

KANSAS FARMER

For the improvement



of the Farm and Home

Volume 55, Number 35. TOPEKA, KANSAS, SEPTEMBER 1, 1917. Established 1863. \$1 a Year

THE FARMHOUSE IMPROVED

Plan Showing Many Conveniences and Labor-Saving Devices

"THE American farmhouse is coming into its own," says Prof. W. A. Etherton, of the Kansas Agricultural College, in his introduction to the bulletin entitled "The Farmhouse Improved." "It has suffered neglect during past years of industrial progress and territorial expansion, but there is no longer a great need as formerly for sacrificing the home 'to get a start.' Moreover, the American farm family knows today, better than ever before, that home improvements are necessary to a realization of the things in life that are most worth while. It knows, too, that the future holds greater opportunities for the farm home and greater incentives for improving it that have obtained in the past."

"The physical and social lines between country and town are growing less distinct. City folk are building their homes in the country and farm families are driving in their automobiles and riding on interurban cars to church and school in town. The obscure farmhouse of today may be on a paved highway or a boulevard tomorrow. Such changes are now accomplished facts in some of the older states and they are encroaching rapidly upon the newer ones. With better roads and more automobiles, with telephones and other home conveniences, there will be better farmhouses, also, and more people who will want to live in them."

It is pointed out in the opening chapter that the house plan needed by the farm owner cannot often be found; it must be made. A thousand good plans and designs of farmhouses would not suffice the need of owners for architectural assistance of this kind. If one had this number of representative plans to select from, less than one-tenth of them would meet one's requirements for size and cost. Probably half or more of this tenth part would not be for the number of stories wanted. Many of the houses would be suitable only for level building sites, whereas one may want to build on a hillside and have entrances from two levels. The building site may be south of the highway, but many of the plans would be made for farmsteads on the north, the east, and the west sides of the road. Some of the plans would be made for semi-tropical, or very temperate climates, but one may need to be comfortably housed during months of cold weather. Some would be suitable for windswept plains, but if one lives in the hill country, a prairie adaptation would be quite out of place. There a Swiss chalet or other type of mountain home would be in demand, whereas many of the designs to select from would be in colonial and Spanish mission.

If, perchance, there should be any of the one thousand plans left, after discarding all that would not meet the foregoing requirements, the weeding-out process should continue according to many additional items that need to be considered in planning a new house or in remodeling an old one.

It may be, for instance, that the prospective builder would want a room for a hired man. He would want this room to be separate and apart from the family rooms, but many farmers do not house their help under the family roof

and many good plans would not provide for it. The farm tenant house is regarded by many owners as a better solution of the problem where permanent help is required.

A separate room for a farm office might be in demand. This room could be found in some of the larger and more expensive plans, but not in others for which more important items must be sacrificed.

The wife would have very definite notions about some items pertaining to her workshop and the home of the family. If she has been accustomed to large kitchens, she might discard at once all kitchenette plans. She would be sure about the best location for the laundry and might demand that it be in a building detached from the house, or in the basement, or adjoining the kitchen. She might believe in parlors for the farm home and rightfully demand such a room for her daughters, but there would be many plans without parlors.

Some plans, and probably the larger number of them, would have one convenience in particular that country folk have been slow to accept and to provide. This is the roomy porch which is screened against insects and has folding sash, drop canvas curtains, or some other practical means of protecting the porch from wind and rain. The ultra-conservative builder who regards this convenience as a fad of city folk would be disappointed when making his selection to find so few plans without it.

The many materials of construction and the many ways of using them account for numerous other combinations to choose from, and the weeding-out process could be continued until ten times the number of plans and designs proposed would not furnish the exacting farm owner with one that is quite as good as it might be, and perhaps ought to be, for his particular needs. What, then, can be the value of so few plans as here shown?

"Ready-made plans," says Professor

Etherton, "if carefully worked out, are valuable for their suggestions. It is probable, too, that a ready-made plan can be found which is much better for the purpose than another which the owner and the country carpenter may devise. The use of such a plan may help to avoid unforeseen difficulties which are sure to be encountered in building from plans that are not carefully made. But the plans in this bulletin were made as aids in developing, trying out, and explaining important features of the work, and they are here used to exemplify important items in the text. A larger number of plans does not appear needful for this purpose. They are explained briefly in this chapter for the convenience of readers who may not care for the detailed information in succeeding chapters."

Of the plans referred to, we have selected for description and illustration that of House No. 4. This plan has an inclosed porch under the main roof of the house, which is the principal living room for the family in summer and during all but the coldest days of winter. It communicates by double doors with an adjoining room that may be used as a sitting room, a parlor, or a bedroom. It is easily accessible from the kitchen and may be used as a dining room. The porch door which opens to the stair hall is so placed as to make room behind it for a double bed. The porch can be enlarged in width by omitting the porch closet, the dining room closet, and the broom closet, but none of these can well be spared.

This plan provides for a separate dining room. The room is without sunshine, except such as can enter through north windows, but it is well ventilated through wide casements at the two ends and through three doors. It is directly accessible from the wash room and stair hall and has a very direct route from the kitchen.

This is essentially a kitchenette plan. The first effort was to make the kitchen

an alcove of the dining room for an example of that kind, but continued efforts for convenience and economy caused the abandonment of that plan. It is the smallest kitchen shown, and, for the housewife who can work alone, or with only one helper in the room, it is the most convenient. It has the fuel and water supply, the waste-water drain, and the ash disposal scheme which are provided in the other plans. It has a convenient arrangement of china closet and sink and special provisions for the disposal of slops and also for the temporary disposal of waste paper, strings, broken glass, etc. It has an alcove for pastry work. This alcove is equipped with a work table, cupboards, flour and meal bins, and a cooling closet which has openings in the north wall. The kitchen has a raised ceiling above the range and an opening from this heat pocket into a vent flue. It has a south door through which the summer breezes can blow into the room, and north windows through which the fumes and heat can be carried away. It has a flood of north light. It has the range, sink, work table, and cupboards within two steps of the center of the room. It has direct and short lines to the dining room, the porch, the refrigerator in the hall, the stairs, the water-closet off the stair landing, the laundry, the side exit, and the basement.

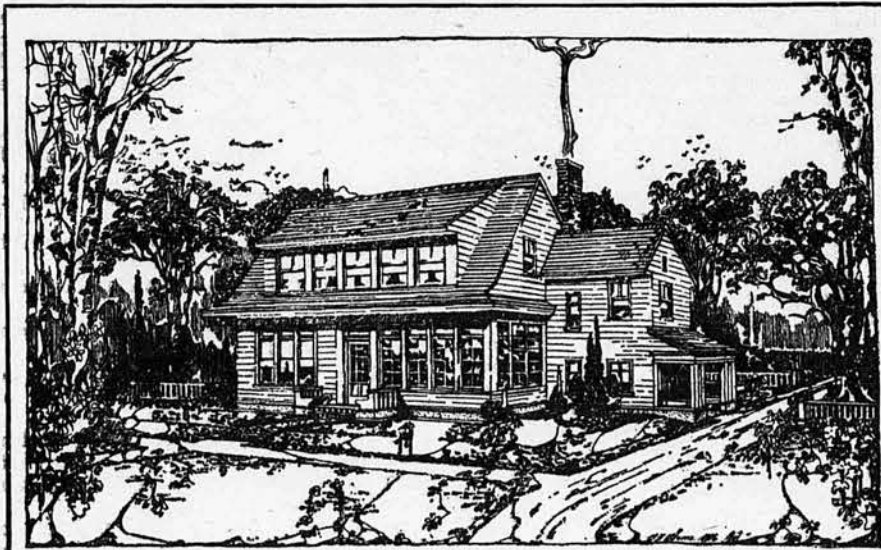
The laundry is convenient to the kitchen and to the side entrance. It is four steps below the first floor level and but one or two steps above the ground. Obviously, it would be more convenient in passing between kitchen and laundry to have both rooms on the same level, and less convenient in passing from laundry to outside or to the basement. The arrangement here shown avoids the outside steps which are so objectionable in winter. It makes possible a concrete floor on the ground. It gives a grade entrance to the basement steps. It lowers the floor of the room above the laundry to the level of the stair landing and thus adds to the economy of the plan.

The laundry is lighted and ventilated by casement windows on the south and by the door on the east. It has stationary wash tubs and room for a clothes basket at either end of the tubs. There is room for a washing machine, but not for a gas engine. Such machinery should be in the basement where small children can be kept away from it, or preferably in a detached wash house.

The stove in the laundry is a combined water-and-laundry heater. It has a water jacket, which is intended to be connected with the range boiler in the kitchen for heating water for all domestic purposes. A little fire in this laundry heater will keep an abundant supply of water hot when the kitchen range may not be in use, or when gas or oil may be used for cooking and not for heating the water.

The shower bath is a modern improvement for the farm home, and it is here provided without much additional expense for room and for plumbing connections. The dressing room which adjoins the shower bath inclosure is to be used also as a wash room. It has a corner

(Continued on Page Eight)



DESIGN HERE SHOWN ONE OF MANY THAT CAN BE USED WITH FLOOR PLAN ILLUSTRATED ON PAGE EIGHT

Put an End to Barn Door Troubles

Barn doors which balk, stick and jump the track are an everlasting nuisance. What is more, they are unnecessary. Yours will never balk, never stick, never jump the track and will always run smoothly and easily if equipped with the

McKinney-Pittsburgh Door Hanger

There is a vertical adjustment which takes up all the sag, leaving plenty of clearance between door and floor. There is a lateral adjustment by which you can increase or decrease the space between door and wall. There are double, roller-bearing wheels which make it run smoothly; and deep-grooved runways, enclosed on top and sides, from which the wheels positively cannot jump.

The McKinney-Pittsburgh Door Hanger and Track are made substantially, of tested iron and steel. The outfit is weather-proof and bird-proof; and can be used on doors varying in thickness from one and one-half to two and one-half inches. Sold under a binding guarantee.

If your dealer does not handle McKinney Hangers, send us his name. Also send us the width of your door opening, the height of your door, and whether double or single, and we will tell you what it will cost to equip it. We will also send literature describing the hanger in full.

McKinney Mfg. Co.
Makers of Hardware for the Farm
5 Locust St. Pittsburgh, Pa.

CORN HARVESTER Self-Gathering Corn, Cane and Kafir Corn. Cuts and throws in place on harvester. Man and horse cuts and shocks equal to a Corn Binder. Sold in every state. Price only \$22 with fodder binder. The only self-gathering corn harvester on the market that is giving universal satisfaction. —Dexter L. Woodward, Sandy Creek, N. Y., writes: "2 years ago I purchased your Corn Harvester. Would not take 4 times the price of the machine if I could not get another one." Clarence F. Huggins, Sporemore, Okla.: "Works 5 times better than I expected. Saved \$40 in labor this fall." Roy Apple, Farmersville, Ohio: "I have used a corn shaker, corn binder and 2 rowed machines, but your machine beats them all and takes less time of any machine I have ever used." John F. Haag, Mayfield, Okla.: "Your harvester gave good satisfaction while using filling our silo." K. F. Ruegnitz, Otis, Colo.: "Just received a letter from my father saying he received the corn binder and he is cutting corn and cane now. Says it works fine and that I can sell lots of them next year." Write for free catalog showing picture of harvester at work and testimonials. **PROCESS MFG. CO., SALINA, KANSAS.**

Faster Baling at LOWEST Expense

Develop a steady baling business with the Admiral Baler. Simple construction. Bigger capacity. Runs on steam, tractor or gasoline engine. **ADMIRAL BALERS COMPANY** Box 11 Kansas City, Mo. GET THE FACTS. Send for new FREE catalog today.

\$16.00 Sweep Feed Grinder | **\$21.00 Salvaged Steel Wind Mill.**

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO.,
610 E. Seventh St., Topeka, Kansas

Send for Catalog **FARM WAGONS**

High or low wheels—steel or wood—wide or narrow tires. Wagon parts of all kinds. Wheels to fit any running gear. Catalog illustrated in colors free.

Electric Wheel Co., 34 E. 1st St., Quincy, Ill.

A 60-TON SILO

No scaffolding. Erected one day. Round wood stave. Thousands in use. Save that feed. **\$75**

BONITA FARM - RAYMORE, MISSOURI

FARM POWER

Items of Interest About Automobiles, Engines, Tractors, and Motorcycles

THE effect of the tractor upon American agriculture was discussed by Arnold P. Yerkes, of the Federal Department of Agriculture, at a meeting of the Society of Automotive Engineers in Fremont, Nebraska, during the recent tractor demonstration. Mr. Yerkes is connected with the Bureau of Farm Management, and for several years has been studying the tractor proposition all over the country. He pointed out that there are two angles to the tractor situation—that of the manufacturer and that of the farmer. He chose to speak from the farmer standpoint.

We are indebted to the Implement and Tractor Trade Journal of Kansas City for this report of Mr. Yerkes' remarks:

He does not believe that the tractor will make agriculture more intensive, but does believe that it will make it more extensive. He said that it had been his observation that the tractor had a tendency to increase the farm acreage; that the farmer who owns a tractor rents additional land and farms on a larger scale. In other words the farm acreage will be extended when tractors are in general use. He based his opinions largely on observations he has made since the development of the tractor and also the fact that other improved farm machinery has extended the acreage tended by the individual farmer.

While tractors will be sold throughout the entire United States in time, Mr. Yerkes defined a definite geographical area in which the preponderance of sales will come within the next five years. This district embraces Illinois, Iowa, North and South Dakota, Nebraska, Kansas and Missouri.

Mr. Yerkes gave his auditors the results of his observations regarding the sizes of tractors in most general use and those most practical and economical for the farmer. He believes that in the future the bulk of the tractors in use will be those generally designated as three and four-plow tractors. The two-plow tractor, he says, is all right for small farms where there is but little belt work to be done. But in his opinion the two-plow tractor does not offer enough power for belt work.

Some interesting observations were also offered by Mr. Yerkes on the work performed by tractors. He designated belt work as the most important feature and said that the amount of belt work even exceeds plowing. He says that the tractor must be able not only to plow, but to handle all work on plowed ground. Cultivation of row crops, he believes, is being solved. Mowing was pronounced practical where hitches are employed by which mowers can be worked in multiple to cut a sufficiently wide swath. By inference, the tractor is not economical when used to pull only one binder. Although it is somewhat cumbersome, Mr. Yerkes believes the use of a tractor in harvesting is practical. Much here also depends on the hitch. A side rake attachment for tractors also is possible and practical, in Mr. Yerkes' opinion.

The hauling of manure under present conditions, however, Mr. Yerkes does not consider practical. He believes that a larger manure spreader will come in time by which manure hauling will be made economical with a tractor. He does not believe much in the tractor for road hauling. Only 3 or 4 per cent of a farmer's work is done on the road. Road hauling requires an economic load, which makes a cumbersome outfit. He is more inclined to favor a truck and trailer by which smaller loads can be hauled, but in much faster time.

Mr. Yerkes also paid his respects to tractor service. He said that the farmers should be educated in the use and operation of tractors to such an extent that they would get their service from the tractor, rather than from the manufacturer. Manufacturers have advertised, Mr. Yerkes said, that "even a boy or girl can run our tractor." This idea has a tendency to make the farmer feel that he does not know much if he asks for instruction. The easiest and cheapest way to give service, Mr. Yerkes said, is to educate and instruct the farmer fully before he is turned loose with the

machine. Nine out of every ten farmers will respond to instruction.

Caring for Inner Tube

One of the foremost automobile tire dealers in the United States is authority for the statement that more than half of the inner tubes returned for adjustment are nothing more or less than victims of abuse, and are not defective, as claimed by the purchasers, says Albert Marple, writing in the current issue of the American Motorist. This is rather a sweeping statement, and, if true, it appears as though the tire user in general might, with profit to himself and the tire companies, be enlightened as to the proper care of the automobile inner tube.

Says Mr. Marple:

"There are a number of things which absolutely must be done if the tube is to give its best service. In the first place, it must be realized that the tube is made of rubber, and that rubber has a number of natural enemies. Among these are sunlight, oil, grease, acid, water, and the very atmosphere itself. One of the worst of these is sunlight, which has an effect of drying up the rubber, whereupon it becomes brittle and loses its elasticity, when it is known as 'macaroni' (brittle) rubber.

"If the tube is permitted to come in contact with grease or with rags covered or saturated with grease or oil, the rubber in the places touched will quickly deteriorate unless the tube is soon cleaned.

"The method of carrying the spare tube is also important. It should never be carried loose in the tool box, for if carried this way it cannot help becoming injured. If folded and carried unprotected there is danger of the tube becoming chafed at the points where the folds occur, then, when these chafed places are put under pressure, there is great danger of their proving unable to stand the strain.

"Never should the tube be carried anywhere near the battery box of the car, as the acid in the battery means certain death to the tube, and no one can say just when the battery is going to spring a leak and splash over everything in sight.

"Placing undersized tubes in oversized casings is another common fault of car owners. This practice will ruin a tube within a short time."

Economize on Gasoline

After a careful investigation of the present gasoline situation, Van H. Manning, director of the Bureau of Mines of the Department of the Interior, has issued the following statement:

One-half of the gasoline used in the United States (1,250,000,000 gallons) is used in pleasure riding.

It is estimated that the United States Army will need 350,000,000 gallons for aeroplanes, trucks, automobile tractors, and other machines. There is no way of obtaining this in this country except by saving from the existing supply, and this economy may be effected by voluntary cutting down of pleasure riding (for instance, the man who takes his family out on Sunday for a fifty-mile ride can cut this in half).

It has been estimated that by economical use enough gasoline can be saved to supply not only the United States but also its allies for war purposes.

The following suggestions should be observed by automobile owners:

Do not allow your gasoline engine to run idle.

Use kerosene, not gasoline, for cleaning purposes in the garage.

See to it that the carburetor does not leak. Form the habit of shutting off the gasoline at the tank.

By judicious regulation of the mixture of gasoline and air in the motor both greater power and economy of fuel may be obtained.

Automobile owners need not lay up cars, but should use them either for trade or pleasure purposes thoughtfully and judiciously. If this advice is followed there will be no undue scarcity, for the United States possesses an abundant supply for ordinary purposes.

Fills The Silo on Time

You Can Depend On SILVER'S "OHIO" The Logical Silo Filler

and dependability is a big point at silo filling time. This is one of the reasons for the "Ohio" unbeatable leadership. It's always ready—built for big capacity—fast work—with least chances for breakage and delays. Backed by 25 years' manufacturing experience—by the silo filler pioneers. Used by experiment stations and leading farmers everywhere. Big features: Automatic beater feed, power-saving direct drive, friction reverse, single lever control, "Bull-dog" grip" rollers, non-explosive blower. Better cut silage—picks air tight—ferments better—better food for stock. Write for catalog, also book on Silverized Silage.

THE SILVER MFG. CO.
352 Broadway, Salem, Ohio
Modern Silage Methods—254
Pages
—10c.
Coin or stamps.



"50"

"50-50" means that I stand ready to meet you half way on engine prices—sell direct from factory—Make Immediate Shipment—save you \$15 to \$200 according to size. I make nothing but engines—Kerosene and Gasoline—2 to 22 H.P.—give you the benefit of 31 years continuous, practical, engine-building experience. Write for latest price list—all styles—Stationary, Portable and Saw-Rig.

WITTE KERO-OIL ENGINES

time-tried and time-tested—cut fuel cost 50 per cent, using kerosene—start as easy as a gasoline engine. My terms are Cash, Payments, No Money Down—30-Day Trial—5-Year Guarantee. Read my new illustrated book, "How To Judge Engines", before you choose any engine. This is a book for the farm owner as well as the shop expert. By return mail—FREE.

ED. H. WITTE, Pres.
WITTE ENGINE WORKS
1602 Oakland Ave., Kansas City, Mo.
1602 Empire Bldg., Pittsburgh, Pa.

"50"

Light Weight Cushman Engines

Built light, built right—for farmers who want an engine to do many jobs in many places, instead of one job in one place. Easy to move around. Very steady and quiet—no jumping, no loud or violent explosions, but smooth running. Throttle Governed. Schebler Carburetor. Friction clutch pulley. Runs at any speed.

4 H. P. Weighs Only 190 lbs.
Mounted on light truck, it may be pulled around by hand. Besides doing all regular farm work, it is original and successful engine for binder. 8 H. P. only 320 lbs. May be mounted on hay baler. Not cheap but cheap in the long run. Engine Book free.

CUSHMAN MOTOR WORKS
822 N. 21st St., Lincoln, Nebr.

For All Farm Work 4 to 20 H.P.

GREEN CORN CUTTER

Cuts and gathers corn, cane, kafir corn or anything planted in rows.

Runs easy. Long lasting. Thousands in use. Fully protected by patents. Send for free circulars. Price \$12.00 f. o. b. Topeka.

J. A. COLE, Mfr., TOPEKA, KANSAS

Important Announcement

See Page 11

Editorial, Advertising and Business
Offices, Topeka, Kansas

Entered at Topeka Post Office
as Second Class Matter

Published Weekly by The Kansas
Farmer Company, at Topeka

KANSAS FARMER

THE FARM PAPER OF KANSAS

T. A. BORMAN, President and Editor
S. E. Cobb, Vice President

CHICAGO OFFICE:
T. D. Costello, Stager Building

MINNEAPOLIS OFFICE:
R. R. Ring, Palace Building

W. J. CODY, Secretary and Treasurer
G. C. WHEELER, Associate Editor

NEW YORK OFFICE:
S. E. Leith, Fifth Avenue Building

ST. LOUIS OFFICE:
C. A. Cour, Globe Building

Established by First State Board
of Agriculture, 1863

Member Audit Bureau of
Circulations

Member Associated Farm Papers

PRICE FOR WHEAT

Wheat growers are anxiously awaiting the fixing of the price of the 1917 crop. Many have the fear that the Food Administration will consider the demands of the consumer more than the cost of production in fixing the price on wheat grown the past year. The one man on the price-fixing commission on whom the farmers of Kansas are pinning their faith is President Waters of the Agricultural College. Doctor Waters knows the conditions under which wheat was grown in Kansas the past year and can be counted on to insist on a price high enough to protect the farmer from loss. We know that President Waters favors a higher price for this year's crop than the Government guarantee for the 1918 crop. Coming as he does from a state producing such large quantities of wheat and being so thoroughly familiar with the conditions, his views are certain to command the serious consideration of his colleagues on the committee.

The present crop has not been grown under normal or average conditions, and it is not an easy matter to adjust prices so as to be fair even to all the men who have grown wheat. At the conference recently held in Kansas City under the auspices of the Federal Department of Agriculture, one speaker presented figures showing that in a certain section the effects of dry weather and winter-killing so reduced the yield that the wheat actually cost \$2.71 a bushel on the farm. Another from a section more favored with rains reported a survey of seven hundred farms which indicated that a price of \$1.73 a bushel might be fair for that section.

On page five of this issue we print in full the official statement of the Food Administration relative to handling the wheat price situation, in order that our readers may know what is being done and the reasons assigned for such action as is being taken. In reading the considerations enumerated, it would seem that considerable effort is made to express extreme solicitude for the producer. A stabilizing of prices seems to be the objective, and this can hardly be accomplished without price-fixing and undoubtedly means a lower price than would have prevailed under uncontrolled marketing. Wheat growers are not lacking in patriotism and now that this policy has become law, can be depended on to fall into line and co-operate, assuming of course that whatever else is done, illegal manipulation and speculation will be eliminated in the handling of wheat from producer to consumer.

The methods being worked out by the Government constitute a gigantic experiment in cutting out some of the unnecessary complications in handling this great staple crop. We may come through this experience with a fund of knowledge which will enable us to make some big forward strides in handling this problem so as to cut out a lot of the illegal and corrupt manipulations which all farm organizations have been fighting and protesting against for years.

KANSAS FOOD ADMINISTRATOR

It was announced last week that H. J. Waters, president of the Agricultural College, had been appointed food administrator for Kansas. A federal food administrator is to be appointed for each one of the different states. Nineteen of those appointed to date took their oaths of office August 23. This group was in conference with the National Food Administration for two days and received instructions regarding their duties. They are invested with a great deal of power in connection with carrying out in their home states the provisions of the food control law. They were told that the purpose of the law which they are to help enforce, and the policy of the Food Administration, of which they are now agents, is to stabilize and not to disturb conditions and to defend honest enterprise against illegitimate competition. The object is to correct the

abnormalities and abuses that have crept into trade by reason of the world disturbance and to restore business as far as may be to a reasonable basis.

They were instructed that the Food Administration feels justified by its experience so far in counting on the patriotic co-operation of the great bulk of business men, but they were told that if any persons try to exploit the country in this time of war they should not hesitate to take steps to see that the drastic powers conferred by Congress on the Food Administration for such cases are employed.

President Waters has the confidence of all classes of people in Kansas. His knowledge of conditions in the state is such that he can be depended on to administer the duties of this office with justice to all. Heavy demands have already been made on his time. As chairman of the Kansas Council of Defense he has devoted much time to directing the work of this organization, and as a member of the wheat price-fixing commission he has been compelled to spend considerable time in Washington in addition to other trips made in the interests of Kansas people. The Kansas Agricultural College is fortunate in having exceptionally capable men as deans of the different departments, and in spite of the extra burdens falling upon them because of the heavy demands made upon President Waters, the executive work of the institution is being well handled in this emergency.

HOW FAIRS CAN HELP

The question, "Shall we hold our fair this year?" has been wisely answered in the affirmative by the managers of all the big fairs of the country. Nearly all the local fairs are also going ahead as usual. The first thought was that with the United States at war it would be an unwise expenditure of energy and money to conduct our fairs as usual. The facts are, however, that the fairs can actually serve the country most efficiently in the present emergency. The fair as an educational feature can be of greatest value in bringing about a fuller realization of all our agricultural resources. Many of the big state fairs will conduct regular schools devoted to food conservation and the conservation of all our natural resources. These schools will be conducted for the purpose of mobilizing the country as a whole so as to help out in winning the war as quickly as possible. It is now up to the people to support the fairs to the fullest extent possible both by sending exhibits and by attending and taking advantage of the opportunities offered.

The editor of a prominent Wisconsin paper most satisfactorily answered the question as to whether fairs should be held when the country was at war. He said:

"In view of the fact that a great war is upon us, the thought of some at first was not to hold a fair this year; but the officers wisely decided to go on as usual and have an exhibition which would reflect the progress of this part of the country.

"The thought of war cannot, and should not, be excluded from the minds of the people. The many who will meet here in reunion next month will be sobered by the thought of war, and the sacrifices which it demands. It will not be an occasion given wholly to pleasure, but an event which will be remembered as having been held at a time of the greatest war in all history, when the strong, young men of the land went forth to battle that freedom might not perish from the earth. It is not at all necessary that the sports and attractions be stricken from the program of the fair. These, under proper control, are always in order on such occasions.

"But it is necessary to give emphasis to the greater things which make for progress, as it has always been the purpose of the management to give proper emphasis to these things. Wisconsin

has responded nobly to the country's call for increased production of food. If you would see evidences of this fact, look about you. Fields of grain are nearly ready for harvest, city lots are under cultivation as never before, and fields and gardens promise abundant yields. Year by year advanced methods of production have been introduced with most satisfactory results. No section of the country can show greater progress than ours. Our fairs have greatly aided in the work of advancement. The coming fair will be no exception to the general rule."

NATIONAL FOOD SURVEY

The Federal Department of Agriculture is undertaking a tremendous task in the country-wide canvas being made of the farm products which are now available as food or convertible into food. This nation-wide inventory is authorized by the food production bill recently enacted, which is a separate piece of legislation and entirely independent of the food control bill. The Bureau of Crop Estimates is making this survey. Thirty-five thousand picked volunteers from the bureau's corps of 150,000 crop correspondents will be asked to take part in the farm survey.

Each of the field representatives, a farmer himself and thoroughly familiar with farm conditions in his community, will make a report of food stocks, including meat animals and crops on his farm, and each of these representatives will be supplied with ten extra schedules of inquiry which he will distribute among his neighbors, for reports upon their respective farms. From the 385,000 reports thus obtained, the experts of the bureau, knowing the total number of farms in the United States, will make final estimates for the farms of the country. It is believed that this estimate, judging from the accuracy of other records similarly gathered, will be within a few per cent of actual farm food stocks.

A second survey about November 1, similarly conducted, will cover the fall harvests.

The bureau also will extend its regular crop estimates to crops not reported heretofore and further enlarge its service by special inquiries calculated to gather information arising from extraordinary farm conditions in certain sections.

The county agent of Jewell County had received, up to August, requests for over three thousand carloads of alfalfa. Most of these requests came to the farm bureau office through county agents in Northern Missouri, Iowa, Illinois, and Indiana. The farmers in these sections offered as high as \$21 a ton f.o.b. Jewell County points. This is typical of the requests for alfalfa going to other sections of the state. Alfalfa hay and silage is becoming the basic feed combination for feeding milk cows and other live stock as well. It makes it possible to almost cut out the feeding of high-priced grain.

The president of the State Farmers' Union of Kansas is requesting that every local union in the state pass resolutions urging that the wheat price-fixing commission make the price on 1917 wheat at least \$2.75 a bushel on the basis of Chicago, and wire these resolutions to Herbert Hoover at Washington, D. C. The price-fixing commission is now in session, and it has been announced that they desire frank statements from farmers as to actual costs of wheat production. They will make public the method for preparing these statements in the near future.

SEED MORE ALFALFA

We know of some farmers who plan to sow wheat this fall where they had intended to seed alfalfa. Under the circumstances this is probably justifiable on some farms, but there is need for alfalfa on many a farm in Eastern Kan-

sas where it is not now grown or is grown in a very limited way. Alfalfa is almost essential to success with live stock and we should not forget that live stock production is fully as important in the present emergency as wheat production.

The moisture conditions have been especially favorable for fall seeding in Eastern Kansas this year. It often happens that there is not sufficient rain until too late in the fall. Fall-seeded alfalfa should get well rooted before winter sets in, and as the rains came early this year alfalfa can be seeded just as soon as the seed bed can be properly prepared. It is seldom advisable to sow later than the latter part of September.

Alfalfa requires well-drained soil—rich especially in nitrogen—and it must be well supplied with lime. In fact the crop cannot be grown successfully in an acid soil. Poor land can be made to grow alfalfa by the use of barnyard manure or the plowing under of sweet clover some time in advance of the seeding. The acidity of the soil can be corrected by spreading crushed limestone.

On farms where alfalfa has never been grown or fed it may be necessary to inoculate the soil with the proper nitrogen-fixing bacteria. This can be done by the pure culture method, these cultures being manufactured and sold commercially, or by spreading just before seeding two or three hundred pounds of surface soil from an old alfalfa field to each acre of the new field and harrowing it in carefully. The pure culture method is simply a process of pouring a liquid containing the proper bacteria over the seed before it is planted. As soon as the alfalfa plants begin to grow the bacteria begin to develop and soon enter the roots of the young plants and form nodules about the size of a millet seed on the tiny rootlets. As the bacteria grow they take nitrogen direct from the air in the soil and when these tiny organisms die this nitrogen becomes available for the alfalfa and other plants as well.

In Eastern Kansas fall is the best time for seeding ordinarily, as it fits best into the crop rotation. A small grain stubble field plowed shallow and early and worked down after every rain until seeding time furnishes ideal seed bed conditions. Such a seed bed is firm underneath, but has sufficient loose soil on top to cover the seed and give the young plant a foothold. In this method of preparation several crops of weed seeds lying on the surface have germinated and been killed before the alfalfa is seeded. Unless the stubble was plowed fairly early the use of the disk would be the safer method of preparing the seed bed, as it is important that it be well settled and have only a thin layer of loose soil on top.

From twelve to fifteen pounds to the acre of good home-grown seed is enough to plant on a well-prepared seed bed. The agronomy department of the Agricultural College does not advise seeding alfalfa in the fall later than September 25. Of course it can be seeded later in the southern part of the state than in the northern.

If you have a patch of land suitable for fall seeding and can get the seed bed in proper condition, you cannot go wrong in starting some alfalfa this fall.

The rising value of good horses due to the war, both directly and indirectly, should be a great encouragement to owners of pure-breds who have never shown their animals heretofore at the big fairs. More Kansas breeders have entered draft horses at the Topeka Free Fair this year than ever before. Those interested in good horses who expect to make purchases could not do better than to visit the fair and become acquainted with Kansas breeders and their stock. The brick and cement building devoted to horses has accommodations for 300 animals. There is a possibility that it may be necessary to provide temporary quarters for the overflow.

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

WE HAVE been asked to give the method of treating seed wheat for smut. We have given this treatment once or twice almost every year, but for the benefit of new subscribers or wheat growers who may not have heretofore thought it necessary to treat the seed for smut, we give the treatment commonly recommended. There is no question as to the effectiveness of the treatment, and it is to be regretted that wheat growers do not more generally take this precaution so they can be sure they are not putting infected seed into the ground. Smut in wheat quite appreciably reduces its value on the market.

The stinking smut, which is the kind most commonly found, is best treated by using formaldehyde, or commercial formalin. A pound, or pint, of formalin is used to fifty gallons of water, or at the rate of an ounce to each three gallons of water. A gallon of the mixture is enough for a bushel of grain. Spread the seed wheat in a thin layer on a tarpaulin or clean barn floor and sprinkle it with the mixture until it is thoroughly and evenly wet. Then shovel it over to be sure that every seed is wet and cover the pile with canvas or blankets in order to keep in the fumes of the formaldehyde. In from six to twelve hours it should be shoveled out in a thin layer to dry, and stirred frequently. Seed so treated must be carefully handled to avoid reinfection. The sacks or bins in which it is stored must be treated with the same solution and even the drill should be disinfected before using it.

Russian Thistle Hay

R. L., Sherman County, asks if Russian thistles have sufficient feed value to warrant cutting them for hay. Rough feed of all kinds is extremely scarce, and it seems necessary to save every particle of material having feed value.

In years of short feed crops many a Western Kansas farmer has made money by feeding thistles to his stock. The men on the demonstration silo truck which has been touring Western Kansas the past few weeks report a number of instances where thistle hay has been profitably used. These experiences have come up in connection with the silo and feed discussions at the meetings. E. J. Gilbert, of Wallace County, wintered his cattle the season of 1911 on silage made by running in a load of stunted corn fodder on one side of the cutter and a load of Russian thistles on the other. Thistles have been tried alone as silage, but have not given as satisfactory results as this mixture. Two Russell Springs ranchmen said thistle hay was almost as good as alfalfa for wintering stock cattle. Thistle hay sold as high as \$15 a ton in Wallace County the winter of 1911. Alfalfa could scarcely be purchased at all at from \$22 to \$24 a ton.

Chemical analyses which have been made of Russian thistle forage show that it contains from 9 to 20 per cent of crude protein, which is about the amount found in alfalfa. For hay the thistles should be cut before the spines begin to harden and preferably where they are growing very thickly. The hay should be stored at once while containing considerable moisture.

Expensive Grain in Silo

Some of the farmers in Shawnee County who have corn that is likely to yield a good crop of grain are questioning whether they can afford to put this good corn in their silos. In a general way the statement may be made that corn in silage is just as valuable to the stock as corn husked and fed separately. In other words, in fattening a bunch of steers with silage as part of the ration, less grain will be required and the amount will be very nearly in proportion to the amount in the silage they eat. The question this year really is whether corn should be fed to stock at all when it is worth so much on the market as grain. Corn is unusually high in price, but meat animals are also bringing phenomenally high prices, and unless something unforeseen happens stock can be finished even by feeding some high priced corn without loss.

The fact remains, however, that stock men generally are striving to grow and

finish animals with a minimum amount of grain. It is the proper thing to do under present day conditions. We have been too lavish in our use of grain in times past, and must use roughage more largely for animal feeding. Corn is coming down some in price, and with a big crop in sight over the main corn belt states it may get down to a point where it will not be so high as to cause live stock men to leave silos unfilled because they see more money in maturing a crop and marketing it as dry grain.

The silo's chief function is to preserve rough feed so as to make it more valuable and with hay as scarce and high in price as it is this year it is important to use all the fodder and other roughage

the surface and not allowed to run down the wall. On some stock farms it is the practice to refill the silo during the winter with shocked corn after snapping out part or all of the ears. We believe farmers having silos should figure closely before they decide to allow them to stand empty because of the high market value of the corn.

Rapid or Slow Silo Filling

S. M. R., Wabaunsee County, asks if it is necessary to fill a silo quickly in order to have good silage.

It is much easier to make good silage from slow filling, if the crop will wait, than from rapid filling. It is possible



HOLSTEIN MILK COWS GRAZING ON SWEET CLOVER, KANSAS EXPERIMENT STATION, MANHATTAN.—THEY HAVE BEEN ON THIS PASTURE NIGHT AND DAY SINCE MAY 7

possible and to use it with a minimum of waste. In order to preserve a corn crop in the silo when corn is worth too much to harvest in this way, some of the ears might be snapped from the crop before running the fodder into the silo. This would of course necessitate somewhat different silage making methods than are ordinarily practiced. When the crop is in prime condition for silage the ears would spoil if snapped and piled up. By waiting until the corn could be safely snapped and stored, the fodder would be too dry to make good silage without the addition of water.

The best silage is made from a crop in which about 75 per cent of the total weight is water. The percentage of water can hardly run below 65 without causing the silage to be poor in quality. Dry corn fodder which has been shocked can be made into fairly satisfactory silage by adding water in about the proportion of a ton of water to a ton of silage. On a live stock farm in a year when all feeds are high and forage is scarce, this is a practice that will pay. It takes a lot of water, however, to make this material keep as silage. From 200 to 250 gallons of water must be used to each ton of dry fodder. An ordinary windmill will not pump more than five to eight gallons a minute with a ten to twelve-mile-an-hour wind. If the cutter is running a ton of fodder into the silo every ten minutes, the wind mill cannot deliver more than one-fifth to one-third of the water necessary. In addition to running all the water the pump will deliver into the blower while the cutter is working, water must be run in while the cutter is idle. The water must be distributed evenly over

to fill a silo in a day with a big cutter and a large gang of men and teams, but a silo filled in a day is seldom packed solidly enough to make the best silage. In addition it will settle several feet, thus wasting considerable storage space, and even then the silage is not as solid as in a silo filled more slowly. In filling with a small outfit it is not necessary to have so many men tramping on the inside and the silage has time to settle each night. When the filling is finally completed, in the course of a week or more, it will contain more and better feed than if it had been filled quickly.

We believe that with the increasing difficulty of getting together a big silo-filling gang, more small outfits will be used. Outfits that can be handled with the regular labor of the farm or, better yet, by combining the labor of two or three small farms, will be more satisfactory than the big commercial outfit. When these are used it is necessary to get together a big gang and at the end of the day when the silo is full it is not packed solidly and does not contain anywhere near as much silage as the one filled more slowly.

Sweet Clover Pasture

At the Dairy Association meeting held in Hutchinson recently, a member asked about sweet clover as a pasture for milk cows. As Prof. O. E. Reed, of the Agricultural College, was present, he was asked to tell of the results of the test now under way at the Kansas Experiment Station. This experiment in pasturing sweet clover with milk cows has not been completed yet, but it has gone

far enough so that some tentative results can be given. Last spring three and eight-tenths acres of sweet clover which had been seeded with oats in 1915 was fenced off and six grade cows turned in May 7. A cheap shed was built in one corner to serve as shelter from the storms and a tank was provided so the cows could be watered. They have been left on the pasture continuously. They had never eaten sweet clover before, but as they had nothing else to eat, they soon acquired an appetite for it and now apparently graze it with as keen a relish as any other pasture. Professor Reed said these cows immediately increased somewhat in milk flow, and all through the summer have done as well as the cows kept at the dairy barn and fed silage and alfalfa hay. During the first month these six cows averaged thirty-three gallons of milk a day, and the daily grain cost was \$1.65. The cows were heavy producers and of course were given some grain in addition to the feed they got from the pasture.

Late in June it got so dry that there was not enough feed on this little pasture for the six cows, and three were removed. At the time of a visit made to the agronomy farm by the writer only three cows were on the pasture. The cut on this page shows the cows in the act of grazing. A few weeks later some rain came and one cow has been returned, so four are being carried on the pasture at the present time.

At the time of our visit we noticed that a few plants here and there were blossoming, and it seemed quite possible that even with this heavy pasturing enough seed might set to reseed the pasture. Men at the dairy meeting told of sweet clover pastures being maintained permanently following a single seeding, this being possible because part of the seed first sown does not germinate until the second year and in addition a few plants here and there will mature seed even when pastured. Sweet clover is a biennial, but, because of the failure of part of the seed to germinate the first season, a pasture will be almost certain to contain plants of the current year and the previous year.

It seemed to be the opinion of those who had had experience with sweet clover that, even on a rough, rocky piece of land where it would be impractical to plow the land and reseed, a permanent pasture could be maintained.

In this test now under way at the Manhattan Experiment Station, the cows have never bloated, although they were on the clover continuously during the heavy rains of May. The plant does not seem anywhere near as likely to cause bloat as alfalfa, and for that reason is apt to become a popular pasture crop for dairy cattle. Some reported successfully seeding sweet clover in the spring on wheat.

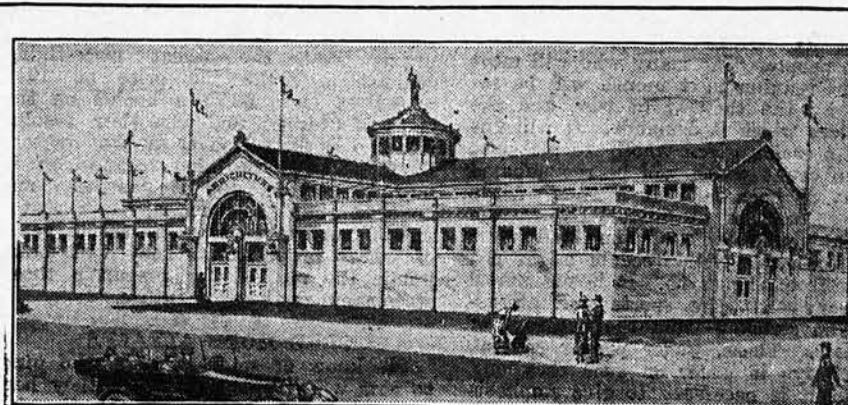
Government Exhibit at Fair

The Federal Department of Agriculture has arranged for an exhibit at the Kansas State Fair to be held at Hutchinson, which will require 5,000 square feet of space in the new agricultural building. The various bureaus of the department will be represented in this exhibit. The visitors will find this Government exhibit of great educational value.

Big fairs should be meeting places for studying agricultural progress along all the different lines. As illustrating the value of fairs, A. L. Sponsler, secretary of the Kansas State Fair, told us recently of the experience of a prominent farmer who became much interested in the exhibits of corn made by a Marion County exhibitor. He was led to buy seed of the variety shown and last year grew fifteen bushels more corn to the acre from this seed than was grown on an average in his neighborhood. This year the variety has shown itself to be unusually resistant to prolonged dry weather. This is just a sample of the hundreds of ways in which attendance at fairs can be profitable to those who go with their minds open to new ideas along agricultural lines.

Frost doesn't nip canned vegetables.

Home preparedness—cans of food on your cellar shelves.



NEW AGRICULTURAL BUILDING, KANSAS STATE FAIR, HUTCHINSON

PRICES FOR 1917 WHEAT

Official Statement From United States Food Administration

PEOPLE everywhere are most keenly interested in the results which will follow the putting into operation of the food control law signed by President Wilson August 10. Kansas people are especially concerned in the first problem taken up by the Food Administration—that of regulating the price of this year's wheat and handling the crop on its movement to the consumer—because this is one of the great wheat producing states. Kansas normally produces about one-tenth of all the wheat grown in the United States, and has produced as high as one-fifth of the total annual crop. While we have grown an abnormally small crop of wheat this year, we feel that our readers will be anxious to know exactly what the Food Administration is doing in this matter of regulating the price and distribution of this year's crop. We therefore print in full the official statement just issued by the Food Administration office.

"To win the war the first consideration of the United States in its food program must be to feed the people within the confines of this government.

"The second consideration must be for our people to spare as much food products as can be spared to feed our Allies, France, Italy, the United Kingdom and Belgium, whose normal consumption exceeds their production.

"The third consideration must be to protect American farmers and other essential parties in the wheat trade from disastrous losses that might occur from the unprecedented choking of the world's arteries through which this wheat ordinarily moves.

"France, Italy, the United Kingdom and Belgium under normal conditions import annually 381,000,000 bushels of wheat. These nations have suffered a lowering of their productivity as a result of being in the war. They now have a total wheat deficiency in production of about 200,000,000 bushels. It will be necessary for them to import within the next twelve months about 577,000,000 bushels. Russia had an abundant grain and a vast surplus, if this surplus could be released; but Russia cannot move any grain to our allies in quantities essentially important.

SITUATION OF THE ALLIES

"Our allies are isolated from practically all markets except the United States and Canada, as compared with ante-war conditions. The supplies of Bulgaria and Roumania are in the hands of the Central Powers. As already stated, the Russian supply is shut off. The voyages from Australia and India are three times as long and will require, therefore, three times as many tons of shipping to move wheat as is required from North Atlantic ports. The voyages from India and Australia are also far more dangerous because of longer exposure to submarine attacks.

NORTH AMERICA'S RESPONSIBILITY

"The responsibility for furnishing our allies this 577,000,000 bushels must fall in no slight degree upon the United States and Canada. The estimated ordinary wheat surplus of the United States for 1917 is 88,000,000 bushels.

"Probably the Canadian surplus will be 120,000,000 bushels. This will still leave a deficiency in wheat supplies of our allies of approximately 369,000,000 bushels. This deficiency is still further enlarged by the fact that the United States must make reservations of wheat for neutral nations with whom we trade and from whom we secure essential products. Such reservations will increase the European deficiency to approximately 400,000,000 bushels.

"The way to keep the allies alive during the war is for us to economize at every turn, and thereby increase the surplus from the United States to 200,000,000 bushels. This, together with shipments from Argentina, Canada and Australia, should supply at least a minimum on which they can live.

HOW ALLIES MEET PROBLEM

"One might think that the American wheat producer stands in a very safe position with regard to prices, but such is not necessarily the case. The allies, foreseeing their situation, have perfected buying arrangements and shipping arrangements, so that all wheat leaving free ports destined for consumption in any of their countries must be brought

through a single agency. Arrangements are being made to liberate in far greater quantities the stored-up supplies of India and Australia. Within the last few years Australian wheat has begun to arrive in America, and will continue to arrive in increasing quantities. Other important changes have occurred since the war that seriously undermine the stability of the wheat market and will tend to offset the apparent advantage of the American farmer in the world trade.

AMERICAN GRAIN TRADE DEVELOPMENT

"To understand this situation, it should be remembered that for the past thirty years the marketing of grain in America has depended for its mobility upon the American system of 'hedging.' This system has grown out of the peculiarities of grain production. Somewhere a crop of grain is always ripening. Somewhere the weather is expanding or contracting the crop. Cable and telegraphic information reaching the buyer and seller on the open marts has been

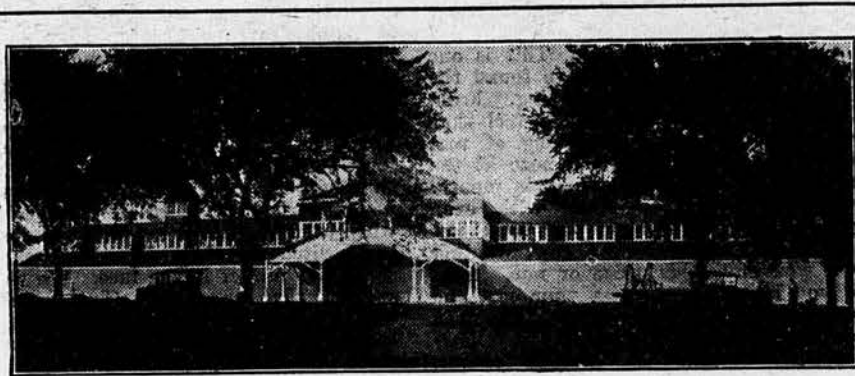
Administration, and there is a likelihood that our 88,000,000 bushel surplus may be expanded to 200,000,000 bushels to be added to Canada's surplus of 120,000,000 bushels.

A FLOOD OF GOLDEN GRAIN

"It is evident that wheat from Australia, India and Russia is awaiting exportation, restricted only by limited transportation facilities. If the war should end immediately this enormous surplus would be turned loose upon the world, flooding the markets. The war foundations of high prices would be knocked from under American wheat growers, because the normal export requirements do not exceed 600,000,000 bushels.

A WEAKENED FINANCIAL SYSTEM

"Again, the operation of the export embargo and the elimination of exchange trading in wheat futures has taken the underpinning from the financial system which for thirty years has been trained to understand that a loan on wheat purchased by contract was a good se-



REMODELED AGRICULTURAL BUILDING ON GROUNDS OF THE TOPEKA FREE FAIR

the basis of their hedging practices which have acted as a kind of insurance to the business. This practice and the unusual transportation facilities of the Great Lakes have enabled American farmers to expand their wheat acreage, the American business men to develop the wheat industry, notwithstanding the competition of other nations with cheaper production costs and greater grain yields, as against our increasing production costs and lessening acre yields.

"So long as the world was at peace and trading had opportunity to function normally, it is doubtful if any fiat price could be made or sustained by any single country. Such fiat prices would have to be by international agreement, which is almost impossible. But with the disruption of world conditions and the shutting off of the sources of grain supply in some countries, and the tendency to exhaust the grain supply in others, a nation like America may find itself in a crisis whereby it is forced to determine and control the price of this commodity to protect its own citizens.

PRECARIOUS CONDITION OF PRODUCERS

"That crisis has arisen. The war has disrupted the world wheat trade. While our reserves are being exhausted, the reserves of other countries are banking up. For three crops the Russian grain has been held, finding very little outlet, and practically no outlet to European consuming centers. Australia has all of her last wheat crop, and part of the crop before, making a total on hand of approximately 180,000,000 bushels.

"Another Australian wheat crop of approximately 100,000,000 bushels will mature in January, and Australia is looking for a market. To find this market Australia has removed her wheat and flour duty, so that this wheat can now move into America, in so far as the limited number of sailing ships available will permit.

"India has a surplus on hand of approximately 100,000,000 bushels with this harvest. This wheat is locked up because of transportation difficulties.

"Although last year's crop conditions were bad in Argentina, there is a greatly expanded acreage, and by January next, when her crop begins to move, Argentina should have a surplus of 150,000,000 bushels.

"The American people are practicing economy as recommended by the Food

Administration because the hedging system would offset any value depreciation should the market fall.

"Without governmental aid the American farmer would be in a position of greater insecurity in the future than ever before in the history of this country. The danger to the farmer would be more acute because his costs of production have risen enormously during the war, and the ordinary organization of the business world would be powerless to prevent the possible decline in wheat values irrespective of the costs of production, and losses would be enormous. This might disrupt the entire commerce of the United States and bring about a condition of financial insecurity.

PROTECTING PRODUCERS AND CONSUMERS

"To protect the public, Congress has constituted an agency to step in between the central purchasing agency of the allies and the unorganized American farmers. Congress has constituted a food control, placing this control in the hands of the President of the United States, and the President has designated the Food Administration to administer this work. The Food Administration now proposes to act for the American people to protect them in the matter of price and to provide the necessary financial guarantees to buy and store the crop of wheat on hand in 1917 at fair prices; to deal with the allies, giving them only such surplus as can be spared; and to control the margin of profit among trading, milling, baking and distributing factors, to the end that feeds may be conserved for American farmers and cheaper bread and flour may be had by the American consumer. Congress has also made an appropriation of \$150,000,000 to enable the Food Administration to finance its operations. The Food Administration will operate without profit, putting only the actual cost of operations as its charge for the handling of the wheat crop.

FAIR PRICE COMMISSION

"In order to finance this undertaking and to supply our allies, a fair price for wheat must be determined as the beginning of this work. Accordingly, the President of the United States has appointed a commission to ascertain what should be a fair price for the 1917 wheat crop. On this commission are represented farmers, consumers and the public at large. The members consist of H.

A. Garfield, president of Williams College, chairman; Charles S. Barrett, president of the Farmers' Union, Union City, Georgia; William N. Doak, vice president Brotherhood of Railroad Trainmen, Roanoke, Virginia; Eugene D. Funk, president National Corn Association, Bloomington, Illinois; Edward F. Ladd, president North Dakota Agricultural College, Fargo, North Dakota; R. Goodwyn Rhett, president Chamber of Commerce of the United States, Charleston, South Carolina; J. W. Shorthill, secretary National Council of Farmers' Cooperative Associations, York, Nebraska; James W. Sullivan, American Federation of Labor, Brooklyn, New York; L. J. Tabor, master Ohio State Grange, Barnesville, Ohio; Frank W. Taussig, chairman Federal Tariff Commission, Washington, D. C.; Theo. N. Vail, president American Telephone & Telegraph Company, New York City; Henry J. Waters, president Kansas Agricultural College, Manhattan, Kansas.

"It will be the duty of this commission to make a thorough inquiry into the costs of producing wheat, costs of milling, distributing, baking, etc. When its inquiry is completed and analyzed this body will announce the basic price at which the wheat will begin to be bought. This price will take into consideration not only the costs of production, but also a reasonable profit to farmers on the average, and an incentive to make it worth while for wheat growers to produce wheat in such quantities as may be needed by the United States and our allies.

"The fair price commission desires a frank statement as to his actual costs from every farmer who produces wheat. The method of preparing this statement will be announced and given general publicity within a short time.

HOW FOOD ADMINISTRATION WILL OPERATE

"The Food Administration will then buy this wheat and resell it to American users and to the allies. The Food Administration will regulate the margin of profits throughout the chain of distribution within this nation, so as to protect the interests of all essential factors concerned.

"The Food Administration will immediately license all grain elevators and storage houses that come within the provisions of the act. In this way the government will protect the interests of the American people against any unusual break in prices.

PROTECTION FOR NEXT YEAR

"The act constituting the food control specifically provides a minimum price for farmers of two dollars a bushel on No. 1 northern spring wheat, or its equivalent, as the basis of sales at the principal interior primary markets, subject to such rules and regulations as may be laid down by the President.

"Consequently, American farmers need have no fear that there will be any unexpected heavy slump in prices for the years 1917-18. They may, therefore, in all confidence plant increased wheat acreages in accordance with the recommendations recently made for each district by the United States Department of Agriculture."

Increase in Tractors

W. H. Sanders, instructor in farm motors at the Agricultural College, believes there are more than 6,000 tractors in Kansas, many having been purchased since the figures were published March 1.

From all information obtainable the most popular size is approximately 12.5 horsepower at the drawbar. Most of the demand is for tractors suitable for farms of 200 acres, with a few inquiries for tractors suited for 160-acre farms.

This indicates that either the number of horses is insufficient to supply power for cultivation or that there is an awakening among the farmers tending toward experiments along new lines anticipating better and cheaper power.

Mr. Sanders points out that the use of mechanical power for all farming purposes in Western Kansas will increase in the future. Large tracts of land in that section of the state have not yet been put under cultivation. With the proper utilization of tractor power this land could be made to contribute its bit.



GET YOUR DE LAVAL NOW

It will pay for itself by spring, and there was never greater reason to save every ounce of butterfat and half-hour of time and labor.

Moreover, if labor and material costs continue to increase, your De Laval must cost you more later on. Buy it now and it will save its own cost in a few months, at present cream and butter prices.

See the nearest De Laval agent right away and let him show you what the De Laval will save for you. If you do not know the De Laval agent, write direct for any desired information.

The De Laval Separator Co.
165 Broadway NEW YORK 29 E. Madison St. CHICAGO

Only \$2 Down
One Year to Pay!
\$29

Buy the New Butter-ry De Laval. Light-running, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 95 quarts per hour. Made also in five sizes to suit up to 100 lbs. of milk. 30 Days' Free Trial. Return it or more by what it saves in cream. Postal brings free catalog, folder and "Direct-from-factory" order. Buy from the manufacturer and save money.
ALSAUGH-DOVER CO. (INC.)
2151 Marshall Blvd. CHICAGO

LUMBER

Direct From Mill—Wholesale Prices
Quick shipments. You inspect before paying. Send us your carpenter's bill for prompt freight prepaid estimate. Ask for free bargain millwork catalog.
Keystone Lumber Company
334-20 South Sprague St. Tacoma, Wa.

POULTRY & EGGS

always wanted.
"THE COPE'S"
Topeka
Highest Cash Prices **FREE** Coops and Cases

We will sell you the best suit of clothes in America for.... **\$25**
No advance in price if you buy this fall.

FRED VOILAND
7th and Kansas Ave., Topeka, Kansas

"Money Saved is Money Earned"

See Page 11

Walker's
Drug Store
Sixth and Jackson

The rubber ring you put on a preserving jar helps to stretch your income.

Kansas Farmer Dairy Club

Dairy Club Contest Ends

RECORDS of all Dairy Club members close with the last milking August 31. Most of the boys and girls of the club started their records earlier in the year, and of course these have already completed their year's work. There are a few, however, whose cows did not freshen until September or a little later, and these must end the year as stated above.

We know you are all anxious to have the prizes awarded, although we believe you have worked in this club with far less thought of the prizes to be won than is usual in club contests of similar nature. The Kansas Farmer Dairy Club has been different from any other club ever conducted. In this club you have learned that you can buy a dairy cow, take her home, and the very next day have some money to apply on the purchase price. If you buy a calf or a pig, you have to wait for it to grow and develop. While you wait you are receiving no income. It is a good deal harder to keep up interest where you do not each day realize the results of your efforts. Of course you can take a pencil and figure that your calf or pig is increasing in value, but with a good cow you do not have to figure out a paper income. You have the product to sell for real money every day. This is one of the reasons why you have found the Dairy Club work so interesting. From the very first day you could feel that you were producing something of real value, and as you saw the note at the bank grow less and less each month, you soon began to work with even greater interest because you could see that you were winning a cow, whether you won any other prize or not. Most of you have already won your cow and own her clear of debt. Some have even purchased a second cow and are following the same method of paying for her. No matter whether you win one of the contest prizes or not, you have earned a cow and besides learned a great deal that will be valuable to you later. This is a contest in which there are no losers.

It will take some time to go over the work of all the members. You can help hurry along the awarding of the prizes by getting your stories in at once if you have not already done so. If you are among the few who close the year's work September 1, be sure to get all your records in as soon as possible.

In awarding the prizes there are a number of points to consider. Perhaps you became so interested in your work that you have forgotten the rules of the contest. First, the total butterfat production of the cow is to be considered. In this the young cows under five years of age will be given the allowance provided for in the record associations for pure-bred animals. This means that if you milked a two-year-old heifer she will not be expected to give as much butterfat in a year as a cow five years of age. Thirty points of the perfect score are allotted to total butterfat production. Next comes cost of production. Here your skill as a feeder has come in. In calculating the cost, the different feeds used have been figured at the same price for all members, no matter what you actually had to pay for the feed. Thirty points are allowed in this section.

The record part of the work is important and all have had a chance to win twenty points, or perfect. We are sorry all have not done the work so well as to win the twenty points. The way in which milk and cream is handled is also important because milk is a human food and can so easily be made unfit for use. Quite a large proportion of the club members have earned the twenty points by giving the milk and cream the best of care.

There were some special prizes offered which you may have forgotten entirely. These were for letters and pictures you sent in during the year. We have all these letters and pictures and now that the year has ended will look them all over carefully and see who among the members are entitled to these special prizes. You have all written so many good letters and sent us so many pictures that we fear it will not be easy to choose the winners.

If you are back on any of your records, do not delay a single day, but get them in at once so that we can award the prizes at the earliest possible date.

Club members will be sorry to learn that Ernest Wendel was taken down

with typhoid fever early in August. He was taken to St. John's Hospital August 5. In case Ernest does not recover in time to get his story in by the first of September, we feel sure the rest of the club members will be glad to have us extend the time for him.

A Cow "Switchboard"

If you have ever milked a cow in fly time, you know what it means to be slapped in the face by the cow's tail. Of course she does not do this from viciousness, but the effect is just as bad as if she really meant to hit you. Some dairymen use devices to hold the tail while milking. These simply clamp the switch to the cow's hind leg. We recently saw an entirely different means of protection described in Hoard's Dairymen. It is used on the Alfalfa Guernsey farm of Math. Michels in Wisconsin. Mr. Michels made this device after having one of his eyes almost destroyed by being hit with the cow's tail. He tried clamping the tails while milking, but found by actual test that some of the cows dropped off as much as 25 per cent in their milk when their tails were tied.

His device consists of a board about eight or ten inches wide and four and a half or five feet long. It is hung by two wire hooks from a long wire running lengthwise of the stable just over the edge of the gutter. In milking a long string of cows, the milker slides this board along so that it hangs in just the right place to protect his face when a cow switches her tail. The cows can switch all they like, but cannot strike the milker in the face. We would suggest that our Dairy Club members who have been annoyed by the switching of the cow's tail try this simple device.

New Member Starts Record

My cow was fresh last week. I did not expect her to be fresh until about the first of October. I took the calf away last night, August 20, but will feed it whole milk for a while. My cow has been running on pasture and has had no other feed.—GLEN D. ULM, Emporia.

You should feed your calf whole milk for two or three weeks at least. Be very careful to have the milk clean and sweet. Of course if you take it fresh from the cow it will be all right if you use clean pails. When you start to use skim milk you will have to be very careful. Do not make the change all at once. Begin by putting in a pint of skim milk to take the place of a pint of whole milk. If the calf does all right, increase the amount of skim milk every day or so by a pint until it is taking skim milk entirely.

Do not feed the calf more skim milk than you would whole milk. You have taken the fat out of the milk, but feeding more does not take the place of any of the fat which has been removed. The way to do this is to teach your calf to eat grain about the time you begin to feed it skim milk. You can do this by having some chop and bran mixed and putting a little in the calf's mouth when he is through drinking his milk.

You should never mix grain with the skim milk. As soon as it has learned to eat some grain, you can give it shelled corn, kafir, or oats, with a little bran if you have it. You must always be very careful to have the pails clean and feed the skim milk warm and at about the same temperature each feed. Do not give the calf any of the foam that forms when you separate the milk. This sometimes causes colic.

You probably will have to feed your cow a little more now that she is fresh. Of course she may give considerable milk on pasture alone, but be sure she is getting plenty of pasture. Good cows will usually pay for a little grain.

Banker Supports Club

I have been reading of the Kansas Farmer Dairy Club and would like very much to join. F. N. Nelson, of the First National Bank of Burlingame, has promised to loan me the money to buy a cow. I expect to purchase a good Holstein. I am hoping that I may be a Dairy Club member soon and that I will meet all the requirements.—ROLAND E. RONEY, Scranton.



Concrete Feeding Floors

SAVING feed is important

on the farm of today. A Feeding Floor has become one of the most useful farm improvements—it saves its entire cost in one year. It means the prevention of all waste—and waste at the present prices of feed, is inexcusable. A concrete feeding floor, watering trough, and hog wallow are essentials on every modern farm.

Your livestock will have full protection against disease if you build of concrete. Concrete is sanitary. It is reasonable in initial cost. Above all, it does not decay or deteriorate.

DEWEY

Portland Cement

is the farmer's favorite for making permanent farm improvements.

See the Dewey dealer near you and ask him for the Bulletin on Concrete Feeding Floors. He has it or will get it for you.



Look for the
Dewey Sign.

FERTILE KANSAS LAND CHEAP

Those who located in Central Kansas 20 years ago are the big farmers today. Their land has made them independent.

Your chance now is in the five Southwestern Kansas counties adjacent to the Santa Fe's new line, where good land is still cheap.

With railroad facilities this country is developing fast. Farmers are making good profits on small investments. It is the place today for the man of moderate means.

Wheat, oats, barley, speltz, kafir and broom corn, milo and feterita grow abundantly in the Southwest counties referred to. Chickens, hogs, dairy cows and beef cattle increase your profits.

You can get 160 acres for \$200 to \$300 down, and no further payment on principal for two years, then balance one-eighth of purchase price annually, interest only 6 per cent—price \$10 to \$15 an acre.

Write for our book of letters from farmers who are making good there now, also illustrated folder with particulars of our easy-purchase contract. Address

E. T. Carthage,
Santa Fe Land Improvement Co.,
1892 Santa Fe Bldg., Topeka, Kansas.

If on the market for pure-bred stock, read KANSAS FARMER live stock advertisements. You will find what you want.



BUTTERFAT AND INCOME

TO BE profitable a milk cow must be a good producer, but few people realize how rapidly the rate of profit increases as the total production increases. The cost of handling an ordinary cow is almost as much as the cost of handling a high producer. It is easy to see that the overhead expense, as it is called in a factory, is considerably greater on three cows capable of producing 150 pounds of butterfat a year each than on one 450-pound cow, and yet the total amount of butterfat produced is the same.

The dairy division of the Federal Department of Agriculture has prepared some figures based on the records of 1,668 cows in various cow testing associations which show how rapidly the net income increases with increased production of butterfat. The figures are as follows:

Average butterfat production (pounds)	Average income above feed cost
100.....	\$ 4.00
150.....	18.00
200.....	29.00
250.....	43.00
300.....	56.00
350.....	68.00
400.....	88.00
450.....	108.00

As butterfat production increased from 150 to 300 pounds, income over cost of feed advanced from \$18 to \$56, or as production doubled income above feed cost increased three times. As butterfat production increased from 150 pounds to 450 pounds, income over cost of feed advanced from \$18 to \$108, or as production trebled income over feed cost increased six times. If no expenses, except the cost of feed, are considered, the cow that produced 450 pounds of butterfat was as profitable as twenty-seven cows of the first group whose average production was 100 pounds. If labor and miscellaneous expenses also could be taken into consideration the results would be much more striking.

A further study of the records showed that the cost of roughage was about the same for all groups, but that the total cost of feed was somewhat greater for the more productive cows. The increased profit should, therefore, be credited in part to better feeding, but apparently it was more largely due to better cows. The present high cost of feed will eliminate the low-producing cow, or it must eventually eliminate the dairyman who keeps such cows. More cows are needed, but better cows are needed more. Certainly it pays to keep good cows and to feed them well.

The Dairy Cattle Congress

At Waterloo, Iowa, October 1 to 7 inclusive, will be held the Dairy Cattle Congress, which will probably surpass all previous shows because its purpose is so directly in line with the food conservation campaign now being conducted by our Government. Arrangements are under way to give a practical demonstration of every important phase of dairying and emphasize the magnitude of the industry.

Present indications point to the fact that the high standing established for both numbers and quality of cattle shown will be maintained if not materially increased this year. Breeders representing fifteen states have already advised their intention of showing their herds and a much larger territory will undoubtedly be represented by the time entries close. The premiums offered to the five herds, namely: Guernseys, Holsteins, Ayrshires, Jerseys and Brown Swiss, total more than \$8,000. The national breed associations and clubs will offer substantial premiums in addition to those given by the show proper.

The manner in which exhibitors of machinery, dairy equipment and supplies have reserved space indicates a great confidence in future dairying. The 48,000 square feet of exhibit space in the buildings and the ten acres of exhibit space on the grounds will be filled to capacity. The man who contemplates the construction of a new barn, the purchase of a cream separator, milking machine, lighting plant, water system, or any piece of up-to-date farm equipment, should visit this show. Here

the buyer has a chance to see and have demonstrated to him many different makes and can choose the one that suits his fancy.

The Iowa State Dairy Association will again hold its interesting sessions on the grounds. A well balanced program for both the production and manufacturing sides of the industry will be given. With the many grave problems facing the dairymen and creamerymen this year, there should be a record-breaking attendance at every session. Every day's program will also contain scheduled meetings of national and state organizations for the development of dairying.

Value of Legumes

In these days of high-priced grain and concentrates of all kinds, every dairyman should learn to appreciate the value of legumes. The whole country has come to look upon alfalfa hay as almost essential in the profitable feeding of milk cows. We sometimes wonder how eastern and northern dairymen can pay \$20 or more a ton for Kansas alfalfa and in addition pay the freight on it to their own station and then have to haul it out to their farms. Growing leguminous crops is a part of the dairyman's farm business. Here are a few suggestive statements about these most valuable plants taken from a press bulletin of the Wisconsin Experiment Station:

"Alfalfa, clover, beans, peas and the rest of this family produce the most nutritious food and at the same time add more nitrogen to the soil than they remove.

"Legumes come nearer to giving something for nothing than any other plants. Yet there is nothing mysterious about these plants. They have formed a partnership with some bacteria that live on their roots. These bacteria in return for being given a home (nodules) on the plant roots and for food from the plant take nitrogen from the air and leave it in the soil for the plant's use.

"There are millions of dollars' worth of this nitrogen over each acre, so the bacteria have an almost endless supply to draw on.

"The way to tap this great wealth is to grow these plants that have these wonderful bacteria on their roots. These plants do not do well without the bacteria. When alfalfa, clover, peas, beans or any of the older of these legume plants are sown on a piece of land for the first time, it is usually necessary to sow the bacteria as well as the plant seed.

"In these days, when plant food is so important, the greatest possible use should be made of the legumes, the greatest food producers for man and beast.

Skim Rich Cream

"A turn of the cream screw on your separator will put dollars in your pocket—skim a rich cream instead of one low in butterfat," says a folder which is being distributed this month by Wisconsin creameries among their patrons. The booklet was prepared by the dairy department of the university.

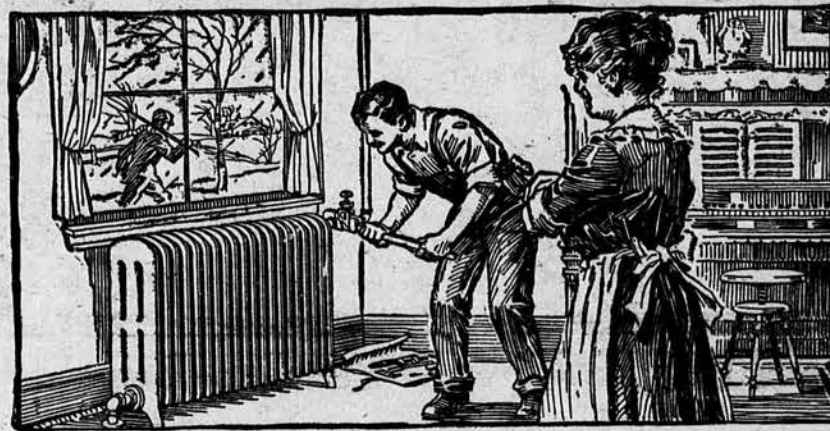
"Wisconsin annually sells about 500,000,000 pounds of cream to butter factories. If this cream tested 20 per cent and the test were increased to 35 per cent, about 200,000,000 pounds of skim milk could be saved—skim milk worth about \$1,500,000 as feed, the equivalent of a million bushels of corn.

"The farmer is paid not for the actual weight of his cream but for the butterfat it contains. Result: 286 pounds of cream testing 35 per cent contains as many pounds of butterfat as 500 pounds of cream testing 20 per cent. And the 35 per cent cream saves 214 pounds of skim milk, worth at present prices \$1.60 for feeding calves, pigs, or chickens."

Skim milk is worth just as much in Kansas as it is in Wisconsin. This is good advice for the Kansas dairyman.

There has been a remarkable increase in the demand for condensed milk. From the custom house office in New York City comes the information that 12,000 tons of American condensed milk has been shipped abroad every month as

IDEAL heating makes a home out of a house



Put in AMERICAN Radiators and an IDEAL Boiler right away and have plenty of heat all winter with a great saving of fuel and labor. Not necessary to have basement or water pressure

Any building *old* or *new*, in country or city, can be successfully heated with an IDEAL Boiler and AMERICAN Radiators. The economy of IDEAL heating outfits is known to all users. They cannot say enough about the great fuel savings, the splendid comfort, the lack of repairs, the little attention, the cleanliness, and the every-day good, solid service that they get from their IDEAL Boiler and AMERICAN Radiators. They have made *homes* out of their *houses*.

AMERICAN & IDEAL RADIATORS & BOILERS

Especially this year you should choose an IDEAL heating outfit for its great fuel saving features.

Any fuel anywhere can be burned with greatest heating results.

The IDEAL heating outfit will last forever. We have never heard of one wearing out. Repair bills are unknown and the attention is so slight for getting plenty of heat day and night that you will wonder why you do not have to look after it more than once a day.

Save fuel this year with IDEAL heating

If everyone would use IDEAL Boilers in their homes, we would have no high priced fuel question. You can burn the low priced fuels of any localities and IDEAL Boilers and AMERICAN Radiators are such great savers of fuel that you will soon save the first cost of the outfit. Phone or call on your heating dealer today and get estimate for putting in an IDEAL heating outfit.

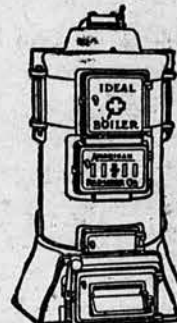
Send for this book (free)

Write today for copy of "Ideal Heating." We want you to read this book through; for it gives you the truth about the heating question and shows why we want you to have IDEAL heating to change your house into a home.

Sold by all dealers. No exclusive agents

AMERICAN RADIATOR COMPANY

Write to Department F14 Chicago



IDEAL Boiler fuel pots mix the air and coal gases as in a modern gas mantle, extracting ALL the heat from the fuel.



Straight Draw-Bar Pull Maximum Pull—No Side Draft

The Parrett pulls same as horses—direct on the draw-bar. No lost power. Implements always under control of one man. This is one feature which makes the Parrett the superior light weight tractor.

Now used in
France
England
Russia
Denmark
Mexico
Cuba
Canada
Etc.



The Original High Wheel Tractor imitated but not equalled. Operates on gasoline or kerosene for all field, belt or road work. Your inquiry will bring full details about this all purpose tractor.

Parrett Tractor Co., 409 E Fisher Bldg., Chicago, Ill.
Kaufmann-Parrett Co., Kansas City, Mo.

compared with 2,000 tons before the outbreak of the war. About half of this enormous quantity of condensed milk goes to the allies and the rest is shipped to South American countries, Holland, Denmark and Switzerland. This heavy demand for condensed milk has had a part in raising the prices being paid for milk. We just learned that one of the big condenseries in Kansas has announced that it will pay three dollars a hundred pounds for milk beginning October 1.

Many carloads of alfalfa hay have been shipped out of alfalfa-growing sections of Kansas this year at remarkably high prices. This hay is going to

Only Two Weeks More

See Page 11

farmers in the northern and eastern states who are paying this high price, adding the freight, and feeding it to their milk cows and other stock. If they can profitably feed this alfalfa after paying freight, we wonder if we could not afford to feed it in Kansas.



Get Rid of Worms

Figure how much it's worth to you in dollars and cents to keep your hogs free from worms. Worms prevent thrift—retard growth—rob you of good, high-priced pork.

Dr. Hess Stock Tonic

Drives Out the Worms

and at the same time tones and conditions the system. It enables your hogs to be at their best—to do their best. You take no chances. My Stock Tonic is guaranteed. You buy it at an honest price, from my dealer in your town who will return your money if it does not do as claimed.

Why Pay the Peddler Twice My Price?

25-lb. Pail, \$2.00; 100-lb. Drum, \$6.50.

Except in the far West, South and Canada.
Smaller packages in proportion.

DR. HESS & CLARK, Ashland, Ohio

DR. HESS POULTRY PAN-A-CE-A
will help your hens through the moult.

Dr. Hess Dip and Disinfectant Kills Hog Lice

Get My New Concrete Mixer Offer

I want ten men in every county right now to accept my special co-operative offer. It will help you obtain a Sheldon Batch Mixer at little or no cost. Let me tell you about it. You probably need a mixer for concreting on your place—most farmers do. The Sheldon is the ideal mixer for the farm.

Sheldon Batch Mixers \$11.50 Up

Light and easily portable, durable, low-priced. You'll find it will prove a mighty good investment. Write for special offer.

MAKE BIG MONEY Concreting in Your Section.

You can easily earn \$5 to \$20 a day with a Sheldon Batch Mixer. Our customers are doing it right now. The jobs go to the man with a Sheldon Mixer every time. Saves labor of 1 to 4 men, according to size of job. Or, if you buy a machine for your own use, you can make many times its cost in a season by renting it to neighbors.

Improve Your Farm Get My FREE Catalog

Build your own silos, tanks, troughs, floors, foundations, buildings, etc., out of concrete with a Sheldon Batch Mixer. Will pay for itself on first small job. Best hand mixing machine. And it's a lot cheaper too. Takes the backsache out of concrete. Makes possible those many small improvements on the farm that you wouldn't do without. Improvements which will add many dollars to the value of your land.

SHELDON MANUFACTURING CO., Box 7650, Nebraska, Neb.

FREE PLANS

Build Your Own Concrete Mixer

6 1-2 to 10%
on your Money
See Page 11

Since the crop conditions have so greatly improved in Kansas, we have heard some criticism of the effort made by Secretary J. C. Mohler of the State Board of Agriculture to help farmers having undeveloped pigs to find a profitable market for them in other states. It was pointed out that this was encouraging the sacrificing of pigs from Kansas farms. The facts were, however, that the pigs were actually being rushed to market. A visit to any stock yards the

latter part of July when Mr. Mohler proposed this co-operative plan of helping out the situation, would have shown the yards filled with pigs and piggy sows. These pigs were actually going to market at a sacrifice and Mr. Mohler, being apprised of the fact through the letters he was receiving from all sections of the state, turned his attention to letting feeders in other states know that pigs were being sacrificed. We understand that a good many carloads of pigs have been loaded direct to Missouri and Iowa. Of course with the wonderfully improved feed condition many who might have been compelled to sell their hogs later are now expecting to feed them out. It is probable that some part of the criticism is due to the fact that these shipments were made direct, thus avoiding the payment of any commission charges en route.



Commercial Fertilizer for Wheat

THE use of commercial fertilizers is becoming quite common in some parts of Kansas. The following inquiry is representative of many that come from farmers wishing to know definitely about the profitableness of using fertilizers:

"I am seeking information regarding the use of commercial fertilizer with wheat. I am contemplating sowing several acres of wheat this fall and want to get right on the use of fertilizer. I hear different ones talking. Some say if used once its use must be continued or nothing will be raised thereafter. Others say that land will not raise clover after using fertilizer, etc. I have here a farm of mulatto soil, or rather red soil, and another at Fort Scott that is rather a white soil. Is it necessary to have this soil analyzed to determine the kind of fertilizer to use?"—T. W. W., Linn County.

Prof. R. I. Throckmorton, soils specialist at the Agricultural College, answered this inquiry as follows:

"The use of commercial fertilizer has become very general throughout the eastern counties, and marked increases in yield have been obtained from the use of commercial fertilizers in the growing of wheat in the southeastern part of the state and on those soils which have been derived from limestone and shale. Soils derived from these sources are very low in phosphorus and therefore require applications of this element before giving maximum yields.

"The soils which have been derived from limestone, however, contain fairly large quantities of phosphorus and therefore do not respond so readily to such applications. The fertilizers required on such soils are those which contain a small amount of nitrogen, a high percentage of phosphorus, and no potash. Potash has not given increases sufficient to pay for the material. Such fertilizer may be applied in the form of acid phosphate or some form of bone meal. High grade bone meal fertilizers have given very marked increases.

"The white ashy soil is especially low in phosphorus and applications of this material have given us an increase of 100 per cent in yield in some of our co-operative tests in Southeastern Kansas. Acid phosphate should be applied at the rate of 180 to 200 pounds per acre. The high grade bone meal should be applied at the rate of 160 pounds per acre.

"The question of whether or not to have a chemical analysis of the soil to determine its fertilizer requirements is a very common one and one which naturally arises when the soil seems to lack plant food elements. We have not found it advisable or practical to make chemical analysis of the soils for this purpose. The chemical analysis will give the total amount of plant food in the soil but not the amount which the plant can use.

"Another question which commonly

arises is whether or not the use of fertilizers one year will make it necessary to continue the use from that time on. This question may be answered by the statement that an application of fertilizer will increase the yield for three or four years. After this, the yield will gradually decrease until it has dropped back to the original point. However, this is no reason why the use of fertilizers at one time should demand their use at some later date."

Showing Potatoes at Fair

If you raised some good potatoes, why not prepare an exhibit for the fair?

After digging, let the potatoes lie on the ground long enough to dry thoroughly and to toughen the skin.

Carefully wrap each tuber separately in paper.

Place in shallow one-layer boxes and store in a dark cool place.

Take out just before time to send the tubers to the show.

Clean them with a soft brush, removing every particle of the dirt.

Avoid pressure in order not to injure the tubers.

Do not wash; tubers wilt if washed and have an unnatural sheen.

Pick out a model of the type, size, color and eyes of the variety to be exhibited.

Make the rest of the lot as nearly like this model as possible.

See that the skin is clean, smooth and free from sunburn, having a desirable luster and bloom and being free from all blemishes of all sorts.

Wrap in soft paper and pack so that they will not jostle or jar in being shipped.

Silage saves much of the cost of high-priced oil meal and ground feed. Silage is the cheapest milk and meat producing winter roughage known.

THE FARMHOUSE IMPROVED

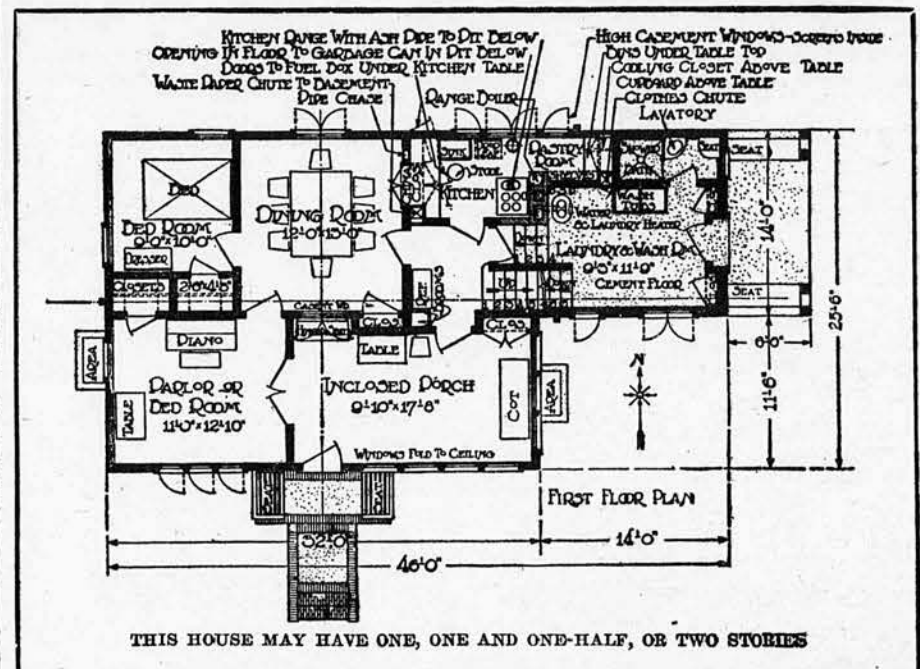
(Continued from Page One)

lavatory for this purpose and a small window under the roof of the east porch for light and ventilation.

The room for the hired help opens off the stair landing and six steps below the family rooms, which are on the second floor. This space can be used for a store room, instead, or it can be made into a sleeping porch and all other space on the second floor be used for rooms. As shown, this little room is well ventilated through a double casement window on the south and a window on the east.

The water closet is on the level of the stair landing for convenience to the first floor. It is detached from the bath room.

Because of lack of space, we cannot show the arrangement of the upstairs rooms or the basement plan. We will reproduce these in a later issue.



Improvements Increase Land Values

THE prosperity of a farming country is gauged by the improvements found on the farms. A good observer in riding through the country can tell from the car window when he is passing through a section of fertile land farmed by progressive, up-to-date farmers and having proper facilities for marketing crops to advantage, by the kind of improvements he sees. Good farm houses, barns, fences, and other farm improvements as a general proposition can be taken as a fair index to the value of the land itself. Of course in a newly opened territory this will not hold good, but as a country develops, nothing so clearly enhances the value of the farming land as good improvements of all kinds.

The value of improvements is not simply a matter of comfort or convenience for the people doing the work. Money invested in improvements on good land is valuable capital. If properly handled it will return as much or more, dollar for dollar, on the investment as the money tied up in the land itself. In sections where the country is fairly well settled, such as Central Kansas and extending west in the better agricultural regions, the value of improvements will be more clearly demonstrated with each passing year.

There are many farms operated by tenants. A good tenant, one who has the ability to make land produce to its fullest capacity, will not be satisfied on a farm having poor improvements. It does not give him a fair chance to demonstrate his ability and compels his family to put up with inferior accommodations and suffer many discomforts. A good tenant will want the place with the good improvements and will usually get it.

Land owners who hold to the idea that land is all that a man needs to make a success of farming, will lose out, whether they farm the land themselves or turn it over to tenants. Land is only a part of the equipment needed to insure success in farming. Too often all the available capital is tied up in land and it cannot be made to return an income on the investment because the farm lacks what might be called working equipment.

In a section where the tenant farms can be picked out because of the lack of improvements, newcomers are apt to get a poor idea of the country. Owners of good farm land in a growing and developing community cannot afford to neglect this matter of farm improvements. We are now being urged to grow maximum crops, especially of wheat, and economic conditions seem favorable to following such a course. Providing the necessary buildings and other improvements will be a most important factor in increasing crop production and enhancing the productive value of farm lands.

The Royal Announcement The American Royal Live Stock Show

LOANS

On Long Time if Desired
Privileges of Payment
Call or Write for Rates
The Capitol Building
and Loan Association
Topeka, Kansas
534 Kansas Avenue

THE TOPEKA STATE BANK

Interest on Deposits Guaranteed Under
the Laws of the State of Kansas

Topeka, Kansas

SAVE MONEY

See Page 11

will be held this year October 1 to 6 inclusive.

This year's show will be purely a show of the four great registered beef breeds, which will be more strongly represented than any previous year. On account of the prevailing high price of beef cattle, unusual interest is taken in the raising of beef cattle, and herds of the four leading beef breeds of America, namely, Herefords, Shorthorns, Aberdeen-Angus and Galloways, will be represented at the American Royal this year from all quarters of the United States.

On account of inadequate space at Convention Hall, this year's show will be held at Electric Park, the week following Old Glory Week celebration at the park, which closes Saturday, September 29, and it is expected that thousands of visitors in the city for Old Glory Week will remain over for the American Royal, to see one of the finest registered breeding cattle shows to be held in the United States this season.

There will be a horse show several nights, in connection with the American Royal, probably under the auspices of the Parkview Riding Club of Kansas City, consisting of light harness and saddle events. The management is going after some other horse show events, and everything points to a first class horse show for the American Royal visitors.

Space has also been provided for a poultry show, which will be under the management of V. H. Southard, manager of Useful Poultry Culture. Mr. Southard has already employed three poultry judges of national reputation. Poultry exhibits from the various state fairs will be brought here for the poultry show during the week of the American Royal.

Topeka Free Fair Plans

The educational feature will be emphasized more than ever this year at the Topeka Free Fair, which will open its gates to the public with no admission charge, Monday, September 10. The second day of the fair will be known as Farmers' and Stockmen's Day. The management has prepared a People's Pavilion conveniently located where addresses and demonstrations will be given throughout the week. Representatives of the Agricultural College and leaders of agricultural organizations will speak on topics of greatest interest to people of all classes. On Farmers' and Stockmen's Day live stock and other agricultural topics will be given special attention. In the evening there will be a grand patriotic display in front of the grandstand. This feature will be repeated several evenings of the week.

The third day will be Good Roads Day, and road enthusiasts will occupy the center of the stage. There will be good roads talks and demonstrations in the building of roads and the use of road machinery. There will also be tractor demonstrations and canning demonstrations. The parades of live stock will be given daily and there will be special entertainment features each day.

On Thursday the subject of defense will be uppermost. The United States Army, Kansas National Guard, Ladies of the G. A. R., the Navy League, Red Cross, Sons of Veterans, Spanish War veterans, Boy Scouts, Campfire Girls, Daughters of the American Revolution, the Royal Legion, and other patriotic organizations will come to the front in the program for the day.

Old settlers are to hold forth Friday. This is also Woman's Day and Health and Hygiene Day in the People's Pavilion. This will also be the day in which all the prize-winning animals will be especially on display. The awards in all departments will have been made by that time and those who cannot come before can on this day get a complete view of the animals and other exhibits in all classes which have won in the competition. As usual the Topeka fair will have a strong live stock exhibit. People of Kansas can well afford to spend a day or two in attendance at the Topeka Free Fair.

A number of bearings on the tractor must be oiled with the squirt oil can. These require frequent attention. The idea in oiling bearings is to constantly keep an oil film between the wearing surfaces. A small quantity of oil applied every hour is much more effective than a pint in the morning and no more for the rest of the day.

We Have

MONEY TO LOAN

On Farms in Kansas.

Call on us or write.

THE PIONEER MORTGAGE CO.

Mulvane Building, Topeka, Kansas.

We Always Have Money On Hand

DO YOU NEED MONEY?

To Buy a Farm or to Make Improvements?

The Government is asking for co-operation in making every acre produce this year. We have plenty of money and are at your service.

WE MAKE

FARM MORTGAGES IN EASTERN AND CENTRAL KANSAS

A special privilege is given whereby a favorable prepayment option can be granted, giving the borrower the privilege of paying \$100 or multiples thereof on the principal note, on the first day of any month after the first interest payment.

THE MERRIAM MORTGAGE COMPANY

Thirty-seven years of continuous and exclusive dealing in farm mortgages

C. W. MERRIAM, President

F. D. MERRIAM, Vice-President

C. B. MERRIAM, Treasurer

J. C. HARMON, Secretary

COLUMBIAN BUILDING

TOPEKA, KANSAS

Zercher Book and Stationery Co.

Topeka, - - - - - Kansas

Books :: Stationery :: Office Equipment :: Shaw-Walker Filing Cabinets

BANK OF TOPEKA

"In Service as Well as in Name"

Established in 1868

Capital and Surplus - - - - - \$500,000.00

READ KANSAS FARMER'S CLASSIFIED ADVERTISING PAGE FOR READY BARGAINS



SAVING THE WASTE MAKES THE PROFIT!

In all kinds of manufacturing the by-products are carefully saved and worked into salable merchandise. Farming is, or should be, a great manufacturing business so carefully conducted that no by-product is permitted to go to waste. The land provides the raw materials and the buildings are the factories where the cheap grains and fodders are changed into high-priced butter, pork, eggs, beef, mutton, etc.

Farmers who try to farm without sufficient factory buildings must sell their raw materials and let the next fellow make the profit.

You want to make the most out of farming—then write us for descriptions of farm buildings that will enable you to make the most out of your land. We will make recommendations for buildings and finance you if necessary.

OUR ADVICE COSTS YOU ABSOLUTELY NOTHING.

FILL OUT
THE COUPON
AND MAIL TO
US

I want to know how to save the waste products on my farm. Give me your advice as to what buildings I should have.

My land is in.....County,

.....State, and I own.....acres.

NAME.....

ADDRESS.....

THE FARM MORTGAGE CO.

TOPEKA - KANSAS

Kansas Free Fair

Topeka, Sept. 10-11-12-13-14-15, 1917

SIX BIG DAYS AT THE BIG FREE FAIR. The gates stand open day and night. This beautiful 86-acre fair ground, all of the twenty-four permanent buildings and every exhibit is open and free to everybody. No admission charged except races and shows.

Mammoth Live Stock and Agricultural Exhibit

The new Agricultural Hall will be crowded with exhibits of the farm, Boys' and Girls' Clubs, the Junior and Home-Made Departments. A big display by Mother and Daughter Canning Club, Culinary, Art and Textile exhibitors. Ten barns devoted to live stock.

24 Horse Races

The afternoons of Tuesday, Wednesday, Thursday and Friday will be devoted to harness and running races. \$7,500 in purses. Kansas Derby.

**THE BIG
FREE
FAIR**

Auto Races

Fred Horey, the world's champion, will defend his title in a match race for a purse of \$1,000.00 on Saturday.

30 Big Shows

The Con T. Kennedy Shows will furnish the amusement on Sunflower Trail, where there will be thirty clean and entertaining Coney Island shows.

Battle in Skies

Katherine Stinson Champion Women Flyer

Katherine Stinson, champion woman flyer, is only twenty years old, but is famed as a flyer. She loops the loop, flies upside-down, does the death drop. Miss Stinson will fly on Saturday, "Katherine Stinson Day," and will race Fred Horey, the auto champion.

Peoples' Pavillon---An Educational Department

In the People's Pavilion, under the auspices of the Kansas Council of Defense, lectures and demonstrations in food conservation and production will be held daily and each day a Mother and Daughter Canning Club will give a canning demonstration.

\$30,000 IN PREMIUMS \$30,000

Feed the Fighters! Win the War!

Harvest the Crops! Save the Yields!

On the battlefields of France and Flanders the United States boys and the Canadian boys are fighting side by side to win for the World the freedom that Prussianism would destroy.

While doing this they must be fed and every ounce of muscle that can be requisitioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

THE COMBINED FIGHTERS IN FRANCE AND FLANDERS AND THE COMBINED HARVESTERS IN AMERICA WILL BRING THE ALLIED VICTORY NEARER

A reciprocal arrangement for the use of farm workers has been perfected between the Department of the Interior of Canada and the Departments of Labor and Agriculture of the United States, under which it is proposed to permit the harvesters that are now engaged in the wheat fields of Oklahoma, Kansas, Iowa, North Dakota, South Dakota, Nebraska, Minnesota, and Wisconsin to move over into Canada, with the privilege of later returning to the United States, when the crops in the United States have been conserved, and help to save the enormous crops in Canada which by that time will be ready for harvesting.

HELP YOUR CANADIAN NEIGHBORS WHEN YOUR OWN CROP IS HARVESTED

Canada wants 40,000 Harvest Hands to take care of its

13 Million Acre Wheat Field

One cent a mile railway fare from the International Boundary line to destination and the same rate returning to the International Boundary. High wages, good board, comfortable lodgings.

An Identification Card issued at the boundary by a Canadian Immigration Officer will guarantee no trouble in returning to the United States.

AS SOON AS YOUR OWN HARVEST IS SAVED, move northward and assist your Canadian neighbor in harvesting his; in this way do your bit in helping "Win the War."

For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to

GEO. A. COOK, Canadian Government Agent, 2012 Main St., Kansas City, Mo.

MODERN HEATING METHODS

IN BUILDING the modern farmhouse, careful consideration must be given to the question of heating. Prof. W. A. Etherton in his recent bulletin, issued by the Engineering Experiment Station of the Agricultural College in co-operation with the National Lumbermen's Association, devotes a whole chapter to the topic, "Protection from Heat and Cold." After taking up in detail the many structural features involved in building a house that will stand the test in protecting from heat and cold, he gives the main points to be considered in selecting and installing the heating system. In the northern states about the first question asked by a farmer who is planning to build a modern house is, "What system of heating do you recommend?" Professor Etherton says that, while furnace heating is to be recommended for most farm houses, hot water is to be preferred except for first cost, and conditions will oftentimes justify the greater expense.

In selecting a heating system, he mentions the following items for consideration:

"The first cost of furnace heating systems is about one-half as much as direct steam and about one-third as much as direct hot water.

"Structural difficulties may render impracticable the installation of hot air pipes and registers in ready-built houses. If this difficulty obtains for only one or two rooms, a combination furnace and hot water system can well be used. A water disk can be placed within the furnace above the fuel and connected by pipes to the radiators as in an ordinary hot water system. These disks, or heaters, are catalogued as auxiliary parts of furnaces and they can be purchased as such.

"More basement room may be required for furnace installations than for steam or hot water. If ceilings are low, the space below the leaders will probably be useless for other purposes.

A furnace should be located to equalize as nearly as possible the lengths of the several leaders. This requirement places it about the center of the house. A steam or hot water boiler can as well be placed near the end of a building.

"Radiators may occupy valuable space in the rooms. Hot water radiators will occupy about one-half more room than steam radiators. Hot air registers occupy practically no space at all.

"Rooms on the windward side of a house cannot be heated by a furnace when the wind is strong. Circulation of steam and hot water through the system of pipes and radiators is not affected by wind pressure.

"Furnace systems respond easily and quickly. The kindling of a fire may be sufficient to remove the morning chill from the house. If the drafts are closed or if the fire is permitted to go out, the house cools quickly.

"A building can be heated more quickly with steam than with hot water, but water in the boiler must be heated to boiling before steam can be generated. Steam radiators are heated to about 220 degrees, but they lose their heat quickly when pressure in the system fails.

"In a hot water system the water fills the boiler, pipes and radiators. A relatively large amount of heat is required to change the temperature of all this water and to circulate it normally through the system. However, the water begins to circulate as soon as there is a marked difference in temperature in any part of the system, and it will continue to circulate as long as there is fire in the heater. Water enters the radiators at about 160 degrees and it has, at this temperature, so much heat that it continues to warm the rooms long after it begins to cool. This advantage of maintaining a nearly uniform temperature in the house, day and night, with comparatively little attention to the boiler and with an economical consumption of fuel, makes hot water heating the most desirable of any system in common use for domestic purposes. This is especially true for cold climates where heat is needed continuously for several months of the year. In localities where the weather is not severe, but subject to sudden changes, fireplaces may well be used to supplement a hot water heating system.

"Steam heating requires too much care and attention for the busy farm wife who may be left alone much of the day.

"It is quite possible to make a furnace system of heating a good ventilat-

ing system also, but this is seldom done. The vent flues for removing foul air from the rooms are seldom provided in residence work and the outside cold air inlets are seldom used when provided. The average owner will not bear the additional expense of operating such a heating-ventilating system. As a result, the inside air and odors are circulated within the house. Herein is an advantage in air leakage through doors, windows, and poorly constructed walls. It compensates, in large measure, for what would otherwise be a bad practice with all systems of residence heating.

"Furnace systems of heating are good, theoretically; but, like other systems, they often fail in practice because of bad installation. It is quite impossible to design furnace work with as much precision as steam and hot water; but, because of its difficulties, it needs even more skillful handling. Unfortunately for the owner and the manufacturers of good furnaces, the installations are too often made by guess and according to eccentric ideas of the mechanics.

"The owner should know, first, that the quantity of air from the furnace which will be required to heat a house will vary considerably, for the several rooms, and according to conditions which must be known and considered carefully and intelligently, to determine, even fairly well, the sizes of the registers, stacks, leaders, furnace, and cold air duct that are necessary for satisfactory results in heating. Second, that the heated air will move along the lines of least resistance and at rates which will vary inversely with the resistance. It is quite desirable, therefore, that all air branches be fairly well equalized in resistance. To this end, the furnace should be located so as to equalize, as nearly as possible, the lengths of the several leaders—the horizontal pipes in the basement. The pipes should have as few bends as possible and these should be made with long-radius elbows. The mechanic should not be permitted to connect a round leader into a narrow vertical stack without an easy elbow or a 'boot' which is made for the purpose. Long leaders and leaders which extend to the windward side of the house should have as much pitch as possible and more than other leaders. The connections of leaders to furnace should be equally distributed about the casing of the furnace. Third, that furnace gases can be and should be excluded from the rooms by making air-tight joints in the furnace castings. Fourth, that these are only a few of the essentials to a good furnace system of heating and that one cannot well afford to sacrifice or to run a risk of sacrificing any essential by employing a heating contractor who has not proved himself wholly capable and trustworthy.

"Steam and hot water systems are more often installed by specialists in heating work than furnace systems, and they can be calculated more precisely by rule, but there is quite as much need for caution in the installation of these systems as in any other.

"It is the keen competition of contractors, aggravated by the poor judgment of many owners who strive for the cheapest possible bids, that accounts for so many 'skinned jobs.' Contractors must have living wages. If they are compelled to bid low to obtain work, they may take larger profits than otherwise, feel justified in doing so, and leave the owner to repent his folly at leisure."

Save Grain Sorghum Seed

The demand for seed of feed crops for late planting was unusual this year.

It was met by those men who had stored seed in the head and kept it dry. At first thought, we felt that these men should have advertised their seed early. But later it seems to us that the interests of the country were served best by holding this seed for late planting. Some of the seed thus held was grown in 1915. Men who put this good seed away and held it proved benefactors, and made money, too.

Now, the suggestion comes from this lesson. Those who have good seed of any feed crops should select as much as they can afford to store and put it away where it can be kept safe from rain and rats.—J. E. PAYNE, Oklahoma.

There has never been a greater demand than now for men and women thoroughly trained in agriculture.

**International
SOIL PRODUCTS EXPOSITION**
(Der Farming Congress)

PEORIA DISTRICT FAIR 1917

THE Biggest Agricultural and Industrial Exposition to be held anywhere in the world in 1917. Foreign countries and our own states are contributing to its splendor. It is a liberal education, as well as good, wholesome enjoyment. **COME EARLY AND STAY THROUGH.**

SEPT. 18-29 PEORIA, ILLINOIS



Tracing Live Stock Shipments

ONE of the serious handicaps in marketing live stock is to know how to avoid sending in stock on an overloaded market. The Bureau of Markets of the Federal Department of Agriculture has undertaken a service that is certain to be of great value to shippers. A shipper can learn early in the morning of each day exactly how much live stock is headed for market at that particular time. If he is willing to pay the expense of the message, he can receive this information much earlier by wire. Heretofore the shipper was probably the last man concerned to learn of the movement of live stock en route to market.

As an illustration of the information now available regarding live stock movements, we quote from a statement furnished for a given date: "Today—August 16—there are 3,115 carloads of live stock on the railroads of the United States destined to some 100 markets. Of these cars, 1,772 are loaded with cattle, 699 with hogs, 289 with sheep, 105 with horses and mules, and the rest with mixed stock. The greatest number of cars for any point are bound to Chicago, with Kansas City second, Fort Worth third, and St. Paul fourth. Chicago is the destination of a larger number of cars of each kind of stock than any other city, except in the case of horses and mules and mixed. The largest number of cars of horses and mules were loaded for East St. Louis, while St. Paul was the destination of by far the largest number of cars of mixed stock."

It was pointed out in the report that the greatest number of the Chicago shipments came from Iowa, with Illinois second and Minnesota third. Iowa's large consignment was made up mostly of hogs. These figures represent the typical live stock movement at this season of the year. The real significance of the figures is in the detail and accuracy with which both shipper and packer can know the probable supply on any market on a given day. With the points of origin and point of destination known, the supply of any kind of stock at the various market points can be approximately foretold.

Five hundred and twenty-one division superintendents of all railroads west of the Allegheny Mountains, representing about 225,000 miles of line, nightly report these facts by telegraph. The bureau receives nightly an average of 300 such wires from division superintendents. A night force of telegraph operators and statistical clerks receives and tabulates this information, so that it can be wired to market points at 7 A. M. eastern time.

A tabulated summary of the loadings is wired daily, including Sunday, to the local offices of the Bureau of Markets in Boston, New York City, Philadelphia, Chicago, Kansas City, Omaha, Portland, Fort Worth, and Washington, D. C., for immediate publication in the press. Thus producers of live stock and members of the live stock and meat trade at the markets have an early morning report which will assist in gauging more accurately the receipts at all of the live stock markets. The information contained in these reports should help to avoid the present costly market gluts and should decrease need for the diversions of live stock in transit.

The operation of this market report service is possible through the co-operation of the railroads which give the facts, and its value to stockmen and the live stock trade is greatly extended by the help of the press which disseminates the information.

The instability of live stock prices and the wide fluctuations which occur from time to time resulted, in part at least, from the lack of dependable estimates on the market receipts. The present reports supplant, with definite advance facts concerning live stock loadings, the former method of guessing at market receipts. This service, it is believed, will make for the better distribution of fat stock consignments in accordance with demands at the various markets on the different market days. They allow the commission men to advise their trade more accurately when to ship; and conduce to more stable mar-

ket conditions, reduce the hazard, and thereby encourage an increase in live stock production.

The reports are mailed free to interested persons making request of the Bureau of Markets, Washington, D. C. Any part or all of the information is telegraphed to those who request wire service, provided they will pay the transmission charges at commercial rates.

Contagious Abortion.

Contagious abortion is one of the most serious diseases that can get into a herd. Only recently some valuable facts have

been learned of this disease. It has been found that infected cows do not continue to abort. When it first breaks out in a herd a considerable number usually throw their calves. During the second year the abortions will be less and the third year the cases will be few. In this way the disease disappears automatically, provided that no new susceptible animals are added to the herd. Disposing of the cows that have aborted and buying new ones usually results in prolonging the disease in the herd. The contagious abortion germs are often spread by the bull, so great care need be exercised in purchasing a sire to make sure that he is free from the contagion and also not to allow him to serve cows that are affected.

Cheap Feed Needed

The county agent of Lyon County, in addressing farm bureau members through his monthly news letter, calls attention to the fact that while the long spell of dry weather has greatly reduced the prospect for corn, there is an abundance of material for good silage. There never

was a better time to build a silo in that section than the present, and what is true of Lyon County is true of many other sections of the state. Mr. Popenoe figures that with an initial cost of four dollars per ton capacity and a cost for filling of one dollar a ton, it is possible to convert into good feed the corn and other forage crops at a cost of five dollars a ton. No silo should stand empty this year.

R. F. Hoch of that county has a 32-ton silo made of 22-foot fir flooring at a cost of only forty dollars. This furnished him silage enough for nine cows last season at a cost for storage of only \$2.25 a ton. He took this silo down for the summer and put it under cover. A silo of this kind of course is not permanent, but it can be used by a renter or man of small means with good profit.

A silo built this year will cut your feed bills, will be a permanent addition to the profit-producing equipment of the farm, and a mighty valuable asset when you wish to rent or sell the place.

Studebaker

Prices of all cars
advance September 15th

The FOUR Touring Car
will be increased from ----

\$985 to \$1050

The SIX Touring Car
will be increased from

\$1250 to \$1385

THE costs of materials and labor used in the manufacture of automobiles have been, and are, steadily increasing.

Studebaker uses only the highest grade materials throughout their car, including chrome-nickel and vanadium steels, genuine hand-buffed leather and other materials of the highest quality.

A year ago Studebaker made huge purchases and placed long-term contracts for materials, making it possible to continue the present low prices while other manufacturers of cars in the Studebaker class have already advanced their prices.

But the popular demand for Studebaker cars is rapidly exhausting the materials purchased at old prices, and therefore, prices of all models will have to be increased on September 15th.

It is an invariable Studebaker policy to subordinate price to quality—quality must always be maintained.

You will probably never have another opportunity to buy, for so little money, such a powerful, durable, accessible, roomy and comfortable car.

Every Studebaker car is guaranteed for a full year from date of purchase.

BUY NOW---SAVE MONEY

Four-Cylinder Models

	Present Prices	Prices Sept. 15
Roadster	\$ 985	\$1025
Touring Car . . .	985	1050
Every-Weather Car	1185	1250

All prices f.o.b. Detroit

STUDEBAKER

Detroit, Mich. South Bend, Ind. Walkerville, Ont.

Address all correspondence to South Bend

Six-Cylinder Models

	Present Prices	Prices Sept. 15
Roadster	\$1250	\$1335
Touring Car . . .	1250	1385
Touring Sedan . .	1700	1850
Coupe	1750	1860
Limousine	2600	2750

All prices f.o.b. Detroit

Classified Advertising

Advertising "bargain counter." Thousands of people have surplus items of stock for sale—limited in amount or numbers hardly enough to justify extensive display advertising. Thousands of other people want to buy these same things. These intending buyers read the classified "ads"—looking for bargains. Your advertisement here reaches over 60,000 farmers for 5 cents a word per week. No "ad" taken for less than 60 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Address counted. Terms, always cash with order.

SITUATIONS WANTED ads, up to 25 words, including address, will be inserted free of charge for two weeks, for bona fide seekers of employment on farms.

AGENTS WANTED.

GENTLEMEN: McNAMES SOLD 29 sprayers and auto-washers one week; profits \$2.50 each. Square deal. Write Rusler Co., Johnstown, Ohio.

HELP WANTED.

FARM HAND, \$35 PER MONTH, HOUSE and wood furnished. F. G. Houghton, Dunlap, Kansas.

WANTED—MEN-WOMEN, 18 OR OVER. Government jobs, \$100 month. Big opportunity for farmers. War necessitates hundreds appointments. Write for list positions. Franklin Institute, Dept. G-82, Rochester, N. Y.

CATTLE.

120 HEAD OF HIGH GRADE HOLSTEIN cows and helpers, priced for quick sale. H. F. McNutt, Oxford, Wisconsin.

FOR SALE—MY ANNUAL CROP OF registered Hereford cattle, 50 head; 14 young cows, bred; 10 heifer calves; 26 bulls, calves to one year old. G. P. Jones, Olpe, Kansas.

HOLSTEIN CALVES, HIGH GRADE, from cows producing up to 60 pounds. Either sex, \$15 to \$25. L. D. Arnold, Manhattan, Kansas.

FOR SALE—DOUBLE STANDARD Polled Durham bulls. Write for description and price. C. M. Albright, Route 2, Overbrook, Kansas.

FOR SALE—FORTY (40) HIGH-GRADE Wisconsin Holstein cows in bunches to suit purchaser. Big, young, bagging to calf. Hannon Bros., Olathe, Kansas, 20 miles southwest Kansas City.

FOR SALE—VERY CHOICE HIGH-GRADE Holstein calves, either sex, three to six weeks old, at \$20 per head, crated for shipment. Or if you want dairy cattle of any age, I will buy them at a commission from the best herds in Southern Wisconsin. Albert M. Hanson, Whitewater, Wisconsin.

HIGHLY BRED HOLSTEIN CALVES, either sex, 15-16th pure, from heavy milkers, five to seven weeks old, beautifully marked. \$23, crated and delivered to any station, express charges paid here. Send orders or write. Lake View Holstein Place, Whitewater, Wisconsin.

DOGS.

FIVE MONTHS MALE COLLIES, QUICK, \$8. Frank Barrington, Sedan, Kansas.

TRAINED RABBIT HOUNDS, FOX hounds, coon, opossum, skunk dogs, setters, pointers, ferrets. List free. Violet Hill Kennels, Hanover, Pa.

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

TRAINED BEAGLES, RABBIT HOUNDS, foxhounds, coon, opossum, skunk dogs, setters, pointers, house, farm dogs. Ferrets. Catalog 10c. Brown's Kennels, York, Pa.

AIREDALES AND COLLIES—GREATEST of all pups. Grown dogs and brood matrons. Large instructive list, 5c. W. R. Watson, Box 128, Oakland, Iowa.

WANTED

WANTED—TO HEAR FROM OWNER OF good farm for sale. State cash price, full description. D. F. Bush, Minneapolis, Minn.

SITUATION WANTED.

EXPERIENCED MARRIED MAN WANTS job on farm or ranch September 1. Earl Miller, 103 The Drive, Topeka, Kansas.

WANTED—WORK ON MODERN PURE- bred dairy farm, by experienced, reliable young man. Lawson Sappington, Centralia, Missouri.

HONEY.

HONEY—NEW CROP. SEND FOR PRICE list. Bert W. Hopper, Rocky Ford, Colo.

SEEDS

WHAT HAVE YOU TO SELL? WHAT do you want to buy? See us fair week. D. O. Coe, 119 E. Sixth St., Topeka.

RYE—NEW CROP, EXCELLENT FOR pasture, soil building or cropping. \$2.50 bushel. B. H. Pugh, Topeka, Kansas.

SEED WHEAT, SEED RYE, ALFALFA seed, turnip seed and other seeds for fall planting. Write for prices. The Barteldes Seed Co., Lawrence, Kansas.

PURE-BRED HIGH-YIELDING TURKEY red hard seed wheat, cleaned and graded, at \$3.50 a bushel. Ferdinand Hubka, Vilets, Kansas.

SWEET CLOVER "UPLAND ALFALFA," dairyman's gold mine. Permanent pasture. Grows with wheat, rye, oats. J. Lewis, Madison, Kansas.

TIMOTHY SEED, \$4.00 PER BUSHEL. High purity and germination, first class in every way. Timothy-alsike mixture, \$4.50 per bushel. Satisfaction or your money back. Henry Field, Shenandoah, Iowa.

POULTRY WANTED.

POULTRY AND EGG MARKET HIGHER. Coops free. For prices, "The Copes," Topeka.

LUMBER.

LUMBER, MILLWORK, POSTS, DIRECT from mill, wholesale prices. Send for carpenter's list for freight prepaid estimate. Millwork catalog free. Keystone Lumber Company, Tacoma, Washington.

HORSES AND MULES.

IMPORTED PERCHERON STALLION, black, sure. Good jack, black with mealy points. Quick and sure. Priced right. W. F. Teague, Collyer, Kansas.

SHEEP

FOR SALE—TWO REGISTERED YEAR- ling Hampshire Down rams, also spring ram lambs. R. C. Krueger, Burlington, Kan.

MISCELLANEOUS.

1,024 YEARS AMERICAN HISTORY, 80c postpaid. Elias Pelton, Hudson, Kansas.

TWO OHIO ENSILAGE CUTTERS, AL- most as good as new. Will sell or trade. Nos. 11 and 17 with 36 feet of blower pipe with each. B. F. Erwin, Fairfax, Missouri.

POULTRY.

BUFF DUCKS, \$1.25 EACH. ROBERT Webster, Canton, Kansas.

WHITE ROCK EGGS, \$4 PER HUN- dred. Nora Lamaster, Hallowell, Kansas.

POULTRY SUPPLIES

WE HAVE EVERYTHING IN POULTRY feeds and supplies. D. O. Coe, 119 E. Sixth St., Topeka.

Real Estate For Sale

10,000 ACRES of good grazing land, well watered, for \$3 to \$5. All crops good. No drouth, no hot winds. Grass for cattle and corn for hogs. Best country in the world to live and make money.

W. W. TRACEY - ANDERSON, MISSOURI

SEVERAL GOOD HOUSES TO TRADE FOR LAND.

Six farms to trade for Western Kansas land. Wheat farms at a bargain.

HEMPHILL LAND CO., Lawrence, Kansas.

WOULD YOU BUY

140 Acres, six miles from McAlester, on terms, for \$4,500, if we show you \$4,500 crop on farm? If so, write

SOUTHERN REALTY CO., McAlester, Okla.

950-ACRE BOTTOM FARM

Four hundred acres in cultivation, 160 acres meadow, balance pasture. Splendid alfalfa, wheat or corn land. Splendid oil possibilities. A fine bargain for some one. Only \$75 per acre. Might take a small farm in on the deal. Write

M. T. SPONG - FREDONIA, KANSAS

A BARGAIN

158½ Acres, 3½ miles from good town of 1,000 people, with high school, good school house on the land; seven-room house, good barn, plenty of water, on state automobile road. A splendid farm. Price, \$7,200.00; \$1,000 cash, balance from one to fifteen years at low rate of interest. Why rent? Send for views of this farm. Address

THE ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

SUMNER COUNTY

The great Sumner County withstood the long drouth and high winds of the spring and then produced more high-priced wheat than any other county in the U. S., and yet land prices are very low on improved farms—\$40.00 to \$75.00 per acre. Write for description and prices.

WILLIAM HEMBROW

The Land Man Caldwell, Kansas

FARM AND HERD.

W. R. Huston, of Americus, Kansas, is one of the successful Duroc breeders in Kansas. The herd boars now used in this herd are Taylor's Model Chief, a five-year-old hog by Model Chief 44969, out of R. L.'s Model Chief, a combination of the Ohio Chief and the Colonel cross which has proven one of the best crosses in the Duroc families. Taylor's Model Chief is a very large hog and very evenly balanced and is a very fine cherry color. He has proven to be a sire of some outstanding litters and among them are a number of fine herd boar prospects. This boar was shown in the first prize young herd at the Missouri State Fair in 1912. Mr. Huston has also used a Golden Model boar and also Great Wonder by Long Wonder. There are fifty-six spring pigs on the farm by these two boars out of some of the best sows on the farm. They have all been immuned and are coming along in fine shape. A feature of the herd at this time is a splendid lot of spring boars that are herd prospects.

J. H. McAnaw, of Cameron, Missouri, has succeeded in building up one of the choice herds of Chester White hogs in that state. He makes a specialty of developing breeding stock. All animals for breeding herds are carefully selected and developed along lines to insure good breeders. He has the popular blood lines of the breed in his herd and has the type with size and quality. At this time he has a choice lot of young stock including some outstanding fall and spring boars.



We desire to make this department just as helpful as possible, and believing that an exchange of experiences will add to its value, we hereby extend an invitation to our readers to use it in passing on to others experiences or suggestions by which you have profited. Any questions submitted will receive our careful attention and if we are unable to make satisfactory answer, we will endeavor to direct inquirer to reliable source of help. Address Editor of Home Department, Kansas Farmer, Topeka, Kansas.

Cheeriness is a thing to be more profoundly grateful for than all that genius ever inspired or talent ever accomplished. Next best to natural, spontaneous cheeriness is deliberate, intended and persistent cheeriness, which we can create, can cultivate and can so foster and cherish that after a few years the world will never suspect that it was not an hereditary gift.—HELEN HUNT JACKSON.

You have a rock somewhere in your own soul, and that is the rock for you to build on. Beware how you borrow a fragment of some other man's and plant it on your sandy places and try to build on that. Dig deep, dig well, dig till you find the proper basis of your own strength.—PHILLIPS BROOKS.

Teeth Facts

Good authorities tell us that children who have perfect teeth are about seven months ahead of other children in physical development and do the same amount of school work in six to twelve months less time than do children with poor teeth.

Many children's chances for physical and mental development could be materially improved by dental attention when it is needed. Because it is the first set of teeth we should not neglect them and excuse ourselves with the thought that there will soon be a new set. Before the new teeth come the child may suffer much unnecessarily and his health may be undermined because his body is undernourished on account of his inability to chew his food. If given attention before the nerve is exposed, such trouble can be easily avoided and the cost will be small.

As soon as the first teeth are through children should be taught to brush them at least twice a day—before breakfast and after supper. This habit is learned easily and is a very valuable one, as keeping the teeth clean will do much toward keeping them sound.

Crooked teeth and teeth that are spoiling the shape of the face also should be given immediate attention, as much can be done early toward correcting their growth. Such deformities interfere with perfect mastication.

Canned Chicken

Mrs. B. H. H., Clay County, asks: "Is it safe to can chicken? If so, how long should it be fried before canning? Should the grease in which it is fried be poured over it? If so, should the jars then be filled with water? We have a number of young chickens and as grain is so high in price it is necessary to use as little as possible and yet we do not want to sell the young chickens, as they are needed for meat."

Having had no experience in canning fried chicken, the inquiry was referred to Otis E. Hall, state club leader, who is an authority on the canning of all fruits, vegetables, and meats. His answer is as follows:

"The canning of chickens and other meats obtainable on the farm is one of the most practical things that can be done at present. We need have no fear of ptomaine or losses if extreme care is used in placing the meat in the can while fresh and if the work of sterilizing is thoroughly done. It is necessary to fry chicken for canning only until it is a little brown on the outside or perhaps cooked one-third as long as it should be for serving. Then pack the chicken in jars, and fill up surplus space in jars with the grease in which the chicken was fried, and process three hours in water that is boiling rapidly, counting time when the water begins to boil again after jars are lowered into it. If a steam pressure outfit is used, chicken should be processed sixty minutes after pressure has reached five pounds, or forty minutes at ten pounds of steam, and it will do no harm to allow the steam to go up to fifteen pounds. A variation of five to fifteen pounds for fifty minutes will do no harm."

This is a very practical way to save both chickens and chicken feed, and it is a guarantee to the housewife that she will not be caught unprepared for visitors.

Young rabbits can be canned in the same way.

Spread the Meat Flavor

Spread the meat flavor over other foods and so economize on the quantity of meat consumed, says the United States Department of Agriculture. Here is one way to utilize left-over meat by spreading its flavor:

MEAT TURNOVERS.—Chop the meat. If the quantity on hand is small, mix with it left-over potato or rice. Season with salt, pepper, onion, etc. Place filling on circular pieces of biscuit dough about the size of a saucer. Fold over the dough and crimp edges together. Bake for about one-half hour in a hot oven.

A brown sauce made from two table-spoonfuls of flour browned in two table-spoonfuls of butter to which a cupful of water or stock and a half teaspoonful of salt is added, may be served over the turnovers.

Soup Stock and Broth

A few jars of chicken soup stock or broth on the emergency shelf will be very convenient for use in case of sickness or on a busy day. For the soup stock, place six pounds of chicken in two gallons of cold water and simmer over the fire for five hours. Remove meat from bones, then strain. Add sufficient water to make two gallons of stock. Fill hot glass jars or enameled tin cans with the hot stock. Partially seal glass jars. Cap and tip tin cans. Sterilize for ninety minutes in hot water bath outfit or one hour under five pounds steam pressure.

To can chicken broth with rice, use twelve ounces of rice to each gallon of soup stock prepared as described in the preceding recipe. Boil the rice thirty minutes. Fill hot jars or enameled tin cans two-thirds full of rice and the remainder with soup stock, then proceed as in canning the soup stock alone.

Use of Fruit and Vegetables

Farmers' Bulletin 871, "Fresh Fruits and Vegetables as Conservers of Other Staple Foods," has just been published by the United States Department of Agriculture, and will be sent to any housewife on request. Address the Division of Publications, United States Department of Agriculture, Washington, D. C.

The scope of the bulletin is given in the preface in these words: "In general, the bulletin points out that peas, beans, and similar legumes would be the most useful as protein (meat) savers; potatoes, sweet potatoes, and similar vegetables as starch savers; and fruits and sweet potatoes as possible sugar savers, while all fruits and green and succulent vegetables are valuable to supply the diet with mineral substances and with certain substances essential to health which are present in them and in many other foods in minute amounts. When vegetables are used to supply protein it is important to supplement them with some other food containing protein, and for this purpose milk, particularly skim milk—so often a by-product, and a perishable one as well—is important. By means of bills of fare and recipes practical application is made of the principles set forth in the bulletin."

Essential Food Principles

The problem of the selection of food grows more complicated as prices advance and the available food materials decrease. One of the most vital points in which the diet is likely to fall short is in the mineral-salt content and in the shortage of growth-promoting substances called vitamins.

The following suggestions are given for conserving these essential nutrients, by the Home Economics department of

Ohio University:

Water in which vegetables are cooked should be either served with the vegetable or used in the making of soup.

Potatoes should be cooked in the skins regardless of the final method of serving. This is also true of many other vegetables and fruits.

Unhulled or brown rice is greatly to be preferred to the polished rice from which much valuable material has been removed.

Fine patent flour is deficient in both mineral salts and vitamins. The milling of a higher per cent of the wheat kernel into flour would remedy this deficiency.

Milk should be the last thing excluded from the diet of children, because of its many advantages as a tissue-building and growth-promoting food. "A quart of milk a day for every child" is a good rule.

Skim milk, despite its shortage of fat, is as valuable a source of mineral salts and vitamins as whole milk.

Ordinary "greens" are an excellent source of mineral salts.

If a raw potato is cut across with a sharp knife, a layer called the fibrovascular layer may be easily noticed

just below the skin. This is considerably richer in mineral matter and proteid than the flesh of the potato, and if we peel it off with the skin we lose these valuable ingredients. In order to save these, the United States Department of Agriculture recommends that potatoes be washed, dropped into a vessel of rapidly boiling water, and allowed to cook ten minutes. Remove and strip off the thin skin as when potatoes are peeled after thorough cooking by boiling. The potatoes will still be practically raw and may be handled like raw peeled potatoes in preparing any dish, as scalloped, French, or German fried potatoes, potato chips, etc. An excellent way of cooking the potatoes is to bake them, and the entire potato, including the thin brown crust, may be eaten, or they may be boiled with a pot roast or placed in a roasting pan with a meat roast, removing the cover before they finish cooking to allow them to brown.

Growing children need more tissue-building foods than do persons whose growth is completed. Milk, eggs, meat, fish, cheese, and legumes are all tissue-building foods, but milk and eggs are best for young children.

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 Dressmaker," 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. 8300—Girls' Dress: Cut in sizes 4 to 14 years. Ready for any emergency is the junior girl if she is dressed in such a smart little frock as No. 8300. The straight loose lines are particularly good for the slight undeveloped figure. The waist is in the popular Eton jacket effect and fastens at the center front. The straight one-piece skirt is gathered to the upper part around the back and sides as far as the pockets. No. 8311—Ladies' Waist: Cut in sizes 34 to 42 inches bust measure. The advantages of simplicity are exploited in this plain but nevertheless good-looking waist. The center front closing is stitched back to form a broad tuck, and the turn-back revers are formed by the extension of the fronts. A separate girdle is included in the pattern and may be of ribbon. No. 8292—Girls' Jumper Dress: Cut in sizes 6 to 14 years. Mothers will welcome a new idea for a jumper dress—a style which has always been more or less popular for the junior girl. This dress has a suggestion of a man's vest in the straight pockets, and the deep V-shaped opening at the front. The plaited skirt is cut in one piece. No. 8302—Ladies' Apron: Cut in sizes 36, 40 and 44 inches bust measure. This model is really intended for an apron, but as a matter of fact it can be worn instead of a dress just as well. Body and sleeves are in one, which saves time in making. The short sleeves may be finished with or without the cuffs. The neck is cut quite low in front, to allow the apron to slip on over the head. No. 8305—Ladies' Skirt: Cut in sizes 24 to 32 inches waist measure. A version of the two-piece skirt which is a little different from the usual conception of it is shown in No. 8305. It will make a splendid utility skirt if it is developed in a suitable material, for it has simplicity combined with smartness. The major part of the skirt is in one piece, cut circular. The other piece is used for the front panel. No. 8301—Ladies' Dress: Cut in sizes 34 to 40 inches bust measure. This dress fills all requirements for an informal afternoon frock. The waist is in shirtwaist style, but the collar and vest transform it into a dressy affair. The generous opening is filled in with a lacy vest. The simple skirt is a two-piece model, gathered at the top with slash pockets in the side seams.

L. M. Penwell, President

R. M. Johnson, Secretary and Treasurer

The L. M. Penwell Undertaking Co.

Phone 192
506-508-510 Quincy St.

Topeka, Kansas

SCHOOLS AND COLLEGES

GOVERNMENT SCHOOL

The Kansas Wesleyan Business College holds an appointment by the United States Government to teach Morse and Radio Telegraphy. This honor is a fitting recognition of the efficient work of this school.

The War Department furnishes us all needed additional equipment to handle the great classes of young men and women now enrolling.

Graduates are guaranteed immediate appointment with the Signal Service or, if preferred, with the railroads.

Write at once for catalog.

The Kansas Wesleyan Business College, Salina, Kansas

Central Kansas Business College

ABILENE, KANSAS.

Please send me your catalogue, and special tuition rate to first one hundred new students. Positions guaranteed.

Name

Town..... State.....

"The House of Courtesy" NOW SHOWING

New Fall Modes

In Suits, Dresses, Coats,
Blouses and Separate Skirts

The prices are always moderate, consistent with quality of material.

Berkson Bros
707 Kansas Ave., Topeka, Kansas



Ralph R. Peterson
JEWELER
106 West Eighth Street
TOPEKA

Quality Diamonds, Watches and
Jewelry
Cut Glass and Silver

THE ADDIS JEWELRY STORE

This ad is worth \$2.00 to you on any purchase of \$10.00 or more.

817 Kansas Ave., Topeka, Kansas

"YOUR OWN NAME"



ON THIS EXTRA FINE KNIFE

Two best quality steel blades. German silver tips, brass lined. Transparent handle showing your own name.

We will send this beautiful knife with your own name on it for one yearly subscription to Kansas Farmer at \$1.50 or a three years' subscription at \$2.25. Address KANSAS FARMER - TOPEKA, KANSAS

\$75 A Month Guaranteed

the day you graduate from the Kansas Business School, 1341 Grand Ave., Kansas City, Mo. Higher accountancy, stenography, bookkeeping, banking, penmanship, advertising and salesmanship. A lesson in penmanship by the world's champion penman, a lesson in Gregg shorthand, and catalog and particulars free. Call, write or phone immediately.

Strickler's Banks And Railroads

Demand Our Graduates

Graduates guaranteed positions and furnished employment to defray expenses while attending.
119 East Eighth St., Topeka

HELD CONSERVATORY OF MUSIC

VOICE—We guarantee any woman High C with ease.
PIANO—Latest methods.
Dunning System—Kindergarten graduates.
Degrees in Voice and Piano.
Community Chorus.

For particulars address
F. J. HELD, DEAN, OTTAWA, KANSAS



814 Students from 16 States.
College, Academy, Domestic Science, Business, Music, Piano Tuning, Art and Expression. For catalog write Pres. E. E. Philbrick. Mention course.

— OTTAWA — Business College

OTTAWA, KANS. CATALOG FREE



LEARN TELEGRAPHY

Young men and women attend on credit. A practical school with railroad wires. Owned and operated by the A. T. & S. F. Ry. EARN FROM \$55 TO \$165 PER MONTH. Write for catalog. SANTA FE TELEGRAPH SCHOOL Topeka, Kansas

WE BUY JUNK

Old copper, brass, zinc, aluminum, scrap-iron, rubber, bones, rags, bottles, old auto tires, tubes and radiators.

DYAL BROS.

Largest Junk Dealers in Kansas
PHONE 266

Write for Price List.
WE PAY HIGHER PRICES

"Your Flag and My Flag"

"Fling out, fling out, with cheer and shout,
To all the winds, Our Country's Banner;
Be every bar and every star
Displayed in full and glorious manner."

—Cole.



"Long may it wave
O'er the land of the free
and the home of the
brave"

The big demand, the scarcity of good dyes and the high price of cotton have made it hard to secure flags. We have been fortunate enough to secure a few high-grade printed flags 3 feet by 5 feet with canvas heading and brass grommets, colors fast.

**You May Have One of These
Flags If You Act Promptly
HERE IS OUR OFFER**

For only \$1.50 we will enter your subscription or extend your subscription for one year and send you this beautiful flag, postpaid. Price a flag of this size and quality. You will then appreciate our splendid offer.

**Don't Delay—Send Your Order NOW, Before It Is Too Late
FLAG OFFER BLANK**

Name..... R. F. D.....

Postoffice..... State

DESK D, KANSAS FARMER, TOPEKA

CHESTER WHITE HOGS



FOR SALE
Spring Pigs in Pairs and Trios
Not related, from my unde-
feated show herd 1916. Ship
at weaning. Send for prices
and show record. COLEMAN
& CRUM, Danville, Kansas.

O. I. C. SPRING PIGS, BOTH SEXES.
Bred glits.
HARRY W. HAYNES, GRANTVILLE, KAN.

Clinton County Chesters

Booking orders for spring pigs of National
Swine Show blood lines. Fall and spring
pigs at bargain prices.
J. H. McANAW - CAMERON, MISSOURI

HORSES AND MULES.



PERCHERONS—BELGIANS—SHIRES
2, 3, 4 and 5-yr. stallions, ton and
heavier; also yearlings. I can
spare 75 young registered mares
in foal. One of the largest breed-
ing herds in the world.
**FRED CHANDLER, R. 7, Char-
lton, Ia. Above Kansas City.**

Choice Young Belgians, English Shires,
Percherons, also Coach stallions, also mares.
Many first prizes. Long time 6% notes.
Illinois Horse Co., Good Blk., Des Moines, Ia.

Barn Full of Percheron Stallions and Mares.
Twenty-five mature and aged jacks. Priced
to sell. **AL. E. SMITH, Lawrence, Kansas.**

GALLOWAY CATTLE.

GALLOWAY BULLS

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

M. E. FRIZELL, Frizell, Pawnee Co., Kansas

HAMPSHIRE HOGS

HALCYON HERD HAMPSHIRE HOGS
Best breeding, best type. Stock for sale.
GEO. W. ELA, Valley Falls, Kansas

POLLED DURHAM CATTLE.

FOR SALE—A few choice young bulls,
sired by Chief, a son of True Sultan. Priced
to sell.
D. C. VAN NICE - RICHLAND, KANSAS
(On Mo. Pac. Ry., 17 miles S. E. of Topeka.)

AUCTIONEERS.

Jas. T. McCulloch Live Stock Auctioneer. I
make sales anywhere.
Write for date. **CLAY CENTER, KANSAS**

LESTER R. HAMILTON
Live Stock Auctioneer
Write for terms and date. **Clarksdale, Mo.**

Breeders' Directory

RED POLLED CATTLE.
Mahlon Greenmiller, Pomona, Kansas.
ANGUS CATTLE.
D. J. White, Clements, Kan.
JERSEY CATTLE.
J. B. Porter & Son, Mayetta, Kan.
DORSET HORN SHEEP
H. C. LaTourette, Route 2, Oberlin, Man.

SHORTHORN CATTLE.

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

Sunflower Herd of Shorthorns

A few good cows and heifers for sale, also
choice bull calves. Come and see my herd.
A. L. HARRIS - OSAGE CITY, KANSAS

Registered Shorthorn Cattle

Ten Scotch-topped bulls ready for service,
also a few cows and heifers, priced reason-
able. Come and see my herd.
O. W. LONG - MAITLAND, MISSOURI

ALYSDALE HERD OF SCOTCH SHORT- HORNS

Prince Valentine 4th and Clipper Brawith
in service. Orange Blossoms, Butterfys,
Queen of Beautys and Violets. Choice
young stock for sale.
H. H. HOLMES, Route 28, Topeka, Kansas

ABBOTSFORD SHORTHORNS

Sixty breeding cows. A few choice young
bulls for sale.
David Ballantyne & Son, Herington, Kansas

Pearl Herd Shorthorns

Vallant 346162 and Marengo's Pearl 391-
962 in service. Young bulls up to 10 months
old for sale. Reds and roans, in good
thrifty condition and the making of good
useful animals. Inspection invited.

Can ship on Rock Island, Union Pacific or
Santa Fe Railway.
C. W. TAYLOR - ABILENE, KANSAS

AYRSHIRE CATTLE.

SOUTH FARM AYRSHIRES

300 HEAD.
75 Animals Imported from Scotland.
143 cows have qualified for advanced
registry.
Males and females for sale.

SOUTH FARM
WILLOUGHBY - - - - OHIO

**WHEN WRITING TO ADVERTISERS
PLEASE MENTION KANSAS FARMER**



Poultry Show at Free Fair

FROM present indications there will be more chickens than ever at the Topeka Free Fair this year. The poultry building has always been crowded almost to its fullest capacity. Thomas Owen, superintendent of the poultry department, says that he fears the newly created junior department will fairly swamp the poultry section of the fair. While the outlook for entries in the regular classes is fully up to last year, the junior department is meeting with a most enthusiastic response. Mr. Owen, who is an experienced poultryman, makes the following statement regarding this increase in interest in poultry production:

"The poultrymen have raised more chickens this year than ever before, and with the prediction of 75-cent eggs before Thanksgiving, they will be in the millionaire class before long. When war was first declared, poultrymen, like everybody else, were jarred. But they soon got over that and proceeded to raise more chickens than they ever had."

"The American Poultry Association in April called off their annual meeting, which was to have been held in August at Milwaukee, but the officers soon saw their error and are now calling the meeting for September. They had cold feet in April, but the temperature is all right now. The war won't affect our exhibit unless it be to increase it, so put the poultry department down as a foregone success."

The poultry department will be open to entries later than the other stock departments of the fair. Entries may be made until 6 o'clock the evening of September 8, the Saturday before the fair opens.

respond and as poultry at this time is being marketed at an actual loss when care and feed are considered, we would therefore advise the holding of all pullets and caponizing of the cockerels. There is bound to be high prices paid for eggs and we have never yet found more capons than could be sold advantageously.—FRANK COPE.

Many complaints are coming in stating that young chicks are not doing well. From all chicks that have been sent us, we conclude that the greatest cause is lice. Many sick birds have been received that had a serious bowel trouble. In each case it was found that lice were causing the looseness of the bowels as well as the weak emaciated condition. The hot dry weather was ideal for the development of lice and mites. Blue ointment will kill the lice and coal oil and crude carbolic acid or stock dip will get rid of the mites.

We are not inclined to throw any spasm because of the present grain prices. It has rained and the hysteria has passed. Prices will steady down and the chickens will harvest a good crop of late weed seed and be ready for the business of winter egg production. As a rule after a hot dry summer we may look for a long late fall, which greatly helps the poultryman to get his birds in winter quarters in the best of condition.

Scaly leg is a troublesome and loathsome disease, and is contagious. A mixture of kerosene oil, lard and carbolic acid, if rubbed on the legs, will soon cure this malady.

Don't Force the Molt

Laying hens should be allowed to molt naturally. The common idea that if hens are compelled to molt early they will quickly feather out and commence laying in the fall, is erroneous. An early molt is not a sign of early fall production. Usually the late-molting hen is the heavier producer. In fact a lack of feather growth is suggested by G. W. Hervey of the University of Missouri College of Agriculture as one of the points to consider when selecting hens for winter laying.

Very often show birds are forced into a summer molt by a restriction of feed. This is done so that the birds may be in full feather once more for the early show season. This should never be practiced with utility stock. It will cause production to stop and weaken the hens at a time of the year when full strength is needed. It is unwise to change the general character of the feed. The addition of some oil-carrying ingredient, however, such as sunflower seed, will aid in the development of new feathers.

Poultry a Good War Crop

Poultry has been called the crop that never fails. It offers one of the best ways of increasing food production on short notice. Poultry uses feed more economically probably than any other class of farm animals when it is carefully handled. It will produce a pound of meat or eggs on four pounds of grain when protein concentrates are fed. Pullets will begin laying in from six to eight months. Cockerels are ready for market at the age of twelve to sixteen weeks. There is good money in poultry and eggs if the flock is properly managed. Very little capital is required and expensive stock and equipment are unnecessary. Careful management and feeding are more important than expensive equipment.

Poultry Prices

The present market is lower than a year ago on poultry as a result of the very high prices paid for the 1916 crop, a large percentage of which is yet held in cold storage, for the reason that it was impossible to secure refrigerator steamers in which to export the surplus. Further, the European nations have bought but little of our poultry during the past year. The high price of feed and the low price of poultry do not cor-

Oliver the Choice at Fremont



At the National tractor demonstration at Fremont, Oliver tractor plows and other Oliver products were drawn by forty-two different tractors. The same reason that caused sixty-five per cent of the tractor manufacturers not making plows to pull Oliver products in order to secure the best results from their tractors is the reason why you should insist upon an Oliver implement for use with your tractor.

Oliver tractor plows are furnished with two, three or four bottoms for light tractor use; in larger sizes for heavy tractors.

The Oliver tractor disk harrow and roller pulverizer are especially adapted for tractor hitch.

Tell your plowing needs to the nearest Oliver dealer or write us for information on the plow best adapted to meet them.

Oliver Chilled Plow Works

Plowmakers for the World

South Bend, Ind.

POLAND CHINAS

POLAND CHINAS.



Faulkner's Famous Spotted Polands

The world's greatest pork hog are raised exclusively on

HIGHVIEW BREEDING FARMS

The largest registered herd of old, original, big-boned, spotted Polands on EARTH. Spring Pigs Now Ready to Ship, Pairs and Trice No Kin. H. L. FAULKNER - BOX D - JAMESPORT, MISSOURI

ELKMORE FARM POLAND CHINAS

HOME OF THE GRAND CHAMPION, CALDWELL'S BIG BOB. See show herd at the Topeka Free Fair. Annual bred sow sale February 19, 1918. FRED B. CALDWELL, HOWARD, KAN.

Spotted Poland Chinas

Thirty spring boars, thirty spring gilts. Sired by Billie Sunday, Cainville Giant and Perfect Judge. Sows by Brandywine, Budwaiser, Old Clipper and Spotted Giant. Priced to sell. J. O. RILEY & SON - CAINSVILLE, MO.

TOWNVIEW HERD BOARS

Ten big stretchy fellows farrowed in June. Every one a good one. Two choice fall yearlings. I ship my boars and gilts any place on approval. They make good. Prices are right. CHAS. E. GREENE, Peabody, Kan.

OLD ORIGINAL SPOTTED POLANDS

Stock of all ages, sired by seven of the very best boars of the East and West. Priced right. Write your wants to the CEDAR ROW STOCK FARM. A. S. Alexander, Prop. Burlington, Kansas

OLD ORIGINAL SPOTTED POLANDS

Choice March and April pigs of both sexes. H. A. MATTOX, Route 2, Burlington, Kan.

Langford's Spotted Polands.—Last call for early spring boars. Yours for good hogs.—T. T. Langford & Sons, Jamesport, Missouri.

POLAND CHINA HOGS 150 HEAD IN HERD

Breeding stock for sale. Immune. Satisfaction guaranteed. Come and see me. V. O. JOHNSON - AULNE, KANSAS

SPOTTED POLAND BOARS

FOR SALE—Five February boars sired by Spotted Lad and out of Ennis Queen. They are real herd headers, priced at \$40. First check gets choice. C. A. GOOCH - ORRICK, MISSOURI

FAIRVIEW POLAND CHINAS.

Heavy-boned March pigs, either sex. Eighty to select from. Prices reasonable. Write us your wants. P. L. WARE & SON - PAOLA, KANSAS

POLAND CHINA HOGS

Twenty-five spring boars ready for service, 25 spring gilts, and a few bred sows. All immuned. Priced to sell. Come and see my herd. O. W. LONG - MAITLAND, MISSOURI

JERSEY CATTLE.

120 Jersey Cows and Heifers

Pure-bred and high grade. Forty bred yearlings, superior individuals, all from profitable dams, now for sale. J. W. BERRY & SON, Jewell City, Kansas

REDHURST JERSEYS

Grandsons of Golden Jolly and Noble of Oaklands for sale. Also a few fancy cows and heifers of same breeding. Write. REDMAN & SON - TIPTON, MISSOURI

Registered Jersey Bulls, butter-bred, from high producing cows. Photo furnished. Maxwell's Jersey Dairy, Route 2, Topeka, Kan.

CATALOGS ARE READY

For the following Jersey sales to be held under my management: Lochrie & McCoy, Carl Junction, Mo., September 27. Oklahoma Breeders' Sale, Oklahoma, Okla., September 29. Redmon & Son, Tipton, Mo., October 1. Geo. W. Hagan, Lee's Summit, Mo., Oct. 31. Write today and ask to be placed on my mailing list. Address B. C. Settles, Sales Manager, Palmyra, Mo.

HEREFORD CATTLE.

HEREFORD CATTLE

Want to Sell Forty Cows and Heifers. Cows have calves at foot and are rebred. Twenty-five bulls of breeding age, real herd headers. Send for my annual sale catalog, October 6, 1917. J. O. Southard, Comiskey, Kan.

GUERNSEY CATTLE.

GUERNSEY BULLS. Buy a grandson of Imp. May Royal, whose dams are granddaughters of Imp. Masher Sequel. One to seven months old. ADAMS FARM, Gashland, Mo., 12 miles from K. C.

FARM AND HERD.

F. H. Rock, owner of Rock's Dairy, Wichita, Kansas, owns one of the great producing herds of Holsteins in Kansas. His herd from the foundation up has been built for production. All breeding stock in the herd is backed by a long line of records that insure profitable dairy cows and it is one of the strongest dairy herds in Kansas at this time. A feature of the herd is the choice lot of young stock and cows all with A. R. O. backing.

F. F. Wood, of Wamego, Kansas, reports his herd of pure-bred Durocs doing well. Mr. Wood has succeeded in building up one of the good Duroc herds in Kansas. He has the popular blood lines and the big, smooth, easy-feeding type that make the profitable market hog. A feature of his herd at this time is the choice lot of young stock of both sexes.

P. L. Ware & Son, of Paola, Kansas, owners of a choice herd of big-type Poland Chinas, report their spring pigs growing out fine. They have about eighty head of March pigs sired by such boars as Miami Chief, Ware's Blue Valley, and Frazier's Timm, and out of dams by Major B. Hadley, Wedd's Long King, Master Orphan, Big Logan Ex., McGrath's Big Jumbo, Wonder King, and Wedd's Expansion.

C. W. Taylor, of Abilene, Kansas, is one of the successful breeders of Shorthorn cattle in Kansas. This herd is larger than the average, numbering eighty-five head, and has been established about twenty-five years. Some of the best Scotch bulls known have been used in the herd. Mr. Taylor has sold cattle in several states to start herds. A feature of the herd at this time is a choice lot of young bulls that are herd bull prospects.

The Illinois Horse Company, of Des Moines, Iowa, report their fine lot of young stallions doing well. They also report a growing demand for choice stallions and a number of good ones from this herd have recently gone to good herds and leading breeding farms.

The Iowa Holstein Breeders' Association will hold a public sale of Holsteins at Waterloo, Iowa, October 4. A very choice offering from the best herds in Iowa will be catalogued for this sale. The offering will represent the best in Holstein breeding and individuality and every animal that will go in this sale will be carefully inspected.

J. O. Riley & Son, of Cainsville, Missouri, are owners of one of the noted herds of old original big-boned Spotted Polands now assembled. Their herd is one that is drawn upon heavily for herd material and a number of the best herds in Missouri and neighboring states were started with foundation stock from this herd. They have all the noted blood lines of the breed and have the type with size and quality. A feature of their herd at this time is the choice lot of young stock of both sexes.

David Ballantyne & Sons, of Herington, Kansas, are among the oldest established breeders of Shorthorn cattle in Kansas. Mr. Ballantyne has maintained this herd on the same farm for more than forty years. The herd now numbers sixty breeding cows, descendants from some of the best Scotch bulls known in the West. Choice Orange by Victor Orange, assisted by Roan Model by Victor Model, now heads the herd. Bulls that have been used in this herd the past few years were such well known bulls as Marshall Abbottsburn by Young Abbottsburn, Goldfinch 115705 out of a Linwood Golden Drop cow, one of the best cows in the late Col. Harris' herd. Collynie's Pride by Imported Collynie was also used for a number of years and this bull left a number of valuable cows that are now in the herd. Dexter by Imported Scottish Chief proved a valuable sire and left a string of good breeding cows in the herd. A feature of the herd at this time is a splendid lot of young bulls that are coming along in good condition.

J. A. Porterfield, of Jamesport, Missouri, is one of the successful breeders of Duroc hogs. Mr. Porterfield is not only a constructive breeder but a feeder, and has built up a herd that has few equals for size and quality combined. The stock sent out from this herd always makes good for the purchaser, as they are grown in a way that insures them valuable breeding stock. A feature of the herd at this time is twenty-five extra large growthy spring boars and gilts, the kind that make good material.

Robert H. Hazlett, of El Dorado, Kansas, will exhibit at the leading state fairs a splendid string of Hereford cattle. Mr. Hazlett has for years attended a number of state fairs and has always taken pride in showing only cattle of his own breeding. He has the means to go out and buy the best cattle that can be found, but his motto is, "Produce them on the Hazford Place." The great bull, Bocaldo 6th, grand champion at all the state fairs last year, is a product of the Hazford herd.

The Deming Ranch Poland China show herd will be one of the full show herds at the big fairs this fall. This is one of the largest Poland China herds in Kansas. The herd boars now used are Big Bob Jumbo by old Big Bob out of a Jumbo sow; King

MODERN HEREFORDS HAZFORD PLACE

Home of the Grand Champion BOCALDO 6TH, assisted by CALDO 2D, PUBLICAN 4TH AND BEAU BALTIMORE.

All our show cattle our own breeding. Inspection of farm and breeding herd invited. A few choice young bulls reserved to head high-class pure-bred herds now ready for inspection and sale. William Condell, Herdsman. ROBT. H. HAZLETT, EL DORADO, KANSAS

HOLSTEIN CATTLE.

HOLSTEIN CATTLE.

CLYDE GIROD, At the Farm HOLSTEIN FRIESIAN FARM, TOWANDA, KANSAS

BREEDERS OF PURE-BRED HOLSTEINS

We offer special attractions in choice young bulls, ready for service, both from tested and untested dams, at prices within reason. Let us furnish you a bull and improve your herd.

IT WILL PAY YOU TO SEE OUR OFFERING

of high grade young cows and heifers, all springers, in calf to pure-bred sires, large developed females, good udders, nicely marked and the right dairy type at prices that challenge comparison for Holsteins. A visit to our farm will convince you. Keep us in mind before purchasing. Wire, write or phone us.

GIROD & ROBISON - TOWANDA, KANSAS

MAURER'S HOLSTEIN FARM

Why not buy pure-breds when you can get them at near-grade prices? WE HAVE THEM from three-months-old heifer and bull calves to matured cows, all with exceptionally high class breeding. Finely marked and good individuals. Also grade cows and heifers. Write for description and prices or, still better, call at farm and inspect them. T. R. MAURER & COMPANY - EMPORIA, KANSAS



HOLSTEINS AND GUERNSEYS

High grade cows and heifers, carloads or less. Calves crated and shipped anywhere, price \$20.

F. W. WALKER

Way Side Stock Farm - Whitewater, Wis.

DUROC JERSEYS.

15 Duroc Spring Boars

Sired by Illustrater O'Rion 3d and Fancy Victor and out of my best herd sows. They are real herd prospects, selected from 91 pigs raised. Write today if you want a good spring boar.

John W. Pettford

Route 1 Saffordville, Kansas

DEMING RANCH QUALITY

BIG-TYPE POLAND CHINA HOGS.

See our show herd at Topeka Free Fair, Kansas State Fair at Hutchinson, and Oklahoma City. Fifty spring boars for sale. Six hundred head in herd to select from.

H. O. Sheldon, Herd Manager OSWEGO, KANSAS.

PORTERFIELD DUROC JERSEY HOGS

My entire herd, bred sows, spring boars and gilts. All will be sold. Write me your wants. I guarantee satisfaction or refund your money. Don't wait—write today.

J. A. PORTERFIELD, Jamesport, Missouri.

JONES SELLS ON APPROVAL

February, March and April Durocs, pairs and trios and herds unrelated. First class pigs at reasonable prices. W. W. JONES, CLAY CENTER, KANSAS

McBRIDE'S DUROCS

Four-months-old boars for sale. Good ones. Tops, \$25, if taken at once. W. T. McBRIDE - PARKER, KANSAS

WOOD'S DUROCS

Boars, sows and gilts. Best lines of breeding. THE WOOD DUROC FARM F. F. Wood Wamego, Kansas

LONE TREE DUROC FARM

Herd Boar Graduate Prince by Graduate Col. Sows, Ohio Chief, Tatarax, Model Top and Good Enough. Again King blood lines. Spring pigs, two for \$35.00, three for \$45.00; not related.

GEO. J. BURKE, LITTLE RIVER, KANSAS

IMMUNED DUROCS

With size and bone. Bred sows and males a specialty. 150 early pigs; pairs and trios, no kin. All immuned. Satisfaction guaranteed. C. G. DITMARS & Co., Turney, Mo.

What's Wanted by Long What's Wanted: Big Bob Orange, a litter brother to Big Jumbo, is also used in the herd; Big Logan by Big Tom, the grand champion of Dakota and Minnesota state fairs last year; King Receiver by Old Receiver will also be used in the herd. A feature of this great herd at this time is 300 extra good spring pigs sired by their bunch of herd boars.

O. W. Long, of Maitland, Missouri, is making a great success with his Poland China hogs and Shorthorn cattle. Mr. Long has raised sixty-five spring pigs and they have been well grown out, all immuned, and are the real big-type Poland Chinas. Mr. Long has one of the ideal stock farms in North Missouri and he has made very satisfactory profits from Poland China hogs and Shorthorn cattle, and a feature of the herd at this time is ten Scotch-topped bulls and fifteen choice cows that are bred.

John W. Pettford, of Saffordville, Kansas, has one of the best bred herds of Duroc Jersey hogs in Kansas. The head of this herd is Illustrater and O'Rion 3d, a combination of the Illustrater and O'Rion blood mated with sows by Defender, Ohio Chief, Top Notcher and other very popular breeding, such as Belle of Iowa, John's Combination, Grand Lady 46th by Grand Model. This sow raised a litter by Great Wonder, the grand champion at the 1916 Iowa State Fair, and was second at the Omaha Swine Show. Mr. Pettford raised ninety-one spring pigs and they are growing out fine.

FOR SALE

Registered Holstein Heifer Calves, 3 to 5 months old. Bull Calves, 1 to 2 years old. A. R. O. backing. Also milk cows. BOCK'S DAIRY, Route 9, Wichita, Kansas.

Braeburn Holsteins Bull Calves by Walker Copia Champion, whose dam and sire's dam each held world's records in their day. H. B. COWLES, 608 Kan. Av., Topeka, Kan.

GOLDEN BELT HOLSTEIN HERD

Herd headed by Sir Korndyke Bess Hello No. 165946, the long distance sire. His dam, grand dam and dam's two sisters average better than 1,200 pounds butter in one year. Young bulls of serviceable age for sale.

W. E. BENTLEY, MANHATTAN, KANSAS

50 HOLSTEIN HEIFERS

We offer for sale fifty of the best high grade Holstein heifers in Wisconsin. All bred to a 29-pound bull whose dam is sister to the sire of the world's champion cow, Duchess Skylark Ormsby. Also a few choice fall cows.

CLOVER VALLEY HOLSTEIN FARM Whitewater - Wisconsin

HOLSTEIN CALVES

Very high grade heifer calves, five weeks old, nicely marked, \$25 each delivered to your station. We can supply you with registered or high grade Holsteins, any age or number, at reasonable prices. Clover Valley Holstein Farm, Whitewater, Wisconsin.

Segrist & Stephenson, Holton, Kan. Breeders exclusively of pure-bred prize-winning record-breaking Holsteins. Correspondence solicited.

Butter Bred Holsteins

Buy your next bull calf from a herd that won the butter test over all breeds.

J. P. MAST - SCRANTON, KANSAS

High Grade Holstein Calves 12 heifers bred, 4 to 6 weeks old, beautifully marked, \$20 each. Safe delivery and satisfaction guaranteed.

FERNWOOD FARMS, WAUWATOSA, WISCONSIN

Nicely marked high-grade Holstein calves, price reasonable. O. Canuteson, Route 4, Delavan, Wisconsin.

SHEEP.

A LIFETIME EXPERIENCE proves the Rambouillet the best sheep for Kansas. Stock for sale. E. D. KING, Burlington, Kansas.

DOYLE PARK SHROPSHIRE

Sixty Registered Shropshires—Thirty ewes and ewe lambs, thirty rams and ram lambs. Lambs sired by our undefeated ram, Ohio and Michigan, 1916. HOMAN & SONS - PEABODY, KANSAS

FIVE EXTRA GOOD HAMPSHIRE RAM LAMBS

Priced right if taken in the next two weeks. L. M. SHIVES, ROUTE 1, IUKA, KANSAS



RAMS Registered Shropshires, bred for WEIGHT and WOOL. Our aged ram was champion 1916 Iowa State Fair. Imported Buttar rams. Also 100 ewes. C. W. Chandler, Kellerton, Ia. Above Kansas City.

ERWIN'S SHROPSHIRE

Registered Shropshire Rams and registered Jacks and Jennets for sale. B. F. ERWIN - FAIRFAX, MO.

FOR SALE—Ten registered Shropshire ewes, fifteen registered Shropshire buck lambs, ten pure-bred unregistered Shropshire yearling bucks. K. HAGUE, Route 6, NEWTON, KANSAS.

REGISTERED SHROPSHIRE RAMS

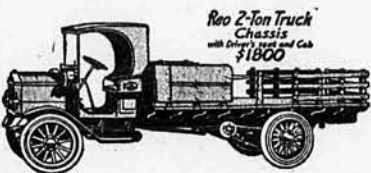
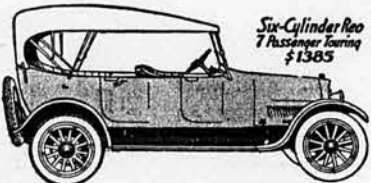
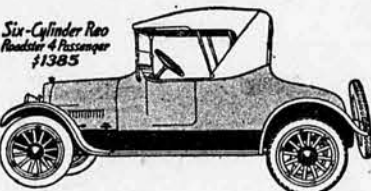
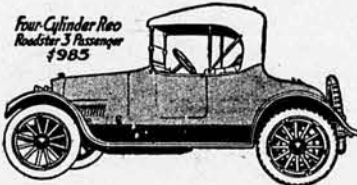
Ten extra large boned yearling Shropshire rams by imported sire, priced to sell. E. E. LAUGHLIN Bates County, Rich Hill, Missouri

WHEN WRITING TO ADVERTISERS PLEASE MENTION KANSAS FARMER

REO

The
GOLD
STANDARD
OF VALUES

Reo Quality is
Uniform in all Reo Models



All PRICES are
F.O.B. LANSING
and subject to
increase without
notice

AND REO QUALITY at Reo Prices and backed by the Reo guarantee, constitutes "The Gold Standard of Values"—each model in its class.

WE SHOW HERE SIX Reo Models, comprising Fours in Touring and Roadster types; Sixes in Touring and Roadster; and the two Reo Commercial Vehicles—the $\frac{3}{4}$ -Ton "Speed Wagon" and 2-Ton "Heavy Duty" Truck.

IN THIS ADVERTISEMENT we have space only for a brief paragraph pertaining to each Model—lest you forget the line is so complete that you can find the car you desire, in the type you prefer, and in a Reo.

REO THE FIFTH, "The Incomparable Four," is America's most famous automobile. Standard in practically its present form for now eight seasons—"going on nine." At its present price, \$985, this car is verily "A gold dollar for ninety cents."

TO REO THE FIFTH more than to any other, is due the movement that is now so apparent—the return to the Four-cylinder type in all cars listing at less than \$1000.

THE FOUR IS THE ULTIMATE type in that price class. Economy of upkeep, as demonstrated by this Reo model, has done much to prove the superiority and ruggedness and economy of the Four in that class of car where the buyer must count the cost and yet demands the service and the roominess.

THE FOUR ROADSTER is the handsomest model of its type you'll see on the road—at any price. And, for the present, you can get it for \$985 and freight from the factory.

OF THE SIX ROADSTER the same is true, plus the extra luxury it affords the owner at the extra cost—\$1385 f. o. b. Lansing.

THESE TWO ROADSTERS are of similar design and identical construction, and are conceded to be the handsomest cars of the type—price aside.

FOR THE FAMILY that needs a car of greater capacity than five and yet of moderate upkeep, the Reo Six Touring Car—also \$1385 for the present—knows no equal.

NO MATTER WHAT YOU PAY you cannot obtain a 7-passenger car of better design; one that represents sounder engineering; more experience; better materials and workmanship than enter into the making of this Reo Six.

THAT'S A BROAD CLAIM, but we make it unhesitatingly—and you know that the word of Reo passes at par everywhere.

OF THE REO MOTOR TRUCKS the same is true. The $\frac{3}{4}$ -Ton "Hurry Up" Wagon at \$1,125 (chassis \$1050); and the famous 2-Ton Reo "Heavy Duty" Truck at \$1800—each is the leader in its own class—demand greatly in excess of factory capacity.

BUT THAT IS TRUE of all Reo models, without exception.

THAT'S WHY WE SAY "Reo Quality is Uniform in all Reo Models," the uniform over demand for all Reo models justifies the statement.

ORDER NOW if you'd have your Reo soon. Present prices obtain only from day to day, and are subject to increase without notice.

Reo Motor Car Company

Lansing, Michigan