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"Open Market for Michigan Beans"

A LARGE number of bean growers, bean jobbers, elevator men, and others interested in the great Michigan bean industry met at the Bancroft Hotel in Saginaw on Tuesday, April 23.

The large convention hall in the Bancroft Hotel was filled to capacity when the meeting was called at 2:30 p. m. The meeting was called to order by Mr. M. J. Hart, who briefly spoke of the object of the meeting which was called for the purpose of discussing what action should be taken in the interest of the Michigan bean industry to counteract the effect of the campaign being pushed by the bean section of the Food Administration to introduce and stimulate the consumption of western pinto beans by appealing to the patriotic instincts of consumers.

Only a Clear Right of Way is Asked.

Following Mr. Hart's introductory address Mr. Nathan F. Simpson was elected chairman of the meeting and Mr. Fred Cross secretary. In brief but well chosen remarks Mr. Simpson discussed the situation which led up to the meeting and the attitude in which bean growers and dealers of Michigan should properly approach the question. He emphasized the fact that all that Michigan growers or dealers could ask for Michigan beans was a clear right of way in the market on even terms with the product of other sections of the country, and that if possible this should be secured without causing friction which would reflect upon future production.

The meeting was attended by Governor Sleeper, who made a short address in which he offered to accompany any delegation which might be sent to Washington to take this question up with the Food Administration, and emphasized his belief that the government of the United States would not knowingly discriminate against an important product of Michigan.

Two Views of Price Fixing.

Mr. Almendinger, a former president and secretary of the Michigan Bean Jobbers' Association spoke briefly urging conciliatory rather than drastic action by the convention. He expressed the opinion that the present situation was in part due to previous efforts to force the price on Michigan beans to a very high figure, thus stimulating production in other sections of the country.

In response to this view of attempts at price fixing by the Michigan Bean Growers' Association, Mr. A. B. Cook, president of that organization disclaimed attempts at absolute price fixing, and emphasized the fact that the action of Michigan bean growers during the past three years in designating a price which would cover cost of production plus a reasonable profit, based on an accurate knowledge of the condition of the crop at harvesting time and the conditions under which it was produced, is in accord with the government policy toward other industries in

Slogan of Allied Michigan Bean Interests at Saginaw Meeting

which the average cost of production plus a reasonable profit has been allowed.

Effect of the Patriotic Appeal.

Mr. Cook had an interesting exhibit composed of two jars of cooked beans, Michigan white beans and western pinto beans, which were passed around among those present for examination. As illustrating the method by which the consumption of pinto beans is being encouraged Mr. Cook stated that a local merchant induced his wife to buy some of these pinto beans because it was the patriotic thing to do, which fact was a striking illustration of the power of such a campaign. It even brought pinto beans to the table of the president of the Michigan Bean Growers' Association.

With regard to the steps being taken

to force pinto beans on the markets of the country for domestic consumption, communications were read showing that special efforts were being made along this line in Indianapolis, which was taken as a typical example of the large bean distributing centers. Mr. Llewelyn spoke of the proposition from another angle, intimating that united western influence might be in a measure responsible for the pushing of the pinto beans, and advocated a closer affiliation of producing, marketing and distributing interests in this state, to the end that such influences might be successfully combated.

Mr. W. I. Biles and Mr. E. L. Wellman, large bean handlers, also spoke briefly, expressing the same opinion which had been advanced by other speakers regarding action which should

be taken by the convention and urged that a strong committee be sent to Washington to make proper representations to the Food Administration regarding the need of an unrestricted outlet for Michigan beans at the present time in order to aid growers in moving the present crop and stimulate future production.

Future Contracts Suggested.

State Market Director McBride reviewed the history of government bean purchases down to the present time, pausing to comment on the fact that California white beans were taken at eleven and one-fourth cents per pound on government orders, and pinto beans at eight cents. He suggested that the committee appointed might well urge the Food Administration to take a portion of the Michigan crop at the present time, and to stabilize future markets and production by contracts for next year at a price sufficiently in advance of the pinto bean price to represent the usual market differential, it being stated that contracts are now being offered for pinto beans at eight cents per pound for this year's crop.

Mr. M. J. Hart briefly discussed this suggestion and moved that a committee composed of Chairman Simpson and four other members to be appointed by him representing the allied bean interests of the state be delegated by this convention to take the proposition up with the Federal Food Administration at Washington, which motion was unanimously adopted.

Growers Are Patriotic.

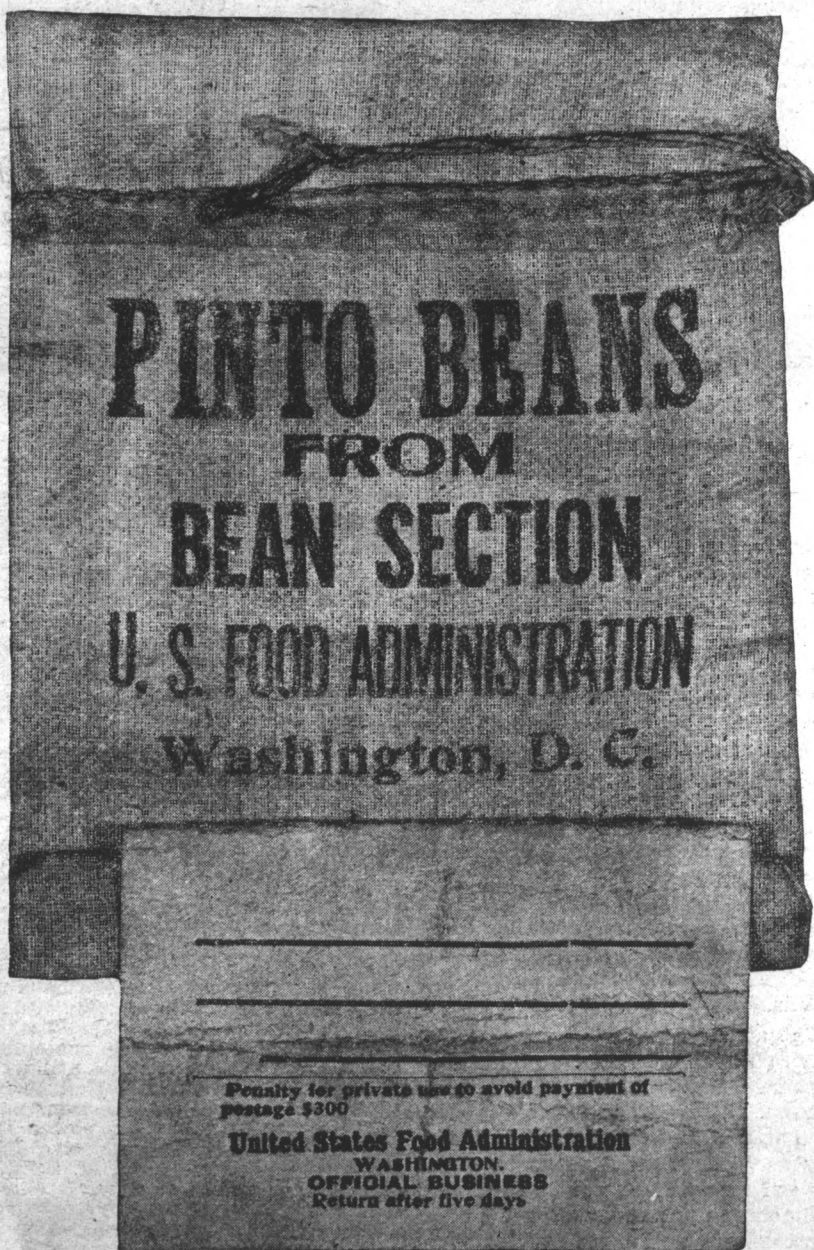
Pending the consideration of these appointments remarks were asked for from representative growers. Mr. Cook, president of the growers' association first called out Mr. King, of Montcalm county, who received an ovation from the convention for his patriotic statements declaring that while conditions had been bad and the crop an unprofitable one this year, the farmers of Montcalm county, and he believed of Michigan, would plant beans to feed the boys to help win the war, whether they made a profit or not.

Mr. W. H. Keddy, of Genessee county, believed strongly in the soundness of the cost plus profit theory, and believed that farmers should follow this idea as a business proposition, whatever their action from a patriotic standpoint might be. Mr. Fred Gosen, of Saginaw county, also spoke in patriotic vein, stating that he believed the farmers of his county and the state would do all in their power in the matter of food production this year. Mr. Slichter, of Gladwin county, approached the problem from the standpoint of the farmers of more newly developed sections of the state.

The Bankers' Attitude.

Mr. Rankin, of Huron county, spoke on the subject from the standpoint of a banker whose duty it is to finance the operations of the bean jobber and

(Continued on next page.)



Food Conservation Makes the Pinto a Temporary Rival of the Navy Bean.

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DETROIT, APRIL 27, 1918



CURRENT COMMENT.

The Dairy Outlook. Dairy men everywhere have been much concerned regarding the future outlook for their business during the past year. The general situation has been very greatly benefited by the demand for condensed milk for army use and for export to foreign countries. This export business has been greatly curtailed in recent months by the lack of cargo space and there is now a large accumulation of condensed milk in tins stored in warehouses in this country. This accumulated surplus, together with the limited cargo space available for its shipment in the near future seems very likely to limit the amount of whole milk which can be manufactured into condensed milk products during future months. On this account the outlook for dairying is a source of growing concern on the part of many who are engaged in the business.

As is ever the case under similar conditions, there are many dairymen who can see no silver lining to the cloud, and who feel that the only solution is a reduction in the dairy cow population of the country. Before taking a radical step of this kind, however, every dairyman should pause to consider the fact that when the war is finally over there will be a very great demand for dairy products of all kinds for European consumption. The only difficulty at the present time is the lack of transportation facilities. The demand is in evidence, and just as soon as more ships are available, any surplus of dairy products now in reserve will be quickly exhausted.

By keeping their dairy herds intact and looking for a better solution of the present problem, the dairymen of the country will be pursuing the wise course. Acting independently and alone they can do little toward the solution of this problem. Acting together through an effective organization they will be able to find a better solution for present problems than the sacrifice of the dairy cows which will be a valuable asset when normal conditions are again restored. The success which has been attained by organized dairymen in this state through the

Michigan Milk Producers' Association thoroughly demonstrates the value of organized effort. Through the effective work of this organization the producers of market milk have been able to secure a living price for their product in many sections of the country. The same organization has added many thousands of dollars to the income of dairymen who have contributed raw material for the making of condensed milk during the past year.

Every milk producer in Michigan should affiliate himself with this organization at once. This would be an inspiration to the dairymen of other states to take like action, particularly where the nucleus of such an organization already exists, as is the case in several states. Working in conjunction, these organizations could do much toward the solution of the problems now confronting the dairy industry. Some effective work is already being done along this line, as will be noted by a careful reading of the milk news from Field Secretary Reed, of the Michigan Milk Producers' Association which is published in another column. Disposing of valuable dairy cows as a solution for the temporary difficulties now confronting the dairy industry seems like killing the proverbial goose that laid the golden egg, in view of the future prospects for profitable dairying after the war has been won.

Price Regulation. The proposal to advance the price for wheat grown in 1918 above the price fixed by the President and announced through the Food Administration which has been under consideration in congress for some weeks, has failed of passage by that body. Rumors are now emanating from Washington that a more comprehensive plan of price regulation, including necessary commodities other than food stuffs is under consideration by the government.

In the meantime there remains a wide difference of opinion among thinking people of all classes regarding the expediency of price regulation, even in the present war emergency. Many people believe that a disturbance of the natural economic balance by fixing prices on even the most vital necessities is not only an injustice to producers, but as well a menace to a future adequate supply of such necessities. Others believe just as strongly that the price fixing program should be extended to practically all necessities, including essential factors of production.

The great economic difficulty encountered in any program of price fixing is the factor of labor. The labor problem was a serious one for farmers even before the outbreak of the war, and is certain to be increasingly serious during the war's duration. The withdrawal of millions of men from industrial occupations for military duty is certain to aggravate an already serious labor problem in other industries. Labor difficulties have seriously hampered war work, and it has been necessary, or at least has been deemed expedient to advance the pay of workmen in almost every war industry, not only once but repeatedly to even approach the schedule of production which had been laid out in these various departments of war work. Price regulation of commodities will be found a difficult proposition under these conditions.

The apparent intent of price regulation so far as it has been undertaken in this country has been increased production. Experience seems to teach us that conditions may change so rapidly as to cause the means to defeat the end for which it was devised. Experiments in price regulation for other purposes are still more problematical in their outcome. Control of the channels of distribution would seem to promise greater advantages in the pres-

ent emergency, although such control has not proven wholly satisfactory in practice.

OPEN MARKET FOR MICHIGAN BEANS.

(Continued from first page).

in many cases of the bean grower. He expressed confidence in the ability of Michigan growers and dealers to cope with the situation so far as natural influences were concerned, but stated that if a further handicap was placed upon them, such a factor would necessarily have to be taken into consideration by bankers in extending credit. Mr. John I. Gibson, secretary of the Western Michigan Development Bureau, talked briefly in his usual happy style, and emphasized in the most positive terms that the only thing worth living for under present conditions was to lick the Germans.

The Personnel of the Delegation.

At this time Chairman Simpson announced the members of the committee to represent various allied bean interests as follows: W. I. Biles, of Saginaw, representing the bean jobbers, with M. J. Hart as alternate; Christian Breisch, of Lansing, representing the elevator men; Frank Gerber, of Fremont, representing the canners, and James B. Crawford, of Ithaca, representing the bankers. These gentlemen, together with Chairman Simpson, Governor Sleeper, I. R. Waterbury, previously designated by the State Board of Agriculture, and others invited by the chairman, including President Cook of the Bean Growers' Association, and prominent bean dealers, will proceed to Washington and secure a conference with Food Administrator Hoover at the earliest possible date, with a view of presenting to the Food Administration all the facts relating to the Michigan bean industry, and particularly to the effect of the pinto bean campaign on the industry for the consideration of the Food Administration.

Members of this committee as well as growers and dealers generally are confident that when this proposition is thus presented, some action will be taken by the Food Administration to relieve a situation which threatens to seriously affect next year's production in this state, as well as the free and unrestricted marketing of the present crop on an even basis with the product of other sections of the country in the open market.

Conservation vs. Production.

As the chairman well said, the course being pursued may be well calculated to conserve the present bean crop, since the trade accustomed to the handling of white beans will not purchase pinto beans freely with the knowledge that their trade does not want them, neither will they purchase navy beans freely in the face of a patriotic appeal of this kind. While food conservation makes the saving of the entire bean crop necessary, this result should, if possible, be secured without hardship to the bean industry of any section.

HAPPENINGS OF THE WEEK.

Wednesday, April 17.

Germans are successful in capturing Wytschaete, Wulverghen and Bailleul, important positions near Ypres. Included in their successes is also a portion of Messines Ridge. British hold out before Merville and the French put down raiding parties before Amiens, while the Americans and Germans are contending for positions near St. Mihiel, southeast of Verdun.—Turkish and Bulgarian forces are contending over claims to territory lost to Bulgaria during the Balkan war six years ago.—British House of Commons passes third reading of man power bill. Government is pledged to give Irish home rule at once.—Chas. M. Schwab, steel maker and shipbuilder is chosen director general of the United States emergency fleet corporation.—Abattoir at Union Stock Yards, Toronto, Ont., burns, entailing a loss of \$750,000.

Thursday, April 18.

English yield Poelcapelle and Lange-

marck to the northwest of Ypres to the Germans.—Belgians force Germans to retire on extreme northern end of western front, and 600 prisoners are taken.—A tremendous artillery duel rages along the entire northern front.—British U-boat loss for the week is fifteen boats, eleven being over 1600 tons.—English House of Lords pass second reading of man power bill now before that body.—Liberty Loan campaign goes on with many districts far over-subscribing their quotas. Detroit's over-subscription is estimated at \$15,000,000, making her total purchase over \$52,000,000.—Secretary of War Baker states that our military power must be immediately increased to 3,000,000 and ultimately to 5,000,000.—Eric Canal is seized by Director General McAdoo, for the purpose of relieving railway traffic between the great lakes and New York City.

Friday, April 19.

French troops come to the assistance of the English and the Allied line holds everywhere.—Germans make extraordinary violent attacks between Givenchy and Robecq without results.—The French carry positions before Amiens.—Berlin admits counter attack halts forward movement.—British war cabinet has a shake-up in which Viscount Milner becomes war secretary and J. A. Chamberlain member of the war cabinet.—King George signs the man power bill.—Irish leaders unite to resist conscription.—Central powers decide to dissolve the parliament of Ukraine and establish an Austro-German government.—A new scale of wages for civilian workers in Atlantic coast navy yards is announced for May 1.

Saturday, April 20.

Germans fail to make additional advances with the Allied line holding firm at every point on the western front.—Italian troops arrive in France.—Allies predict a new offensive by Germans.—French losses during four years are announced as 1,300,000 men killed and almost as many wounded or prisoners.—Officers predict that the U-boat peril will be ended by June.—General Pershing reports that twenty-two United States engineers are killed in battle.—Schwab secures preference in steel production for ship building purposes.—Liberty Loan sales are reported beyond the billion dollar mark.

Sunday, April 21.

Allied positions in Flanders are materially improved by successful attacks northwest of Bethune by the French and near Givenchy by the British. Germans make a strong attack northwest of Toul, but after furious hand to hand fighting are obliged to retire before the American troops.—Experts believe that the German drive has been stopped both on the French front at Amiens and also in Flanders.—Two American ships are reported lost in war zone on which eighty-five persons perished.—Irish members of British Commons adopt resolutions to remain in Ireland to fight the draft measure.—A foot of snow falls in northern Michigan.—Philadelphia is put under United States police control.

Monday, April 22.

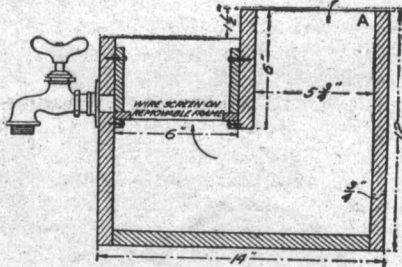
American soldiers are successful in ejecting Germans from the village of Seicheprey, which was recently reported taken from the Americans. Pershing's men also defeat the enemy's efforts to separate them from the French farther to the west.—British forces drive the Germans from Robecq trenches.—German troops fail in an effort to break through the British lines northeast of Ypres.—Japan turns over sixty-six ships for use of the United States government.—British and German light naval forces clash east of Heligoland and the latter retire behind mine fields.—Civil war is reported in Russia, with the Soviet troops opposed by an army under General Korniloff.—Earthquakes shake southern California coats towns, entailing a property loss of \$500,000.

Tuesday, April 23.

Events along the battle line in France and Belgium portend new German offensive. Violent artillery efforts have been in progress along practically the entire western front for nearly two days. Infantry attacks have been few however, which makes it difficult to fortell where the next drive will occur.—Baron Richtofen, famous German aviator who has achieved eighty aro victories, is shot down on the Somme front.—Guatemala breaks diplomatic relations with Germany.—American casualty list contains seventy-one names.—Canada is planning to raise \$500,000,000 additional war revenue, this coming year.—Large Mexican military forces are reported near the United States border.—Norway will place 500,000 tons of shipping at the disposal of American interests.—Additional earthquake shocks shake southern California.

Practical Suggestions

After the lime-sulphur has been made it should be strained before storage in order to remove the coarser undissolved particles. Any kind of a strainer having either brass or tinned iron wire (never copper), thirty to fifty meshes to the inch may be used. With the usual type of strainer, however, the sediment will clog the wire mesh more or less and thereby will prevent the rapid flow of the solution through the screen. A strainer design-



ed to overcome the clogging of the screen may be made upon the principle of the model shown in the illustration. With this type of strainer the material is poured in at A and is strained upward through the screen. The coarse particles settle to the bottom of the strainer, instead of lodging on the screen as in the ordinary type of strainer.

RAT PROOF CORNCRIB.

The common practice of setting corncribs on posts with inverted pans at the top often fails to exclude rats, because the posts are not high enough to place the lower cracks of the structure beyond reach of the animals. As rats are excellent jumpers, the posts should be tall enough to prevent the animals from obtaining a foothold at any place within three feet of the ground. A crib built in this way, however, is not very satisfactory.

For a rat-proof crib a well-drained site should be chosen. The outer walls laid in cement, should be sunk about twenty inches into the ground. The

this belt of sheet metal about a foot in width may be tacked to the outside of the building.

SILO IN GROUND.

In the Michigan Farmer of April 6, R. E. M. inquires about a silo for two cows, and asks if it is practical to build such a silo in the ground.

I beg to differ with the party who answered it, as I know from experience that it is practical to have a silo in the ground.

I have one that is seven and a half feet across and twenty-one feet deep, that I have used for four years, and see no reason why one could not be made three or four feet across and be a perfect success.

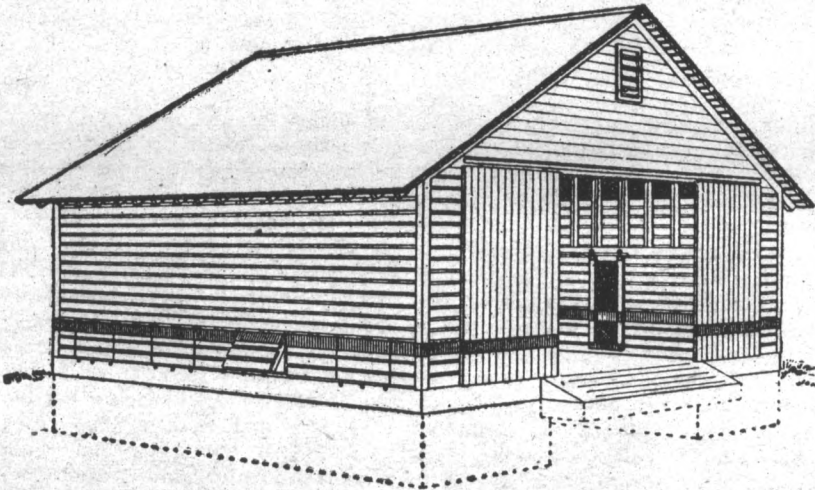
For a large herd of cattle it might be too much work to draw the silage, but for a few head it is not. I am never troubled with the silage freezing and the silo never needs any repairs, and for the man keeping but a few cows I believe it is an ideal silo.

It is practical and cheap, and most men can build it themselves, and it can be filled with a common cutting box.

Leelanau Co. C. H. MILLER.

HYGIENIC SIDE OF LABOR SAVING.

There is a closer relation between the use of labor-saving devices upon the farm and the health of the country people than is ordinarily suspected. Save in regard to certain diseases and the variations due to different localities there is no very alarming difference, according to most authorities, in the average death rate the country over between people who live in the open country and those who live in the cities. Certain diseases exert a heavier toll in the country, while others claim the most victims in the congested centers. Each locality averages up fairly well against the other. But the death rate tells nothing conclusive about the



One Way to Defeat the Rat Nuisance is to Construct Rat-proof Buildings.

space within the walls should be grouted thoroughly with cement and broken stone and finished with rich concrete for a floor. Upon this the structure may be built. Even the walls of the crib may be of concrete. Corn will not mold in contact with them, provided there is good ventilation and the roof is water-tight.

However, there are cheaper ways of excluding rats from either new or old cornercribs. Rats, mice, and sparrows may be kept out effectually by the use of either an inner or an outer covering of galvanized-wire netting of half-inch mesh and heavy enough to resist the teeth of the rats. The netting in common use in screening cellar windows is suitable for covering or lining cribs. As rats can climb the netting, the entire structure must be screened, or, if sparrows are not to be excluded, the wire netting may be carried up about three feet from the ground, and above

general health conditions. It tells the story of the average number of lives which are terminated each year in various places but it tells nothing of the average condition of those lives before death ensues.

Observation and such statistics as are available indicate that the general health of country people is not as good as that of city folks. Among men it has been found that they "break" earlier in life on the farm, due to the exacting stress of farm work. Farm men may live long, possibly longer on an average, than men in the city, yet is their "strength labor and sorrow," as the good Book puts it. They endure a longer span of years during which their efficiency is less than the efficiency of men who live in cities. In other words, they wear out sooner. And while they may live long in spite of this they are not able to do their bit (Continued on next page).

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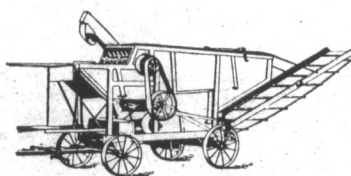
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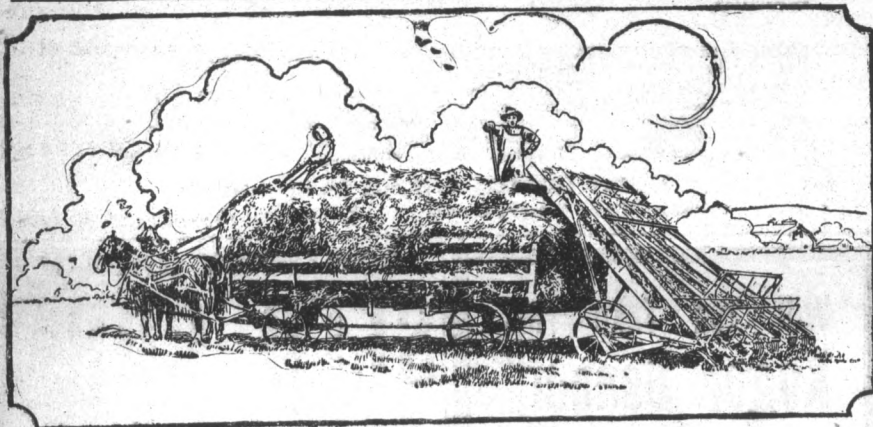
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roll on a load in the shortest possible time, avoiding the back breaking work of hand pitching. If you desire you can load just as well from the swath with a Moline Hay Loader.

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Will the Potato Market Improve?

THE potato growing states, including Michigan, are deeply interested in the tuber problem right now. The bulk of the 1917 crop is unsold and in growers' hands, with no market for them, and the outlook is dark. Potatoes are being fed to stock. A. M. Smith, of Lake City, president of the Michigan State Potato Association, was in Washington recently and he announces that while Senator Smith's measure to do away with potato grades was killed, the agitation over the present rules has brought about a modification that should help the grower somewhat.

The United States Bureau of Markets established two grades, the size requirements being minimum diameter of one and seven-eighths inches for No. 2's. A tolerance of five per cent by weight was allowed for potatoes below the minimum size for the particular grade and in addition a tolerance of three per cent by weight was allowed for potatoes below the other requirements of U. S. Grade No. 1.

Greater Tolerance.

Now the Bureau of Markets has amended this tolerance statement to read as follows: "In order to allow for variation incident to commercial grading and handling, ten per cent by weight of any lot may be under the prescribed size, and in addition three per cent by weight of any such lot may be below the remaining requirements of this grade. In the grading of potatoes no method or screen shall be used which will place in the No. 2 grade more than five per cent by weight of the No. 2 potatoes that are above the size requirements for this grade, provided that by agreement between contracting parties grades in size and quality above the specifications of U. S. Grade No. 1 may be made."

This is a move toward establishing the single grade of No. 1, made up of potatoes that, as to size, will pass over a one and three-fourths-inch round mesh screen, and as Michigan growers have been asking for.

Michigan growers are organizing local associations, with better marketing methods as the chief end in view. The Hobart Potato Growers' and Sellers' Association was formed recently in southern Wexford county, starting with twenty-five members and \$3,000 subscribed. Oceana county growers will meet at Hart on April 20 to form a similar body.

Growers in the Grand Traverse region are interested in the statement that a factory at Traverse City has been remodeled for the manufacture of potato flour, potato chips and potato stock feed. The No. 2 grade, or at least field run stock will be used principally and the plant's capacity is estimated at 1000 bushels a day. Potato starch factories are reported opening in Min-

nesota that are paying farmers seventy-five to eighty cents per cwt for the field-run stock.

What we might do.

It is interesting to note what Germany, our enemy country, has been doing with her enormous potato crops in recent years. We are even told that the fate of Germany depends on the potato behind the man behind the gun in this war. Before the war consumption of potatoes in that country was about three and a half pounds per adult per day, while the production was far ahead of that of any other country. Germany raised fifty-five million tons in 1914, while in 1915, the first year of the war the production was still over forty million tons, or enough to supply her people with twenty-five pounds per capita per day. There was a crop failure in 1916, with production estimated at twenty-three million tons. The 1917 crop was much better.

Germany learned almost twenty years ago that potato drying plants pay, and from three of such plants found throughout the empire in 1903 the number had increased to 841 in 1916. Roller apparatus and drum drivers are now generally used and the machines are easy to operate.

Germany grows great quantities of tubers for industrial uses, including starch, denatured alcohol and for drying. Thousands of tons are dried for stock food and market quotations there regularly cover potatoes for eating and potatoes for manufacturing, the latter being about one-third less in price. Potato breeding for starch content is common and experiment stations are maintained for this purpose. The increase in starch content often means smaller potatoes and less yield per acre.

A Market Regulator.

Potato drying has developed from big crops and low prices, and when the yield is small nothing but the culls, of course, are dried. Drying reduces the weight three-fourths and the dried product is readily shipped any distance and keeps indefinitely. Drying is no longer an experiment in Germany. There are two types of drying, the shredding of the raw potato to pieces the size of a small lead pencil, and drying under intense heat, and the flaking process, when potatoes are first cooked by steam, then mashed and dried by running through hot rolls. Both are used as food for horses, cattle, sheep and swine and are quoted regularly in market reports. The flakes are preferred, however, because they are more digestible, even though the cost of manufacture is considerably higher, ranging from \$2 to \$2.50 per ton. Out of 404 factories operating in 1911, 314 made flakes. This food is used largely for hogs and replaces corn in the ration almost wholly.

How Farmers Can Get Flour

AN order governing the amounts of wheat flour that wheat and rye millers can sell to farmers or give in exchange for wheat has been promulgated by the Milling Division of the United States Food Administration.

The order limits all millers to the sale of not to exceed forty-nine pounds of wheat flour to a person living in a rural district. In addition, no miller may knowingly sell quantities to exceed a customer's requirements for thirty days.

The miller must require the customer to accept wheat substitutes of equal weight to the flour purchased, unless the customer submits in writing a certificate showing that he has on hand a sufficient supply of such substitutes. These are defined as hominy, corn

grits, corn meal, corn flour, edible corn starch, barley flour, rolled oats, oat meal, rice flour, buckwheat flour, potato flour, sweet potato flour, soy bean flour, milo, kaffir, feterita flour and meals.

Each miller must forward to the Federal Food Administration of his state on the first of the month the certificates thus received.

When a farmer brings wheat grown by himself to the mill to exchange for wheat flour the amount of the flour that can be exchanged shall not exceed an amount that, with flour already in the hands of the farmer, will reasonably meet the requirements of his household or establishment during the next thirty days. In determining the quantity of flour to be consumed mill-

(Continued on page 552).

Shifting Costs Money

Every farmer who changes from one breed to another finds that it costs money. He finds that the new breed may not be as good as he thought and his old stock was not given full credit for its value. Of course, there are often good reasons for making changes, but in general they should not be made too frequently and it pays to remember that one year cannot tell a whole story with any breed and the farmers who stick to one line seem to have the best success.

The hog breeder may become discouraged because of lack of feed or the low price paid for pork. Therefore he goes out of the hog business. Then pork goes up and his neighbors find it profitable. He becomes interested and buys stock when pork is high. It is the farmer that sticks to his business and bases his profits on a ten-year average who will find any breed of live stock the most profitable and satisfactory to manage.

Poultry flocks on the farm, frequently become mixed because of the practice of buying a few fowls or a few hatching eggs from another breed

whenever the farmer becomes discouraged with his own stock. If the same money had been used to buy better stock of the same breed to improve or breed up the home flock, the investment would have paid better dividends. It takes some time to build up a large flock of profitable fowls and if the farmer is constantly shifting from one breed to another the profits are reduced.

Experience counts a great deal in any kind of farming and constantly shifting from one breed to another simply cuts down the amount of experience with any one breed and reduces the chances for success. One farmer will succeed with live stock without any apparent effort after years of studying the breed. Another farmer may take the same stock and immediately begin to fail, although he seems to be trying hard for success. It is the factor of experience which makes the first farmer successful and the experience is the result of sticking to one line instead of shifting too frequently from one breed to another.

Ingham Co. R. G. KIRBY.



The Lamb Feeding Business is no Small Part of Michigan Sheep Industry.

To Insure Health of Stock

The following suggestions, if followed carefully, will go far toward insuring the health of the animals on our farms and increase their service, either as food or work animals. The Work-horse Relief Association has given us these pertinent facts:

1. Do not fail to provide clean, warm quarters in which your cows, ewes and mares can bring forth their young. Navel ill comes from dirt.
2. It is dangerous to expose young stock, especially foals and colts, to the spring rain-storms. A day's exposure, if not fatal, may stop a month's growth.
3. It is bad policy to turn the stock to pasture before the grass has well started—bad for the pasture and bad for the stock.
4. A gradual change from hay to grass is best; but, if you are bound to make the change at once, turn the stock out at night, instead of in the morning. Then they will feed through the night, and not lie down until the sun has warmed the air and ground.
5. Get your horses into condition for the hard spring work—the young horses especially. Many a colt has been ruined by being put to hard work without preparation. It is the same with green horses.
6. Look out for sore shoulders and backs, especially in plowing. Be sure that your collars fit. A collar too big is as bad as one too small. If the collar rides up, use a martingale, or a girth running from trace to trace, back of the forelegs.
7. When the horses are at work on a warm day, lift up the collars now and then to cool their shoulders, and wipe off the sweat and dirt with a bunch of grass.

8. Wipe off the harness marks on your horses when you stop work at noon and at night, and clean the inside of the harness, the collars especially. The salt sweat, drying on the skin and on the harness, is what makes the trouble.

9. If the skin is wrinkled under the collar or saddle, bathe it with witch-hazel. If the skin is broken, bathe it with clean warm water containing a little salt. Fix the collar, with padding or otherwise, so that it will not touch the sore spot the next day. A little carelessness at the beginning may cause a lot of trouble to you and suffering to the horse.

10. Clean your horses at night, water them, give them a good bed, and water them again after they have eaten their hay. Let them rest an hour or more before they are grained. The observance of these simple rules will not cost you a cent, and will make a big difference in their condition.

CORNCOB ASHES.

Wherever corncobs are used for fuel, the ashes should be carefully preserved and used as fertilizer as they contain about thirty per cent potash, or about five times as much as wood ashes. It would pay large feeders to gather up the cobs and burn them for this purpose. Many times millers are glad to get rid of cobs and they may be had for the asking. Farmers should never let a chance like this pass by.

H. L. SPOONER.

The way to wealth is as plain as the way to market; it chiefly depends on two words, industry and frugality.—Benjamin Franklin.



The Spirit of War Service

Alone in the midst of war's desolation, the telephone lineman crawls to mend the broken wires.

On all sides the thunder of artillery; in the air bursting shrapnel.

He faces danger with that unconquerable spirit of war service which permits him to think only of maintaining the telephone connections.

The safety of the troops depends on these lines of communication, often used for the sentries' warnings, the carrying of official commands and the

summoning of reinforcements.

In a dark hole hidden among sparse brushwood are the telephone operators, some of whom have been for months in their damp cave ceaselessly swept by shells.

And they are admirable, all these heroes of the Signal Corps, whether serving in darkness or in the all too bright light of day.

The spirit of war service, over here as well as over there, furnishes the nerves, the endurance, the morale—the stuff that wins war.

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Now is the time to negotiate for your Silo Filler. Terms are arranged so as to have the machine without investment prior to silo filling time. Write today for terms.
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and My solution that will appeal to every Farmer

This year my farmer friends are asked to produce more than ever before. And they are going to do it. But they are certainly up against it for help. Hired hands are scarce, hard to get, and expensive.

That's why I'm so glad to be able to make this announcement just at this time. I have a device that makes a giant, never-tiring, never complaining hired-man of the farmer's car.

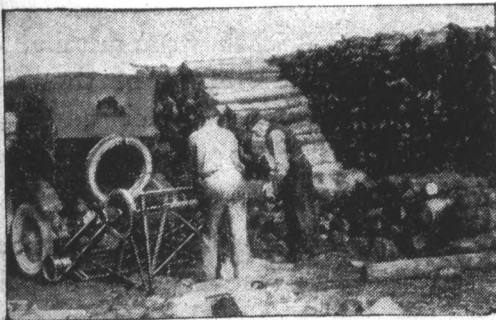
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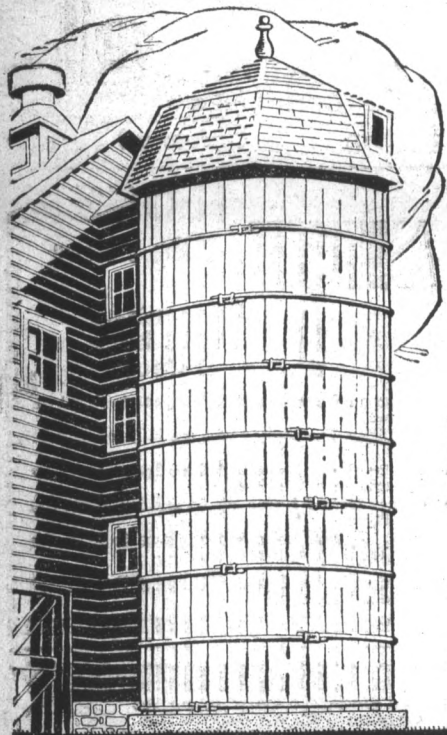
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Orchard Soil Fertility

By W. C. ECKARD

IN considering the matter of fertilization of orchards perhaps it will be well to first discuss somewhat the different systems of orchard management.

While there are innumerable systems of handling orchards there are only four which are very widely used for bearing orchards. They are the sod and mulch systems, the sod system, the clean cultivation system, and the cultivation and cover crop system. The first and last named systems are the only ones worth considering where planning a permanent system of orchard management.

The Mulch System.

With the sod and mulch system for young trees there are at least two distinct methods which may be followed: First, where all the land is in a legume and the crop cut and used to mulch the trees, this is an almost ideal method but expensive; second, where the tree rows are in sod and the trees mulched, with the spaces between the rows cropped with either cultivated crops or hay, or small grain crops. In this case it is necessary to use at least part of the hay for mulching, or in

removes from the soil 11.28 pounds of nitrogen; 1.88 pounds of phosphorous; and 13.16 pounds of potash. As compared to 37.44 pounds of nitrogen; 6.12 pounds of phosphorus, and 7.74 pounds of potash for a thirty-bushel wheat crop per acre. This not including the amount contained in the leaves on the trees required to grow the apples, or that in the straw of the wheat.

Orchards Need Fertilization.

We will assume that the leaves from the apple trees are held to the land which produced them by the cover crop, and that the straw is returned to the soil as crop residue.

In addition the plant food contained in the fruit produced there is considerable being used to grow the trees which sooner or later will be taken off the land and used for fuel, also considerable nitrogen is likely to be lost each year in the burning of prunings.

From these figures one may be led to believe that the fertilization of orchards is not as important as the fertilization of land used for growing the grain crops, but when considering that 100 barrels of apples per acre is not a large crop, and that thirty bushels of



The Result of Proper Fertilization and Care.

case grains are grown the straw must be returned for mulching. In case cultivated crops are grown mulching from outside sources must be secured, and a cover crop should be sowed at the last cultivation the same as in the cultivation cover crop system.

Personally the writer sometimes thinks that it might be practical to plant an orchard in a sweet clover field and each year cut the sweet clover for seed, and return the straw to the trees as mulching, hoping to secure returns enough from the sale of seed to pay the cost of growing the orchard to bearing age.

Humus a Necessity.

In using the cultivation cover crop system for young orchards we can cultivate all the land until mid-summer, and then sow a legume for a cover crop to be plowed down the following spring, or we can cultivate only the tree rows, and sow a cover crop there while we are growing hay or grain in the spaces away from the tree rows; each year enlarging the cultivated strips in the tree rows, or we may grow a cultivated crop in the spaces; each year cultivate the tree rows as we do the crop, then at the last cultivation sow a legume for a cover crop to be plowed down the following spring; each year leaving more of the land along the tree rows without a crop.

The writer feels safe in saying that the advantages of either of these systems in the way of a better nitrogen and humus supply over the plain sod system, or clean cultivation system will more than offset the added cost of either of these systems. Assuming, even, that we can by these systems secure all the nitrogen and humus we need with legumes we still must supply the mineral elements in some form; for the average orchard soil in Michigan is getting to be somewhat depleted of the same.

A 100-barrel per acre crop of apples

wheat per acre is quite a large crop, also that as a general thing orchard soils are likely to be poorer naturally than wheat soils it may be more important than at first would seem to be the case. However, it is very likely that with the better orchard lands the limiting factor in crop production, as far as soil goes is a lack of organic matter and nitrogen rather than a lack of phosphorus or potash.

Many Orchard Soils Acid.

A great deal of the orchard land in Michigan would be greatly benefited by an application of from two to five tons of finely ground limestone to the acre or its equivalent in marl. Not for the direct results, but that the legumes would grow better, it being very important to have legumes grow well in an orchard no matter what system is used. If mulching they are needed to mulch with; if using the cover crop and cultivation system they are needed to plow down to furnish organic matter and nitrogen.

Personally the writer believes that when we have solved the problem of maintaining the fertility of our soils we have solved the greatest problem connected with the orchard business. Soils are not what they once were, no matter whether they have been growing orchard or farm crops. The change has been so very slow and gradual that it is hard for us to believe our soils are constantly decreasing in fertility, but such is the case as we are forced to admit, when occasionally we get a chance to see what a new soil, or practically new soil will do, as compared to what our old worn soils will do.

Peaches Need Cultivation.

The above was written with special reference to apples, pears, plums and cherries. I have grave doubts as to the advisability of attempting to grow peaches commercially by any system other than the cultivation and cover crop.

The Cooperatives

MORE than fifty Huron county farmers met at Bad Axe and took steps toward forming a cooperative mercantile association to operate a general retail store and conduct live stock selling for its members. The proposed capital is \$30,000 and the company will be incorporated when \$20,000 is subscribed. The subscriptions at this first meeting were \$4,900.

Consider Organization.

Farmers of Ionia, Kent and Montcalm counties met at Belding to discuss plans for forming a cooperative elevator company. Fred Thompson was elected chairman and Floyd Jenks secretary. The leading speaker from outside was George Miller, manager of the farmers' elevator at Chesaning. It is proposed to organize with \$40,000 capital to build an elevator at Belding and a committee of eight members was named to secure pledges for stock.

A Good Report.

The Central Barry Cooperative Shipping Association met at Hastings and elected the following officers: President, C. A. Woodruff; vice-president, Peter Kunz; secretary-treasurer, A. N. Williams; manager, C. J. Moore. Shipments for nine months beginning May 12, include 561 head of cattle, 594 calves, 3,745 hogs, 2,285 sheep and lambs and the net receipts for same were \$166,961.09. Orders for feed stuffs or fuel as listed by members are placed in carload lots.

Farmers and Business Men Meet.

Farmers in the vicinity of Belding, Ionia county, met with the business men of that city and after extended discussion voted to take the first steps toward establishing a farmers' cooperative market in Belding. A committee on organization was appointed, with Fred Thompson of the Belding Grange as chairman, and the following members: Thos. Bookey, Grattan Grange; Louis Jenks, West Otisco Farmers' Club; Clyde Beach, East Otisco Farmers' Club; Edward Woldridge, Orleans Farmers' Club; Ira Richmond, Smyrna Gleaners; H. S. Gardner, Fairview Farmers' Club; Ralph Hall, Grattan Gleaners; F. W. Belding, Shafter Harbor Gleaners; W. F. Sandell, Belding Board of Commerce.

A Big Season's Run.

The Conklin, Ottawa county, cooperative creamery, has closed the most successful year in its history, having paid out to farmers \$115,562.97, or \$44,000 above the previous year. The annual dinner was well attended and officers and directors were reelected. C. J. Lazenby continues as manager.

The cooperative creamery at Litchfield, Hillsdale county, is a busy institution. A recent shipment was made of 289 tubs of butter, amounting to nearly \$10,000 for one and a half weeks.

Another New Association.

Farmers of Lincoln township, Osceola county, have formed the Lincoln Farmers' Cooperative Association, with the following officers: President, C. N. Fleming; vice-president, Michael O'Brien; secretary, L. E. Green; treasurer, James Pease. One of the early plans considered is to get rid of their potatoes at a fair price.

Doing Good Business.

The Shiawassee Cooperative Association met at Bancroft and elected the following officers: President, Emery Lewis; vice-president, B. D. Stephenson; secretary-treasurer, Jesse Alchin; manager, Fred Perry. Since September 1 stock has been shipped as follows: Five hundred and forty hogs; 73 calves, 111 cattle, 262 sheep and lambs. The association has a cash balance in the bank and is in a flourishing condition with about eighty-five members.

One must be economical in order to be liberal.—Voltaire.



Speedy Haying and Finest Hay When Help is Scarce and Time is Short

WHEN the haying rush comes on this season, a good deal of hay money is going to be lost on many farms—and saved on many other farms—in the short space of a few weeks. A very few days' delay, a rainy day or two, poor curing facilities, and hay values vanish like magic. Everything depends on haying machine preparedness. Will you be ready for haying?

Good hay is made in fast time with little help, year after year, on farms equipped with mowers, rakes, tedders, side delivery rakes, loaders, etc., sold by International Harvester dealers.

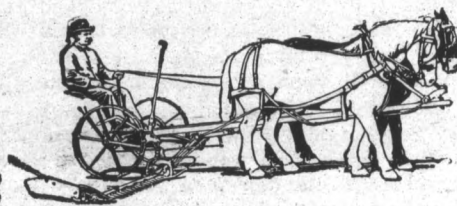
Champion, Deering, McCormick, Milwaukee and Osborne Mowers, Dump Rakes and Tedders have been too long and favorably known on forty million acres of hayfield to need description.

Every hay grower should become familiar with the construction of the new International, Keystone and Osborne Combined Side Delivery Rake and Tedder. This popular, economical machine has two duties in

one—it can be instantly adjusted for rake or for tedder. It rakes clean, teds thoroughly, and handles hay gently. It is a left-hand-delivery rake, which means it can follow the mower closely and strike the heads first (not the stems). It does clean work, piling two swaths at once on the clean stubble (not on an unraked swath), which means proper curing. Quickly adjustable to any condition of hay and ground.

International, Keystone and Osborne Windrow Loaders are built to last. Pulled easily by two horses, they load uniformly, leave the field clean, lift hay over 10 feet, do not thresh off blossoms and leaves. Sold with or without forecarriage and are released easily from top of load.

Hay values are high. These tools, which put hay under cover in prime condition four or five hours after cutting, return their price, and more, to your pocket. The International Harvester dealer can furnish you with proper sizes and types and special equipment. (The lines include also sweep rakes, stackers, and combined sweep rakes and stackers.) **WARNING:** This is a year of big demand for machines, scant supply and handicapped shipping. Act early and be certain. See the dealer—write to the address below for folders.



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Work in Joint Effort the Soil of the U. S. and Canada—Co-operative Farming in Man Power Necessary to Win the Battle for Liberty

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

Every Available Tillable Acre must Contribute; Every Available Farmer and Farm Hand must Assist.

Western Canada has an enormous acreage to be seeded but man power is short and an appeal to the United States allies is for more men for seeding operations.

Canada's Wheat Production last Year was 225,000,000 Bushels; the demand from Canada alone, for 1918, is 400,000,000 Bushels.

To secure this she must have assistance. She has the land but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment Service, and we will tell where you can best serve the combined interests.

Western Canada's help will be required not later than May 5 th. Wages to competent help, \$50 a month and up, board and lodging.

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return. For particulars as to routes and places where employment may be had, apply to

U. S. Employment Service,

Dept. of Labor.

Detroit, Grand Rapids, Sault Ste. Marie and Port Huron, Mich.

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Write for Greatest money saving fence bargain book ever printed. Brown fence is made of Heavy DOUBLE GALVANIZED WIRE. Resists rust longest. Also Gates and Barb Wire. Low Factory Prices. Freight Prepaid. Write for free fence book and sample to test.
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FENCE BARGAINS

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For Sale. 40 horse gasoline or kerosene engine in A-1 condition.
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A Gas Engine That Goes The Nichols-Shepard Oil-Gas Tractor

does not "lay down" on the job. A heavy engine for heavy duty. Successful because simple and built with nothing but work in view.

The Nichols-Shepard Oil-Gas Engine has never been a compromise. It is designed for work—any kind of work that a traction engine should do—and it does it.

It will plow, haul, thresh, or work with the belt with the ease and certainty of steam. It is ready for another job and not the repair shop when it gets through.

Two sizes—25-50 h. p., 35-70 h. p.

One kind—a Worker.

Uses gasoline, kerosene, naphtha or distillate at all loads.

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In Continuous Business Since 1848
Builders exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines
Battle Creek Michigan

Why Your Own Silage Cutter?

WITH it you can answer the urgent cry for increased production of meat and fats. Your silo will be full to the brim of mold-proof silage. Your crops will be put up by your own engine without outside help. The



SAFE SILAGE CUTTER

is the choice of careful buyers because it is protected by Patented Safety Yoke and Oushion-Drive, by Steel-Plate case and solid disk. Cutting mechanism founded on steel-rail base, 3-bearing mainshaft; Springless Compression Force—Feed with throwing and blowing fans. Lightest power consumption: sizes for 4 h. p. up.

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Blocks of Iron Stone, Vitrified Glazed Tile, triple wall design, self-reinforced and interlocking, with double lock cement mortar joints. Extra steel reinforcing does not depend on mortar to hold in place, as it is laid direct against the block. Built for service and satisfaction and guaranteed for the life of the purchaser.

You can save \$25 to \$50 on an Everlasting Silo.

Write for more complete information about the silo itself and ask for special money-saving proposition under which you can buy an Everlasting Silo with the Iron Stone Block

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Milk News from the Field Secretary

By R. C. REED

ARRANGEMENTS have been made whereby the Dairy and Food Department of the state are to put a tester in the field, hoping to avoid the annoyances that are so frequent between the buyer and seller of milk. Our people must be fair in this proposition and study to know all the conditions that enter in to change the test of your milk.

Another thing that we must stoutly adhere to is the principle of receiving compensation for the milk that is in accordance with the ruling of the milk commission and its appointed committees. Under no condition should the milk producer allow the buyer to change this price. As you very well know, the amount designated for the association does not come out of the price which you were to receive for your milk. You receive for your pay the scheduled price for milk—the association for its work receives one cent per hundred pounds for its pay.

Be Cautious.

In many states there are men who are attempting to organize stock companies and buy the milk from cows of certain individuals—if these individuals will pay for a certain amount of stock for each cow from which they expect to sell milk. Wherever a proposition of this kind is made in your community we urge upon every milk producer to investigate thoroughly before he puts his \$10 per cow into a deal of this kind.

The Condensed Milk Situation.

In our meeting at Chicago last week it was found that on account of the lack of transportation facilities there

is today in the United States more than thirty million cases of condensed milk. This would not be a serious question if the way was open for immediate shipment; but inasmuch as the opportunities for shipment are to be less in the near future than they have been in the past, this question assumes serious proportions.

Seeking Relief.

A committee of three was appointed at the Chicago meeting to go to Washington to visit the food and war departments and see if it would not be possible to obtain a change of this ruling at the earliest possible date and also to get two ounces of cheese incorporated in every soldier's ration. From the best available sources we are informed that there are about one million American soldiers in France at the present time. Could these soldiers each have two ounces of cheese it would require one hundred and twenty-five thousand pounds of cheese a day to supply them and as this is the best animal food nutrient available it can be readily understood how vital this is—not only to the dairy industry but also to the well being of our soldier boys who are fighting our battles.

Profiteering on Cheese.

In most places in Michigan cheese is retailing at the present time from thirty-six to forty-four cents a pound, while the wholesale market price for cheese today is twenty-one cents. Everything should be done that can be done in the near future to change this method of profiteering and, if possible, to cause the people to consume more of these vital food products.

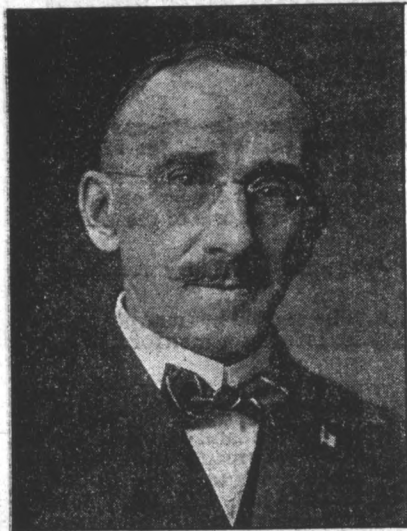
Devoted to a Big Task

A NUMBER of readers have wondered why more has not been heard from the Field Secretary of the Michigan Milk Producers' Association following the recent announcement in these columns that regular communications from him would appear. The reason is that Mr. Reed has recently been obliged to undergo a rather serious operation, due to the over-taxing of his energy in the service of Michigan milk producers.

Mr. Reed has a real mission to perform in carrying out a program for the

in his enthusiasm for, and devotion to, the great task before him—the task of placing the dairy industry of Michigan upon an economically sound basis.

We are glad to announce that he is now rapidly recovering and has been able to submit the above notes to keep our dairymen in touch with the latest changes in the marketing of dairy products. We bespeak for Mr. Reed the fullest cooperation of every milk producer and every local milk producers' association of the state to the end that Michigan dairymen will receive and give justice and that she will enter ere long into that deserved position, the leading commonwealth in the production of dairy products.



Field Secretary R. C. Reed.

dairy industry of the state, that is quite unique. This program is getting the producer better results than is being secured in any other state of the union—even in those states where drastic measures have been employed. The final success of his undertaking will likely set the standard for sister commonwealths to follow. Our field secretary feels this responsibility and he is putting not only his heart and soul into the work but also reserve strength which the most of us feel that society has no right to call upon us for. He has forgotten his own physical comfort

HOW FARMERS CAN GET FLOUR.

(Continued from page 548).

ers are required to conform to the Food Administration's statement of March 24, asking all persons to cut their consumption of wheat flour by fifty per cent and limiting the amount of the sale for exchange to a monthly basis of six pounds for each person.

No wheat miller is allowed to deliver flour without an equivalent amount of substitutes in exchange for wheat until the customer gives him a written statement which the miller has reasonable cause to believe to be true. The form of the statement follows:

I, 1918.
..... hereby certify that the wheat this day delivered by me to the mill of at (address) was grown by me on my farm, that the amount of flour to be delivered to me, together with that already on hand, will not give me a supply more than sufficient to meet the requirements of my household or establishment during the next thirty days, and that I will not sell, lend or deliver such flour to anyone, nor permit such flour to be used for any purpose, except human consumption in my household or establishment.

(Signed)

(address)



A Package of Grape Nuts teaches food conservation.

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THE LEADER CHURN GETS MORE AND BETTER BUTTER

You can churn in a few minutes with the Leader, stop butter waste and do away forever with the old-fashioned back breaking churn. Over 15,000 Leader owners are getting more and better butter in a third the time, and making churning day a pleasure—saves money, time and labor every day.

Made of highest quality material—simple construction—nothing to get out of order—no hoops to fall off—no barrel to foul and sour—no iron bearings to make black grease—most durable and easiest running churn made. Pays for itself many times each season; will last a lifetime with proper care.

30 Days' Trial

We will send you this wonderful churn on 30 days' trial. Try it; see for yourself the better grade of butter, the ease of operation. If you are not satisfied it is the greatest churn you ever used return it at our expense. Thousands of owners have made this same 30 day trial. You will not want to return it.

Send No Money

We originated the Leader plan of selling, which enables you to get any size Leader Churn you need. You take no risk—no money down—no deposits—no full 30 days' trial fees. After trial if you are satisfied it is the greatest churn you ever used and our low introductory price. All we ask is that you will pay the express charges.



Special Introductory Prices

You cannot equal these prices anywhere—money cannot buy greater churn value. Why pay more?

3 GALS. Churns \$5 - 5 GALS. Churns \$5.50 - 8 GALS. Churns \$6

We know just what the Leader will do, or we could not make such a startling offer. The money you lose in time, work and butter would pay for one many times. Send for one on this liberal selling plan. Simply write telling us the size churn you need—it will be shipped you promptly. Address **Novelty Mfg. Co., Box 432 Abingdon, Ill.**

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It's the sensation of all separators. Sensational in construction, clean skimming, sanitation, easy cleaning and durability. The features of the Galloway Sanitary Separator combine the new and best advantages of all high grade separators. Buy a Galloway and you get the best of all embodied in one perfect machine. Four big sizes at four low prices. Every size guaranteed to skim to rated capacity. Sold on 120 milking test in your own dairy before you decide to keep it.

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Galloway also makes Engines, Spreaders, Tractors and sells them direct, too, at lowest factory prices. Don't order any implement until you get Galloway's factory price.

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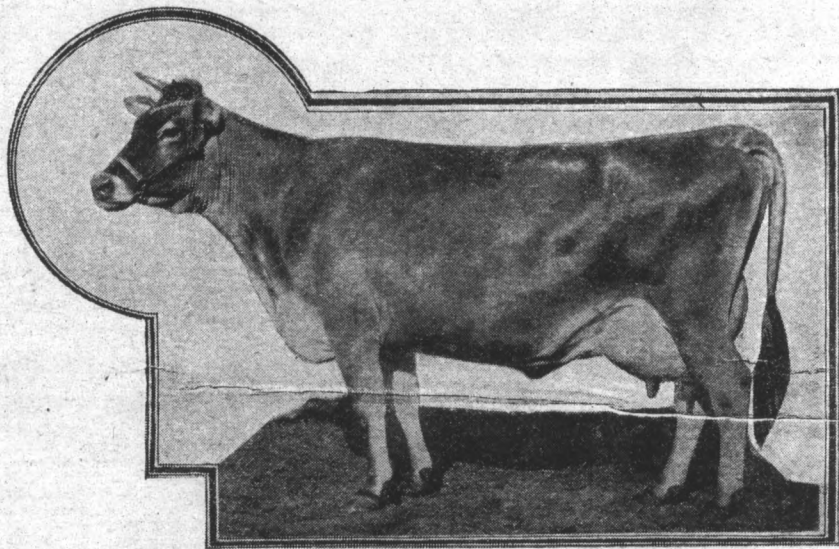
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Freshening the Cows

By CHAS. E. RICHARDSON

A SHORT while ago I went into the stable of a farmer friend who lived about a mile or so from me. He was just feeding his cows. I noticed that he measured out the grain ration for the different ones and also gave each one the hay that was needed. There was one cow that only received hay for her feed. I asked him why he did not give her any grain. "Oh! That one, why she is dry. I expect that she'll 'come in' in about a month or so. After one of my cows stop giving any milk, I do not give them any more grain," he told me. "But, in her case," I asked him, "don't you think that she is so near freshening time that it might pay?" "I do not see where there'd be any profit," he answered. "How can any cow that is dry be worth giving anything but hay to?" And he laughed as he thought that it was quite a joke to feed anything but hay to his cows that were dry. As I looked at the cow that was getting only hay, the one that he had told me he expected would have a calf in a few weeks, I was surprised. She was

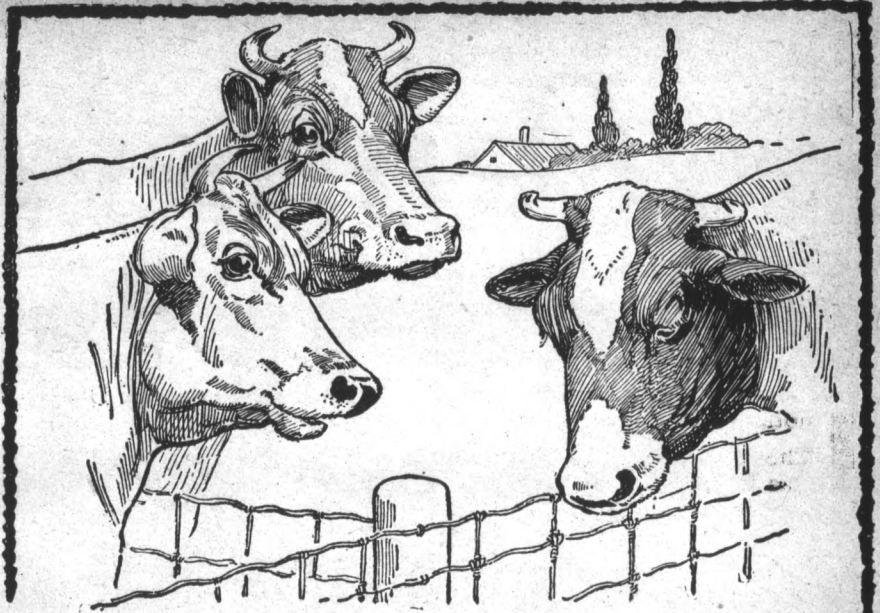
gans which makes a tendency to lose the calf, develop. When the time draws near for the cow to have the calf, she should be placed in a separate pen or box stall, large enough so that she can move around easily. The bowels should be kept free by the use of laxative feeds. Roots are valuable. A good feed for a cow some time before and after she has her calf, is whole oats that have been swelled by having boiling water poured over them. Three pounds of these, three pounds of bran, and one-half pound of linseed oil meal mixed with warm water and a little salt, makes a good feed and has the tendency to prevent the retaining of the afterbirth. Of course, hay is to be given. After calving give this feed for a week or so, increasing one-half a pound a day as the cow increases in her milk flow, and gradually change to the regular ration. For at least ten days before the cow calves she should have water with the chill taken off; also for two weeks after. While, as a rule, cows have their calves born without much trouble, they



The Dairy Cow Responds to Wise Handling at the Freshening Period.

very thin. To look at her I would not have known that she was to freshen soon. I felt that the joke was really on him. I know that there are quite a few farmers that feel as he does. They do not think that a cow that is not giving any milk needs much to eat. But a cow that is to have her calf ought to be fed quite liberal. While she is not giving milk perhaps, she is using feed to grow the new calf to be born soon. She needs food to bring her into moderately high condition, without too much fatness. Excessive fat is apt to make difficulty at time of calving. But if the cow has a liberal quantity of it with good flesh, she is ready to start immediately to make a large quantity of milk. Fat that has been stored up, is ready as a reserve to be drawn upon to help at the time that she is to make the largest quantity of milk. While there are farmers that do not dry off their cows for any length of time before they freshen, most farmers agree that cows should have from six weeks to two months rest from milking, before they have their calf. Cows should have exercise in moderation during pregnancy, as with these that are kept in too close confinement, there is sometimes difficulty during calving time. Of course, too much and violent exercise or conditions which might lead to slipping or jumping is bad, as such may cause abortion. Cow yards where they get their exercise should be free from ice and be even and smooth. Cows that are kept in the stable a large part of the time should have the platform or floor under them level; floors that slope towards the rear cause an unnatural pressure to be brought to bear on the generative or-

should be watched carefully as the time draws near, and if there are any signs of difficulty, help should be gotten quickly, if it is to be of use. After the calf is born the danger from milk-fever should be guarded. While perhaps it may not be necessary for every farm to have a milk-fever outfit, there ought to be one at least in every neighborhood and every farmer that has many cows should understand how to use it. It is very simple; in fact, many times a common bicycle-pump with a small tube attached to it that is small enough to be inserted into a cow's teat, has been successfully used. After filling with air, the teat is tied with strips of cloth to hold it in for an hour or so, and the process repeated, until recovery takes place. Particular directions come with every outfit. The capacity to give milk is developed in cows by breeding early. While a heifer is not fully grown at two years of age, it seems to be the rule among most breeders that that is about the right age for a heifer to have her first calf, providing she is in no way stunted in her growth. To fix the habit of persistent milking, a cow is not bred so that her second calf comes within a year and a half. Of course, the best of care at this time is requisite so that the future cow may have a chance to develop as much as possible. While cows are bred until they are twenty years old sometimes, the best period is from four to five or six, up to twelve years old. To get the best from any cow, good care is important at all times, and even though she is not giving milk, she should have a properly balanced ration to prepare her for the work that is to come to her as soon as she freshens.



IF COWS COULD TALK

"Good-morning, Mrs. Fawncoat. I hear that all the cows in the county are joining the 'Win-the-War' Club."

"Yes, Mrs. Starface; Secretary of Agriculture Houston says we must increase the production of butter-fat, and we cows have all promised to do our 'bit.'"

"There's one thing I want to say right now," spoke up Mrs. Black. "The farmers have got to back us up in this movement. I'm with the rest of you, heart and soul, but what chance have I got?"

"Why, Mrs. Black, what's the matter? You have a fine warm barn and plenty to eat and drink."

"Yes, I know; but what can I do as long as they use that old cream separator on the place? It never was any good any way, and now it wastes so much cream I'm just plain discouraged."

"Well, you're not so badly off as some cows, where they haven't any cream separator at all."

"I don't know about that. There's a lot of cream separators in this county that are only 'excuses'—not much better than none at all. I tell you, Mrs. Fawncoat, with butter at present prices and the people at Washington begging everyone to save fat, it's almost a crime to waste butter-fat the way some of these farmers do."

"That's one thing I'm thankful for," said Mrs. Fawncoat; "there's no cream wasted on this farm. We have a De Laval Cream Separator and everybody knows that the De Laval is the closest skimming machine."

"Well," said Mrs. Starface, "we never used a De Laval on our place until last fall, and supposed one separator was about as good as another; but, honest, the De Laval is the first cream separator we've ever had that gave us cows a square deal."

P. S.

Of course your cows can't talk—but if they could you'd never have a moment's peace until you got a De Laval Cream Separator. Remember that a De Laval may be bought for cash, or on such liberal terms as to save its own cost. See the local De Laval agent, or if you don't know him, write to the nearest De Laval office as below.

THE DE LAVAL SEPARATOR CO.
165 Broadway, New York 29 E. Madison St., Chicago

GEHL Ensilage Cutters

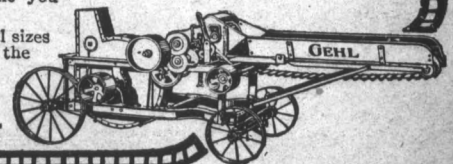
The simple, yet strong and rugged construction of Gehl Ensilage Cutters makes it absolutely impossible to clog throat or blower, no matter how fast the corn is thrown in. Gehl Cutters are strong, powerful, safe, economical—that's why the demand for Gehl Cutters grows bigger every year. Gehl Cutters have positive safety device, best knife adjustment, strongest built all steel frame and other valuable features not found in others. Some of the seven sizes of Gehl Cutters can be run by a 4 h. p. gasoline engine. In addition, any recent model of the Gehl Cutter can use the

Gehl Alfalfa Attachment

To get best results in feeding alfalfa it should be cut into meal—not shredded or crushed or ground in an ordinary feed mill. By using a simple attachment, which fits any recent model of the Silberzahn or Gehl Ensilage Cutter, you can make alfalfa meal right, at great capacity and at little cost. You can produce a better quality of meal than with any other alfalfa cutter. By getting this attachment you have two cutters for the price of one.

Write for Big, New Catalog showing all sizes of Gehl Cutters and giving full details about the alfalfa attachment.

GEHL BROS. MFG. CO.
111 S. Water St., WEST BEND, WIS.



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Vacuum Cup Tires cost approximately the same as ordinary 3,500-mile tires. They cost much less than any other make of tire carrying anything like equal mileage assurance.

Vacuum Cup Tires mean longest wear, greatest service, actual economy.

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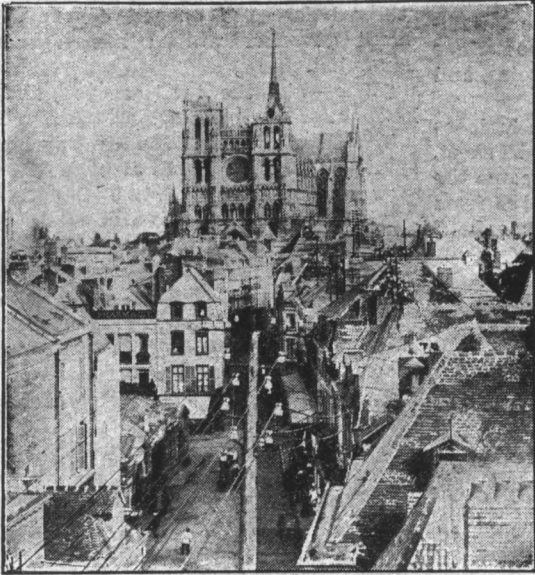
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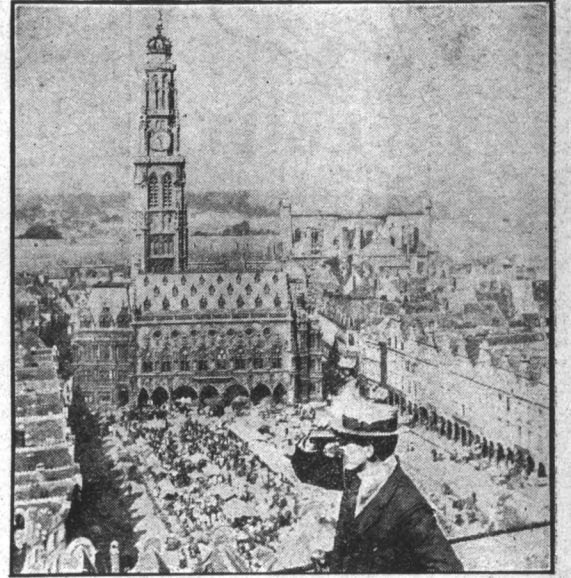
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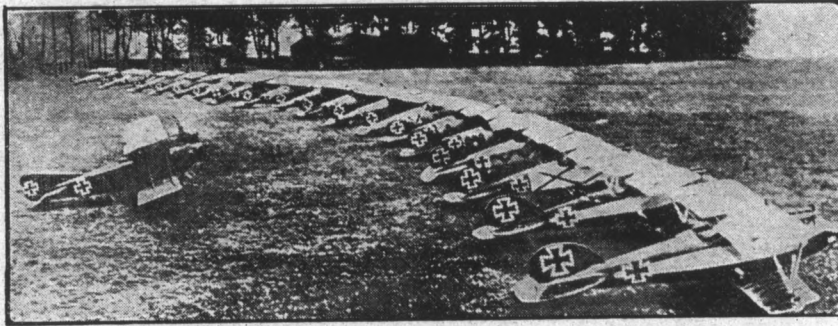
Panoramic view of Amiens, great railroad center, objective of German drive. In the background is the famous Amiens cathedral.



High on the sides of the mountains the Italians have built these unusual shelters which are used for observation purposes.



Market Square and town hall in the city of Arras. The Allies anticipate a German drive here following their advance in the north.



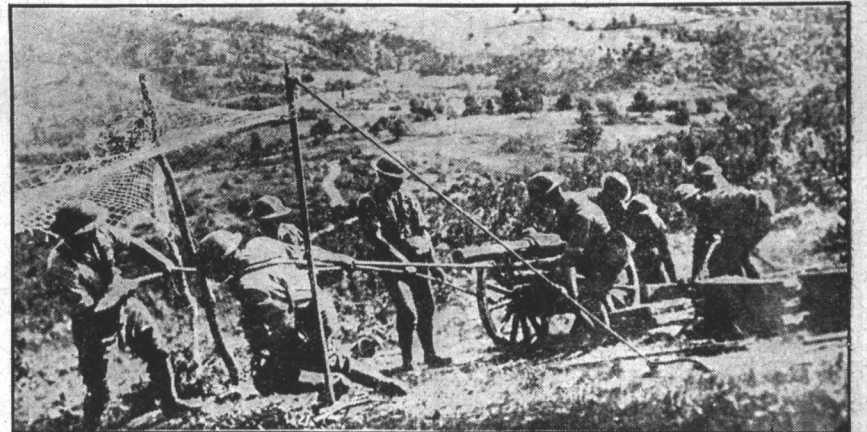
This photograph of a group of German monoplanes was found on a German aviator who was made a prisoner. The United States must speed up the building of air craft to compete with the enemy machines.



Three mile line of army motor trucks making its way through New York City enroute to government piers. There were more than 150 of these trucks, making the longest procession ever seen there.



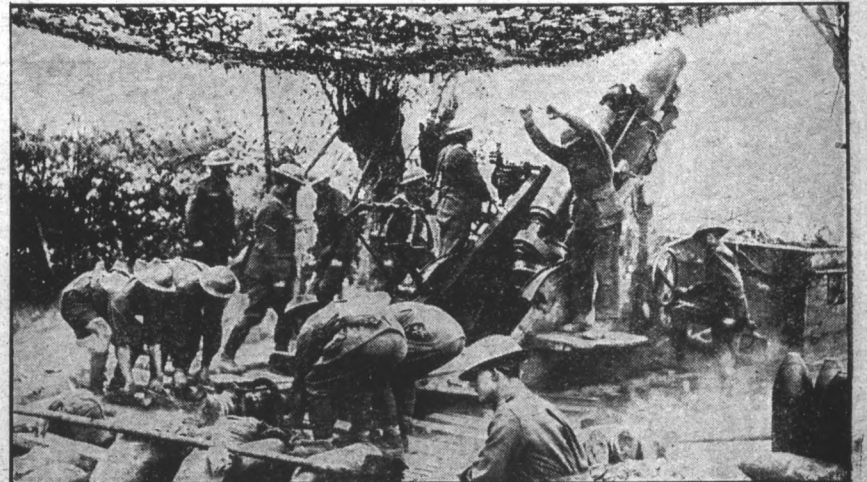
When enemy shells make the tanks unfit for active use, some are left apparently abandoned on the field, but are used by the Tommies as advance observation posts to watch the enemy. (British Official Photo).



This gun, one of the lighter types, requires the efforts of nine American soldiers to wheel it into position. The gun position will be safe from detection by a netting screen of camouflage.



British soldiers who have gone to the assistance of Italy quickly become friends with the Italian children, who are here shown entertaining their Allies at a party. (British Official Photo).



An Australian howitzer under a camouflage screen that conceals the gun from enemy aeroplanes. Four men are needed to handle the shell in loading. (Australian Official Photo).



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For style and comfort wear

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HONORBIT SHOES For all the Family
Ask your dealer for Mayer Shoes. Look for the trademark on the sole.

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IT IS the necessity of cutting labor costs and releasing men for the front that makes the tractor a present necessity.

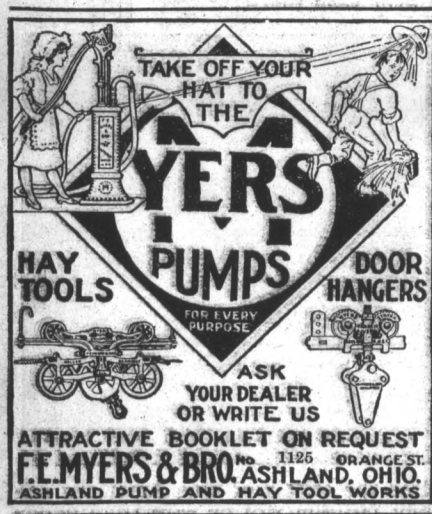
BULLOCK CREEPING GRIP TRACTOR

is an old acquaintance of war-time conditions. As son of a worthy sire, the British Battle Tank, it knows the grudging warrant of rough ground; but lingers on—majestic, resolute.

The BULLOCK CREEPING GRIP TRACTOR promises to do more and better work than three men and six horses on any farm. We only ask that you encourage it to make this promise good.

A three-horse tractor—35 h. p. on drawbar. Write for catalog today.

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I have a competent and reliable manager and sinew herdsman and now wish to secure an experienced and reliable dairyman to feed and care for my registered herd of Jersey cattle and the milk and cream products. Cream sold wholesale. Dairyman must understand the use of separator. Must be man without bad habits. Married man with small or no children preferred. Address Herbert W. Mumford, Brookwater Farm, Ann Arbor, Mich. Long distance phone connections.

Inside the Lines

By EARL DERR BIGGERS & ROBERT WELLES RITCHIE

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The general writhed in agony. Jane, fallen into a chair by the far edge of the desk, had her head buried in her arms, and was sobbing.

"And we are going to think, my General," the Indian's voice purred on. "While we wait we shall think. Who will General Crandall be after tonight—the English sahib who ruled the Rock the night the English fleet was blown to hell from inside the fortress? How many widows will curse when they hear his name? What—"

"Jaimihr Khan, what have I ever done to you!" The governor's voice sounded hardly human. His face was blotched and purple.

"Not what you have done, my General—what the English army has done. An old score, General—thirty years old. My father—he was a prince in India—until this English army took away his throne to give it to a lying brother. The army—the English army—murdered my father when he tried to get it back—called it mutiny. Ah, yes, an old score; but by the breath of Allah, tonight shall see it paid!"

The man's eyes were glittering points of white-hot steel. All of his thin white teeth showed like a hound's.

"You dog!" The general feebly wagged his head at the Indian.

"Your dog, my General. Five years your dog, when I might have been a prince. My friend goes up the Rock—step—step—step. Closer—closer to the tower, my General. And Major Bishop—where is he? Ah, a knife is swift and makes no noise—"

"What a fool I've been!" Crandall rocked in his chair and passed a trembling hand before his eyes. Sudden rage turned his bloodshot eyes to where the girl was stretched, sobbing, across the desk. "Your man—the man of you go to the cells until I sift this you protected—it is he who goes to the signal tower, girl!"

"No—no, it can't be," she whispered between the rackings of her throat.

"It is! Only a member of the signal service could gain admittance into the tower tonight. Besides—who was it went with Bishop down the Rock after the dinner tonight? And I—I sent Bishop with him—sent him to his death. He was tricking you all the time. I told you he was. I warned you he was playing with you—using you for his own rotten ends—using you to help kill forty thousand men!"

It needed not the sledge-hammer blows of the stricken Crandall to batter Jane Gerson's heart. She had read too clearly the full story that Jaimihr Khan's sketchy comments had outlined. She knew now Captain Woodhouse spy. The Indian was talking again,

his words dropping as molten metal upon their raw souls.

"Forty thousand men! A pleasant thought, my General. Eight minutes up the Rock to the tower when one moves fast. And my friend—ah, he moves verree—verree fast. Eight minutes, and four have already passed. Watch the windows—the windows looking out to the bay, General and Sahibah. They will flame—like blood. Your hearts will stop at the great noise, and then—"

A knock sounded at the double doors behind Jaimihr. He stopped short, startled. All listened. Again came the knock. Without turning his eyes from the two he guarded, Jaimihr asked: "Who is it?"

"Woodhouse," came the answer.

Jane's heart stopped. Crandall sat frozen in his seat. Jaimihr turned the key in the lock, and the doors opened. In stepped Captain Woodhouse, helmeted, armed with sword and revolver at waist. He stood facing the trio, his swift eye taking in the situation at once. Crandall half rose from his seat, his face apoplectic.

"Spy! Secret killer of men—" he said.

Woodhouse paid no heed to him, but turned to Jaimihr.

"Quick! The combination," he said. "Over the phone—afraid I might not have it right—stopped here on my way to the tower—be there in less than three minutes if you can hold these people."

"Everything is all right?" Jaimihr asked suspiciously.

"You mean Bishop? Yes. Quick the combination."

Jaimihr picked the slip of paper containing the formula from the edge of the desk with his disengaged left hand and passed it to Woodhouse.

The latter stretched out his hand, grasped the Indian's with a lightning move, and threw it over so that the latter was off his balance. In a twinkling Woodhouse's left hand had wrenched the revolver from Jaimihr's right hand and pinioned it behind his back. The whole movement was accomplished in half a breath. Jaimihr Khan knelt in agony, and in peril of a broken wrist, at the white man's feet, disarmed and harmless. Woodhouse put a silver whistle to his lips and blew three short blasts.

A tramp of feet in the hallway outside, and four soldiers with guns filled the doorway.

"Take this man!" Woodhouse commanded.

The Indian, in a frenzy, writhed and shrieked:

"Traitor! English spy! Dog of an unbeliever!"

"The Flying Fighter"

(Our New Serial)



An American Aviator Over the Lines in France. (Story starts May 11).

The soldiers jerked him to his feet and dragged him out; his ravings died away in the passage.

A high-pitched scream sounded behind Lady Crandall's door, and a pounding on the panels. Jane Gerson, first to recover from the shock of surprise, ran to unlock the door. Lady Crandall in a dressing gown, burst into the library and flung herself on her husband.

"George—George! What does all this mean—yells—whistling—"

General Crandall gave his wife a pat on the shoulder and put her aside with a mechanical gesture. He took a step toward Woodhouse, who still stood stiffly before the opened doors; the dazed governor walked like a somnambulist.

"Who—who the devil are you, sir?" he managed to splutter.

Woodhouse brought his hand up in a salute as he faced General Crandall.

"I am Captain Cavendish, General." Again the hand came to stiff salute on the visor of the pith helmet. "Captain Cavendish, of the signal service, stationed at Khartum, but lately detached for special service under the intelligence office in Downing Street."

"The other spy, Almer, of the Hotel Splendide, has just been arrested, sir. Major Bishop has taken charge of him and has lodged him in the cells."

The man's eyes jumped for an instant to Jane Gerson's face—found a smile breaking through the lines of doubt there.

"Your papers to prove your identity" Crandall demanded, still in a fog of bewilderment.

"I haven't any, General Crandall," the other replied, with a faint smile, "or your Indian, Jaimihr Khan, would have placed them in your hands after the search of my room yesterday. I've convinced Major Bishop of my genuineness, however—after we left your house and when the moment for action arrived. A cable to Sir Ludlow-Service, in the Downing Street office, will confirm my story. Meanwhile I am willing to go under arrest if you think best."

"But—but I don't understand, Captain—er—Cavendish. You posed as a German—as an Englishman."

"Briefly, General, a girl secretly in the pay of the Downing Street office—Louisa Schmidt—Josepha, the cigar girl, whom you ordered locked up a few hours ago—is the English representative in the Wilhelmstrasse at Berlin. She learned of a plan to get a German spy in your signal tower a month before war was declared, reported it to London, and I was summoned from Khartum to London to play the part of the German spy. At Berlin, where she had gone from your own town of Gibraltar to meet me, she arranged to procure me a number in the Wilhelmstrasse through the agency of a dupe named Capper—"

"Capper! Good Lord!" Crandall stammered.

"With the number I hurried to Alexandria. Woodhouse—Captain Woodhouse, from Wady Halfa—a victim, poor chap, to the necessities of our plan, fell into the hands of the Wilhelmstrasse men there, and I gained possession of his papers. The Germans started him in a robber caravan of Bedouins for the desert, but I provided against his getting far before being rescued, and the German agents there were all rounded up the day I sailed as Woodhouse."

"And you came here to save Gibraltar—and the fleet from German spies?" Crandall put the question dazedly.

"There were only two, General—Almer and your servant, Jaimihr. We have them now. You may order the release of Louisa Schmidt."

"The captain has overlooked one other—the most dangerous one of all, General Crandall." Jane stepped up to where the governor stood and threw back her hands with an air of submission. "Her name is Jane Gerson, of

New York, and she knew all along that this gentleman was deceiving you—she had met him, in fact, three weeks before on a railroad train in France.”

The startled eyes of Gibraltar's master looked first at the set features of the man, then to the girl's flushed face. Little lines of humor crinkled about the corners of his mouth.

“Captain Cavendish—or Woodhouse, make this girl your prisoner!”

CHAPTER XIX.
At the Quay.

FIVE o'clock at the quay, and already the new day was being made raucous by the bustle of departure—shouts of porters, tenders' jangling engine bells, thump of trunks dropped down skidways, lamentations of voyagers vainly hunting baggage mislaid. Out in the stream the Saxonia—a clean, white ship, veritable ark of refuge for pious Americans escaping the deluge.

In the midst of a group of his countrymen Henry J. Sherman stood, feet wide apart and straw hat cocked back over his bald spot. He was narrating the breathless incidents of the night's dark hour:

“Yes, sir, a soldier comes to our rooms about three-thirty o'clock and hammers on our door. ‘Everybody in this hotel's under arrest,’ he says. ‘Kindly dress as soon as possible and report to Major Bishop in the office.’ And we not five hours before the guests of General and Lady Crandall at Government House. What d'you think of that for a quick change?”

“Well, gentlemen, we piled downstairs—with me minus a collar button and havin' to hold my collar down behind with my hand. And what do we find? This chap, Almer, with a face like a side of cream cheese, standing in the middle of a bunch of soldiers with guns; another bunch of soldiers surroundin' his Arab boy, who's as innocent a little fellah as ever you set eyes on; and this Major Bishop walkin' up and down, all excited, and sayin' something about somebody's scheme to blow up the whole fleet out there. Which might have been done, he says, if it wasn't for that fellah Woodhouse we'd had dinner with just that very evening.”

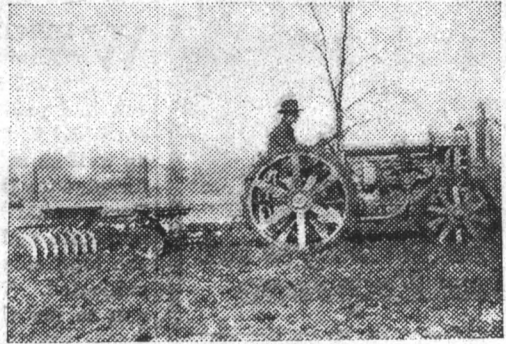
“Who's some sort of a spy. I knew it all the time, you see.” Mrs. Sherman was quick to claim her share of her fellow tourists' attention. “Only he's a British spy set to watch the Germans. Major Bishop told me that in confidence after it was all over—said he'd never met a man with the nerve this Captain Woodhouse has.”

“Better whisper that word ‘spy’ soft,” Henry J. admonished sotto voce. “We're not out of this plagued Europe yet, and we've had about all the excitement we can stand; don't want anybody to arrest us again just the minute we're sailin'. But, as I was sayin', there we all stood, foolish as goats, until in comes General Crandall, followed by this Woodhouse chap. ‘Excuse me, people, for causing you this little inconvenience,’ the general says. ‘Major Bishop has taken his orders too literal. If you'll go back to your rooms and finish dressin' I'll have the army bus down here to take you to the quay. The Hotel Splendide's accommodations have been slightly disarranged by the arrest of its worthy proprietor.’ So back we go, and—by cricky, mother, here comes the general and Mrs. Crandall now!”

Henry J. broke through the ring of passengers; and with a waving of his hat, rushed to the curb. A limousine bearing the governor, his lady and Jane Gerson, and with two bulky hampers strapped to the baggage rack behind, was just drawing up.

“Why, of course, we're down here to see you off—and bid you Godspeed to little old Kewanee!” Lady Crandall was quick to anticipate the Shermans' greetings. General Crandall, (Continued on page 559).

Tractor Power Needs Special Tractor Tools



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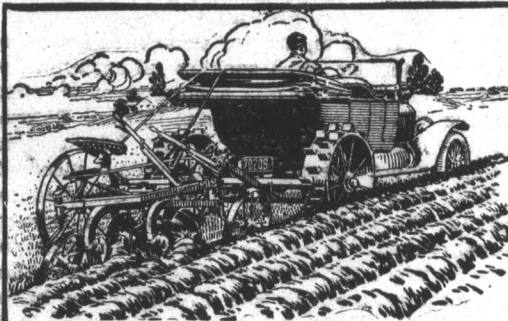
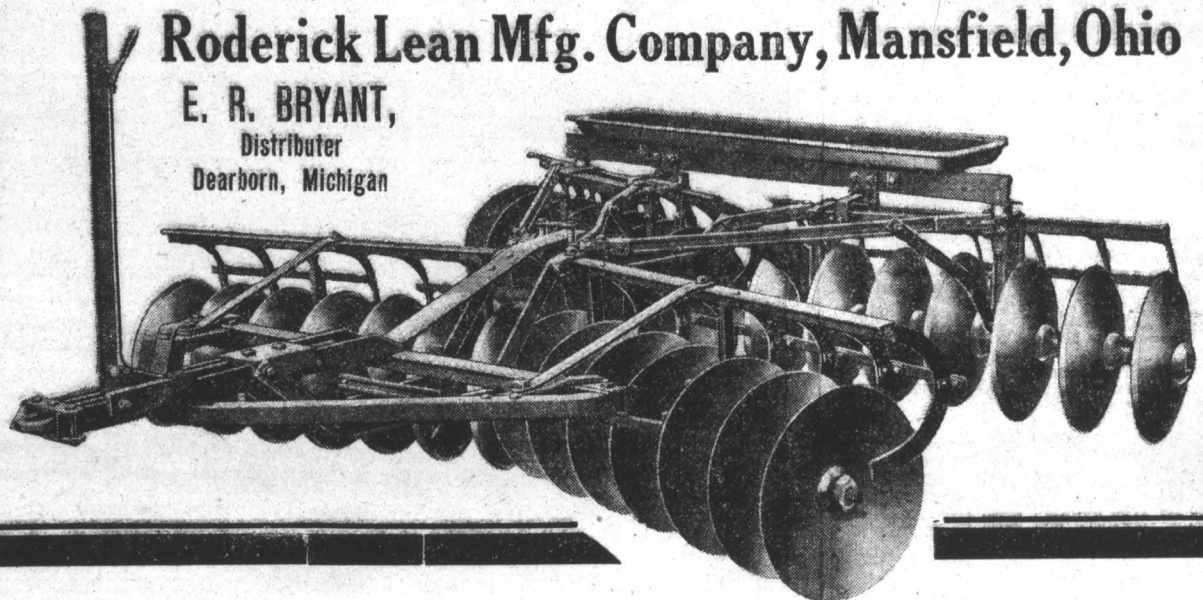
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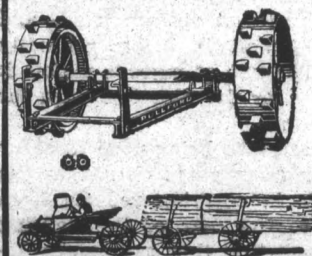
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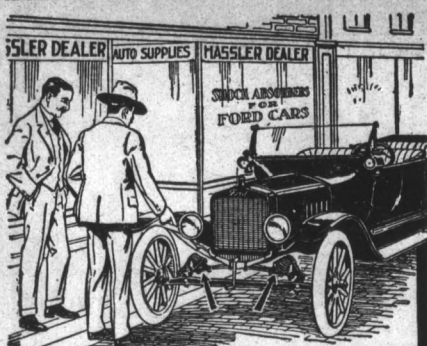
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The Carrier Pigeon, a Bird of War

By E. I. FARRINGTON



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FOR ten days we want to transform your Ford into a \$2,000 car. We will do this by putting on a set of Hassler Shock Absorbers.

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ROBERT H. HASSLER, Inc. 304 Naomi St., Indianapolis, Ind.

WHEN the wireless telegraph was invented everybody supposed that the day of the carrier pigeon had passed. Up to that time pigeons had had a prominent place in war as well as in peace. If it had not been for pigeons the beleaguered citizens of Paris would have been unable to communicate with the outside world during the long siege to which that city was subjected. When steamships first began to ply the ocean, carrier pigeons were released when the vessels were a few hundred miles from land, and quickly brought home advance information for the use of public officials and business men, as well as supplying news to the people.

It is a fortunate thing that the carrier pigeon did not become extinct after it had been supplanted by the Marconi invention, for the present war has demonstrated that pigeons can be depended upon when the wireless fails. Armies which long ago disbanded their pigeon service are now trying to accumulate all the available birds that can be found. This is especially true of the army in this country. Twenty years ago we had the beginnings of a pigeon service, but for a long time there had not been a pigeon loft within an army post until the news came from France that pigeons were doing yeoman service and that more were

owned stock which came from England or Belgian strains. There is much more interest in racing pigeons among Americans than is commonly realized. Two National Associations have been in existence for several years and many races are flown each year.

The Germans have not been prominent in the breeding of racing pigeons, but when the war broke out they realized the value of the birds which the Belgians possessed. Among their first orders as they passed through the ravaged territory of the Belgians was that all pigeons and firearms should immediately be delivered up. Of course the intrepid Belgian people did not obey this order if they could avoid doing so. Hundreds of pigeons were concealed, only to be liberated from time to time when occasion offered. They revealed to the English and French the truth about affairs in Belgium when the Germans were giving out wholly misleading information.

With the Belgian, French and English stock to draw upon a veritable pigeon army has been quartered back of the fighting lines. The birds are housed in portable lofts, the roofs of which are painted in bright colors which can be seen a long distance. It has been found that the pigeons will find their way back to these lofts even though the latter are moved a distance

to mind the shock of smoke and battle. At least they are not confused, but fly from the trenches straight back to their home lofts. So important has this service become that German sharpshooters can reach with a bullet. A pigeon on shooters have now been given the task of bringing down every pigeon they see flying at the rate of a mile a minute is a difficult object to hit, however, and most of them escape. Formerly there was considerable loss from the gas which the Germans occasionally sent floating over the trenches. Now, however, a cage with a special gas protector has been invented so that the pigeons are saved from this untimely death.

Although called carrier pigeons abroad, the bird used by the army is not the carrier as known in this country. Our carriers are bred solely for exhibition purposes and can fly only a short distance. The message carrying birds are really homing pigeons similar to the homers used for squab breeding, but trained for flying. This training must begin when the birds are only five or six weeks old. First of all it is necessary to get them "settled" to the loft which they are to occupy. That is, they must become accustomed to returning there. Whatever loft they are settled in will remain home to them.

There is no reason why any farmer's boy should not breed homing pigeons successfully. Any boy who has a good strain of birds now can make money selling them to the government. It is important, though, to have pedigreed stock, and to be a member of some homing pigeon association. Probably the interest in homers will continue to grow so that birds will be in demand for many years. Perhaps the raising of pigeons will come to be as common a sport in this country as it formerly was across the sea.

AN OLD-TIME PRACTICE.

Many a thoughtless observer of the ships that enter and leave ports at present will get the impression that camouflage (deceit) in war developed primarily to meet the ruthless U-boat campaign, but readers of history know that even the American Indians, half savages as they were, were familiar with resources in deceiving their enemies, by covering their bodies with branches and using the skins of animals for concealment. It is also on record that in a campaign between the Moors (Moslems) and Spaniards (Christians) in the fifteenth century in Andalusia the walls of a Spanish city were destroyed due to a freak in their construction.

In order to deceive Moorish scouts in the vicinity, the Spanish commandant immediately set all of his troops and the town's people to work constructing scenery walls and battlements, conning towers and all. They used cloth painted to resemble stone, and mounted the canvas on wooden frames, with the result that, although the Moorish troops rode by close to them they were deceived by the ruse. Solomon truly said, "There is nothing new under the sun," and he might have added, because human nature never changes.

APRIL.

BY M. A. CROMLICH.

Oh, beautiful April showers,
With sunbeams gleaming through,
And then a glorious rainbow,
That spans the heaven's blue;
With grass blades all a-glitter,
Where little raindrops cling,
Then Mother Earth looks radiant
With pretty flowers of spring.



A Pigeon Loft Showing the Trap for Training the Birds.

needed. Now an elaborate pigeon service is being built up with a loft for seventy-five birds at forty cantonments and stations throughout the country. Recruiting officers of the pigeon corps have established headquarters in various cities and are paying two dollars each for all the suitable young birds brought in. Scores of experienced pigeon fanciers are being enlisted to manage the lofts, and train soldiers in handling the pigeons. It is expected that twenty thousand birds will be on duty within a short time. Some pigeons have been shipped to France, but the experiment was not very successful, as by the time the birds reached that country they were too old to be properly trained. Now all the pigeons collected are being used for breeders. The youngsters will be taken across the water as needed, but a permanent pigeon corps will be built up here.

As it happened, the raising of pigeons is the national sport of Belgium. It corresponds to baseball in America. There are many associations of racing pigeon keepers in England, too, and some in France. It is generally admitted that the Belgians and the English breed the best birds, and most of the successful fanciers of this country

of forty or fifty miles. When an aviator scout flies over the enemies' lines seeking information he carries with him a number of pigeons which are released one by one. Before each pigeon flies away, however, a short message is written on a piece of rice paper and the paper attached to the bird's leg by means of a rubber band. It is the common practice to use a little aluminum case to hold the message, but the French fliers have found that the message is carried just as safely under a rubber band, and this simple plan is being generally adopted. The use of pigeons makes it unnecessary for the flier to return for several hours.

Pigeons are also being used to carry information from ships at sea to the land. It is in carrying reports from the front to the rear of the fighting line, however, that they are most valuable. Wireless apparatus is often dismantled and telephones broken down in the course of a battle. Then recourse is had entirely to the pigeon service, which seldom fails. It has been estimated that ninety-seven per cent of all messages sent are delivered.

Although the birds are very sensitive little creatures, they do not seem

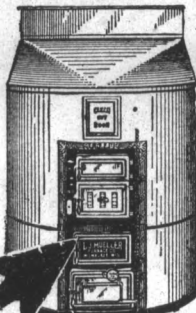
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will help you do this. Has pivot wheels and gangs with parallel motion. Adjustable to any width of row. Every tooth can be raised, lowered or turned to right or left. Lever adjusts balance of frame to weight of driver. Light, strong and compact—the latest and best of riding cultivators. We make a complete line of potato machinery, garden tools, etc. Write us today for free booklet.

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Buy the New Butterfly Junior No. 2. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime against defects in material and workmanship. Made also in five larger sizes up to No. 8 shown here. Earns its own cost and 30 DAYS' FREE TRIAL more by what it saves in cream. Postal brings Free catalog-folder and "direct-from-factory" offer. Buy from the manufacturer and save money.

ALBAUGH-DOVER CO., 2165 Marshall Blvd., CHICAGO

Mention the Michigan Farmer when writing Advertisers

INSIDE THE LINES

(Continued from page 557).

beaming indulgently on the group of homegoers, had a hand for each.

"Yes—yes," he exclaimed. "After arresting you at three o'clock we're here to give you a clean ticket at five. Couldn't do more than that—what? Regrettable occurrence and all that, but give you something to tell the stay-at-homes about when you get back to—

"Kewanee, Illnoy, General," Sherman was quick to supply. "No town like it this side the pearly gates."

"No doubt of it, Sherman," Crandall heartily agreed. "A quiet place, I'll wager. Think I'd relish a touch of your Kewanee after—ah—life on Gibraltar."

Jane Gerson, who had been standing in the car, anxiously scanning the milling crowd about the landing stage, caught sight of a white helmet and khaki-clad shoulders pushing through the nearer fringes of travelers. She slipped out of the limousine unseen, and waited for the white helmet to be doffed before her.

"I was afraid maybe—" the girl began her cheeks suddenly flaming.

"Afraid that, after all, it wasn't true?" the man she had found in war's vortex finished, his gray eyes compelling hers to tell him their whole message. "Afraid that Captain Cavendish might be as vile a deceiver as Woodhouse? Does Cavendish have to prove himself all over again, little girl?"

"No—no!" Her hands fluttered into his, and her lips were parted in a smile. "It's Captain Woodhouse I want to know—always; the man whose pledged word I held to."

"It must have been—hard," he murmured. "But you were splendid—splendid!"

"No, I was not." Tears came to dim her eyes, and the hands he held trembled. "Once—in one terrible moment this morning—when Jaimihr told us you were going to the signal tower—when we waited—waited to hear that awful noise, my faith failed me. I thought you—"

"Forget that moment, Jane, dearest. A saint would have denied faith then." They were silent for a minute, their hearts quailing before the imminent separation. He spoke:

"Go back to the states now; go back and show this Hildebrand person that you're a wonder—a prize. Show him what I've known more and more surely every moment since that meeting in Calais. But give him fair warning; he's going to lose you."

"Lose me?" she echoed.

"Inevitably. Listen, girl! In a year my term of service is up, and if the war's over I shall leave the army, come to the states to you, and—and do you think I could become a good American?"

"If you have the proper teacher," the girl answered, with a flash of mischief.

"All aboard for the Saxonia!" It was Consul Reynolds, fussed, perspiring, who hustled up to where the Shermans were chatting with Lady Crandall and the general. Reynold's sharp eye caught an intimate tableau on the other side of the auto. "And that means you Miss Step-lively New York," he shouted, "much as I hate to—ah—interrupt."

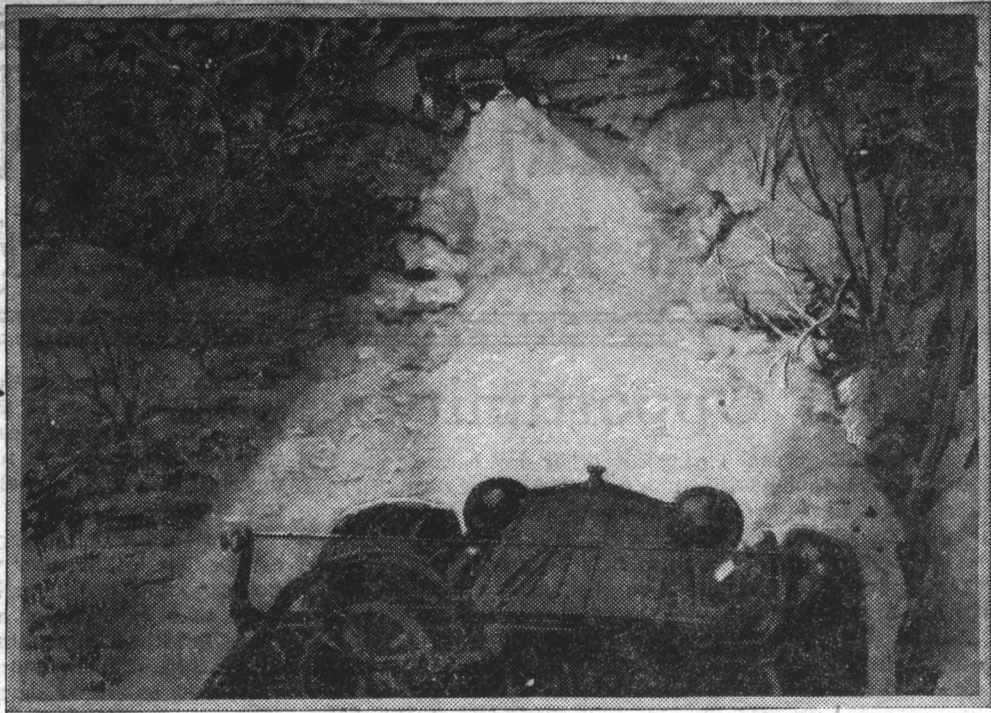
Jane Gerson saw her two precious hampers stemming a way through the crowd on the backs of porters, bound for the tender's deck. She could not let them out of her sight.

"Wait, Jane!" His hands were on her arms, and he would not let her go. "Will you be my teacher? I want no other."

"My terms are high." She tried to smile, though trembling lips belied her. "I'd pay with my life," he whispered in a quick gust of passion. "Here's my promises—"

He took her in his arms, and between them passed the world-old pledge of man and girl.

THE END.



Photograph by L. A. Hiller

Kills all glare—Legal everywhere
Gives you 500 ft. range

BOTH these cars are equipped with Noviol (yellow-tint) Conaphores—*legal everywhere*. The photograph shows them as they meet at a dangerous turn on a dark country road.

The instant a driver sees the yellow-tint Noviol lights he knows that they will not blind him—and feels perfectly safe. The soft mellow light is easy on his eyes and helps him to see past the oncoming car.

Kills all glare. The Conaphore uses all the light, but patented corrugations control it within legal limits. Height of beam is not more than 42 inches from the road.

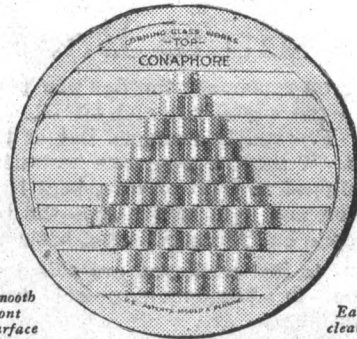
Range 500 feet. Corrugations throw a shaft of strong driving light 500 feet ahead of the car.

Ample side light. Cylinders fan strong rays out over the roadside. Light spreads 25 feet at each side of the car 75 feet ahead.

Pierces fog and dust. This wonderful exclusive feature of Noviol Conaphores (yellow tint) is patented.

Equip your car with Conaphores. They safeguard you, and make for the safety of others. Legal everywhere. Dimming unnecessary. Made in both Noviol and clear glass.

Easy to install. Sizes to fit all cars. Order from your dealer—if he has not received his supply, write us.



Smooth front surface

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Manufactured by the World's Largest Makers of Technical Glass

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7 to 8 1/2 inches inclusive	3.50	2.50
8 3/4 to 10 inches inclusive	4.50	3.00
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See 2 yr. 6 to 7 ft. xxx Apples, Plums, Pears	\$.30	\$2.50	\$18.00
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Sweet & sour cherries 6 to 7 ft.	.35	3.00	24.00
Quinces xxx 4 to 6 ft.	.30	2.50	22.50
Medium size 3 to 4 ft.	.25	2.00	18.00
Peaches 1 yr. 5 to 6 ft.	.20	1.50	12.00
4 to 6 ft.	.15	1.35	9.00

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Woman and Her Needs

At Home and Elsewhere



Our Real Opportunity

I LOVE to think that no heroic sacrifice is ever lost," said a thoughtful writer, who must have had more than the usual share of respect for human nature. Certainly it seems to us many times that not a few of the sacrifices we make are lost, so far as their attainment of the end we desired is seen. We give up a thing which to us is of heroic size, and the one for whom we make the sacrifice accepts our offering as calmly, and ungratefully, as a child takes its daily bread, with never a thought of what the gift means to us. But if we look at it in the light of our philosopher we will see that the sacrifice is not lost. Its influence shows up in our lives if it makes no impression on the one for whom we sacrificed. So that no good deed dies so long as the soul of the doer lives.

It's a sustaining thought for those who are seeking for good out of the present world chaos. Certainly if the amount of good derived is in proportion to the sacrifice, a colossal amount awaits this poor world as a result of the stupendously heroic sacrifice now being offered up. Life will never be the same again to the wives and mothers who have given their all. Can it ever be the same to the rest of us? Can we go back to our old careless, selfish way after it is over, calmly forgetting the blood that has been offered up for our peace and safety? If we can, then our old philosopher is wrong and the most vital sacrifice offered up since Calvary will have been in vain.

Surely we who are old enough to understand it all can not accept the sacrifice unchanged. We have been grossly selfish, demanding that life give all to us, and refusing to give in return. Looking upon our little chance here on earth as a time to get all we could and give as little as possible. But we can never do it again.

Already there is a change. Women who have never roughened their hands with work are scrubbing hospital floors on the other side, and doing the most menial forms of service. On this side women who have scarcely entered their own kitchens except to give orders, are letting cooks go and are themselves trying the conservation recipes sent out by the government, in order to save the foods so necessary to win the war. And men who thought they could eat nothing but choice steaks and roasts, flanked with hot-house products, are eating stews and rutabagas with an appetite whetted by the thought that they can help in this way though they may be too old to carry a gun. If the boys can give their lives, if the mothers can give their hearts, those of us who are not called on for this sacrifice, see that we can easily give our pleasure.

We have entered into a new dispensation, the dispensation of service. Our thought no longer is to see how much we can shirk but how much we can do. For the first time in our selfish lives we are mindful of the injunction of Christ, and after we have done all we can we say we are unprofitable servants. One woman who is taking care of four children, two of her own and two whose father has gone to war, and cooking for three boarders so as to help out the meager income, was found

crying the other day because she had no time to knit. She bought a \$50 bond of each issue, given to every form of relief work, is paying fifty cents a week to help keep a Syrian baby, and yet feels she hasn't done enough because she can't turn out a pair of socks a week.

The heroic sacrifice is at work in our hearts now. Will it continue when the victory is finally won? Or will another generation find Americans slumped back in their old habits? Will we give to our children and our children's children a passion for service? Will we make them see that the real things of this world are the things of the spirit? Or will they gather that the chief thing in life is to work for material success? We have been blind worshippers of what we termed success. But our idea of a successful life has

Substitute Brains and Save Wheat

Do you remember the day you picked up the coffee pot and off fell the top? The rod had slipped out of the hinge. Without a moment's hesitation you slipped in a bit of wire, bent it in position and secured the top—the rod was gone but you substituted brains.

That is just what you are called on to do in bread-making—substitute brains.

The object of the wheat campaign is to cut consumption. Keep your eye on that goal; let nothing turn you aside. We are in a race with Germany. "Food Will Win the War"—but whose food?

The American people have been ask-



The attractive feature about this dress of the ever popular navy serge, is that it may be worn instead of a suit and blouse, the pretty guimpe and collar of checked silk gingham giving the effect of a blouse. Running diagonally across the skirt are bands of wide black silk braid, while down the right side is a long black satin sash finished at the bottom with silk fringe.

been the wrong one. If this war brings to us the abiding idea that the great man is the one who gives, not the one who takes, then it will not have been in vain. This is what Galsworthy says to America:

"The burden of proving that a democratic 'live and let live' world-civilization can stand will be on her shoulders more than on those of any other nation. It will all depend on what Americans make of their inner life, on their individual habits of thought, on what they reverence and what they despise. If they despise meanness and cruelty, injustice and oppression, shoddiness and blatancy; if they reverence chivalry, freedom, toleration, good order, and pride of work—America's star will shine before all peoples not so blessed by fortune. She will be loved, not feared; she will lead in spirit and truth, not in mere money and guns. She stands at the door of her real greatness."

ed to save 100,000,000 bushels of wheat by July as a military necessity. You are a military unit in the campaign and three times a day you are called on to do your share. If you fail you imperil the safety of the army on the other side. No reason, no excuse matters; the only thing that counts is saving the wheat—the cut must be made.

"But biscuits are the quickest to make," objects one woman.

That's an excuse not a reason—if you must have biscuit why not barley biscuit, rice biscuit or corn flour biscuit instead?

"I must keep light bread on hand," says another, "my oven is often not hot enough for cornbread."

Another excuse—mush, rice, potatoes or hominy are excellent bread substitutes and can be cooked on top of the stove.

"But," and this is heard from many women, "my grocer has no substitute flour for victory bread."

Well, why not potatoes? Potato bread is excellent and potato biscuit a treat. There are always potatoes too small to bake that can be turned into bread. Small potatoes make large loaves. Substitute brains and the will to conquer for excuses, and the wheat will be saved.

One woman who could buy no substitute cereals at her store, and had no money to order elsewhere, made two weeks' supply of flour do for three. She did the job; she cut flour consumption one-third, and that's the point.

How to save your share of that 100,000,000 bushels of wheat is mostly a matter of ingenuity. When you get in a tight place use your head—substitute brains—but above all do the job.

Give King Corn a royal welcome to your home.

Silent pro-German appetites are as hostile to the allied cause as disloyal utterances.

There are many substitutes for wheat flour but no substitutes for peace.

The difference between the patriotic American housewife and the one who is indifferent or disloyal is measured by the amount of wheat flour in her kitchen.

Do You Know Oatmeal?

DO you know that oat meal makes delicious puddings and other good things? Of course you know it is a good breakfast food, but it is even better fixed up for dinner or supper. To cook oat meal, stir slowly two and a half cups of rolled oats into five cups of boiling water which has in it one teaspoon of salt. Cook for one hour, or over night, in a double boiler or fireless cooker. This will serve five people. If you want it for two meals, cook twice the amount to save time and fuel.

Other Ways with Oatmeal.

Oatmeal Betty.—Two cups of cooked oatmeal, four apples cut up small, one-half cup of raisins, one-half cup sugar, one-fourth teaspoon of cinnamon. Mix and bake for one-half hour. Serve hot or cold. Any dried or fresh fruits, dates or ground peanuts may be used instead of apples. This will serve five people.

Scotch Soup.—Two and a half cups of water, one and one-fourth cups of rolled oats, five potatoes cut in small pieces, two onions sliced, two tablespoons of flour, two tablespoons of fat. Boil the water and add the oatmeal, potato and onion, salt and pepper to season. Cook one-half hour. Brown the flour with the fat and add to the soup. Cook until thick. One cup of tomato adds to the flavor. Serves five people. With bread and dessert it is enough for lunch or supper.

Oatmeal Bread.—One cup of milk or water, one cup of rolled oats, two and a half cups of wheat flour, one-third yeast cake, one teaspoon of salt. Scald the liquid, add salt and pour over the oats; cool half an hour, add the yeast mixed with one-quarter cup of lukewarm water and the flour. Knead and let rise until double the size. Knead again and let rise in the pan until the size is doubled. Bake in a moderate oven for fifty minutes. Makes one loaf weighing one and a quarter pounds. Is delicious with all meals—try it.

Spiced Oatmeal Cakes.—One-half cup of cooked oatmeal, one and a half cups of flour, one-fourth cup of sugar, one-fourth cup of raisins, one-fourth teaspoon of soda, one-half teaspoon of baking powder, one-half teaspoon of cinnamon, three tablespoons of fat, one-fourth cup of molasses. Heat the molasses and fat to boiling. Mix with all the other materials. Bake in muffin pans for thirty minutes. This makes twelve cakes.

Scotch Oat Crackers.—Two cups of rolled oats, one-fourth cup of milk, one-fourth cup of molasses, one and a half tablespoons of fat, one-fourth of a teaspoon of soda, one teaspoon of salt. Grind or crush the oats and mix with the other materials. Roll out in a thin sheet and cut in squares. Bake twenty minutes in a moderate oven. Makes three dozen crackers.

Baked Oatmeal and Nuts.—Two cups of cooked oatmeal, one cup of crushed peanuts, one-half cup of milk, one tablespoon of vinegar, one-fourth teaspoon of pepper, two and a half teaspoons of salt. Mix together and bake in a greased pan fifteen minutes. This is enough for five people.

A WORD WITH MOTHER.

BY M. MEREDITH.

Are you a "fun spoiler?" This is how a little friend of mine designated grown-up people. I heard him say: "They're all fun spoilers, and mother's the worst one of all." How it set me thinking. I was sure that I couldn't possibly be included in that category, but, when I reflected on the many games I had ruthlessly interrupted and the apparently arbitrary demands I had made on my children at times when they were most deeply absorbed, I was forced to admit that I, too, had been all too often a "fun-spoiler." We mothers are a thoughtless lot, and are apt to forget that the rights of the children as individuals are quite as sacred as our own right to liberty.

When we want a child to do something for our convenience, we do not hesitate to call him away from his play to do it, even if he is in the middle of placing a beam in a shack he is building. We demand our small daughter's immediate and cheerful attention at the crucial moment in her doll's dressmaking when, if she drops her work, the stitches will all be lost. To them these matters are of tremendous importance, and we should respect them. We should give them the thoughtful consideration that we are training them to give us. This is not to say, of course, that children should not learn the lessons of obedience cheerful service and unselfishness. It does mean, however, that the parents should not demand a service without stopping to consider the children's side of it, whether it will interfere with some task he has set himself, or even "spoil his fun." The service should be asked as a favor, and time allowed for the completion of the matter already on hand.

If we expect children to appreciate the loving things done for them by their elders, we must render appreciation for the things the children do for us. If it seems necessary to call a child away from play to perform some errand or household duty, the child should be consulted, the favor asked, and a reasonable time given for adjusting its thoughts to a change of occupation. Due consideration should be given to their plans and if possible we should arrange our work so that their play shall be reasonably free from interruption.

Ever since that little lad gave me an unconscious warning, I pause before summoning my children to carry out my wishes, even when I know my way is right, and murmur to myself, "Fun spoiler." Then I try to be as considerate of their convenience and happiness as I like others to leave me free to follow out my plans, always allowing for the proper guidance and oversight that is a mother's duty. Children are individuals with individual growth and progress to make, and it is not the parents' place to form and mold children to their own personal wishes, but to help them unfold in the best way for their own good.

MENDING.

There is an old saying, "One stitch in time saves nine." This is especially true in the mending of stockings. By laying aside a ragged stocking as soon as a hole is discovered that it may be washed and mended, three pair of good quality hose wear my children about a year. As the boys wear long overalls, only the stocking feet are worn out. The tops make good mittens for the younger children.

Wornout garments are not allowed to accumulate. If they contain material that can be made into any useful article, that is done as soon as possible and put away till needed. Winter garments taken off in the spring are mended before putting away for the next winter.

One of the best ways to keep the

mending from accumulating is to place a large basket in a convenient place, out of sight, and as soon as a garment is found to be in need of repair to place it in the basket. It can then be cared for whenever there are a few moments to spare, and will be ready to wear when needed.—Mrs. Wm. R.

CONSERVATION HINTS.

Meat and grease may be saved in different ways. Rich milk added to beans before baking will make them just as good as if pork had been put in. If a well beaten egg is put into pancake batter, the griddle will not need greasing. When baking pie crust, if the pie can be eaten the same day, suet (tried out) may be used for shortening by adding one cup of boiling water when mixing it.—Z. I. D.

If you have fruit juice left after using the fruit for pies, do not throw it away as many do; instead, prepare apples as for sauce, put into a granite or earthenware baking dish, add a little sugar, pour the juice over them and bake till well done, keeping covered, and stirring occasionally.—Mrs. J. C. T.

Do you know that goose, duck and chicken oil is an excellent shortening for cake? You will not need to use as much as of other shortening.—Mrs. J. C. T.

My children will not eat fat pork, therefore I trim off the fat instead of giving it to them to waste, and save it until I have some lean beef leftovers, when I chop the fat pork and lean beef together, mix a very little chili sauce with it and set aside for making sandwiches for school lunches. The dear kiddies do not suspect the presence of the fat. The sandwiches are fine.—Mrs. J. C. T.

Sometimes I boil rice in fruit juice, using a double boiler, of course. 'Tis fine with sugar and cream.—Mrs. J. C. T.

After a dinner of boiled ham and cabbage, or any boiled dinner, strain off any remaining broth, and you will have when it cools a cupful or more of clear fat, slightly seasoned perhaps with the vegetables of the dinner. Mix a part of this with chopped potatoes, a little pepper and a small chopped onion and you have a delicious hash to fry.—L. M. T.

When bits of several different kinds of meat and vegetables have accumulated, cut in small pieces and mix, placing all in casserole. Pour in one cupful or more of cooked tomatoes and bake rather slowly until done.—L. M. T.

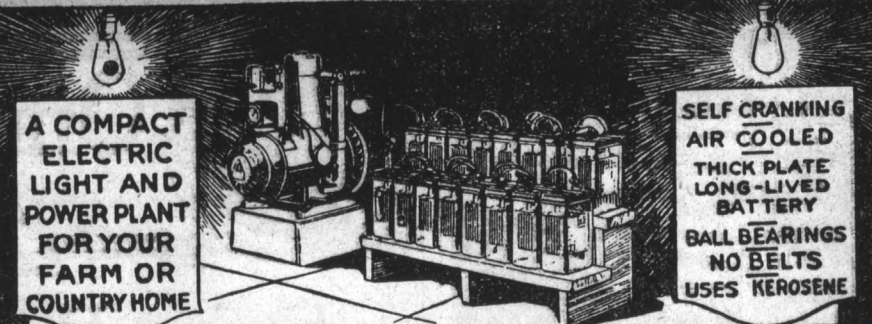
I have found that carrots make as good a pie as pumpkin. Boil them in salted water, mash in their own juice, brown down, run through collandar and then proceed as if it were pumpkin.—Z. I. D.

HOME QUERIES.

Household Editor.—Would you kindly print a recipe for rye bread with full directions?—M. S.

A good rye bread is made as follows: Pour one pint of boiling water, or of scalded milk, or a mixture of both, over two teaspoons of salt, and two tablespoons each of sugar and shortening. Allow to get lukewarm and add one cake of compressed yeast, which has been softened in lukewarm water. Stir well and then mix in one pint, or two cups of wheat flour. Do this in the evening, and set away, covered with a clean cloth, to rise until morning. In the morning work in rye flour until the dough will not stick to the hands, and set away again to rise until double in bulk. Then form into loaves, let rise again, and bake as wheat bread. If you are in the habit of making bread, use your own rule and finish with rye flour after sponge is light. Many prefer a sour rye bread. This can be made by adding a piece of sour dough to the new bread when it is set to rise after the first kneading.

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Our Boys and Girls
At Work and play

State Potato Club Champion

By A. C. SPAULDING

At the recent Farmers' and Housewives' Congress at the Michigan Agricultural College, one of the displays that attracted considerable attention was the Boys' and Girls' Club Exhibits which were given considerable prominence along the left side of the pavilion. Part of this display was given over to the Red Cross work of the girls' sewing clubs and part to the handicraft work of the boys, but the major portion was left for the annual

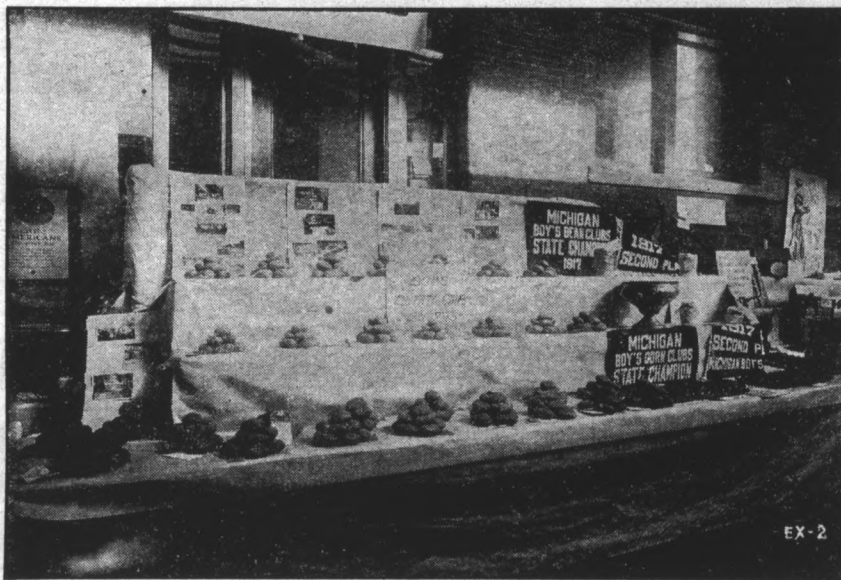
bushels; and one acre profit, \$193.50. Fourth Place.—Willard Miller, Manistique, Schoolcraft county. Age, 13 years; size of plot, one-fourth of an acre; yield of plot, 56 bushels; profit from plot, \$43.45; acre yield, 224 bushels; acre profit, \$173.40. Many of these boys were enabled to make extra money from their potato crop this year by hill selecting a quantity of good seed. In fact, several of the best clubs in the upper peninsula

Walker, with the result that my returns this fall were beyond even what I had hoped for.

The plot of ground selected was 104 feet square. Last year this plot had yielded 75 bushels of potatoes, that is at the rate of 402.6 bushels to the acre, yet I was sure that the soil had not been completely robbed of its fertility.

About May 30 this sandy soil was plowed to a depth of five inches. Green Mountain potato seed was cut, two eyes to the piece, and planted by hand to a depth of four inches. The rows of potatoes were planted two and one-half feet apart, and one and one-half feet separated the hills in the row. After harrowing my plot it appeared to be in fine condition and I felt sure, right from the start, that a bumper crop would greet me in the fall, I knew, of course, that to realize my ambition meant work. The soil had to be enriched and for that purpose two team loads of manure were scattered evenly over the plot, and then turned under. Twice during the growing season the soil was cultivated by hand. Happily, treatment of the stalks and leaves for insects and plant diseases was unnecessary. In fact the potato plants grew so fast and so thick that I was convinced that I could do little to improve conditions. About October 1 my first crop seemed to have reached maturity, but it was not until the tenth that I began the pleasant work of harvesting. Every hill I turned up tickled me, because of the large number of potatoes I found under each one. When I had finished a pile of large, clean, white potatoes, measuring 126 bushels, had been dug up.

"I do not believe I was ever happier, for I had accomplished what I set out to do, namely, grow more potatoes on



Boys' Potato Club Exhibit at the Farmers' and Housewives' Congress.

state exhibit of the boys' potato clubs. The past year was not a good one from the standpoint of the potato club members of the lower peninsula, but it did not keep them from finishing up and making a fine display at the final show. About thirty of the best displays from the upper peninsula exhibit were sent to the state show by the boys, and they certainly demonstrated the fact that they can produce potatoes in that region.

The potatoes on exhibit were accompanied by the reports and stories of the club members. The work of these junior potato growers was judged on the basis of the quality of the exhibit, the amount raised per acre, the profit made and the report and story. The potatoes themselves were judged by Mr. J. E. Milward, Potato Extension Specialist for the University of Wisconsin, Madison, Wis. The reports and stories were graded by a committee from the Junior Extension Department of the Michigan Agricultural College.

When the reports, stories, yields and profits had been averaged the judges announced the following results:

State Champion.—Gifford Felt, National Mine, Marquette county. Age, 15 years; size of plot, one-fourth acre; yield of plot, 126 bushels; profit from plot, \$146.40; grade on report, 95 per cent; acre yield, 504 bushels; acre profit, \$593.20.

Second Place.—Fred Bickola, Trout Creek, Ontonagon county; age, 17 years; size of plot, half an acre; yield of plot, 181½ bushels; profit from plot, \$151.90; report, 93½ per cent; acre yield, 373 bushels; acre profit, \$313.80.

Third Place.—Roy Wiltse, Big Rapids, Mecosta county. Age, 15 years; size of plot, half acre; yield of plot, 129 bushels; profit from plot, \$90.05; report, 93 per cent; acre yield, 275

are at work at present making a specialty of such seed.

The work which these potato club boys have been doing in the last few years is double interesting now in the light of our present need for all kinds of food. The following story may give some idea of how the actual raising of



Handicraft and Boys' Bean and Corn Club Exhibit.

a crop of potatoes appeals to a good, bright, normal American boy. This boy's story and his achievement are of more interest when we learn that his brother won the state championship for potato growing last year, using the same ground.

How I Grew my Potatoes. "Spurred on by my brother's success last year, I enrolled as a member of the Boys' Potato Club. Eager to do better than my brother, I followed as closely as I could the instructions given me by our club supervisor, Mr.

that one one-quarter of an acre of ground than my brother did. "Boys, if you want some real fun, join the Potato Club."

BOYS' AND GIRLS' CLUB NOTES.

The Michigan State Fair is planning to construct a model rural school on the grounds for the coming fall fair. This building will be the headquarters for the Boys' and Girls' Club Department. All contests and demonstrations will be held in the model school.

HANDLING BROODY HENS.

Some of the larger breeds of hens will persist in becoming broody and they sometimes refuse to give up without we go to extremes with them.

I have found that three things help me: Air circulating under the hen, plenty of water and feed for them to work on when they are restless, and the society of the flock.

Breaking up quickly is important, for a hen is a laying machine, and it is necessary for her to keep up her vigor and condition to be laying at her best.

One of the reasons why the smaller breeds lay more eggs is their non-brooding habit, and by care we can reduce the trouble from broodiness in our flock of larger breeds to an equal extent.

Kansas. FLORA DEAN.

DO NOT NEGLECT LATE HATCHES.

I have found that with proper care, chickens hatched out in April, May and even in June, will mature and start laying before cold weather comes.

It is during the month of May that we are often surprised by seeing a large brood walking around proudly as a result of the hen stealing her nest, and this is an indication that the best natural conditions are more favorable for the young at this particular season.

It is a good plan, however, to raise early chicks also, and especially where they are to be sold on the market as broilers, but is a mistake to think that it is absolutely a necessity to get early hatches in order to have chickens in condition for winter laying.

MRS. E. O. SWOPE.

BABY CHIX Hatched for 5 Cents Each Do you know that the chicks hatched by your hens cost you 22 cents each? They do. Let us prove it to you.

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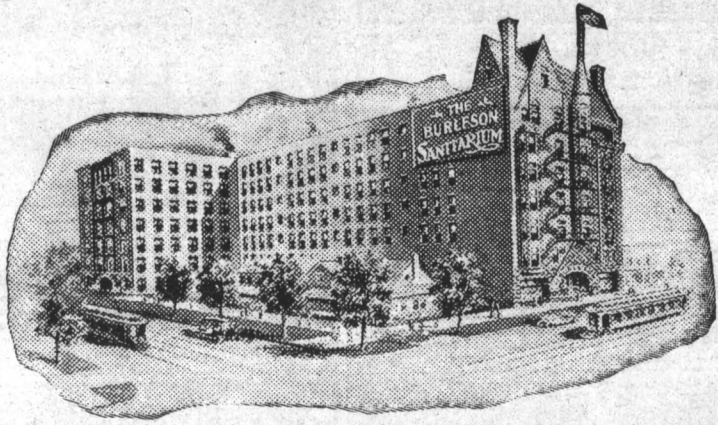
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M. L. McLAULIN, Redford, Michigan.

The Grange and the Rural Community
By W. F. TAYLOR

NEVER before in the history of agriculture have there been so many people watching the farmer. Never before has there been such widespread interest in rural problems. Teachers and preachers are talking about agriculture, authors are writing stories about the farm, magazine writers are racking their brains to find a solution of difficult rural problems that have puzzled farmers for "nobody knows how long," and the daily press is giving information and instruction in the art of farming until it would seem to anyone who knows little or nothing about it, that all these good people have made the way so plain "that the wayfaring man though a fool, need not err therein."

A Social Question.

Speaking of magazine articles about rural conditions and possibilities, reminds me of a recent contribution to one of the most reliable magazines in the country, relating to the problem of farm management under the growing scarcity of farm labor.

The author says that it is not high wages that induces our country boy to go to town. They would not stay on the farm if wages were as good as they are in the city. They are tired of long hours, and of the isolation of country life. They want a short day, and a chance after their work is done, to meet with their fellows. The farm must be run like any other business or manufacturing. There must be no more hours in a day, and the workers must be given an opportunity to meet when the day is over, for social privileges.

Community Management.

He suggests the taking over of several small farms into one large estate, and the management of it by competent parties who will employ men living in town. He suggests that these laborers can reach the farm by means of autos, motorcycles, and that to do so will be a very simple matter.

He says, however, that he knows of sufficient good land adjoining several cities that might be gotten, and he is anxious to see the experiment tried out. I make mention of this article, not to discuss its merits, because farmers are going to read what I am writing and the insuperable difficulties in the way of carrying out the plan involved will appear to them. But I refer to it merely to show the interest in the calling of agriculture on the part of prominent men in the city.

The reason for much of this anxiety is clear. The farmer produces the food and with meatless and wheatless days, the memory of three dollar potatoes fresh in our minds, and with talk of eight dollar beans to the farmer, it is small wonder that city people are getting anxious about what they are going to eat at no distant day.

Then, too, it is cheerfully admitted that a part of this interest in country problems springs from an honest desire to help their brothers out on the farm.

Evolution Not Resolution.

We need not look for a revolution in agriculture. We may expect evolution instead. We do not doubt the ability of a good business man who understands how to operate a farm, to run a large area of land with greater efficiency than is possible with that land divided into small farms and tilled by men who are ignorant or careless or both, of the methods that bring results. But we have not the least idea in the world, that it would be possible to buy up these small farms at a price that would make it practical to assemble them in large estates and devote them to agriculture. No, we are going to have large farms, small farms and between, for many years yet.

This means in Michigan, that there

will be rural neighborhoods having rural schools, trying to maintain the Granges and other farm organizations, with rural churches and other centers of activity of one kind and another.

The Stability of a Community.

The rural community where people own their farms, where they are content to live, and so pass the greater part of their lives, is not much of a problem compared with the community composed largely of renters who do not usually remain in one location more than a year or two. But in any community certain things should be made possible. There should be a good school, a good Grange, a prosperous rural church, unless it is near enough to town to permit the people to attend church there, and these educational, social and religious centers should be so supported as to make them powers in the moulding of the lives of the young, and in adding to the happiness of all.

To build schoolhouses, Grange halls and churches requires money. While we are building them we ought to add to the comfort and convenience of our homes, and that will take money also. If we are to do any of the many things that we are so often told will increase our happiness and our power to do good in the world, money must be had.

True, there are many Granges that do little or nothing for the neighborhood where they are, there are churches of which the same may be truly said. It is not so strange either, for if there are men and women who live with no purpose save their own enjoyment and so miss that, then why should there not be organizations of those people whose collective vision is as dim and restricted as that of the individuals who compose them?

Rural Organization Necessary.

If agriculture is to maintain its place among the activities and callings of men, then it will be through organization. The Grange is here, and so we do not have to build it save where it has grown weak, or failed altogether.

Through the Grange, the best people of every rural neighborhood should give expression to their best and wisest plans for community betterment. First, there is the matter of better farming. The Grange should be ever at the front in every movement toward better agriculture. In a fruit section, spraying programs should be so frequent and so serviceful that not a single member can stay in that Grange and not get the information which he should have if he is to operate an orchard. If the community is a dairy center, then dairy programs should enlighten all upon this important subject.

Work for Improvement.

The Grange in each locality should give its support to every movement calculated to better the condition of agriculture. If there are sufficient people in the community or in reach of the Grange, then cooperative selling associations should be formed.

The Grange should cooperate with the county agent if there is one, and if not, steps should be taken to secure one. We meet now and then one who questions the county agent plan, who objects to the program of our agricultural college, and who is using a lot of energy in objecting to things that he is going to like very much after he knows more about them.

Now, everything is changing—much of our fertility has been lost by bad methods of soil handling, combinations of capital and organizations of labor have alike limited our privileges, products of the farm are sold under the widest competition by those who have little or nothing to say about the prices paid for them, labor has gone to the

(Continued on page 566).

CATTLE

HOMESTEAD FARMS

A Federation of Interests

Holsteins

A herd of 50 Holsteins headed by the bull, King Zerma Alcartra Pontiac, son of King Segis Pontiac Alcartra the \$50,000 Holstein Bull and full brother to Mable Segis Korndyke; 40.32 lbs. of butter in 7 days at four years old.

This herd is of the very highest class of Holsteins and are the kind that the practical farmer should have who wants stock that is sure to pay out.

The following family is offered as a foundation for a high class practical herd: Dam, Tatty Topsy Dawn, 4 yrs. old just freshened; 1st daughter Pauline Sade Dawn, 2 yrs. old, bred Nov. 7, 1917, to bull with 29 lb. dam; 2nd daughter 1 yr. old and 1 full sister of 1st daughter; 3rd daughter, born April 13. Let us send you photographs and full description of this family.

Heifer calves, bred heifers and cows. Please tell what you want and let us describe and send photograph of the individual such as we think you would like.

Young Bull, sired by King Zerma Alcartra Pontiac; Grand sire King Segis Pontiac Alcartra, the \$50,000 bull. Dam is Genesee Wonder, direct descendant on both sides from De Kol 2nd Butter Boy 3rd.

This young bull was born Jan. 30, 1918; is 95 per cent white, a straight, upright animal. We will send you description and photograph. Other young and older bulls of high class.

A fine Holstein herd; animals of all ages to select from. Please let us hear from you.

HOMESTEAD FARMS, Bloomingdale, Mich.

8th Annual Sale 8th 80 Holstein-Friesian Cattle 80

To Be Held

April 25, 1918, at Howell, Mich.

by

The Howell Consignment Sale Co.

These Cattle are a high class of stock nearly all are from one to four years old, bred in the most noted families individually fine, and bred to bulls of the 30 lb. kind. Catalogue ready.

Mark B. Curdy, Sec'y.

Col. Perry, Auctioneer.

I Always Have Holsteins To Sell

If wanting Registered cattle write me your wants before placing your order elsewhere.

L. E. CONNELL, Fayette, Ohio

OAK Leaf Farm. Herd sire Lenawee Pontiac Calamity King offer Registered Holstein bull calves from A. R. O. cows and the above sire whose dam holds the milk and butter record in the state of Ind. 7 days milk 796.3, butter 32.51-315 days milk 23782.3, butter 826.75. E. H. GEARHART & SON, R. 4, Marcellus, Mich.

"Top-Notch" HOLSTEINS

The young bulls we have for sale are backed up by many generations of large producers. Buy one of these bulls, and give your herd a "push". Full descriptions, prices, etc. on request.

McPherson Farms Co., Howell, Mich.

5 HOLSTEIN BULLS

ready for service, on account of selling farm and entire herd will sell these choice bulls from world record families at 1/2 actual value. Don't wait come see them.

LONG BEACH FARM, AUGUSTA, MICH.

The Traverse Herd Great Values In Bulls

from A. R. O. Cows with records up to 30 lbs. Let us know your wants. We will send extended pedigrees and prices.

TRAVERSE CITY STATE HOSPITAL, Traverse City, Michigan.

Advertisement for Purebred Holsteins, featuring an image of a cow and text describing their profitability and availability through The Holstein-Friesian Association of America.

Extraordinary Opportunity

The Livingston County Holstein Breeders Sale Co., will Hold Its

Fourth Annual Public Sale, Thurs., May 16, '18

At 10:30 A. M. at Howell, Mich., at the Sale Pavilion on the Fair Grounds

100 Head of Registered Holsteins

Consisting of 91 Females and 9 Bulls.

This sale will be the Dispersion of the entire herd of S. B. Rubert, Howell, Mich., who contributes 40 head.

Among the bulls will be a herd bull by the Mighty Rag Apple Korndyke 8th and out of a daughter of Pontiac Korndyke. Several of the bull calves are of choice breeding and are fit to head herds. Their dams have records from 22 lbs. as Junior two-year-olds, to 29 lbs.

Among the females will be found: A 28-lb. daughter of King of the Pontiacs and two of her daughters by an extra good sire.

Two daughters of Pontiac Korndyke and some stock from each.

A 26-lb. Junior three-year-old; a 26-lb. Senior three-year-old; a 26-lb. Junior four-year-old; a 25-lb. cow and her daughter by a 30-lb. sire; two 22-lb. Junior two-year-olds; two granddaughters of Colantha Johanna Lad, both with records; 20 daughters of Smithdale Alcartra Pontiac who has six two-year-old daughters that average 19.7 lbs. butter each in seven days and two three-year-olds with 25 and 26 lbs. He is a son of that famous cow, Alcartra Polkadot, who has three daughters with records above 31 lbs., and is a brother to the sire of Tilly Alcartra, the World's Champion Long Distance Cow.

A large percentage either have records themselves or are from record dams.

Many of the females are bred to bulls whose dams have records from 30 to 35 lbs. and nine are bred to King Segis Champion Model whose dam has a 40-lb. record at four years old, and who is a full brother to King Model who sold in the Steven's Sale in 1917 for \$10,000.

We believe they are the best bred lot of cattle ever offered at Public Sale in Michigan, with the single exception of the National Sale at Detroit in 1916. Remember the Date and Place and plan to be present.

Catalogs May 1st.

Auctioneers: Perry and Mack. F. J. FISHBECK, Secretary, Howell, Mich.

FIRST ANNUAL SALE OF Michigan Ayrshires

27 head of Registered Ayrshires, including White Marmaduke 18882

Grand Champion at Michigan State Fair 1916

at Flint, Michigan

Wednesday, May 8th, 1918

at 12.30 o'clock P. M.

All animals tuberculin tested and guaranteed.

Write for Catalogue

Michigan School for the Deaf

W. L. HOFFMAN, Steward

West Michigan Holstein Breeders' Annual Spring Guarantee Quality Sale of

Registered Holstein Cattle, Wed. May 15, 1918

At the West Michigan State Fair Grounds, Grand Rapids, Michigan

A real Guarantee Quality Sale of 75 head of high class registered Holstein Cattle, from the breeding herds of the leading Holstein Breeders of Western Michigan.

Nearly all these Herds are under Michigan State and Government supervision and are being regularly tuberculin tested by State or Government Veterinarians.

We hold two Guarantee Quality Sales each year and our "Guarantee" means just what it says, and is not worded to fool the prospective purchaser.

Remember, we guarantee all females to be breeders if of breeding age, if they are placed in herds which are free from contagious abortion. We also guarantee all cattle to stand the Tuberculin Test, if retested within sixty days from the date of the sale, if placed in known healthy herds, or kept where they can in no way come in contact with any other cattle.

We have two 30 pound bull calves in the Sale. One is from a cow that milked over 100 pounds of milk per day, and made over 30 pounds of butter in 7 days, and is sired by a high record son of King Segis Pontiac that is out of a cow with a 40 pound daughter. The other is from a 30 pound dam and is sired by a 31 pound son of the famous Colantha Johanna Lad. These two bulls are handsomely marked and are splendid individuals, and should interest any owner of a high class herd who is looking for a 30 pound sire that possesses both "breeding and individuality."

We also have a bull calf from a 20 pound junior two year old Dam and out of a high record sire.

We will sell 40 choice cows, several with A. R. O. records, of from 20 to 26 lbs. of butter in 7 days. A large number of these cows are safe in calf to bulls out of the Best Sires of a Breed and from Dams with A. R. O. records from 30 to 37 lbs.

There are 30 choice yearling heifers and heifer calves out of high class Sires and many of them from good A. R. O. Dams.

These cattle have all been carefully inspected by the Sale Committee and all undesirable animals have been rejected.

Remember, this is a Sale where the buyer can get "Good, Healthy Cattle" and a square deal. If interested, write for a Sale Catalog.

W. R. HARPER, Sale Manager, Middleville, Mich.

AUCTION SALE!

I will sell at Public Auction on my farm located in the township of Nankin, one mile west and one mile north of Inkster (conveyance will meet all local cars up to noon at the Jim Ruff Road on the D., J. & C. Electric Line), three miles east and one mile north of Wayne, on

TUESDAY, APRIL 30, 1918

Commencing at 9 o'clock (Hot Lunch at Noon), the following

Registered Holstein-Friesian Cattle

The Cow Mercedes Butter Boy Colantha. She is in the advanced registry, with a seven-day butter record of over twenty pounds.

My Herd Sire, Dearborn Butter Boy No. 180874.

Huron Hill Pontiac Boy No. 211246.

son of King of the Pontiacs. Also This choice yearling bull is out of a

67 High Grade Holsteins and Five Durham Cows

AUGUST BEWERNITZ, Proprietor.

Charles Thompson & Son Auctioneers

James M. Butler and Thomas Jameson, Clerks

Stonyhurst Stock Farm

Bull born April 10th 1917. Dam a 13 lb. Junior 2 yr. dam of Maplecrest Korndyke Hengerveld whose dam and granddam both have yearly records of over 120 lbs. of butter. Sire is King Ova whose dam has yearly record of 1345 lbs. and her dam a yearly record at 11 years of over 1100 lbs. Bull is 3/4 white and as straight as a string. Priced cheap for immediate sale. Other good ones from \$75 up. F. A. BARNETT & SONS, Rochester, Mich.

Holstein bull, nearly ready for service, large straight deep bodied, handsomely marked 3/4 white. His six nearest dams have A. R. O. records that average butter 7days 24.13 milk 534 lbs. W. B. Reader, Howell, Mich.

The Pontiac Herd

"Where the Champions come from"

Offer Bull Calves sired by sons of Pontiac Korndyke, Hengerveld DeKol, Pontiac Dutchland, or Admiral Walker Pieterje.

Do you want a Pontiac in your herd? Pontiac State Hospital, Pontiac, Mich.

HOLSTEINS of quality. Bull calves from dams with records high as 31 lbs. in 7 days. Also collie puppies. E. A. HARDY, Rochester, Mich.

Registered Holstein bull calf, born Sept. 1917, dam daughter of 24 lb. cow, write for pedigree and price. F.O.B. your station. E. E. STURGIS, R. 3, St. Johns, Mich.

Holstein calves, 25 heifers, & 2 bulls 15-16ths pure, 5 weeks old, beautifully marked, \$25 each, crated for shipment anywhere. Buy only the best. EDGEWOOD FARMS, Whitewater, Wis.

Parkside Holstein bulls. 8 and 16 mo. Both sired by noted bull, 37 relatives are 30 lb. cows. Priced to sell. J. E. TIRRELL & SON, Charlotte, Mich.

HEREFORDS

10 bull calves for sale, Perfection

Fairfax and Prince Donald breeding.

ALLEN BROS., PAW PAW, MICH.

Bob Fairfax 494027 at head

Herefords of herd 14 bulls for sale

all ages either polled or horned. EARL O. McCARTY, Sec'y Mich. H. B. Ass'n, Bad Axe, Mich.

Choice Bulls ready for service. Also heifers for sale. Strong in the Blood of Royal Majesty. Come and see them or write for particulars. THE WILDWOOD HERD, Alvin Balden, Capac, Mich., Phone 143-5.

Choice Reg. Jersey Bull Calves. 2 bulls 3 mos. old from dams that are doing better than 40 lbs. monthly grandsons of Majesty's Western King. Price \$50 reg. & transferred. FRED A. BRENNAN, Capac, Mich.

Maple Lane R. of M. Jersey herd. For sale bulls, bull calves and heifer calves sired by a grand-son of the greatest Jersey bull in the world, Pogis 397, of Hood Farm. IRVIN FOX, R. 3, Allegan, Mich.

JERSEY bull and bull calves for sale from R. of M. cows, also heifers and cows of all ages. C. B. WEHNER, R. 6, Allegan, Mich.

FOR SALE Registered Jersey

SMITH and PARKER, R. 4, Howell, Mich.

Jerseys for sale Ready for service bulls

St. Lambert, Raleigh, Majesty, breeding. WATERMAN & WATERMAN Meadowland Farm, Ann Arbor, Mich.

Lillie Farmstead Jersey Cattle. Several heifers bred to freshen next fall. Also a few heifer and bull calves of choice breeding. Colon C. Lillie, Coopersville, Mich.

For Sale A fine, dark, solid color Jersey bull 16 mos. old. Double grandson of Royal Majesty and out of R. of M. cow. C. & O. DEAKE, Ypsilanti, Mich.

Shorthorn Cattle of both Sex for Sale W. W. KNAPP, Howell, Michigan.

BIDWELL SHORTHORNS

For Beef and Milk.

Registered bulls, cows and heifers-Good Scotch and Scotch-Topped for sale. In prime condition. Modern sanitary equipment. Farm 10 minutes from N. Y. C. depot, 1 hour from Toledo, Ohio. Automobile meets all trains. Write

BIDWELL STOCK FARM, Box B, Tecumseh, Mich.

Richland Farm

Shorthorns.

IMP. Lorne in Service. Grand Champion Bull of Mich. Special offer on 14 head of Shorthorns. Cows with calves at foot, heifers two years old and heifers one year old. Also a number of bull calves. We invite correspondence and inspection.

C. H. PRESCOTT & SONS, Farms at Prescott, Mich. Office at Tawas, City, Mich.

Francisco Farm Shorthorns

We maintain one of Michigan's good herds of Scotch and Scotch Topped cattle. They are well bred, properly handled and price reasonable. Come and see; we like to show them.

P. P. POPE, Mt. Pleasant, Mich.

Fair Lawns Shorthorns

Yearling bulls by Canada's best sire: Missie Augusta 605778 and Imp. Newton Frier 528120.

LAURENCE P. OTTO, Charlotte, Mich.

Additional Stock Ads. on Page 567

Markets.

April 23, 1918.

WHEAT.

Reports show wheat stocks to be low and receipts both at country elevators and primary points to be unusually small. The visible supply decreased 266,000 bushels during the past week. A year ago No. 2 red wheat was quoted locally at \$2.61 per bushel. The latest quotations are:

No. 2 red	.....\$2.17
N. 2 white	..... 2.15
No. 2 mixed	..... 2.15

CORN.

Corn values are considerably lower on the Detroit market, but firmer at Chicago than a week ago. Early this week there were signs of an improvement in the demand with the receipts running rather small. Restriction in exports due to the shortage in shipping facilities aids the bears in keeping prices down. Farmers are getting on nicely with their work which increases the probability that the corn ground will be well prepared and that planting will be done at a seasonable time, thereby improving the chances for the 1918 crop. Our records show that a year ago local trade was paying \$1.51 for No. 3 corn. Present prices for cash corn are:

No. 3 corn	.....\$1.55
No. 3 yellow	..... 1.65
No. 4 yellow	..... 1.50
No. 5 yellow	..... 1.25
No. 6 yellow	..... 1.15

At Chicago futures were in good demand, while cash corn moved comparatively slow at the following prices:

No. 2 yellow	.....\$1.68@1.72
No. 3 yellow	..... 1.60@1.68
No. 4 yellow	..... 1.45@1.57

OATS.

Our reports show a slight falling off in oat values this past week. At the opening Monday, however, there was some improvement in the deal, due to rather liberal purchases by agents of our Allies. Stocks in the central western markets appear to have decreased, while seaboard points report large increases. There is a general feeling that this deal will be sustained somewhere near the present basis of values. There is, however, a bearish feature in the large acreage that is being sown in this country, and the unusually early date that this is being done. The visible supply shows an increase of a little over 1,000,000 bushels. According to our records, the local market paid 76½¢ per bushel for standard oats a year ago. The following are the latest prices for cash oats on the Detroit market:

Standard oats	.....91
No. 3 white	.....90½
No. 4 white	.....89½

RYE.

There is very little doing in this market, millers seemingly not anxious for the grain. Prices have declined during the past week. Present quotations for cash No. 2 are as follows:

Detroit	.....\$2.45
Chicago	..... 2.52

BEANS.

This market lacks life, which may be due in part to high prices and also to the crowding of some of the larger markets of the country with other varieties of beans, principally pintos. Most of the stock, however, is now in the hands of dealers. The Detroit price for cash beans is \$11.50 per cwt. At Chicago trade conditions are about what they were a week ago, with the demand slow and offerings fairly liberal. Present prices at that point are:

Hand-picked pea beans	\$12@13
Red kidney	11@14

FEEDS.

There is practically no change in the bran market. The maximum price to consumers as fixed by the food administration is \$31.10 per ton in carload lots, or \$31.60 in less than carload lots, but these prices are not being adhered to by many Michigan dealers. Other feeds in 100-lb. sacks, jobbing lots:

Cracked corn	.....\$70.00
Coarse corn meal	..... 63.00
Chopped Feed	..... 56.00

HAY.

Offerings are large and market is weak. Prices in carlots at Detroit are:

No. 1 timothy	.....\$23.50@24
Standard timothy	..... 22.50@23
Light mixed	..... 22.50@23
No. 2 timothy	..... 21.50@23
No. 1 clover	..... 20.50@21

Pittsburgh.—Our correspondent advises us that terminals are still con-

gested with hay, and do not advise shipping to that market.

No. 1 timothy	.....\$27.00@27.50
No. 2 timothy	..... 23.00@24.00
No. 1 light mixed	23.00@24.00

POTATOES.

With few exceptions, the markets east of the Mississippi river are steady to firm, with values generally higher than a week ago. Farmers are also securing higher prices at country points. In order to save the surplus potato crop the U. S. Department of Agriculture and the Federal Food Administration now have 10,000 representatives working in the various cities throughout the United States encouraging the consumption of potatoes. This action should bring about some relief from the extremely discouraging situation prevailing in many potato growing communities. Jobbing prices paid at various important markets per cwt. for U. S. Grade No. 1 and the condition of trade are as follows:

Detroit (unsettled)	.....\$ 1.50
Cleveland (steady)	..... 1.70
Buffalo (firm)	..... 1.50@1.65
New York (steady)	1.67@1.73
Cincinnati (firm)	..... 1.55
Indianapolis (steady)	1.50@1.60
Pittsburgh (slow)	1.60@1.67

At country loading points in Michigan farmers are receiving 70@90¢ for round whites U. S. Grade No. 1 in bulk; in New York they are getting \$1.25; in Wisconsin 95¢@1; in Oregon 75¢; in Maine \$1.27.

BUTTER.

Our reports show further improvement in the butter trade. Demand is strong and supply is diminishing. Storage stocks of butter in leading markets show a decrease of nearly 2,000,000 pounds since April 1. Detroit prices are advanced a full cent over a week ago. Extra creamery firsts are generally quoted at 42@44½¢, with some houses quoting as high as 45¢. Fresh creamery firsts 41½¢. The Chicago trade reports moderate receipts and a steady demand. Strictly fancy butter is in specially good demand. Extra fresh creameries 42¢; firsts 38@40¢; packing stock 30@30½¢. New York trade is a little easier, with the creameries at 42@45¢.

CHEESE.

There is a fair amount of cheese being sold. The older makes are meeting with a good demand, while new cheese is going a little slowly, due to increased supplies. October cheese sells to trade in Detroit at 24@26¢, while 22½@23¢ is being paid for new cheese, which is sold to retailers at about 24¢. Dealers claim that they fear the government will undertake to regulate cheese prices, for which reason they are restricting their purchases. In Chicago Daisies are quoted at 21½@21¾¢ for doubles, and 21¾@22¢ for singles; Young Americas 21¾@22¼¢ per pound.

EGGS.

The central western markets are higher and firmer while the seaboard cities report a steady trade. In Detroit prices have advanced one cent to 34½@35¢ for fresh firsts, while eggs for storage are quoted at 35½@36¢. The Chicago trade is paying 32@33¢ for miscellaneous lots, cases included, and 33@33½¢ for fresh firsts. The new York market is steady at 38@38½¢ for fresh gathered and 36½@37½¢ for storage packed.

POULTRY.

Live poultry is in demand and the market is firm. Embargo on selling hens and pullets has been amended to end April 19, so farmers can sell these classes of poultry on and after April 20. Detroit prices are:

Hens	.....34@35
Old roosters	..... 24
Ducks	.....34@35
Fat geese	..... 30

Chicago.—In live poultry the demand for fowls is very brisk, and receipts not up to expectations.

Fowls	.....30
Ducks	.....25

WOOL.

In some of the important sheep states of the west shearing is now in progress. This work will soon be on in the more southern fleece states. A year ago at this date probably more than one-half of the wool in the territory states had been purchased. Practically none has been bought so far this year. This is due probably to the agreement among dealers not to purchase wool before it is removed from the sheep. Independent buyers may take advantage of this situation to influence producers to sell at a reduced price. The scarcity of the wool supply warrants farmers receiving quotations commensurate with the cost of production. The quality of the new clip is reported as being of a higher grade than usual.

DETROIT CITY MARKET

Our market representative found a fairly good trade at the Eastern Market Tuesday morning, with potatoes selling at \$1 per bushel; parsnips 85¢; apples \$1.75@2.25; cabbage 75¢@1; onions \$1.50; carrots 75¢; beets 75¢; eggs 40¢; hay \$24@26 per ton.

GRAND RAPIDS

No special change is noted in the potato market except a slightly better inquiry. The movement out of the state to date has been close to 8,000 cars and at present shipments from Michigan average about the same as from Wisconsin and Minnesota. With cars scarce and farmers busy with the spring work, the movement is slow and the price prevailing during the past week has been 60@85¢ for bulk round white No. 1 stock, trackside at country loading points. Greenville quotes at 90¢. White beans are worth \$10.50 per cwt. Reports show a decided slump in the hay market at Portland, Ionia county, prices dropping from \$24 a ton to about half that figure. The Grand Rapids market, up to the early part of this week at least, continued at \$22 @24 per ton.

BUFFALO.

April 22, 1918.

Cattle.

Receipts 160 cars; prime grades 50¢ higher; common 25¢ lower; prime heavy steers \$15.50@17; best shipping steers \$14.50@15.75; fair to good \$13.50@14.50; plain and coarse \$12.50@13.50; native yearlings \$14@15; best handy steers \$12@12.50; fair to good \$11.50@12.50; handy steers and heifers mixed \$11.50@12; western heifers \$12 @13.50; state heifers \$10@11; butcher cows \$9@10; best fat cows \$11@12.50; cutters \$7.50@8.50; canners \$6@6.50; grazing cows \$7.50@8; fancy bulls \$11 @12; butcher bulls \$9.50@10.50; common bulls \$8@9.40; best feeders 900 to 1000 lbs, \$10@11; medium feeders \$9 @10; light common \$8@9; stockers \$8@9; best milkers and springers \$110 @150; mediums \$75@100; common \$50@60.

Hogs.

Receipts 70 cars; market 25¢ lower; heavy \$18.25@18.50; yorkers and pigs \$18.65@18.75.

Sheep and Lambs.

Receipts 25 cars; steady, wool lambs \$22; clipped \$18.75@19; yearlings \$15.50@17; wethers \$15@15.50; ewes \$14@14.50.

Calves.

Receipts 2500; market \$1.50 lower; \$7@15.50.

CHICAGO.

April 22, 1918.

Our special representative at the Chicago Stock Yards reports:

Cattle.

Receipts.

Monday, this week	.....24,000
Total, last week	.....78,025
Total, preceding week	69,817
Total, week year ago	48,345

Notwithstanding the greatly increased cattle receipts last week, the strong demand for the better class put them 75@85¢, and the bulk of the steers sold 25@50¢; while most light lots closed 50@75¢ below the recent high time, with too large a showing of these. Cows and heifers closed largely 25¢ lower than a week earlier, and canners and cutters declined 50@75¢ with bulls off 50¢. At the week's close steers sold at \$11@17.25, with the bulk of the week's sales at \$14@16.50. This week starts off with a further widening out of prices, with choice heavy beefs selling at \$17.35 and over, three cars bringing \$17.50. Butchering cows and heifers are lower, with sales at \$8.10@13.50 and a few at higher figures. Last week a load of fancy heifers broke all past records by bringing \$15.40, but such sales are rarely exceptional. Bulls bring \$8@12.50, and calves have been going at \$8@14.50, while stockers and feeders are taken at \$9@11.60 and a few loads of strong weights taken for a short finish at higher prices.

Hogs.

The event in the hog market today is the offering of 72 hogs by as many farmers of Grinnell, Iowa, for sale for the benefit of the Red Cross. Hogs received last week averaged 242 lbs. There was an early morning top at \$17.85, with a later decline of 10@15¢ and sales down to \$16.25 for the rough heavy packing lots. Pigs are bringing \$13.50@16.90, with not many offered and recent sales of feeding pigs at \$16.50@17.25. At last week's best time prime hogs brought \$18.05. The prime light hogs go highest and prime heavy ones about 40¢ below them.

Sheep and Lambs.

Shorn lambs have made a fresh high record by bringing \$18.25, with sales down to \$16.25 for inferior lots. Shear-

ing lambs are taken at \$19.75@21.60 and ewe breeding lambs at \$20.50@21.40. Within a week lambs have advanced largely 75¢, with top woolled lots now held at \$22 or more. Shorn wethers bring as high as \$15.60, and a few woolled Colorado yearlings brought \$20 per cwt.

THE GRANGE AND THE RURAL COMMUNITY.

(Continued from page 564).

city, men in the fields and women in the homes are about equally overworked, and now we have our problems. These problems are evident to many public spirited men and women who would help us if they knew how, and at any rate are bound to try.

For a Grange to confine its efforts to the development of the farms in the community, to the matters of cooperative buying and selling and to other things that relate only to money getting, is to miss the mark altogether.

Let the Grange lead out in the building of communities through which the very best in the lives of young and old shall find expression, and men and women will flock to its gates in great numbers.

WOOL

Growers and Buyers

Before selling or shipping your wool, don't fail to write us for our wool price lists and

Get Our FREE Market Reports!

Prices are higher this year than ever before in history. Keep posted by getting your name on our mailing list. You can always depend on us for

Highest Prices Correct Grading Quickest Returns

We return your money same day your shipment arrives. 52 years of satisfying shippers is our record. Write us today. Our price lists, and shipping tags, etc., will be sent FREE. Just a postal will do.

S. SILBERMAN & SONS
"World's Greatest Wool House"
1105 W. 35th St. Chicago, Ill.

Sow Cover Crops

between rows Cut down labor and get better results by seeding between rows with the

Eureka New Seeder

3 Feet Wide
Sows clover, alfalfa, turnip, rape, timothy, rye, wheat, oats, buckwheat, etc.—any quantity per acre. It flat teeth cover seed thoroughly and make dust mulch, leaving ground flat. Also an ideal cultivator. Works close to small plants and kills weeds. In stock near you. Send for catalog.
EUREKA MOWER CO.,
Box 1226, Utica, N. Y.



WAR NECESSITY FOR NURSES MET BY SPECIAL SUMMER CLASS

As a war measure, Mount Sinai Hospital School of Nursing is entering a special class, June 15th, 1918. Recognizing the need for additional nurses for military and civilian purposes, the Mayor's Advisory War Committee of Cleveland, and the Western Reserve University have made this course possible, the former by supplying the funds, and the latter by offering facilities for a ten weeks' course in theory. Students will live at the hospital which is in close proximity to the University. No tuition will be charged for the course at the university. Living expenses will be met by the Hospital. This plan offers unusual opportunities to qualified young women wishing to serve the country. Applications should be made at once to Miss C. A. Wheeler, Principal of Mount Sinai Hospital School of Nursing, 1800 East 105th Street, Cleveland, Ohio.

EMPTY EGG CRATES

FOR SALE

Used Only Once. Good Crates with Fillers.

Hamburger Bag & Egg Crate Co.,
375 Bellvue Ave., Detroit, Mich.

EGGS

Production well started, general quality, fine. For a few months it will be hard to get any premium. Will do best we can although may have to stop paying premiums until loss of season sets in. Keep shipments coming.
AMERICAN BUTTER & CHEESE COMPANY,
Detroit, Mich.

HAY Ship To The Old Reliable House
Daniel McCaffrey's Sons,
623-625 Wash Blvd., Pittsburgh Pa.

12 Trees
Only \$3
4 Bartlett Fr., 4 Montmorency Cherry, 4 Lombard Pl. with Premium Rose \$3. All trees 2 yr. medium trees, on half cherry. GOBLEVILLE, MICH. NURSERIES.

THIS IS THE LAST EDITION.

The first edition is sent to those who have not expressed a desire for the latest markets. The late market edition will be sent on request at any time.

DETROIT LIVE STOCK MARKETS.

Thursday's Market. April 25, 1918.

Cattle.

The cattle trade this week was fairly active but at a decline of 25@50c from last week. Unusually high market, bulk of the decline was on canners while prime steers and butcher grades dropped about a quarter and bulls held full steady. Prices held strong at the decline all the week the quality was fair.

Receipts 2109. Bulls steady, canners 50c and other grades 15@25c lower than last week.

Table listing market prices for various types of cattle: Best heavy steers, Best handy wt. butch. str, Mixed steers and heifers, etc.

Sales.

Butchers.—15 av 748 at \$10.25; 10 av 934 at \$12.60; 17 av 775 at \$10.50; 16 av 808 at \$9; 10 av 713 at \$10.90.

Stockers.—9 av 600 at \$9; 29 av 500 at \$8.85.

Steers.—4 av 850 at \$10.25; 15 av 1000 at \$13.75; 10 av 1040 at \$13.35; 12 av 666 at \$11; 19 av 1016 at \$13.40; 20 av 842 at \$12.

Veal Calves.

Veal Calves broke bad and were from \$1@1.50 per cwt. lower than last week and very dull at the decline; a few extra good sold at \$14.50 and an occasional small bunch at \$15@15.25, but the bulk of sales for good was at \$13@13.50, with common and heavy at \$8@12. Indications are that prices will continue to drop.

Receipts 1104. Market dull at \$1@1.50 lower than last week.

Best \$13@14 Others 8@12

Sheep and Lambs

Sheep and lambs were scarce and sold fully steady with last week.

Receipts 1425. Market steady.

Table listing market prices for various types of sheep and lambs: Best lambs, Fair lambs, Light to common lambs, etc.

Sales.

Lambs.—22 av 70 at \$17; 114 av 55 at \$15.25; 42 av 77 at \$17.50; 154 av 63 at \$17; 104 av 70 at \$17.75; 5 wool lambs av 55 at \$18.

Sheep.—2 av 80 at \$12; 5 av 95 at \$12; 3 av 80 at \$11.

Hogs.

The hogs trade was very dull, all grades selling at \$17.25@17.35, or 35@40c lower than the opening on Monday.

Receipts 4469. Market 20@25c lower than on Tuesday.

All grades \$17.25@17.35

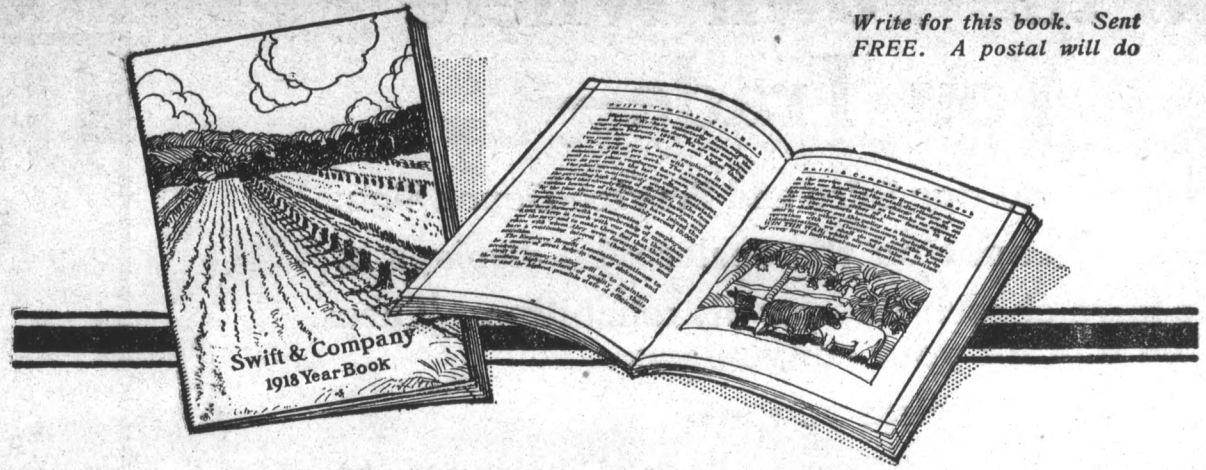
HYGIENIC SIDE OF LABOR SAVING.

(Continued from page 547).

as effectively during the years, say from forty-five onward until death claims them.

Consequently, it follows that it is good insurance to invest in anything which has a distinct value in the way of saving labor on the farm. This applies both to those who work in the field and to those who work in the home. And how many farms there are on which considerable labor-saving can be effected at comparatively little expense. The proper piping of water, for instance—both into the house and into the barn—is but a single example. There is drudgery in carrying water. Every day it adds steps and consumes strength. Almost anyone could discover similar means of promoting efficiency on any farm. There is a certain amount of such drudgery which may not be eliminated but there is lots of energy wasted, on the other hand, which might be conserved. And it is this same drudgery which wears men and women out before their time. Of what value is length of years if the last half of life must be spent in dragging about because one's frame has worn out and one's strength become exhausted?

Illinois. ORIN CROOKER.



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MINERAL HEAVE COMPOUND CURES HEAVES. Booklet Free. \$3 Package guaranteed to give satisfaction or money back. \$1 Package sufficient for ordinary cases. MINERAL HEAVE REMEDY CO., 463 Fourth Ave., Pittsburg, Pa.

Railroad Traffic Inspectors Wanted. \$125 a month and expenses to start; short hours; travel; three months home study, under guarantee; we arrange for position. No age limit. Ask for booklet L28. FRONTIER PREP. SCHOOL, Buffalo, N. Y.

CATTLE

Shorthorns. Three scotch bulls ready for service. Price reasonable. W. B. McQUILLAN, R. 7, Howell, Mich.

Shorthorns Maxwellton Monarch 2nd. 887322 half brother to 5 Grand Champions in service. JOHN SCHMIDT, R. 5, Reed City, Mich.

CON of Harthorth Welfare heads our herd of milk-ling Shorthorns comprising Chifley of Clay bred cows, young bulls ready for sale and service, write us Liddel Bros., R. 2, Clinton, Mich., Macon Phone.

Grand Traverse Shorthorn Asso. Reg. stock for sale. M. E. DUCKLES, Sec., Traverse City, Mich.

1867-1918 Maple Ridge Herd of Shorthorns Yearling heifers and bull calves for sale. J. E. TANSWELL, Mason, Mich.

Shorthorns Four very desirable heifers 17 to 21 months old, and bull 8 mo. All roans. Price \$1000. S. E. BOOTH, Morrice, Mich.

SHORTHORN: 1 bull 6 months old, 1 heifer 14 mos. Sold Registered in buyer's name, \$100 if taken soon. H. W. MANN, Danville, Mich.

SHORTHORNS—20 bulls 2 to 18 mos., mostly from S. Dorthy's Sultan 463045, a grandson of Whitehall Sultan, also a few cows. O. Carlson, LeRoy, Mich.

Bairybred Shorthorns of best Bates Strains, young stock of both sexes for sale. J. B. HUMMEL, Mason, Mich.

Scotch Shorthorns for sale, 5 bulls ready for service. John Lessiter's Sons, Orion, Mich. R. F. D.

Shorthorns—Sired by a grandson of Cyrus Clay. No stock for sale. COLLAR BROS., R. 2, Conklin, Mich.

SHORTHORNS Cows, heifers & young bulls' for sale at farmers prices; herd catalog mailed free. Horrieton Farms, Hart, Mich.

Registered Shorthorn bull for sale 7 mos. old, also bull calf; roans. WATERSTRADT BROS., Marcellus, Mich.

Winona Pet No. 214312 Butter yrs. 3 mos. 27.4; milk 545.80. She is the dam of a bull calf born Sept. 17th we are offering for sale. His sire is from 23 lb. four year old and 30 lb. sire. Calf is straight as a string and all right in every way. Price \$125. Also one heifer. Jay B. Tooley, Howell, Mich.

Red Polls One yearling bull. Also bull calves by Lincoln Lad 2nd. For prices and description, write Wells Parish & Sons, R. 3, West Olive, Mich.

Polled Durham Cattle 9 yearling bulls for sale. J. A. DeGARMO, Mutr, Mich.

Cattle For Sale 2 Loads feeders and two loads yearling steers. Also 2 can show you any number 1, 2 and 3 year old from 600 to 1200 lbs. Isaac Shanstam, Fairfield, Iowa, R-8

For Sale Young bulls eligible for registration one light roan one red. JAMES NEAD, Sunfield, Mich.

Guernseys For sale, animals of both sexes from A.R.C. cows. Prices reasonable. Geo. N. Crawford, Holton, Mich.

HOGS

GREY TOWER FARM

Now offers for sale a few choice Holstein bull calves, from high testing dams, with good A. R. O. records, at farmers' prices, write us about them and our

Durocs & Berkshires M. D. KITCHEN Mgr., Grass Lake, Mich.

Additional Stock Ads. on Page 563

In the Town Where You Trade—

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