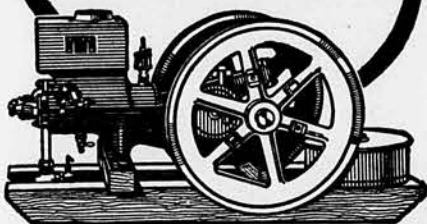
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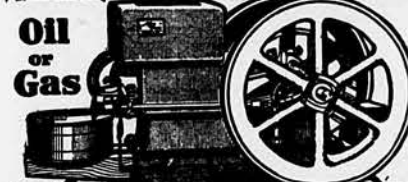
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FARM LABOR PROBLEMS

"Few things could be more deceptive than the inference drawn by some farm laborers on comparing their wages and hours of work with those of their city cousins," says O. R. Johnson of the University of Missouri College of Agriculture, after a very careful study of the county and a general review of the situation in the state as a whole. He finds that the average Missouri farm laborer works about 9.64 hours a day for 12.8 cents an hour in money, and board.

When employed by the month, the farm hand receives an average of \$22 with, or \$29 without board. During harvest time, he may be temporarily employed at an average of about \$1.60 a day with board or \$2 a day without board. The average wages a day during other seasons is from \$1.10 to \$1.40. These wages may not seem very high as compared with from 15 to 30 cents an hour in the city, but this is where the fallacy of comparing such incomes begins to appear. The city laborer is probably more likely to find himself out of work without any fault of his own and will certainly have to spend much more for board, room, and practically every other item of expense, to say nothing of his greater temptation to spend money foolishly.

It has been estimated that during the last twenty years wages have increased 23 per cent in the manufacturing industries and 36 per cent on farms, indicating that the lot of the farm laborer is improving more rapidly; although, of course, such figures tell us nothing about his welfare as compared with that of his city cousin, either now or twenty years ago.

Perhaps one of the greatest surprises to be found in Mr. Johnson's figures centers about the length of the work day on the farm. In the industries there has been an agitation for a reduction to a ten hour day, then to an eight hour day, but the Missouri farm laborer already enjoys advantages in this particular perhaps fully equivalent to those his city cousin would enjoy under an eight hour arrangement. It is true that his average working day, as determined from careful records kept on twenty-three farms representing all sections of Missouri, is 9.64 hours; but during the season from November to April is only about 8½ hours; and during May, June, and July it is about 10½ hours. This is not to be compared with a city working day of 8 or 10 hours. It includes all time spent in chores, in preparing for work, and going to the field, but the city worker spends from one to two hours, or even more, in getting to and from work, thus adding to the nominal working day just this much which is usually not considered in making comparisons of the length of the working days in country and city.

It is difficult to cite definite figures indicating the value of the healthfulness and variety of work on the farm or the reader access to amusements and social pleasures in the city, and Mr. Johnson does not undertake to decide this matter, but leaves it to the individual preference and judgment of the worker.—Press Bulletin Missouri Experiment Station.

The necessity of plenty of pure drinking water for the laying hens should be apparent to everybody, but we are sorry to say that many hens do not get enough water for their necessities during cold weather. In many poultry houses the water freezes before the hens can get enough to drink, and they go without water for most of the day. When we consider that the contents of an egg is about 90 per cent water, it should be plain to everybody that without plenty of water a hen cannot manufacture eggs. There are water fountains with a lamp attachment that will keep the water from freezing in the coldest weather, but we do not urge these, but that fresh water should be given the hens two or three times a day. All poultry houses should be made warm enough so that water should not freeze in them, but this is more than can be expected in a country where the thermometer goes as low as it sometimes does in Kansas.

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The Sunshine Safety Lamp Co., 822 Factory Bldg., Kansas City, Mo., has a new portable gasoline lamp which gives the most powerful home light in the world—a blessing to every home not equipped with gas or electricity. Three hundred candle power at one cent per night. This remarkable lamp has no wick and no chimney, is absolutely safe and gives such universal satisfaction they are sending it on free trial. They want one person in each locality to whom they can refer new customers. Take advantage of their free trial offer. Agents wanted. Write them today.—[Adv.]

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Makes big hatches winter or summer for the beginner as well as the oldtimer. Now used by 650,000 poultry raisers, which is three or four times more than the next best can show. That's because Old Trusty owners go in for profits and get them. You take no risks the Johnson way. Old Trusty comes on forty to ninety days' trial and ten-year guarantee. Also we pay freight. Write today for Old Trusty book and low price based on 100,000 sales this year.

M. M. JOHNSON CO., Clay Center, Nebr.



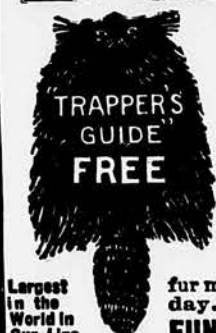
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FUNSTEN BROS. & CO., 876 Funsten Bldg., St. Louis, Mo.

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This offer is made to farmers' wives and daughters, who strive to get the best results from their baking—who wish to save the loss of good materials—who know the health value of light, wholesome cake, biscuit and bread, and—who want to make the most of their skill and knowledge of baking.

For 4c. in Stamps

mailed to us with your name and address, we will send you a liberal trial can of Rumford Baking Powder, postpaid. And if you will mention the name of this paper, we will include a free copy of the famous "Rumford Dainties and Household Helps."

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Large stock men's socks selling at mill prices. Satisfaction guaranteed.
Heavy weight cotton, 1/2 doz. \$0.60
Medium weight cotton, 1/2 doz. 90
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Cash with order. All sizes and colors.
STONE & COMPANY - TRYON, N. C.

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TWO BIG LAND BARGAINS

160-Acre Well Improved Farm—80 acres cultivated, balance pasture and meadow; 1 1/2 miles good high school town; good soil; big snap. Worth \$75. Priced at \$45 per acre for quick sale.
210-Acre Alfalfa Creek Bottom Farm—60 acres now in alfalfa. Some fine walnut timber. 160 acres as good soil as there is in Kansas. Price only \$60 per acre. Come at once and see these farms.
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FOR SALE UNTIL JANUARY 15.
130 Acres, 2 1/2 miles McAlester, city of 15,000. 100 acres strictly first class bottom, 50 acres cultivated. Fair improvements. \$18 per acre. Terms.
SOUTHERN REALTY CO., McAlester, Okla.

IMPROVED STOCK FARM

For Sale—240 Acres, four miles from county seat, Meade County, Kansas. Or will trade for wheat land in Meade, Ford or Clark counties, not too far from market. Can sell this at a bargain.
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For Immediate Sale I offer my east 1/2 of the S. W. 1/4 and the S. W. 1/4 of the S. W. quarter of Section 13, Township 16, Range 24, Miami Co., Kan., 120 acres partly improved small buildings for \$4,000 spot cash.
E. W. Jones, Owner, Crookston, Minn.

FOR RENT OR SALE

160 Acres in Lincoln County, Okla., 3 1/2 miles from Chandler, the county seat. 75 acres of fine bottom land, suitable for alfalfa, corn, or any other crop. House not very good but would repair for good party. Two or three teams would be needed to properly handle the farm. Address
WILLARD P. HOLMES
New England Building Kansas City, Mo.

SALE OR TRADE

Good improved 55-acre farm, near Springfield, Mo. Will consider horses, cattle or good auto on deal. Price, \$30 an acre.
W. G. OSBORNE - ALTA VISTA, KAN.

SITUATION WANTED.

YOUNG MARRIED MAN WANTS POSITION on farm, house furnished, commence any time between now and March 1. Carl Miller, Garnett, Kan.

MAN WITH SMALL FAMILY WANTS steady work on farm where house, garden and cow is furnished. G. F. Dukes, Sedgwick, Kan.

MARRIED MAN WITH FAMILY WANTS steady employment on farm. E. W. Perige, New Cambria, Kan.

FARM HAND WANTS WORK ON FARM, all summer work preferred. Can give number one references. Address Stuard Dewalt, Vliets, Kan.

POSITION WANTED AS MANAGER OR foreman on stock farm. Experienced, best references, no bad habits, single. Salary, not location, object. A. L. Pope, Blalock, Ala.



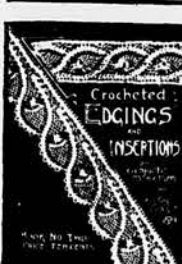
Free for Testing
A pair of mated EVERBEARING STRAWBERRY PLANTS FREE. You will report as to your success with them. Will bear loads of big, red, berries from June to November. We have counted 480 berries. blossoms and buds on a single plant. A postal will bring the plants, also enough seed of the new CERIAL FETERITA to plant a rod square of ground. Also a pkt. of perennial ORIENTAL POPPY seed. Send 10 cts for mailing expense or not, as you please. Write today and get acquainted with THE GARDEN NURSERY COMPANY Box 766 Osage, Iowa.

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From the Farmer Seed Corn Grower That made 100 bushels per acre. Best that grows. Catalog free. It tells all.
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New Feather Beds only \$5.40

6-lb. Pillows \$1.00 per pair. New, Clean, Odorless, Sanitary and Dustless Feathers. Best Ticking. Satisfaction guaranteed. Write for catalogue and our wonderful FREE OFFER.
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Topeka, Kan.

WANT GOOD MAN WITH SOME BACKING to run good irrigated Montana ranch on shares. On railroad. Have deeded grazing and range adjacent. I have horses, machinery, hogs, alfalfa and some cattle. Man must support himself and furnish cattle or sheep. If you know how to make money and believe in yourself you can make money. Tell me all about yourself. WILLIAM H. RIFE, 351 W. Austin Ave., Chicago, Ill.

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Students Earn Board while Learning. A practical school with railroad wires. Owned and operated by A. T. & S. F. Ry. Earn from \$55 to \$165 per month. Write for catalogue.
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Business College
OTTAWA, KANS. CATALOG FREE

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Advertisers in Kansas Farmer are reliable and sell dependable merchandise. Tell them where you saw their ad.



Little Talks to Housekeepers

Helpful Hints Here for the Women Folks of the Farm

ANYONE can carry his burden, however heavy, till nightfall. Anyone can do his work, however hard, for one day. Anyone can live sweetly, patiently, lovingly, purely, till the sun goes down. And that is all that life ever really means. — ROBERT LOUIS STEVENSON.

One way to be sure that the lamps will be in readiness when evening comes, is to have a special time for looking them over and cleaning them each day. We used to find that following the washing of the breakfast dishes was a convenient time for this work.

Co-operation is the word of the day, and nowhere will it work more effectively than in the affairs of the household. All working together for a worthy end will almost assure its realization.

During this season of the year in this section of the country everyone can have ice, and it can be made very useful in adding frozen dainties to the diet. We know of one farm family where ice cream is made regularly throughout the

winter and it is enjoyed then more than in the summer time. The following recipe for peach ice cream is simple but delicious:

- 1 Pint of peaches
- 1 Pint of cream
- 1 Pint of milk, sweetened
- Whites of 2 eggs

Rub the peaches through a sieve and sweeten to taste. Mix the milk and cream and put in freezer. As soon as this sets, add the peaches, freeze five minutes and add the eggs whipped light. Freeze hard.

Credit Where Credit Is Due.

Not long since we heard a man proudly give his wife credit for a large part of his farming success. Nor was it because of the butter and eggs she sold, the returns from which helped take care of the current expenses, that she received this credit. Her husband said her business ability was such that many times her judgment was far more valuable than his own and he felt absolutely safe to follow her advice when undecided about anything.

We know this partner, too, and know

FASHION DEPARTMENT — ALL PATTERNS TEN CENTS

This department is prepared especially in New York City, for Kansas Farmer. We can supply our readers with high-grade, perfect-fitting, seam-allowing patterns at 10 cents each, postage prepaid. Full directions for making, as well as the amount of material required, accompanies each pattern. When ordering, all you have to do is to write your name and address plainly, give the correct number and size of each pattern you want, and enclose 10 cents for each number. We agree to fill all orders promptly and guarantee safe delivery. Special offer: To anyone ordering a pattern we will send the latest issue of our fashion book, "Every Woman Her Own Dress-maker," for only 2 cents; send 12 cents for pattern and book. Price of book if ordered without pattern, 5 cents. Address all orders for patterns or books to Kansas Farmer, Topeka, Kansas.



No. 7364—Girls' Dress: Cut in sizes 6, 8, 10 and 12 years. In this original design the fronts are cut away to show a flat vest, except at the lower edge where they form a narrow belt. There is a wide, flat collar and regulation full-length sleeves. The skirt is attached to the blouse and is plaited all around, with panel plain bodice is made with gathered fronts and with a yoke across the shoulders in the back. The neck may be high with stock collar or low with a sailor finish. **No. 7352—Girls' Dress:** Cut in sizes 6, 8, 10, 12 and 14 years. A smart frock for school, is finished with a flat collar and the sleeves may be long or short. The high neck plaited all around and joined to a yoke. **No. 7356—Ladies' Apron:** Cut in sizes 36, 40 and 44 inches bust measure. This garment is almost a dress, made with raglan sleeves, cut short and forming a shoulder yoke. Front and back are plain, with the closing in the back, and there is a wide belt at the low waist line. **No. 7355—Ladies' Yoke Skirt:** Cut in sizes 22 to 32 inches waist measure. This design is made with the lower portion in five gores arranged in as many wide box plaits and attached to a deep yoke, which is fitted by means of seams at the sides. The waist line may be raised or regulation and the lower edge as short as desired. **No. 7375—Ladies' Negligee Gown:** Cut in sizes 30, 32, 36, 40 and 44 inches bust measure. This simple wrapper is of sacque cut and may be made full length or cut off at the hips. The adjustment of the closing makes the neck somewhat open and the edges are bound with ribbon. The sleeves are long and wide at the wrist, where they are finished with a band.



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Be So Good
I Just Can't Wait"**

"If you've ever tasted the big, tender, tasty, light biscuits, doughnuts, cakes and other things made with Calumet you can't blame me for being tempted."

"Mother sticks to Calumet because, like millions of housewives, she knows it means sure, uniform results—better bakings every bake day—purity in the can and purity in the baking. Calumet is economical to buy and to use. Try it now on the money back guarantee."



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See Slip in Pound Can

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Barteldes' Kansas grown
tipped—budded—tested
for vitality by experts trained
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Well acclimated to produce big-
gest crops in this climate.
Generous Sample FREE!
Write us before buying your
seed corn or other field seeds.
Big Seed Catalog now ready,
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prices on field seeds in quantities.
Books Given with \$5.00 Orders
Choice of two valuable books of
ready reference, Barteldes' Farm
Guide or Barteldes' Cook Book, free
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100,000 Customers

It pays to buy from a house that is well es-
tablished and known to be reliable. Espe-
cially is this true of seeds and trees.

Garden Book Free. Write for your copy of
our 1910 illustrated Garden Book. It will
help you in planning your Garden and Or-
chard planting. All kinds of Vegetable, Field
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Apple, 6c; Peach, 8c; Plum, Pear and Cherry, 15c each,
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BIGGEST MONEY-MAKER KNOWN—INVESTIGATE
The greatest forage plant that grows. Superior to all
as a fertilizer. Equal to Alfalfa for hay. Excels for pas-
ture. Builds up worn-out soil quickly and produces im-
mense crops, worth from \$50 to \$125 per acre. Easy to
start, grows everywhere, on all soils. Don't delay writing
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particulars. We can save you money on best tested,
guaranteed, scarified seed. Sample Free. Write today.
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Buy Trees At Wholesale

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Apple trees \$8.00 per 100; Peach \$6.00 per 100; Cherries
\$14.00 per 100; Concord Grapes \$2.00 per 100; Dunlap
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\$2.50 per 100. Everything in Fruit trees. **Free Catalog**
Plants and Ornamentals. Send for our **Free Catalog**
HOLSINGER BROTHERS NURSERY,
BOX 109, ROSEDALE, KANSAS.

it would not be in a dictatorial way that
her advice would be given, but in a
kindly way in the interest of their com-
mon welfare.

A partnership can attain the greatest
success only when the partners are pull-
ing together toward the same end. The
woman who will show her interest in
the business of the partnership, can be of
tremendous help. An inclination to share
the credit will greatly stimulate interest.

All Were Satisfied

The thing that stands out most viv-
idly in our memory of Farm and Home
Week, is the approval and satisfaction
of those in attendance. We have al-
ready stated that the keynote of the
meeting was practicability. Nowhere
was common sense in evidence more than
in the women's sessions and many words
of praise were heard at the close of
each of these. Of course, the purchasing
of labor-saving equipment for the house,
was recommended, but this not beyond
the practical point. As the farmer needs
implements to conduct the outside farm
work profitably, so the housewife has
needs in her department that she may
make her strokes count for the most
possible.

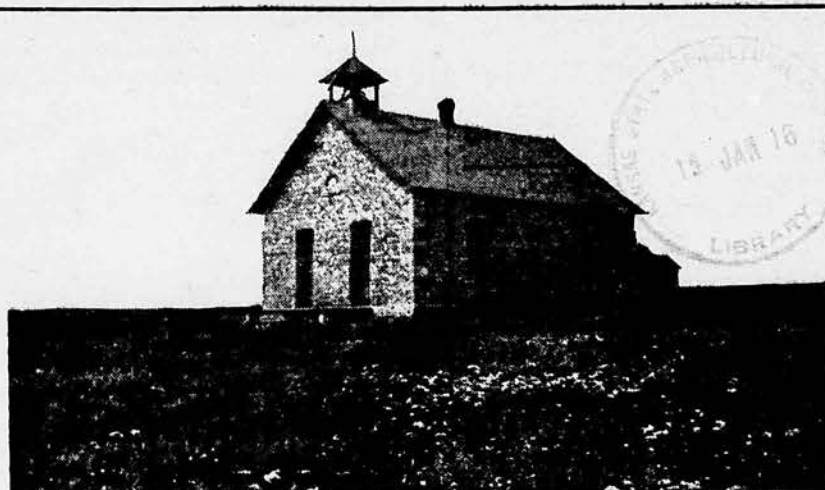
One expression worthy of quoting is—

for the sake of making a reputation as
a housekeeper.

A friend, the mother of two girls
grown to womanhood, once told us the
regret of her life was that she had not
spent more time with the girls while
they were small. Of course, she had fed,
clothed and cared for them—and know-
ing both the mother and the girls, we
would say she had been a very good
mother—but she said there always
seemed to be work ahead that must be
done and the time of giving her undi-
vided attention to the girls was thus
postponed. Ere she realized it, the years
had rolled by and her babies had grown
out of their sweet childish ways to those
of more mature years, and her life had
lost the intimate companionship of the
little folks, which she craved and toward
which she had been working while the
children had been growing. She said she
could look back and see how fruitless her
labors were when compared with the
satisfaction of having lived the child life
over again with her children.

One of the daughters, then a young
mother, had been told this story of re-
gret by her mother, in the hope that she
might escape doing the same thing.

Nothing can be so important as the



FEW places will be remembered longer than will the schoolhouse where
we received our first public instruction. It is there we planned for
the future, and the influence brought to bear upon us there, and the
surroundings, will have their part in our lives. How necessary it is that
these influences and surroundings be inspiring—that they bring to the
surface the best that is in us.

The picture here shown brings many memories—some very pleasant,
some unpleasant ones. The unpleasant experiences started with the first
day at school, when we fell asleep and the chubby boy in the seat just
ahead laughed at us. But the teacher—a man who had not forgotten his
own childhood days—was equal to the occasion, and won us for good by
sending us out to play, where the tears were forgotten and "going to
school" seemed one long play day.

All through the year that teacher had a way of helping over the hard
places and turning them into valuable experiences, with the result that a
real desire for learning was born.

The teacher has an important work to do, and should love his work
and be well trained for it, but he cannot wholly make up for a lack of
equipment and pleasant, comfortable surroundings. These are all means
to a very important end, and should be provided to the fullest extent pos-
sible, that education may be made attractive in the early years before its
real value can be comprehended.

The type of schoolhouse here shown is better than many now in use
in our state, but there is much opportunity for improvement and bettering
the conditions in this district.

"Our progress is marked by our good-
byes and farewells"—the thought being
that many things well serving their pur-
pose in another day, have been replaced
by those much better suited to our
needs, and we should not, merely for
the sake of sentiment, refuse to try the
new. For instance, the broom was long
considered an indispensable in every
household, but carpet sweepers and
vacuum cleaners do the work with much
less effort, and the woman who can have
one of these would be foolish to break
her back sweeping carpets and rugs
with a broom because her mother and
grandmother did.

On the return trip from Manhattan,
we sat with another visitor at the meet-
ings—the mother of four children, liv-
ing on a Kansas farm having many con-
veniences. In the comparison of notes
and ways of doing things, she said she
had told her husband many times dur-
ing the week that though she had al-
ways done things the best way she
knew, she had learned many improve-
ments over her methods that would save
both strength and time.

We believe there is no part of the
farm more neglected than are the con-
veniences for the housewife, and there
is nothing that will bring surer returns
on the investment made.

"The Children's Hour."

Time spent with the children is well
spent. Even though some of the work
must be slighted in order to give an
hour or two a day to the little folks, it
is much better so than to neglect them

care and development of the little lives
entrusted to parents, nor could anything
be more satisfying than true fellowship
with them from the beginning.

Over-Sacrifice.

Most parents naturally and cheerfully
do without things, that their children
may have more of their wants supplied.
We can understand this willingness on
the part of the parents, but we some-
times wonder if they do not make too
great a sacrifice for their own good and
that of the children. We have known in-
stances where the mother wore the same
dress season after season without even
having it freshened or remodeled, in
order that the daughter might have a
new frock more often. The daughter
grew selfish and thought only of her own
clothes, and in time the mother's needs
ceased to be considered. Her willing
sacrifices were accepted as a matter of
course—were fast developing selfish-
ness in the daughter, rather than an ap-
preciative and reciprocal spirit.

This neglect will in time cause a break
in the mother's spirits and even in her
health. There is no medicine that will
reach this ailment. The mother owes it
to herself and to her family to look as
attractive as possible, and her example
in this way will many times be more
helpful than will over-sacrifice.

The head of the family should also see
to it that his personal appearance is an
example of neatness and self-respect,
that his sons may look upon him and
remember him in this way.



KNOX JELLIED PRUNES

Wash 1/2 lb. prunes and when thoroughly
cleaned soak for several hours in 2 cups cold
water, and cook in same water until soft;
remove prunes, stone and cut in quarters.
To prune water add enough boiling water
to make 2 cups. Soak 1 envelope Knox
Sparkling Gelatine in 1/2 cup cold water,
dissolve in hot prune water, add 1 cup sugar
and 1/4 cup lemon juice, then strain, add
prunes. Dip mold in cold water, fill with
above mixture and set in cold place to
harden. Stir twice while cooling to prevent
prunes from settling. Serve with sugar and
cream.

You never tasted a better
dessert than this one made
with prunes, sugar and

KNOX
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(It is Granulated)

KNOX Gelatine combines
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dried or canned fruit, and with
all flavors, nuts and berries.
It is a kitchen standby. With
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Salads, Puddings, Ice Creams
and Candies. And it's econom-
ical, too, for a package makes
two quarts of jelly. A KNOX
Gelatine dish is a welcome
change from pie and cake.

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Get my new fruit book, which is ready to show
you how I can save you forty cents on every dol-
lar's worth of trees you buy.

For nearly forty years I have been in the Nur-
ery business right here in the Southwest. I was
probably the first nurseryman in this section to
sell direct to my customers and save them the tree
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Peach, Pear, Plum, Cherry, Small Fruits, Orna-
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farmers at wholesale. Big
beautiful catalogue free.
Write today.

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White Plymouth Rocks

Hard to beat as all-purpose fowls. Excel-
lent layers, with yellow legs and yellow
skin. Eggs, \$2 per 15, \$5 per 45, express or
postage prepaid. Have bred them exclu-
sively for twenty-four years.

THOMAS OWEN, Route 7, TOPEKA, KAN.

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MOTORMEN-CONDUCTORS, \$80 MONTHLY. Interurbans everywhere. Experience unnecessary. Quality now. State age. Booklet free. Electric Dept., 807 Syndicate Trust, St. Louis, Mo.

AGENTS WANTED—LIFE BOOKER T. Washington. Big book, 50 per cent discount, retail price only \$1.00. Send 10c as postage on free outfit. Credit given. Willmore Book Company, Chicago, Ill.

LADY OR GENTLEMAN TO TRAVEL for old established firm. No canvassing. Staple line. Salary, \$18 weekly, pursuant to contract. Expenses advanced. Address G. M. Nichols, Pepper Bldg., Philadelphia, Pa.

DAIRYMAN WANTED—FARM NEAR Emporia, completely equipped for dairying. Good opportunity for young man who knows cows and hogs. Write me for terms. J. H. Giotfelter, Oskosh, Wis.

MEN AND WOMEN WANTED EVERY-where. Government jobs. \$70 month. Short hours. Vacation. Big chance now for farmers. Write immediately for list of positions now obtainable. Franklin Institute, Dept. F-82, Rochester, N. Y.

MEN WANTED IN EACH COUNTY with rig or auto to engage in a profitable, dignified business. Big money and easy work selling the famous Seelye Products, Wasa-Tusa, Fro-Zona, etc. Needed and wanted in every home. They sell themselves. The Seelye Company, 438 Seelye Bldg., Abilene, Kan.

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REAL ESTATE.

120 ACRES, CLOUD COUNTY, IM-proved, \$5,000. 1315 Lincoln, Topeka, Kan.

FOR SALE—PANHANDLE AND OKLA-homa land. Write D. Thoburn, Higgins, Texas.

OZARKS OF MISSOURI, FARMS AND timber lands, from \$5 to \$40 per acre. Write for list. Avery & Stephens, Mansfield, Mo.

IF YOU WANT TO SELL OR EX-change your farm, write us. Black's Business Agency, Desk C, Chippewa Falls, Wis.

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. C. C. Buckingham, Houston, Texas.

FOR SALE OR TRADE FOR WESTERN Kansas land, good 80 acres in Atchison County. Price, \$7,000. What can you offer? Harry McStay, Horton, Kan.

FOR SALE—LEVEL QUARTER CHEY-enne County, Kansas, near town. Well improved. \$4,800 net. Incubance \$1,800. E. W. Perrige, New Cambria, Kan.

WANTED—GOOD FARM, WELL LO-cated; possession next spring. Give price and description. Address S. Lamb, Box 754, Chicago.

FARMS WANTED—WE HAVE DIRECT buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 43 Palace Bldg., Minneapolis, Minn.

FOR SALE—A MODERN HOME IN Topeka, located on a good street, near school and business district; two lots, modern seven-room house, barn, a choice location. Will sell at a bargain. No trades. Address Z, care Kansas Farmer.

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RED POLLED, WILKIE BLAIR, GIR-ard, Kan.

FOR SALE—REGISTERED HOLSTEIN bulls. Smith & Hughes, Route 2, Topeka, Kan.

FOR SALE—REGISTERED GUERNSEY bull calf. John Bogner, Mt. Hope, Kan.

HOLSTEINS—TWO FINE REGISTERED bulls for sale cheap. Warren S. Neff, Glen Elder, Kan.

FOR SALE—TWO PURE-BRED HERE-ford yearling bulls. Priced reasonable. W. J. Bilson, Eureka, Kan.

EIGHT REGISTERED SHORTHORN bulls, eight to fifteen months old. One herd header. John J. Thorne, Kinsley, Kan.

FOR SALE—SOME SHORTHORN BULL calves. R. L. Skubhl, Route 1, Jennings, Kan.

ALYSDALE SHORTHORNS FOR SALE—Six good registered Shorthorn bulls of serviceable age, red in color, prices very reasonable. Write or call upon C. W. Merriam, Columbian Bldg., Topeka, Kan.

HONEY.

RICH, DELICIOUS EXTRACTED HONEY—60 pounds, \$4.00; 120 pounds, \$7.50. F. Monaghan, Mesilla Park, N. M.

DOGS.

TRAINED COON AND WOLF HOUNDS and greyhounds. Tom Rice, Garnett, Kan.

FOR SALE—TWO REGISTERED MALE greyhounds, extra good coyote dogs. Chic Branson, Adams, Neb.

TWO REGISTERED NEWFOUNDLAND pups, three months old. Females, \$10 each. Pioneer Kennels, Alert, Ind.

AIRDALE—THE GREAT TWENTIETH century dog. Collies that are bred workers. We breed the best. Send for list. W. R. Watson, Box 128, Oakland, Iowa.

COLLIE PUPS FROM GENUINE STOCK dogs that drive from the heel. Best of breeding. E. L. Dolan, Route 2, Platte City, Mo.

LUMBER.

LUMBER—WHERE AND HOW TO BUY it cheap. Send material list to Box 1502, Tacoma, Wash.

MISCELLANEOUS.

FOR SALE OR TRADE—ONE GASOLINE plowing and threshing outfit. Bender & Schwab, La Crosse, Kan.

DEEP WOODS YOUNG TREES FOR transplanting. Holly, laurel, cedar, pine. Write for prices. J. T. Watson, Georgetown, Del.

FARMERS, LOOK HERE! A GUARAN-teed name fastener, postpaid for 35c each. If not satisfied, money refunded. I. M. Beckner, Rose Hill, Kan.

GET MY AUCTION MANUAL AND learn auctioneering. Teaches the business thoroughly. The Auctioneer's Journal says, "Col. Long's Manual is the most thorough, most complete auction treatise ever written." Sent postpaid this month for two dollars. Address Col. Long, Route 6, Cedar Rapids, Iowa.

WANTED

WANTED—NICE WHITE WOOLY ES-kimo-Spitz puppies, about six weeks old. Brockway's Kennels, Baldwin, Kan.

WISH TO HEAR AT ONCE FROM RE-liable party, man capable of managing large ranch successfully. Mrs. Ward, Box 337, Valley, Neb.

WANTED—TO SELL OR TRADE \$1,500 worth of stock in the Arkansas River Bed Oil & Gas Company of Tulsa, Okla., for small stock of general merchandise, groceries preferred. Will pay difference in cash. Write R. J. Conneway, Guthrie, Okla.

WANTED—TO CORRESPOND WITH parties having Single Comb Rhode Island Red strain with trap-nest records of 200 eggs or better. State price on cockerel and eggs by the hundred. Fred B. Gebhart, 1605 West Street, Topeka, Kan.

BUSINESS CHANCES.

FREE FOR SIX MONTHS—MY SPECIAL offer to introduce my magazine, "Investing for Profit." It is worth \$10 a copy to any one who has been getting poorer while the rich, richer. It demonstrates the real earning power of money, and shows how anyone, no matter how poor, can acquire riches. Investing for Profit is the only progressive financial journal published. It shows how \$100 grows to \$2,200. Write now and I'll send it six months free. H. L. Barber, 431-28 W. Jackson Blvd., Chicago.

HEDGE POSTS.

HEDGE POSTS FOR SALE—CAR LOTS. H. W. Porth, Winfield, Kan.

HORSES AND MULES.

FOR SALE—BLACK REGISTERED PER-cherons, two years with foal. Yearling stallion. E. S. Sloan, Fargo, Okla.

SHEPHERD PONIES, GELDINGS, MARES and colts, all colors. C. H. Clark, Leocompton, Kan.

HOGS.

FOR SALE—ONE SHARE STANDARD Poland China Record Association stock with volumes from 1901. C. M. Garver, Abilene, Kan.

HAMPSHIRE BRED GILTS AND SOWS for sale; also White Wyandotte cockerels. All birds \$5.00 and over shipped on approval. A. G. Burbank, Cordova, Neb.

TOBACCO.

KENTUCKY'S BEST NATURAL LEAF tobacco by parcel post, prepaid, 4 pounds for \$1.00; 10 pounds for \$2.00. Special prices on larger quantities. State if you want chewing or smoking. S. Rosenblatt, Hawesville, Ky.

PATENTS.

IDEAS WANTED—MANUFACTURERS are writing for patents procured through me. Three books with list hundreds of inventions wanted sent free. I help you market your invention. Advice free. R. B. Owen, 116 Owen Bldg., Washington, D. C.

BABY CHICKS.

BABY CHICKS—FIRELESS HOT WATER brooder—can't freeze water fountain. Get our circular. Kansas Poultry Company, Norton, Kan.

CANARIES.

CANARIES—BEAUTIFUL GOLDEN, guaranteed singers, \$2.50; pair, \$3.50. Mrs. Iver Christenson, Jamestown, Kan.

ORPINGTONS.

FINE BUFF ORPINGTON COCKERELS, \$1 each. White Pekin Ducks, \$1 each. Mary Price, Manhattan, Kan.

S. C. WHITE ORPINGTONS FOR SALE. Pullets and cockerels to mate. Satisfaction guaranteed. Roy Young, Leonardville, Kan.

SINGLE COMB BUFF ORPINGTON cockerels for sale, \$1 and \$2 each. J. W. Falkner, Belvue, Kan.

FOR SALE—FINE BUFF ORPINGTON cockerels, \$1 to \$5. Eggs from blue ribbon winners, \$3, \$2 and \$1 per fifteen. Mrs. Myrtle Howard, Byron, Okla.

COCHINS.

WHITE CORNISH—SILVER CUP WIN-ners. Cockerels for sale. Spellman & Spellman, Fredonia, Kan.

PARTRIDGE COCHINS—ALL FULL-blooded stock, prize winners. Fifteen eggs, \$3. Hens or pullets, \$2 each; cockerels, \$4 each. Nicholas Bach, Hays, Kan.

DUCKS AND GESE.

FAWN AND WHITE RUNNERS, CUP winners. Bert White, Burlingame, Kan.

300 ROUEN, MUSCOVY AND INDIAN Runner Ducks for sale. Fred Kucera, Clarkson, Neb.

DUCKS FOR SALE—WHITE RUNNERS, females, \$1 each. Pure white eggs. J. F. Cox, Route 28, Topeka, Kan.

LANGSHANS.

BLACK LANGSHANS—STOCK FROM blue ribbon and sweepstakes winners, young and old. Reduced prices. Mrs. D. A. Swank, Blue Mound, Kan.

BLACK LANGSHANS—STOCK FROM blue ribbon and sweepstakes winners, young and old. Reduced prices. Mrs. D. A. Swank, Blue Mound, Kan.

EXTRA LARGE GOOD SCORING BLACK Langshan cockerels, \$2.50 and \$5 each. Pullets, \$15 per dozen. Guaranteed to suit. H. Osterfoss, Hedrick, Iowa.

EXHIBITION AND UTILITY LANG-shan cockerels from high scoring stock, \$1 to \$5 each. J. A. Lovette, Poultry Judge, Mullinville, Kan.

PLYMOUTH ROCKS.

DUFF'S MAMMOTH BARRED ROCKS—A. H. Duff, Larned, Kan.

FIFTY CHOICE BARRED ROCK COCK-erels, Ringlet strain, \$1.50 each, six for \$8. John Tatge, White City, Kan.

FOR SALE—A FEW WHITE ROCK cockerels at from \$2 to \$5 each. Thomas Owen, Route 7, Topeka, Kan.

BUFF ROCK COCKS AND COCKERELS. High quality. Mrs. Wm. Small, Wilson, Kan.

BARRED ROCKS—WICHITA BLUE RIB-bon winners. Eggs, \$1 per fifteen. Meek, Mulhall, Okla.

BUFF ROCK COCKERELS, \$1.50, \$2, \$3 each. Two for \$5. In lots of six, \$6. Nellie Yount, Humboldt, Kan.

WHITE ROCK COCKERELS, \$2 TO \$3. Photo free. Mrs. John Ramsey, Fort Scott, Kan.

BUY THE BEST PRIZE WINNING Barred Rock cockerels, \$2 and \$3 each. T. N. Davis, 508 Fillmore St., Topeka, Kan.

WHITE ROCKS, SIZE AND QUALITY. Satisfaction guaranteed. G. M. Kretz, Clinton, Kan.

RINGLET BARRED ROCKS—BEST blood lines. Satisfaction guaranteed. T. J. Embury, Baxter Springs, Kan.

WAGNER'S BARRED ROCK COCKS AND cockerels, \$1, \$1.50. Fawn White I. R. drakes, \$1. Mrs. E. C. Wagner, Holton, Kan.

PURE BARRED ROCK COCKERELS—Large, vigorous, well marked, \$1.50 each. Call soon, get the best. S. R. Blackwelder, Isabel, Kan.

NICE BARRED ROCKS, RHODE ISLAND Reds, B. Leghorns. Cockerels, \$1.25, six for \$6. Cocks, 80 cents. J. Hammerli, Oak Hill, Kan.

BARRED ROCKS EXCLUSIVELY. BAR-gains now at \$1 each. Fifteen years a breeder. Florence Belle Ziller, Hlawatha, Kan.

CHOICE BARRED PLYMOUTH ROCK cockerels, Bradley strain, Parks 200 egg strain, \$2 to \$5. Gem Poultry Farm, Haven, Kan.

BUFF ROCK COCKERELS BRED FROM Frisco World's Fair champions, \$5 each; elegant breeders. C. R. Baker, Box F, Abilene, Kan.

LINDAMOOD'S BARRED ROCKS—VERY best laying strain. Fine cockerels for sale, hatched from prize winning pens. Light and dark matings. Price \$2.50 to \$5. C. C. Lindamood, Walton, Kan.

WHITE PLYMOUTH ROCK COCKERELS for sale at very reasonable prices. Bred from our Kansas City, Missouri State and other winners. A. E. Glass, Harrisonville, Mo.

BARRED PLYMOUTH ROCKS—FIRST winners; best exhibits Missouri, Nebraska, Kansas, Oklahoma. Exhibition and breeding males. J. K. Thompson, 205 The Drive, Topeka, Kan.

FOR SALE—CHOICE BARRED PLY-muth Rock cockerels from champion colored cockerel at Kansas City Poultry Show, January, 1915. Prices, \$2.50 to \$5. L. P. Coblenz, La Harpe, Kan.

ONE HUNDRED BARRED PLYMOUTH Rocks, cocks, cockerels, hens, pullets, bred from prize winners. Thompson and Bradley blood, about as good as they grow. Write your wants. J. L. Deeds, Lyons, Kan.

PETTIS' BARRED ROCKS—HIGHEST scoring cockerels St. Joseph show. Heavy laying strain. Cockerels, \$2 up. Mrs. P. A. Pettis, Wathena, Kan.

BARRED ROCKS—COCKERELS AT TWO to five dollars each. I refund money, less express one way, if not satisfied. My hen won first at Topeka. Hutchinson and Ellsworth. Booking orders for eggs now. Write me. C. D. McIlree, Lorraine, Kan.

WHITE PLYMOUTH ROCKS STILL hold their popularity. Barring one, they were the largest class at the World's Fair at San Francisco. Good to lay, good to eat and good to look at. I have bred them exclusively for twenty-four years and they are one of the best breeds extant. Eggs from first-class birds, the same kind I hatch myself, \$2 per 15, \$5 per 45, and I prepay express or postage to any part of the Union. Thomas Owen, Route 7, Topeka, Kan.

LANIER'S BRED-TO-LAY BARRED Plymouth Rocks of superlative quality. (Pittsfield and J. W. Parks strains.) They are standard-bred, every one of them. The males that head our pens are pedigreed, those dams with records of 210 eggs or better. We have females that are bred from high record hens. If interested in filling the egg basket, we can supply you in eggs for hatching, four and eight-week-old chicks. Write for prices today to De Witt Lanier, Barred Rock Specialist, Cardwell, Mo.

SEVERAL BREEDS

3,479 COCKERELS—41 VARIETIES—Chickens, geese and ducks. Seeds and trees. Aye Bros., Box 18, Blair, Neb.

ROSE COMB REDS, BUFF ORPINGTONS, Light Brahmas and Geese. Emma Ahlstedt, Roxbury, Kan.

TWENTY LEADING VARIETIES, EGGS and baby chicks. Write for information. Royal Poultry Yards, Coffeyville, Kan.

STOCK, EGGS, BABY CHICKS, LEG-horns, Campines, Orpingtons, Langshans, R. I. Reds, Plymouth Rocks, Wyandottes. Stock, \$2 each; eggs, \$1.50 per 15, \$5 per 100; chicks, 15c each. Miller Poultry Farm, Box K, Lancaster, Mo.

LEGHORNS.

WHITE ROCKS, WHITE LEGHORNS. Priced right. Ross Lane, Newton, Kan.

S. C. BROWN LEGHORN COCKERELS—Extra quality, \$1 and \$2 each. Mrs. L. H. Hastings, Thayer, Kan.

R. C. W. LEGHORN COCKERELS, \$1.00 and \$2.00 each. F. W. Cornell, Wakefield, Kan.

SINGLE COMB WHITE LEGHORN cockerels of quality, \$1. Will Tonn, Haven, Kan.

S. C. BROWN LEGHORN COCKERELS—Extra quality, \$1 each, six for \$5. Mrs. L. H. Hastings, Thayer, Kan.

FULL BLOOD SINGLE COMB BROWN Leghorn cockerels from best pens. W. J. Roof, Maize, Kan.

THIRTY ROSE COMB WHITE LEGHORN cockerels, state and national winners. Price, \$2 to \$5. Satisfaction guaranteed or money refunded. Ruth McFarland, Route 1, Sedalia, Mo.

ONE HUNDRED SINGLE COMB WHITE Leghorn cockerels; Ackerman's famous laying exhibition strain. From 200-egg hens, \$1.50 up; winners for show, \$4.00 up. Also few good females. Cedar View Stock Farm, Dr. C. E. Ackerman, Sec., Bolivar, Mo.

S. C. B. LEGHORN COCKERELS—FINE dark ones, from hens scoring to 94; sired by second prize cockerels, Kansas State Show. Price, \$1 each; \$5 for six. Few show birds, \$3 to \$5. Will win. Jewell Bros., Humboldt, Kan.

LAKEVIEW POULTRY FARM OF PEER-less D. W. Young and Barron strains of S. C. White Leghorns, bred to win and lay. Won at Fredonia, Kan., 1915, six firsts, \$15 cup for best birds in show in strong class; Topeka, second cock, first, third cockerel, first, third pullet. I have thirty-five cockerels and some pullets to sell. Write for prices. Eggs in season. A. K. Sell, Fredonia, Kan.

TURKEYS.

BOURBON RED TURKEYS, PURE-BRED toms \$5, hens \$3. J. W. Wright, Route 6, Newton, Kan.

PURE-BRED MAMMOTH BRONZE TOMS for sale at \$4 each. Big husky fellows. Geo. L. Reese, Lost Springs, Wyo.

OAK HILL FARM, PURE-BRED M. B. Turkeys. High scoring, from 93 to 98%, standard weight. Route 3, Lawson, Mo.

MAMMOTH BRONZE TURKEY TOMS for sale, range raised, five dollars each. Zada Black Hulbert, Lakeland, Kan.

FINE BOURBON TURKEYS, \$3.50, \$4.00. Buff Orpington cockerels, \$1, \$2, \$3. Buff Orpington drakes, \$1.50. Mrs. Frank Neel, Beverly, Kan.

PAYING FOR LIVE TURKEYS, 17c; hens, ducks, geese, 12c; guineas, per dozen, \$4; pigeons, 30c. Coops loaned free. The Copes, Topeka.

MAMMOTH WHITE HOLLAND TUR-keys—Toms twenty-four, pullets fifteen and sixteen pounds. Miss Lillian Schaal, Lexington, Mo.

FOR SALE—W. WYANDOTTE COCK, blue ribbon and sweepstakes winner, high score. Also hens and pullets. G. D. Willems, Inman, Kan.

BOURBON RED TURKEYS FROM PRIZE stock. Toms, \$5; hens, \$3. Also pure Single Comb Reds, very fine. Mrs. Elmer Nicholson, Route No. 5, Wellington, Kan.

BOURBON RED TURKEYS—BIG, DARK red, and correctly marked. Why not get the best at a reasonable price? Toms, \$4 to \$7; hens, \$3 to \$5. Free catalog. Mrs. Clyde Meyers, Fredonia, Kan.

CHAMPION BRONZE TURKEYS, Sired by sons my 52-pound champion tom. Well marked, white edging, won many prizes in largest show. Pleased customers in thirty states. Ike Hudnall, Milan, Mo.

BRAHMAS.

LIGHT BRAHMAS—FIFTEEN EGGS, \$3. Hens, \$2. Nicholas Bach, Hays, Kan.

DARK BRAHMAS—FIFTEEN EGGS, \$3. Pullets or hens, \$2 each. Cockerels, \$5. Nicholas Bach, Hays, Kan.

MAMMOTH LIGHT BRAHMA COCKER-els, including second cockerel Missouri State Show, others his equal. Finely marked, choice cockerels, \$3 to \$5. A few females. Our stock big winners Missouri and Kansas State for years. Mrs. Oscar Felton, Blue Mound, Kan.

RHODE ISLANDS.

RHODE ISLAND WHITE COCKERELS, \$1.25. Will Tonn, Haven, Kan.

R. C. R. I. RED COCKERELS, \$1 AND \$2 each. G. D. Willems, Inman, Kan.

FINE RHODE ISLAND RED COCKER-els, \$1 to \$3. Mrs. F. A. Fulton, El Dorado, Kan.

TWENTY DEEP ROSE COMB COCKER-els for sale. Mrs. Howard Martindale, Madison, Kan.

SINGLE COMB RED COCKERELS, large, husky, deep red, for \$2.50 each. Guaranteed. Creighton Harper, Roca, Neb.

ROSE COMB RHODE ISLAND REDS FOR sale, cockerels and pullets, early hatched, dark red. Prices right. E. F. Helsel, Jefferson, Iowa.

FOR SALE—S. C. R. I. RED COCKER-els, hens, cocks and pullets. Brothers and sisters of our World's Fair winners. Moore & Moore, 1239 Larimer Ave., Wichita, Kan.

FOR SALE—S. C. R. I. RED COCKER-els, \$2 to \$10. Also eggs for setting. Write today for mating list. H. L. White, 1747 N. Waco, Wichita, Kan.

RHODE ISLAND REDS—FIFTEEN EGGS \$3; hens or pullets, \$2 each; cockerels, \$2 to \$15; cocks, \$5. All good ones. Nicholas Bach, Hays, Kan.

\$2.50 SENT TODAY WILL BUY ONE early-hatched Rose Comb Red cockerel, bred from World's Fair winners. Great laying strain. J. M. Clark, 1012 Baltimore, Kansas City, Mo.

FIFTY ROSE COMB RED COCKERELS for sale at right prices. Every one a good breeder, just the birds to improve egg production. E. H. Hartenberger, Route 4, Box 1, Newton, Kan.

WYANDOTTES.

R. C. BUFF WYANDOTTE STOCK FOR sale. G. G. Wright, Langdon, Kan.

BUFF WYANDOTTE COCKERELS, \$1.00 each. Mrs. Lucy Lowe, Pierceville, Kan.

CHOICE WHITE WYANDOTTE COCKERELS, \$1.50 to \$5.00. Mrs. Will Beightel, Holton, Kan.

FOR SALE—1,000 SILVER WYANDOTTES. Write for catalog. Frank Faha, Jr., Box K, Dyersville, Iowa.

"BEAUTIFUL" SILVER WYANDOTTES, \$1.50 to \$5. Write Mrs. Edwin Shuff, Plevna, Kan.

WHITE WYANDOTTES, WORLD'S FAIR winners. Mammoth Pekin and Buff Ducks and capons for mothers for incubator chicks. Mrs. A. J. Higgins, Route 1, Effingham, Kan.

QUALITY WYANDOTTES—STOCK AND eggs for sale. Special prices on a few good breeding cockerels. Square Deal Poultry Farm, Exeter, Neb.

CHAMPION WHITE WYANDOTTES OF the West. A grand lot of cockerels for sale at greatly reduced prices. If you want to win the blue at your show this winter you will need some of my birds, as they are bred to lay and to win the blue for you. Write me your wants. N. Kornhaus, Peabody, Kan.

SHORTHORN CATTLE.**CEDAR LAWN SHORTHORNS**

For Sale—A number of choice bull calves from 8 to 16 months old, by Secret's Sultan 363833 by Missie's Sultan by Glenbrook Sultan by Whitehall Sultan and out of West-lawn Secret 2d, weight 2,200 in breeding condition. Description guaranteed.

S. B. AMCOATS - CLAY CENTER, KAN.

Tenneholm Shorthorns

Collynie Hampton 353998 in Service.

FOR SALE NOW: Eight good bulls from 7 to 17 months old; four Scotch topped Bates. Some of them high-class herd headers. A few bred cows and heifers for sale also. Our prices are not high. Farm one mile from town.

E. S. MYERS - CHANUTE, KANSAS

PEARL HERD SHORTHORNS

Valiant 346162 and Marengo's Pearl 391-962 in service. Twenty head of young bulls for sale, ranging in age from 10 to 20 months. Reds and roans, in good thrifty condition and the making of good useful animals. Inspection invited.

C. W. TAYLOR, Abilene, Kans.

ALFALFA LEAF SHORTHORNS

Young bulls for sale, from 8 to 14 months old. Also some females, bred or open, with breeding and quality.

John Regier, Whitewater, Butler Co., Kan.

HILL'S SHORTHORNS

Two choice Shorthorn bulls. One red, ten months old, sired by Bettie's Albion 399451. One white, eight months old. Extra fine and priced to sell.

C. E. HILL - TORONTO, KANSAS

Sycamore Springs Shorthorns

Master of Dale by the great Avondale heads herd. A few young Scotch bulls and bred heifers for sale.

H. M. HILL - LAFONTAINE, KANSAS

Cloverdale Shorthorns

Two very choice yearling bulls, big-boned and beefy; few nice heifers also. Priced \$100 to \$125.

JEWELL BROS., HUMBOLDT, KANSAS.

Cedar Heights' Shorthorns

Eight head of pure Scotch and Scotch-topped bulls for sale, ten to sixteen months old. Reds and roans. Phone 59-N-1.

HARRY T. FORBES, Route 8, Topeka, Kan.

Shorthorns

20 bulls and heifers sired by Duchess Searchlight 348529, a 2,500-pound bull, and from cows weighing 1,400 to 1,600 pounds. Good milkers. Come or write.

A. M. MARKLEY & SON, MOUND CITY, KANSAS

FARM AND HERD.

Catalogs are out for the great sale of O. I. C. and Chester White bred sows to be held at Marysville, Mo., February 2. The catalog shows a richly bred and very useful lot of sows and gilts in this offering. Messrs. Harvey and Goodspeed own two of the best herds of that breed now in existence. Both are practical breeders and have succeeded in developing the type of white hogs that matures early to a good weight and has show ring quality. The gilts that will go in this sale are by such boars as Sweepstakes Giant 25957, International Boy 22935, Wildwood Prince 28531, Sultan 30543. They are bred to Sweepstakes Giant, Sunny Bar 34087, Missouri Perfection 33435, Show Me 35057, and Harvest Lad 32125. The tried sows catalogued include a number of noted producers, among them Isabelle 65594, Beauty 59226, Rose 59228, Anna 50638, Barber Girl 42882, Aileen 70064, Maxine 70060, and other great producers of the breed.

O. H. Fitzsimmons, of White City, Kan., one of the successful Poland China breeders, has announced a bred sow sale to be held at White City, January 20. Mr. Fitzsimmons will catalog a very choice offering for this sale. There will be two extra good tried sows, fourteen choice spring gilts, and he will also sell five outstanding fair boars and his great herd boar, Blue Valley Ex. The sows, gilts and young boars were sired by such boars as Blue Valley Jr., Mogul's Success, Orange Valley and King of Kansas Jr. The sows and gilts are bred to Blue Valley Ex and King of Kansas Jr. Mr. Fitzsimmons is one of the successful breeders who has succeeded in developing a type of Poland China that is very profitable for the farmer and feeder.

CORRECTION**JOHN O. HUNT'S DUROC SALE at Marysville, Ks.**

will be held Jan. 19th instead of Jan. 20, as announced in issue of Jan. 8

DUROC JERSEYS.**Sisco's Duroc Jerseys PRIZE WINNING BLOOD**

Big, growthy, richly-bred gilts, bred to a choice son of the great boar, A Critic, for spring farrow. Outstanding spring boars. Also a choice herd boar. Prices right.

A. E. SISCO, Route 2, TOPEKA, KS.

BIG-TYPE HEAVY-BONED DUROCS

Bred sows and gilts by Blue Ribbon Model, first prize winner at Iowa, Minnesota and South Dakota, 1911. Bred to Illustrators Jr. and Col. Gano Agall.

CHAS. CHRISTIANSON, AKRON, IOWA.

DUROC JERSEY BOARS

Sired by Country Gentleman 132541, Gold Medal 176231 and Long Wonder 2d 168335. All immune. Prize winning blood. We price them right.

W. R. HUSTON - AMERICUS, KANSAS

DUROC BOARS AND BRED GILTS

Large, smooth, easy-feeding type. From champions Long Wonder, Defender, Superba and Golden Model breeding. Also fall pigs. Everything immune.

JOHN A. REED - LYONS, KANSAS

BOARS! BOARS! BRED GILTS!

Eighteen big husky boars, thirty bred gilts, a few tried sows. Crimson Wonder, Illustrators II, Colonel, Good Enuff, Defender breeding. Either by or bred to sons of the greatest champions of the breed. Priced for quick sale. Immune.

G. M. SHEPHERD - LYONS, KANSAS

DUROC HERD BOARS.

One herd boar 4 years old, sired by Buddy K 4th, \$50. Twenty spring and summer boars, \$15 to \$20. Twenty spring gilts, weight 175 to 230, safe in pig to a good son of Otey's Dream, \$25 to \$30. Forty fall pigs at \$10.

R. C. WATSON - ALTOONA, KANSAS

OHIO IMPROVED CHESTERS**LYNCH'S IMMUNE O. I. C's**

Boars and gilts, not related. Big-boned easy-feeding kind. Best of breeding. Priced right.

W. H. LYNCH - READING, KANSAS

Murray's O. I. C. Chesters

A few choice boars. Forty choice gilts bred for March farrow; thirty for April farrow. All bred to silver cup winner. They are priced low.

CHAS. H. MURRAY, FRIEND, NEBRASKA

IMMUNE O. I. C's---BRED GILTS

HARRY W. HAYNES, MERIDEN, KANSAS

O. I. C. HOGS

Guaranteed cholera immune. Long, smooth, good bone. Boars ready for service, gilts bred or open, \$17.50 to \$25. Pedigrees furnished.

CEDAR VIEW STOCK FARM, Bolivar, Mo.

Dr. C. E. Ackerman, Sec'y.

CEDARDALE CHESTER WHITES.

Extra good March boars, outstanding February and March gilts bred to choice boars for March and April farrow. All big, easy-feeding type. All immune. Priced right. Satisfaction guaranteed.

J. S. KENNEDY - BLOCKTON, IOWA

JERSEY CATTLE.**OLIVER'S JERSEYS.**

For Sale—Jersey bull dropped Nov. 15, 1914. Solid gray fawn, shading darker on sides and neck. Sire, Blue Belle's Owl 79641; dam, Fauvie's Wild Rose 253822. Imported, ten months record milk 6,845.1 lbs.; fat, 328.44 lbs., on every-day care and dairy feed. This is a magnificent bull, guaranteed to please. Price, \$100. Address

ROLLA OLIVER, Box 701, St. Joseph, Mo.

SMITH'S JERSEYS

Five years old, solid light fawn, blue ribbon winner. Must change. Keeping his heifers. His sire, half brother to Noble of Oaklands, sold for \$15,000. His first five dams on his dam's side made 102 lbs. butter in seven days. Also four of his sons, serviceable age, and a few females. Will sell very cheap.

S. S. SMITH, CLAY CENTER, KANSAS.

LINSCOTT JERSEYS.

First Register of Merit herd in Kansas—Established 1878. Oakland Sultan, first Register of Merit sire in Kansas, is dead. Last chance to get one of his daughters. \$100.

R. J. LINSCOTT - HOLTON, KANSAS.

CHAMPION BLOOD

Young bulls by Cretesla's Interested Owl 114512, whose sister has broken the Jersey milk record, giving 19,744 pounds of milk. These bulls are out of very good cows. Write or call on R. A. GILLILAND, Mayetta, Kan.

REGISTERED JERSEY HEIFERS.

They are bargains and will soon go at prices asked; 2 to 5 months old. Write today. Parkdale Farm, Vandellia, Mo.

BARGAINS IN JERSEY BULLS.

Two-year-old brother of Pride of Topeka, also one son of serviceable age.

JAS. H. SCOTT, ROUTE 1, TOPEKA, KAN.

WHEN WRITING ADVERTISERS,

MENTION KANSAS FARMER

HORSES AND MULES.**58 Head Registered Stallions and Mares 58**

Percherons, Belgians and French Drafts, from Yearlings to Seven Years Old.

I have rented my farm and am quitting farming. Must sell all my horses by March 1. Nothing reserved. All priced reasonably—the first buyer to come will get a bargain. I mean business and must sell my entire herd. Come and see me.

J. M. NOLAN - - - - - PAOLA, KANSAS

**ROBISON'S PERCHERONS**

Forty young stallions from two to six years old. A few young mares for sale.

J. C. ROBISON, Towanda, Kans.

**LAMER'S PERCHERONS**

Have just received a new shipment. Also have a barn full of my own raising. A choice lot to select from.

WRITE, WIRE OR PHONE.

C. W. LAMER, SALINA, KANSAS

OFFICE, LAMER HOTEL.

**REGISTERED PERCHERON STUDS**

We have them, BIG FELLOWS, 1, 2, 3 and 4 years old. Real drafters, BIG BONE, lots of quality and action. Grown right, will go out and make good both as to sires and foal getters. You lose money if you don't look at BISHOP BROS.' STUDS before buying. Twenty miles east of Wichita, on Mo. Pacific Ry.

BISHOP BROS., BOX E, TOWANDA, KANSAS

**HORSES AND JACKS**

FOR SALE—Span of 6-year-old mares, ton, imported; span of 2 and 3-year-olds. All in foal and showing good to imported horse, Kansas. Three spans of yearlings, coming two. All of the above as good as ever grown. Twenty head of two-year-old jacks, the big Missouri kind; ten head of jennets, all bred. This stuff, for the purpose of making room, I will sell at rates to suit purchaser. Can show sire and dams of all stuff. Cash or time.

OAKLAND STOCK FARM, Box 207, CHILLICOTHE, MO.

**MAMMOTH JACKS, JENNETS and PERCHERONS**

Jacks 15 to 16½ hands standard, two to five years, very best bone and quality. Stallions, ton weight and over, with finish.

AL E. SMITH, PROPRIETOR - LAWRENCE, KANSAS

**REGISTERED JACKS and PERCHERONS**

A few tried imported black Percheron ton stallions; Brilliant blood, good enough for herd headers. Twelve big black registered jacks, two to five years old, 14½ to 16 hands high, well broke and quick performers. Good herd of registered jennets headed by large Spanish Jack.

J. P. & M. H. MALONE, CHASE, KANSAS

Rice County.

HIGH CLASS JACKS

We offer 25 head to select from. Herd headed by Mo. Chief's Boy 6815. One imported gray Percheron stallion, first prize at Kansas State Fair. Write or phone us.

LOUIS MILLS & SON, Alden, Kan.



FOR SALE—Two extra good registered Percheron stallions. Two choice registered mares, extra large, in foal to registered stallion.

H. A. RITTER

Kiowa - - Kansas

**JACKS AND JENNETS**

10 Large Mammoth Black Jacks for sale, ages from 2 to 6 years; large, heavy-boned. Special prices for fall and winter sales. A few good jennets for sale. Come and see me.

PHIL WALKER, Moline, Elk County, Kansas.

**Jacks for Sale**

I have three good young jacks for sale and worth the money. Also a few very fine jennets.

JOHN A. EDWARDS

Englewood - Kansas



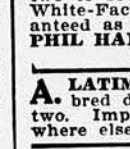
Registered Percheron Stallions—Nineteen ton and 2,200-pound 4 and 5-year-olds. 34 coming 3's. 17 coming 2's. Grandsons International champion Pink. 23 registered mares for sale. Just above Kansas City. Fred Chandler Percheron Farm, Route 7, Chariton, Iowa.

JACKS FOR SALE.

Seven head of big mammoth jacks, from two to seven years old. Would take some White-Face heifers in exchange. Jacks guaranteed as represented.

PHIL HANNUM, JR. - CARTHAGE, MO.

Home Phone 817 Black.

**A. LATIMER WILSON, Creston, Ia.**

Bred draft stallions \$250 to \$400, except two. Imported stallions cheaper than anywhere else.

THIRTY HEAD MAMMOTH JACKS

And Jennets for sale. The big kind. Priced to sell.

J. D. HOLMAN - CURRYVILLE, MO.

DUNHAMS' PERCHERONS

For Fifty Years the Best.

Send for fine photographic catalog.

DUNHAMS
Wayne, Dupage Co., Ill.

**HARRIS BROS.**

90 PERCHERONS 90

Sixty Mares and Fillies. Thirty Stallions, from weanlings to five years old. At live and lot live prices.

Route 6, GREAT BEND, KANSAS.

**TENTH ANNUAL Breeders Sale**

Fifty head of registered saddle stallions, mares, jacks, jennets, and draft horses, on

TUESDAY, FEB. 1

This will be the best bunch of stuff that will be under the hammer this year. If interested, write for catalogue.

HAMILTON BROS. - MEXICO, MO.

MISCELLANEOUS.**YOU CAN BUY THEM HERE**

Registered Percheron Stallions and Mares. Registered Mammoth Jacks and Jennets. Registered Holstein Bulls, Cows and Heifers. M. G. BIGHAM & SONS, OZAWIE, KAN. 20 Miles Northeast of Topeka.

SHROPSHIRE SHEEP**SHROPSHIRE EWES**

Bred to the very best bucks obtainable, for sale in lots to suit purchaser. All stock recorded.

L. M. HARTLEY

PINE RIDGE FARM - SALEM, IOWA

**BRED EWES.**

Registered Shropshires to lamb March and April. Bred to son of imported Ludlow King, sire of state fair champions. Also rams. Eighty miles north St. Joseph, Mo.

C. W. CHANDLER, Kellerton, Ia.

HARVEY AND GOODSPEED'S Great O. I. C. and Chester White Bred Sow Sale

AT MARYVILLE, MO., FEBRUARY 2, 1916.

FIFTEEN CHOICE TRIED SOWS THIRTY-FIVE SPRING GILTS

Gilts are sired by such boars as Sweepstakes Giant, International Boy, Wildwood Prince and Sultan. They are bred to Sweepstakes Giant, Sunny Bar, Missouri Perfection, Show Me, and Harvest Lad.

The offering of tried sows will include noted dams of the breed such as Isabelle, Minnehaha, Rose, Beauty, Anna, Barber Girl, Aileen, Maxine, and other great producers.

Bids sent to auctioneers in our care will be fairly treated. Send for catalog at once.

J. H. HARVEY OR F. B. GOODSPEED,

MARYVILLE, MISSOURI



FITZIMMON'S POLAND CHINA SALE

AT WHITE CITY, KANSAS, JANUARY 20, 1916

TWENTY-TWO HEAD OF BRED SOWS AND GILTS AND FALL BOARS.

Two extra good tried sows, fourteen choice spring gilts, five good fall boars, also my herd boar, Blue Valley Ex. The sows and fall boars were sired by such boars as Mogul's Success, Orange Valley, King of Kansas Jr., and Blue Valley Jr. The sows are bred to King of Kansas Jr. and Blue Valley Ex. Bids sent to auctioneers in my care will be fairly treated. Send for catalog at once.

O. H. FITZIMMONS, - - - WHITE CITY, KANSAS



DUROC BRED SOW SALE FORMOSO, KAN., JAN. 26

25—HEAD RICHLY BRED DUROC SOWS—25

By Crimson Defender 142579, Model A 168243, Buddy O. K. 133089, and Dreamland Col. 106175, out of richly-bred dams. Bred to Crimson Defender and Marsh Creek Col. Send for catalog. Bids sent to auctioneer in my care will be fairly treated. Entire offering is cholera immune.

R. P. WELLS, Formoso, Kansas
COL. J. A. HOWELL, AUCTIONEER.



Faulkner's Famous Spotted Polands

We are not the originator, but the preserver of the OLD ORIGINAL BIG-BONED SPOTTED POLANDS. Now booking orders for spring pigs to be shipped when weaned, pairs or trios, not akin.

Arrange to attend our
ANNUAL FEBRUARY 9 BROOD SOW SALE.
For information and catalog address
H. L. FAULKNER, BOX K, JAMESPORT, MISSOURI

POLAND CHINAS.

Palmer's Poland Chinas

Herd headed by Sir Dudley, first in senior pig class, junior and reserve grand champion Kansas State Fair, Hutchinson. Pigs, either sex, by this boar; also sows and gilts bred to him. For prices and description write

CHAS. B. PALMER, Route 5, Marion, Kan.

PERFECTION SPOTTED POLANDS

Special prices on summer boars—the old original spotted kind. Booking orders for fall pigs and gilts bred for spring farrow. Get our prices and free circular before buying elsewhere.

The Ennis Stock Farm, Horine Station, Mo.
(Just South of St. Louis.)

Henry's Big-Type Polands

March gilts, sired by Big Bob Wonder, Big Bone Jr., and Grand Orange. Bred or open. Also fall pigs, not related. Write me.

JOHN D. HENRY - LECOMPTON, KAN.

ENOS IMMUNED POLANDS.

Fall and spring boars sired by the noted herd boars, Orphan Chief and Mastodon King. Will sell a choice lot of my herd sows and gilts bred for early spring farrow. One hundred head to pick from. Everything guaranteed immune. Write or phone.

A. R. ENOS - RAMONA, KANSAS

PINE GROVE POLAND HERD

Choice big-type spring boars and gilts, a few fall gilts, by Sunflower King, King of Kansas and Major by Designer by Expansion. Tops, \$25; a few for \$20. Also a few spring gilts.

N. E. COPELAND, WATERVILLE, KANSAS

FAIRVIEW POLAND CHINAS

FOR SALE—A few good heavy-boned boars. Also splendid lot of fall yearling and spring gilts, bred for March and April litters. All priced to sell.

P. L. WARE & SON - PAOLA, KANSAS

POLAND CHINA BOARS AND GILTS

A few serviceable boars and bred gilts for sale. Send for my bred sow sale catalog. Sale will be held March 1 at Dearborn, Mo., on electric line out of St. Joseph. Write

CLARENCE DEAN, R. D., WESTON, MO.

ARKELL'S POLANDS.

Choice Fall Yearlings and Spring Gilts. Yearlings by Longfellow Again, bred to Chief Big Bone. Spring gilts by Chief Big Bone, bred to Longfellow Again. Priced for quick sale.

JAMES ARKELL, R. 4, Junction City, Kan.

SCHNEIDER'S BIG-TYPE POLANDS.

Extra good boars, serviceable age, sired by Referendum 2d out of choice dams. Priced to sell. Joe Schneider Nortonville, Kan.

SPOTTED POLAND CHINAS

June and July farrow. Pairs or trios. Not akin. Recorded pedigree with each hog.

GEO. HENRY, JAMESTOWN, IND.

LANGFORD'S SPOTTED POLANDS.

Choice fall boars. Also boars for service. Must sell.

T. T. Langford & Sons, Jamesport, Mo.

OLD ORIGINAL SPOTTED POLANDS.

Spring boars, fall pigs, bred sows. Bargains. A. S. Alexander, Route 2, Burlington, Kan.

BERKSHIRE HOGS.

BIG-TYPE BERKSHIRES FOR SALE

Sired by grand champion boars of Illinois and Missouri State Fairs. Also S. C. Black Minorca chickens. J. V. FISH, Route 7, Bolivar, Mo.

NASH'S BERKSHIRES

Choice bred gilts from \$25 to \$35. Bred to two first prize state winners. Choice fall pigs ready to go at \$25 per pair.

C. G. NASH, ESKRIDGE, KAN.

HAMPSHIRE HOGS

SHAW'S HAMPSHIRE

150 registered Hampshires, all ages, nicely bodied, best of breeding, all immuned double treatment. Satisfaction guaranteed. Priced to sell.

WALTER SHAW, Route 6 - Wichita, Kansas

ATTEBERRY'S HAMPSHIRE

Choice breeding. Bred sows and gilts. Out standing boars. Priced to sell quick.

ATTEBERRY & SON - LANCASTER, MO.

IMMUNE HAMPSHIRE

Choice gilts, bred or open, with size, finish and prolific qualities. Louis J. Paulsen, Cordova, Neb.

AYRSHIRE CATTLE.

CHOICE AYRSHIRE BULL CALVES

One born September 7, 1915, nearly white; one born September 30, 1915, grandson of world's champion, two years old. Priced worth the money.

H. H. HOFFMAN, Route 6, Abilene, Kansas.

POLLED DURHAM CATTLE.

The Profitable Breed

For Sale—Double Standard Polled Durham Cattle. Write for description, breeding and prices.

C. M. ALBRIGHT, OVERBROOK, KANSAS

Hamilton Bros., of Mexico, Mo., breeders

of saddle horses, draft horses, jacks and jennets, claim Tuesday, February 1, 1916, as the date of their tenth annual sale. Fifty head of saddle and draft stallions and mares and jacks and jennets will be catalogued for this sale.

HOLSTEIN CATTLE.

CLYDE GIROD—At the Farm.

HOLSTEIN FRESIAN FARM

M. M. MERCEDES PIETERTJE HOMESTEAD 156587 AT HEAD OF HERD. Large selection, 225 head to choose from. One hundred fifty springing cows and heifers, all the right type, in calf to pure-bred bulls strong in the blood of the best milking strains, to freshen soon, as well as fresh cows on hand. Our pure-bred heifers are choice, some with A. R. O. records under three years of age. Fifteen pure-bred bulls, ages 6 to 24 months, all out of A. R. O. dams and from record sires. Bring your dairy expert—the better informed the easier to please. Write or wire your wants.

GIROD & ROBISON, Towanda, Kansas

F. W. ROBISON—At Towanda State Bank.

260 - HOLSTEIN COWS AND HEIFERS - 260

If you want Holstein cows, springers or bred heifers, see my herd. I have them. They are very large, good markings, out of the best milking strains, bred to pure-bred bulls of the very best blood. Special prices on carload lots. Want to reduce my herd and will make bargain prices for thirty days.

J. C. ROBISON

TOWANDA, KANSAS



TORREY'S HOLSTEIN HEIFERS

High-grade Holstein heifers in single lots or car loads. Prices reasonable. Write, wire or phone.

O. E. TORREY

TOWANDA, KANSAS

HOME FARM HOLSTEINS

OFFER HEIFER CALVES

Five months up to 15 months; grand-daughters of De Kol Burke, Fobes Tritonia Mutual De Kol and Walker Korn-dyke Segis. Official record and untested dams. Prices, \$95 to \$325.

W. B. BARNEY & SONS, Chapin, Iowa.

Regier's Holsteins

FOR SALE—Holstein-Friesian A. R. O. bulls. One A. R. O. 15.78 pounds butter cow, gave 12,386 pounds milk in 292 days, will be fresh December. Price, \$275.

G. Regier & Sons

WHITEWATER - KANSAS

IN MISSOURI

Eight bulls, 2 to 8 months, \$100 to \$175 each. Always have a few good cows and bred heifers for sale. Nothing but registered Holsteins.

S. W. COOKE & SON, MAYSVILLE, MO.

BUTTER BRED HOLSTEINS

Registered bull calves. Prices reasonable. Write today. These bargains will not last long.

J. P. MAST, SCRANTON, KAN.

REGISTERED HOLSTEINS

For Sale—Choice young bulls, also a few females. Have bred Holsteins 25 years on the same farm. Come and see our herd.

M. E. MOORE & CO., CAMERON, MO.

Bonnie Brae Holsteins

Ninety head of high-grade heifers and young cows. Some fresh now. Many heavy springers. Heifer calves. Registered bulls from 7 to 14 months of age.

IRA ROMIG, STATION B, TOPEKA, KAN.

Golden Belt Holstein Herd

Canary Butter Boy King No. 70508 in Service.

Herd has won more prizes from Holstein-Friesian Association for yearly production than any herd in Kansas. Young bulls for sale from heavy producing cows.

W. E. BENTLEY, MANHATTAN, KANSAS

FOR QUICK SALE

Fifty head of highly-bred registered Holstein-Friesian cows and heifers; good ages and good producers. Several bulls from calves up to yearlings. Ready for service.

HIGGINBOTHAM BROS., Rossville, Kansas

SUNFLOWER HERD

Prince Artis Pontiac Abbecker No. 136382 Heads Sunflower Herd. Only 30-pound bull in Kansas. Buy where the best breeding, best producers come from.

F. J. SEARLE, OSKALOOSA, KANSAS.
(Several bulls ready for service.)

CHOICE HOLSTEIN BULLS

Four registered bulls, out of A. R. O. cows. Two ready for service. Best breeding. Choice individuals.

BEN SCHNEIDER, NORTONVILLE, KAN.

EWING'S HOLSTEINS

Watch this space in future issues for something good in Holsteins.

T. M. EWING, INDEPENDENCE, KANSAS

BRAEBURN HOLSTEINS

Product of twenty years breeding. Write me for a good bull calf. Two ready to use.

H. B. Cowles, 608 Kansas Ave., Topeka, Kan.

Did You Know that the Dam of Iowa De

Cola Walker, who heads

TREDICO FARM HERD

Made 812.25 pounds of butter from 18,047.0 pounds of milk?

TREDICO FARM, Route 44, Kingman, Kan.

ANGUS CATTLE

ABERDEEN ANGUS

We Offer For Sale Bulls and Heifers, Any Number, Single or Carload Lots.

These cattle have size and quality and are bred in the purple. See them at Lawrence—forty miles from Kansas City, on Santa Fe and Union Pacific railways.

SUTTON & PORTEOUS

Phone 8454. Route 6, Lawrence, Kan.

WHEN WRITING ADVERTISERS, MENTION KANSAS FARMER

HOLSTEIN CATTLE.

FINE HOLSTEIN CALVES from heavy milkers, \$20 each. Registered yearling bull, \$85. Edgewood Farm, R. 3, Whitewater, Wis.

HEREFORD CATTLE.

HEREFORD CATTLE

For Sale—One carload breeding cows, one carload heifer calves, 75 yearling bulls, 25 two-year-old bulls. Come and see our herd.

FERRY BROS.
Alta Vista, Wabunsee County, Kansas.

STAR BREEDING FARM

FOR SALE—Herefords and Durocs: 65 yearling and two-year-old bulls by Tophon 4th, Hessiod, Anxiety, March On and other good sires. 25 females, some have calves at foot and bred again. 10 head heifer calves. 30 head of registered Duroc gilts sired by a son of Ohio Chief and son of Buddy K. 4th, out of sows by grand champions. Come and see me.

SAM DRYBREAD - ELK CITY, KANSAS

GALLOWAY CATTLE.

GALLOWAY BULLS

FORTY yearling and two-year-old bulls, strong and rugged; farmer bulls, have been range-grown. Will price a few cows and heifers.

E. E. FRIZELL, Frizell, Pawnee Co., Kan.

RED POLLED CATTLE.

RED POLLED BULLS

TWENTY yearling bulls, big rugged fellows, sired by ton sires; all registered and priced reasonably. Will sell a few females.

E. E. FRIZELL, Frizell, Pawnee Co., Kan.

Coburn Herd Red Polled Cattle

AND PERCHERON HORSES.

A few choice bulls. Eight extra good two-year-old stallions for sale at reasonable prices.

MAHLON GROENMILLER, Pomona, Kan.

RED POLLED CATTLE

FOR SALE—1915 bull calves by Rose's Grand Champion 17998, a 2,400-pound bull; also a few good cows and heifers.

AULD BROTHERS, FRANKFORT, KAN.

RED POLLED CATTLE.

For Sale—Eight choice young bulls from 7 to 11 months old.

I. W. POULTON - MEDORA, KANSAS

GUERNSEY CATTLE

THE GUERNSEY is popular among

the dairy-men who appreciate that Economical production, richness and fine flavor of products lead to larger profits.

Try Guernseys and be satisfied.

Guernsey Cattle Club,

Box 2, Peterboro, N.H.

Breeders' Directory

PERCHERON HORSES.

M. E. Gideon, Emmett, Kan.

SHORTHORNS.

E. E. Heacock & Sons, Hartford, Kan.
C. H. White, Burlington, Kan.

HOLSTEINS.

C. E. Bean, Garnett, Kansas.

JERSEY CATTLE.

J. B. Porter & Son, Mayetta, Kan.

DORSET-HORN SHEEP.

H. C. LaTourette, Route 2, Oberlin, Kan.

POLAND CHINA HOGS.

Wm. M. Dixon, New Florence, Mo.

THE STRAY LIST

TAKEN UP—BY G. C. RANDALL, IN Wabunsee Township, Wabunsee County, post office address Wamego, Kansas, on the 8th day of December, 1915, one red steer with no marks or brands, about two years old. Appraised at \$50.00. L. B. Burt, County Clerk.

The announcement of William Inge & Co., of Independence, Kan., that they will hold a sale of registered Guernseys at Independence, January 19, will interest Guernsey breeders and dairymen. They will offer a choice lot of cows and heifers and young bulls. They will also sell one imported herd bull.

TWO DAYS SALE

PERCHERONS, JACKS, JENNETS and POLAND CHINAS

On Thursday and Friday, February 3-4, 1916

At Farm Two Miles From Devon, Kan., Ten Miles From Ft. Scott, Kan.

I WILL SELL ALL MY HORSES, JACKS, JENNETS, MULES, AND POLAND CHINA BRED SOWS.

Have sold my home farm and will sell my entire herd of three registered Percheron stallions, five jacks (including two herd jacks), ten jennets, six draft farm mares, twenty head of yearling and two-year-old mules (one of the best eighteen-months-old mare mules in the state).



The Sales Managers.

45 - Head of the Best Poland China Bred Sows That Will be Sold - 45

Forty-five head of the best Poland China bred sows that will be sold this year will be sold on the second day, February 4. They are the tops of fifteen sales, 1914 and 1915, and sired by such noted boars as Grand Look, Tecumseh Hadley, Gold Medal, Long Prospect, Palmer's Orphan, Expansion Hadley, King Blain by Blain's Wonder, Wedd's Long King, Wales' Missouri King, Expansion Hadley and Wedd's Expansion. Bred to Big Wonder, a grandson of A Wonder; Dan Hadley 2d by Big Hadley, and Sure Prospect by Expansion Sure. I am selling my three herd boars and herd sows. Am not quitting, but moving to another farm, one mile from Ft. Scott, where I expect to improve and keep one of the best herds of Poland Chinas that I can collect together.

Send for illustrated catalog and arrange to attend both days. A special coach will leave Ft. Scott at 10:00 a. m. and return each evening after sale. O. W. Devine will represent Kansas Farmer at hog sale. Write today for catalog to

J. A. GODMAN, DEVON, KANSAS

Auctioneer, Col. R. L. Harriman.

MY ANNUAL SALE OF REGISTERED HEREFORDS

AT WAMEGO, KANSAS., SAT., JAN. 22

30 Yearling and Two Year Old Bulls
30 Two Year Old Heifers Safe in Calf



The bulls are the get of such sires as Beau Belton, Maple Lad 33d, British Mail by Imported Britisher, Java, Beau Real and Boat Man. The heifers are the get of Laredo Boy, Sir Paul, Beau Mistie 39th, Beau Belton, Hill's Pride, Edward Lad and Odessa Lad. All in good condition. Send today for catalog and come to my sale. Sale at Wamego, Kansas.

CARL MILLER, Belvue, Kansas

AUCTIONEERS—COL. REPPERT AND COL. BRADY.

Registered Guernsey Sale Public Sale of Registered Guernsey Cattle

At Independence, Kansas, January 19, 1916

Five Cows and Heifers, One Imported Herd Bull,
Three Male Yearlings and Calves.

This is a richly bred lot of Guernseys and breeders wanting producers should be represented at this sale. If unable to attend, Col. C. A. Burke, Auctioneer, will protect bids by mail.

Sale January 19, two blocks from car barn. Write for further information.

WM. INGE & CO.

Independence, Kansas

CALDWELL'S POLAND CHINA BRED SOW SALE

HOWARD, KANSAS, FEBRUARY 5, 1916

45- HEAD CHOICE BIG TYPE SOWS -45

Sixteen tried sows of Expansion, Bell Metal, Big Chief and M's Giant Wonder breeding.



Twenty yearling sows, seventeen of them by Elkmere Jumbo.

Nine spring gilts by Elkmere Jumbo and one by Big Bob Wonder.

Fourteen of these sows will be bred to Orphan Boy by Big Orphan.

Twelve will be bred to O U Wonder, a grandson of old A Wonder.

Fifteen will be bred to Caldwell's Big Bob, bred by H. B. Walter.

SALE IN HEATED PAVILION.

SEND FOR CATALOG EARLY.

FRED B. CALDWELL,

Howard, Kansas

MENTION KANSAS FARMER WHEN YOU WRITE.

HARTMAN'S SPECIAL Farm Credit Plan



3-Piece, 2-inch Post Steel Bed Outfit

No. MK148. Complete outfit, consisting of elegant 2-in. continuous post steel bed with 3-in. fillers in artistic design, height head and foot 32 in.; link fabric, steel frame bed spring; cotton top, fibre filled mattress and two 4 1/2 lb. selected hen feather pillows 18x26 in. All sizes, 3 ft., 3 ft. 6 in., 4 ft. or 4 ft. 6 in., all sizes in colors, White, Pea Green or Vermeil. Think of being able to order this elegant bed outfit—bed, springs, mattress and pillows—without sending a cent in advance and sleeping on it 30 nights before you even decide to keep it. You couldn't duplicate this bed outfit anywhere else at anything near our price, even if you paid all cash and we give you practically your own time to pay. Price, \$8.98.

\$8.98

before you even decide to keep it. You couldn't duplicate this bed outfit anywhere else at anything near our price, even if you paid all cash and we give you practically your own time to pay. Price, \$8.98.



3-Piece Library Set Bargain

No. MK184. Made of choice quality solid oak, fumed finish. Table has large 86x24 in. top, fitted with 2 roomy book ends, with large 7 in. connecting shelf. Panels at sides of book ends match panels on chair and rocker. Chair and rocker made with heavy 2 inch front posts fitted to genuine quarter-sawn oak arms, 3 1/4 inches wide. Seats and backs upholstered with imitation Spanish leather over wood fibre and soft cotton jute, supported by six heavy steel reinforced springs. Chairs 40 inches high; seat 23x19 inches. Price, Complete Set, \$12.65.

\$12.65

Comfortable Rocker Bargain

No. MK176. A large, comfortable Rocker at a bargain price. Made of solid oak in golden finish in a very choice design. Is upholstered with imitation Spanish brown leather on seat and back. Seat has 4 springs, stuffed with tow and cotton. Front and back posts are handsomely carved. Seat front plaited and back is button tufted. Strong posts and runners. Here is a rocker that is constructed for solid comfort—and it is a handsome piece of furniture as well—a rocker that will grace any parlor or living room. You can make no mistake by ordering it because if you do not think it the biggest value for the money you ever saw, you are privileged to return it at our expense. Price, \$3.57.

\$3.57

Hartman's Dresser Bargain

No. MK180. A remarkable offering of a beautiful dresser constructed of selected hardwood to which is applied a finish in imitation of quarter-sawn oak that closely resembles the real wood. Top of base measures 40x19 inches. It has French bevel plate mirror 24x20 inches in size, supported by strong standards. Top of mirror frame has neat carving. There are two small drawers at top of base, below which are two full length drawers, all fitted with wooden drawer pulls. When you see it you will be amazed that such an elegant piece of furniture, handsome enough for any home, can be manufactured and sold at the price we offer it. Compare it with dressers costing a great deal more and you will at once see that it is far superior in appearance, style, workmanship and finish. A rare value at our price, \$9.68.

\$9.68

Washing Machine Bargain

No. MK185. Tub is 8 shirt capacity, made of red cypress, corrugated on inside for effective rubbing surface. Finished natural color and bound by three steel hoops. Four pronged 10 inch cypress dasher block, cannot slip or crack. Gearing in durable roller bearings. Here is a machine that will take the drudgery out of wash day for it is very easy to run. Tub is supported by three legs bolted in iron sockets. Does not tear clothes. Do not tire yourself out another day rubbing clothes on an old style wash board. How can you afford to when you can buy this easy-running, durable machine at the low price of \$4.50.

\$4.50

Hartman's Solid Oak Kitchen Cabinet Bargain

No. MK178. Elegant Sanitary Comfort Kitchen Cabinet of Solid Oak. Base has whitewood table top 42x26 in., smoothly sanded; convenient sliding bread board; cutlery drawer; large utility drawer for bread or cake, and roomy utensil cupboard with can rack on inside of door. Top has large china cupboard with two artglass doors; tilting flour bin, 46 pound capacity, with silver and artglass front, sliding sugar bin, and two spice drawers. Cabinet stands 63 inches high and is finished in rich golden color. No kitchen should be without this beautiful and useful piece of kitchen furniture. Price, \$11.78.

\$11.78

Hartman's "Wonder" Vacuum Sweeper Bargain

No. MK182. Here's a wonderful value in an article needed in every home. An easy running, silent vacuum sweeper that is offered at a price lower than ever before asked for an article of this high quality. Has noiseless, fibre bearings and bellows lifting rods, steel frame dust bag, wide opening dust pan, pressed steel top, four drive wheels on brush, 8 bellows and 12 inch nozzle. Wheels are flanged to avoid tire trouble. Is nickel trimmed. Fully guaranteed. Has brush adjustment—operated by foot. This is a vacuum sweeper that should be in every home. Will keep your rugs and carpets absolutely free from dust and germs, and is so easy to operate that its more like play than work. None of the dust of ordinary sweepers. You don't have to follow up your work with a dust rag. Order one today at this unheard of price of only \$3.97.

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No. MK179. Magnificent Library Table constructed of selected hardwood to which is applied a finish in imitation of quarter-sawn oak that so closely resembles the real wood that it requires an experienced eye to detect the difference. Comes in golden oak or fumed finish. Has square edge top, 42x28 in., large drawer for papers or magazines; 2 1/2 in. square corner posts fitted to heavy scroll feet, and strong lower shelf. Not only is this a strong, solidly built, durable table but it is also an unusually handsome piece of furniture. You will be proud to own it. It is made in the very best way and it is a great value at this remarkably low price of \$6.95.

\$6.95

Hartman's Collapsible Go-Cart Bargain

No. MK111. New all steel, collapsible Go-Cart, folds completely with one motion. Has heavy tubular steel pushers; beautiful silver nickel corners; 3 bow hood; 10 inch wheels with 1/2 inch cushion rubber tires; metal fenders; 8 bow footwell hood; improved spring construction which guarantees maximum comfort for baby; back adjusts to several different positions. Price includes removable storm front with large mica window that makes it easily convertible into a bad-weather cart. Easy riding, too, as the rubber tires take up the shock and jar when going over rough places. Give the baby real comfort by ordering at once one of these fine Go-Carts. This is the greatest value ever offered by anyone. Price \$6.98.

\$6.98

Solid Oak Dining Table Bargain

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