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Do You Think the Consumer Understands?

By R. G. KIRBY

THE success of the country in the war depends a great deal on the ability of the people of the country to work together. Now is the time when producers and consumers of farm products should make an effort to understand each other's problems. It is certainly not a time when the farmer and the city buyer can afford to have a hostile attitude toward each other.

Many of the present misunderstandings might be eliminated if all farmers' organizations could cooperate in a publicity campaign that would furnish city newspapers with honest reading matter concerning the complex problems with which the producers of farm crops are confronted.

Any attempt to divide the country into producers and consumers must recognize the fact that the essential producers of the country are not all in the country. Farmers must have tools, clothes and household utensils made in the cities. The city producers must have food. Both the city worker and the farmer should work hand in hand with a clear understanding of each other's problems. Right now there is a tendency for city men to think that farmers are in a preferred class. One farmer in a district hoards a little wheat and immediately all farmers are classed as hoarders and slackers. They do not stop to consider that all the other farmers in that section have sold their wheat, either through patriotism or necessity and they do not realize that very few farmers are financially able to hoard their crops with notes, mortgages and household bills coming due.

While trading in a store in a nearby city a young lady volunteered the information that farmers were slackers in their purchases of Liberty Bonds. The writer furnished some proof to the contrary but did not blame the young lady for simply advancing an idea which had been passed on to her by others even less informed. The public press is now giving the farmers in many districts full credit for their patriotic responses in buying bonds, but for a time the farmers were placed in a decidedly wrong light by some daily papers which misrepresented them. A publicity campaign by farmers' organizations might assist in blotting out the prevalent idea that all farmers are more or less alike. If an insurance agent on a street car made unpatriotic remarks about the government, he would be harshly treated as an individual but other insurance agents would receive no stigma from the affair. If a farmer had made the same treasonable utterance the daily papers would have emblazoned a column with the disloyalty of farmers as a class.

At the potato growers' meeting at East Lansing, the first conference was classed as a stormy session. The first articles in some daily papers placed the farmers in a bad light and these articles were decidedly hostile to the farmers and their affairs. Later, when the newspaper men had the situation explained to them, the attitude showed a marked change and articles were far more friendly in their attitude toward the farmer's demands. When they understood the situation they were will-

country and the city workers and producers in the city. Men in the cities who are only consumers will need little attention in this day and age except from the police department. The man, today, who is only a consumer and produces nothing, can never understand the problems of any kind of a producer and talking with such people is a waste of time.

The consumer does not understand the farming business even though the

The farmer tries to understand the needs of his city cousin through the dealer. * * * The city resident endeavors to get an idea of the farmer's problems through the same dealer. * * * There perhaps may be a tendency on the part of the dealer to blame his own shortcomings on the absent part. * * * If producer and consumer of farm crops had a true understanding of each other's problems, would we not be nearer to a rational solution of the distribution question?

ing to be fair. How can farmers expect fair treatment from the average city daily reporter who knows nothing about actual farming conditions? He seldom meets and talks with real farmers but comes frequently in contact with men who are ignorant of farming conditions or are actually hostile to farmers.

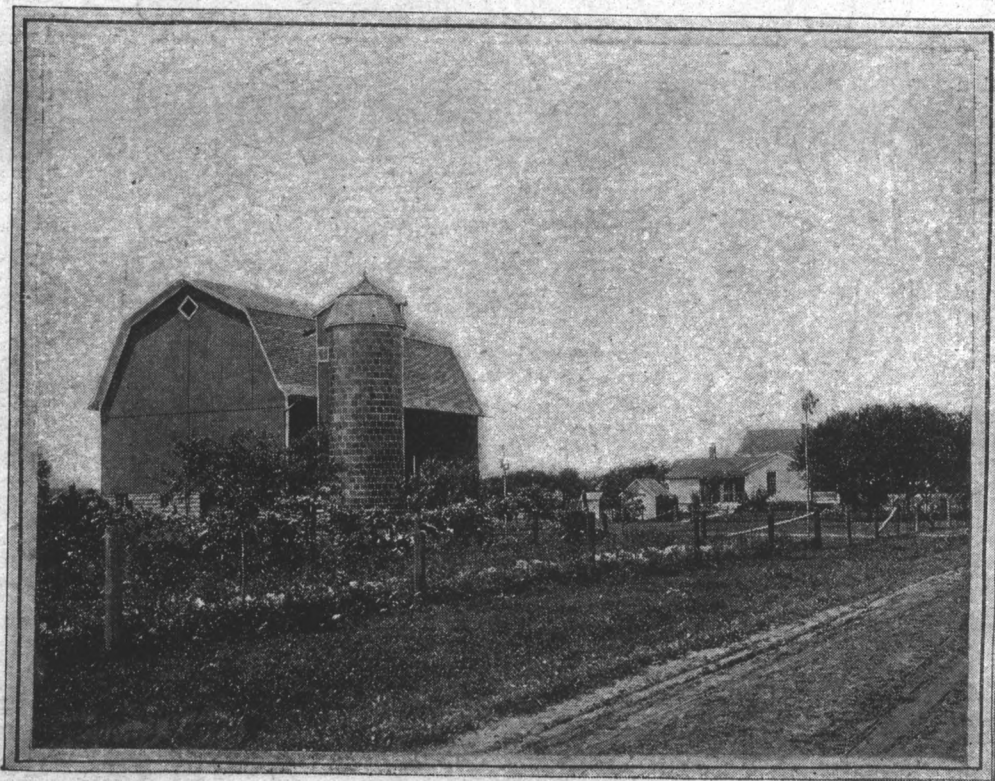
The county agents are increasing in number and efficiency throughout the

product of that business is keeping him alive. Of course, he is busy in his own line of work and cannot be expected to make a study of farming. However, he can learn enough about food production to take a sensible attitude toward farmers and the daily papers should do something to bring about that instruction. City buyers of farm produce do not read the farm journals and so these reliable organs of infor-

Mrs. B. from the city and they discuss the cost of milk. Mrs. B. states how much she pays for milk and says that it must be so nice to take lots of milk out of the farm twice a day without it costing a cent. Of course, she does not know the cost of raising feed for the dairy herd and appreciates none of the problems of the dairy business which are so evident to the farmer that they need little discussion. Mrs. B. buys a few dozen eggs and figures that Mrs. A. is certainly earning a pretty good wage per hour, "just going around picking those eggs out of the nests." Mrs. B. does not know the cost of feeding poultry but she does know that five dozen eggs take several hours pay from her husband's weekly check.

The proposition is not all one-sided. Farmers do not understand the worry which attends the life of many a worker in the city whose earnings barely cover the weekly expenses. The long hours on the farm frequently impose less hardship on the physical being of a man than shorter hours under less favorable conditions in an office or factory. The food problem of the farmer is more easily solved than the same problem in the city. In addition, there is always hope on a farm. Crops may be better next year and the additional income may bring many conveniences. A city man who cannot get ahead because of his position in life does not have the same hope in the future. He knows how much he will earn next year and how much he will spend and there can be but little hope for better conditions in the homes of many city men. Of course, individuality and personality along with training and natural advantages, influence the life of every man. However, taking city men and farmers and comparing them, man for man, will prove that many of the farmers are better off than they ever would have been if they had been city producers instead of farm producers. They should understand each other better for the good of the country.

Mr. C. B. Cook, county Agent for Oakland county, recently stated in the Michigan Farmer, "The agitator who seeks to profit by emphasizing class divisions rather than to seek harmony on a 'square deal for all basis' is playing into the hands of America's arch enemy." There must be no class troubles in America. The city and country population need each other as never before. The county agent should receive access to the daily papers in such a way that he will be able to bring the city people and their country friends closer together. The city friend and the country friend will be reasonable when they have someone to help them to understand each other.



Home

state and they have an opportunity to furnish the daily papers in their community with reading matter concerning the farming business. They will miss an opportunity if they do not use their space and their ability to bring about a better understanding between the farm workers and producers in the

mation are largely confined to the farming districts. The problem of unifying the people of the country and increasing the friendly spirit of cooperation between city and country people is a worthy project in which all Americans should take part.

Mrs. A. from the country calls on

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DETROIT, MAY 25, 1918



CURRENT COMMENT.

In the observance of Memorial Day. Memorial Day, this year, we will pay tribute not alone to the soldiers who died for their country in past wars, but as well to the brave boys who have already fallen in the present conflict in which our country is now bending its every energy.

Both President Wilson and Governor Sleeper, in designating Thursday, May 30, as Memorial Day, have expressed the hope that the day will be observed in a manner consistent with the spirit of the occasion. In addition to being a day given over to the honoring of our soldier dead, it should as well be a day for the rededication of our strength and service, the renewed consecration of our every effort and resource to the support of our fighting forces.

The proclamations above mentioned earnestly request the people of Michigan to observe this day as a solemn festival and to gather in their accustomed places for worship and there offer their prayers for the victory of the American armies, that a just and lasting peace may be established throughout the world.

The Red Cross drive for a fund of \$100,000,000 as the goal for the country should appeal to every citizen in every walk of life. The work of the Red Cross is so well known that comment on its importance is superfluous. It is work which every citizen will be glad to support by contributing to the limit of his ability to this fund. A contribution to the Red Cross means lessening the hardships, alleviating the sufferings and saving the lives of our boys who are fighting the battles of liberty in France and Belgium.

With our boys now going to the front line by the thousands every week, there to fight our battles and many of them to lay down their lives in the defense of their country's honor and for the maintenance of human liberty in America as well as in the rest of the world, each and every one of us should be not only willing but anxious to do our utmost to aid in providing for them

the humanitarian service which the Red Cross is giving in such full measure.

While thousands of loyal men and women are giving their time as well as their means to this great cause, let those of us who are not in a position to give any such full measure, particularly of our time, give of our means to the very limit of our ability. If we have not already subscribed as freely as our conscience dictates that we ought, let us improve the opportunity before this great drive closes on the twenty-seventh of May.

In the building of a permanent agriculture in live stock Michigan live stock has ever been considered an essential factor. While there is no doubt that the fertility of the soil can be maintained without the keeping of live stock, it is generally conceded that this desirable result can be best accomplished under a system of mixed farming in which live stock is made a constant factor.

The balance of our live stock production has, however, been not a little disturbed by conditions which have obtained during the past year. The general failure of the Michigan corn crop to mature sound grain has contributed largely to this result. Many farmers have deemed it necessary to sacrifice at least a portion of their breeding stock under existing conditions. There is no doubt but that in the majority of cases this should be looked upon as a temporary expedient rather than a permanent policy, and the earliest practicable opportunity of adding new foundation stock to bring the flocks and herds up to their desirable standard should be taken.

It may be difficult for many of us to realize the soundness of this argument when both foundation stock and grain necessary for their maintenance is selling at unprecedented prices, but when it is considered that the well-balanced Michigan farm, the one which will yield the best profit in the long run is the farm on which live stock is made the basis of permanent soil fertility, the problem becomes one for

which there is but a single answer, and in increasing the foundation stock we should only retain the best which is produced upon the farm or which is obtainable from other feasible sources.

The Agricultural Outlook.

Perhaps we should not at this time take our minds from the duties and obligations imposed upon us by the international crisis through which the nations of the world are passing, but our young farmer, in particular, is contemplating investments in land, buildings or equipment, and he is debating whether the future outlook of agriculture warrants making investments that will merely serve him temporarily or whether he should place his capital into permanent improvements. Any careful analysis of changes in American agriculture during recent years, and of the conditions that now confront the farmers of the country, invariably lead to one conclusion—that the future farmer will work with larger power units and follow standardized methods of operation. This means increased production per individual farmer. The American farmer is already the most efficient in the world in this regard and has been for some time.

Previous to the outbreak of the present European war ten million American farmers in the Mississippi Valley produced more food units than did twenty-six million farmers in Germany. And now the increased shortage of farm labor and the unprecedented demand for agricultural products are urging him on to still greater attainments. That he will succeed under this new pressure, everyone seems to have confidence. They believe that he will produce these additional units with little or no added discomforts to himself, the same as the farmer of today grows double and treble what his forefather did and at the same time enjoys more hours of freedom from his labor. And when our farmer has more to sell and his markets have improved as they seem certain to, his income should be increased to a point that warrants judicious investments at the present time in those things that will contribute to his efficiency and comfort.

HAPPENINGS OF THE WEEK.

Wednesday, May 15.

Civil war reopens in Russia with fighting at Moscow between Bolsheviks and anarchist forces.—Germans transport forces from Roumania to western front.—Australian troops regain some ground south of Albert.—Germans are also repulsed near Mont Kemmel.—Additional reports of disorder in Bohemia are received.—Roumanian cabinet quits.—Lower house of congress passes Overman bill with only two dissenting votes.

Thursday, May 16.

Russian troops are now being reorganized to oppose Germany.—Finns co-operating with German forces are ready to enter Russia from the north.—German battleships are concentrating at Kiel.—Additional German forces arrive in Belgium.—Attempts to gain Hill 44 near Mont Kemmel have been disappointing to the Germans.—Quiz reveals German plot to arm Teutons in America when this country entered the war.

Friday, May 17.

Italian troops launch a drive on Asiago plateau between Mont Asalone and Mont Pertica, compelling Austro-German forces to give way. This thrust is presumed to anticipate the unofficially announced drive by the Central powers on the Italian front.—In France on the Somme front American gunners are battering lines of transportation being used by the Germans, and also have fired Montdidier.—Aerial fighting is becoming more active and large numbers of planes are being brought down on both sides. Announcement is made of a complete American air squadron in operation at the front.—Russian naval officers blow up submarines to prevent their falling into the hands of the Germans.—Berlin has pledged that German armies will advance no further into Russian territory.—Ships supplying the Allies must be diverted to relieve starving Belgium.—The government of India will recruit 500,000 men at once.—The United States Senate passes measure to make Hawaii dry.—All hotels, boarding-houses and other refreshment places in Canada where twenty-four or more persons are served each day must be licensed after June 1.

Saturday, May 18.

Aerial fighting continues active, 40 German planes being brought down by the British in the last twenty-four hours, while five British machines are missing. During March and April the French destroyed 322 enemy planes and lost ninety-six.—Emperor William is reported on the western front.—Every district in the third Liberty Loan campaign over-subscribed its quota. The total number of subscribers is about 17,000,000.—Steel committee of the War Industries Board suggests that the supply of steel in the United States will be taken over by the government unless the output is immediately increased.—The cost of the United States Food Administration has jumped from \$2,500,000 to \$12,000,000.—The president of Portugal has formed a new cabinet.—Requests for free beds in Detroit missions have been reduced forty per cent since the state went dry.—An explosion of the deadly T. N. T. at Oakdale, Pa., results in fifty-six known fatalities and an estimated property loss of \$1,500,000.

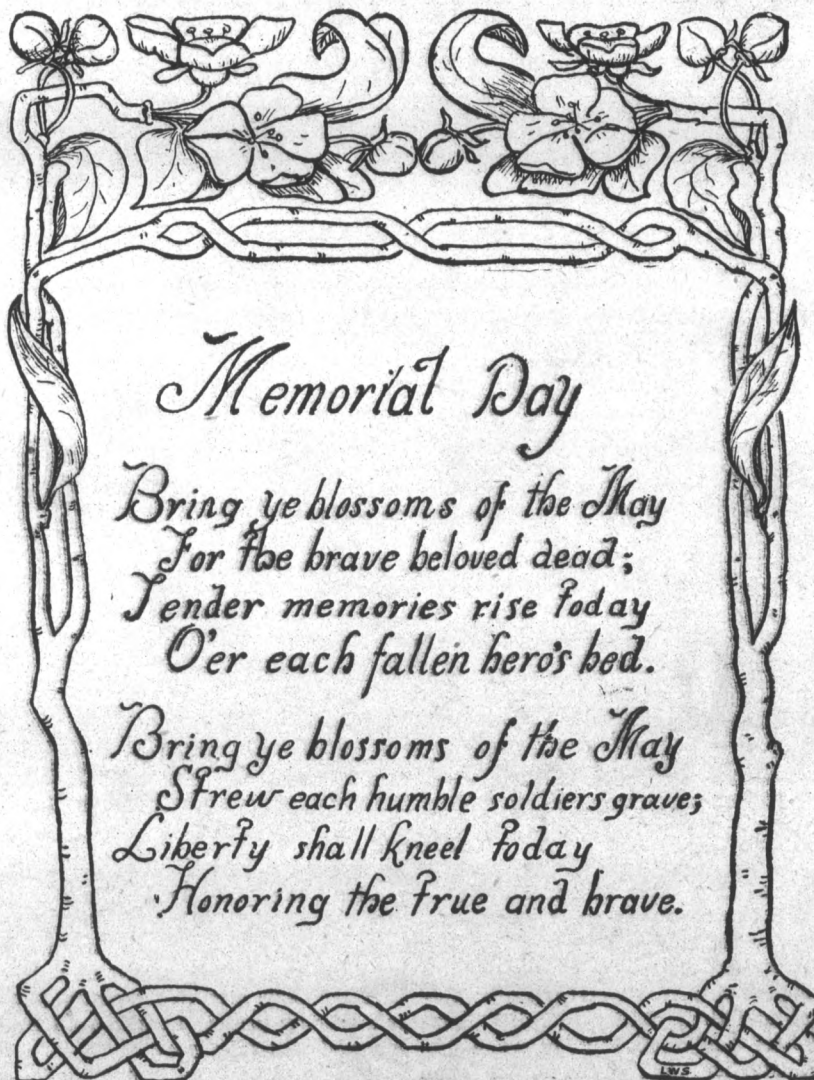
Sunday, May 19.

Hindenburg armies are now fully reorganized for their third gigantic blow on the western front and if weather conditions permit, the Allies anticipate the drive during this present week.—American forces defeat a vigorous German raid in the Luneville sector and another near Montdidier. In both instances enemy's losses are reported heavy.—The British government has foiled a gigantic German plot to assist in an Irish revolt, by arresting 500 Sinn Fein leaders.—President Wilson brings attention to May 24 as the anniversary of Italy's entrance into the great war.—Monster parades in the various cities of the country open the national Red Cross drive for \$100,000,000.—Michigan will issue a text book entitled, "Democracy and the Great War," which will acquaint school children with the causes of the present world war.—Trolley crash in Detroit results in twenty-one persons being injured.

Monday, May 20.

Slavs in the Ukraine provinces of Russia are burning food to keep it from the Germans.—Great camps of American soldiers are springing up in northern France.—Four German aeroplanes are brought down during a raid on London; British aviators retaliating by raiding German towns.—Prague, the capital of Bohemia, an Austrian province, is reported to be under martial law.—Gerard declares in Detroit address that war will last at least two years longer.—Cuba celebrates her sixteenth anniversary as a nation.—Four persons are being held as suspects in

(Continued on page 666).



Bean Anthracnose Is Losing Its Grip

WHEN it comes to inflammatory subjects, there are none, unless it be the potato problem, mention of which will precipitate an argument among Michigan farmers more quickly than the bean topic. The reasons, of course, are patent to every observer of agricultural conditions within the state, for they are to be found in the fact that as a result of two bad seasons and competition from the much advertised but certainly not over-palatable "pinto," the Michigan bean has been suffering a bad attack of adversity. Here and there farmers who have happened to strike it right have made a killing in this crop, but among growers as a whole beans have not been an overly lucrative source, either of food or income for some little time.

It may be expected that these recent experiences with beans will discourage many producers, but be that as it may, there unquestionably will be many others who are counting on these withdrawals to improve their own chances with the crop, for it is more or less of a business axiom that the man who has a good crop of corn or beans when corn and beans are short, is going to make a good thing out of it.

But irrespective of what market conditions may be, the farmer whose crop is wiped out by diseases will not find beans a very profitable source of income on any occasion. Some interesting information on this point is contained in an article recently prepared for the press by Dr. G. H. Coons, plant pathologist for the experiment station of the Michigan Agricultural College.

Anthracnose Not in Evidence.

Perhaps Doctor Coons' most important declaration is that there apparently has been a weakening of the grip anthracnose has heretofore had on the bean crop. Only a relatively small percentage of the seed bean stocks seem to be infected this spring, he de-

The Inspection of Samples of Seed Beans by the M. A. C. Shows the Disease to be Less Prevalent than Usual

clares. On this point he adds that if farmers will make a careful selection of their seed this season, and will plant only absolutely clean beans, anthracnose can be brought practically under control.

"What may the farmer expect in the way of bean diseases in 1918?" Doctor Coons asks. "To begin with," he goes on, "bean diseases are not caused by the weather. This has been said so often that it may sound like an old story to many farmers, but there are still numerous others, who, seeing the direct relation between weather and disease epidemics, blame the whole matter on rainy seasons, and stop at that."

"If the trouble ended there, this article would not be written for no one has yet found a way to control the weather. There is, however, another side to be considered."

Watch the Germs.

"The nigger in the wood pile in this instance happens to be a germ. Plant diseases are caused by germs, and the weather is concerned in the case only in so far as it aids in the growth and

spread of these insignificant germs.

"Take bean anthracnose, for example. Here we are dealing with a disease carried in the seed to the field and brought above the ground when the first seed leaves push out. Rain serves to carry the disease down the stalk to the young unfolding leaves, and rain also serves to wash the germs from the leaves to the pods and from plant to plant."

"The transfer of bean anthracnose, aside from that which comes from cultivating beans while wet, is wholly a matter of how far the rain can splash. If beans are grown in a greenhouse and instead of being watered are irrigated they can be grown with absolutely clean pods—a point which is mentioned to show that rain does not cause anthracnose, but only spreads it. Without the germ there would be no disease. If the germ can be controlled the disease can be controlled."

Disease-free Seed.

"And so with other bean diseases. They are seed borne and greatly influenced by the rainy weather. Yet without the germ, the weather could be

whatever it pleased without any danger of its making the beans blighted or spotted.

"It is this last statement which gives us justification for making predictions for 1918. A farmer will certainly have disease in his fields if he plants diseased stock. If he can get disease-free seed then he will have no trouble."

"This matter is not so simple as it sounds, for the problem is to get disease-free seed. Probably there is not a bushel of such seed to be found in Michigan. All the farmer can do under the circumstances is to try to secure disease-safe seed."

Difficult to Secure.

"The present year is ideal to secure disease-safe seed. As a result of the last two dry summers the percentage of anthracnose has been reduced so that judging from the thousand samples of beans that have been analyzed for disease by the department of botany it is safe to say that not one sample in fifty shows heavy infestation from anthracnose, and in fact many are totally free."

"Anthracnose is now in retreat, but if wet weather keeps up this year it can make a stand and entrench itself as firmly as ever. The time is opportune to get rid of this old enemy. It is wholly an individual problem."

"If I were going to plant beans this spring I would get seed stock free from weathered beans and as clean and dry as possible, and then I would have the beans picked to absolute cleanness. Every bean should be looked at and all with spots or stains should be thrown out. The women in the home who have registered for war service can do no better work."

"It is true that there still will be a little blight left in the seed and the crop may show some leaf trouble, but with the ordinary clean sample, such as grew last year, close picking will absolutely remove anthracnose."



If you Use Caution in the Selection of Bean Seed you May Rid your Fields of Some Important Diseases.

An Emergency Supply of Seed Corn

COOPERATION with the farmer has been extended this spring by the government to the matter of providing corn to meet the emergency calls being made for a supply of seed for replanting.

The establishing of a seed corn reserve for replanting purposes is an elaboration by the state and federal authorities of the arrangement by which the government was able during the past spring to bring in corn to cover up Michigan's shortage. But as usual, and in spite of such precautions as testing and the like, a considerable amount of the seed put into the ground this season has been weak. More than the usual number of fields have failed to come up, while in many more the stands are unusually poor—meaning that replanting will have to be practiced, and in fact is being practiced on a much larger scale than ever before.

It is in Toledo that the federal seed corn reserve for this district has been established. A farmer, for instance, who concludes after ten or twelve days that his corn is not coming up and decides to replant needs only to see his county agricultural agent and leave with him an order (and the cash) for the amount of seed he requires. Or if the farmer resides in a county where there is no agent, he can write direct to the corn reserve headquarters, (A. J. Pieters, care R. T. Miles, 2009 Second National Bank, Toledo, Ohio). Where this is done, the checks should be made out to "Disbursing Clerk, United States Department of Agriculture." The corn itself must be ordered only in lots of at least two bushels. An order

can be sent in, that is, for two bushels, four bushels, etc., but not for three bushels, or five bushels. This is because the bags hold two bushels and cannot be broken. As a governmental enterprise, the corn is, of course, being sold at cost (\$5.10 a bushel). Express charges on this should not run over forty, fifty or sixty cents a bushel to any of the corn districts in Michigan. Orders can be filled in one, two or three days, depending upon the remoteness of the purchase from Toledo. Of course, climatic and soil condi-

tions vary appreciably in the different parts of the state—but this factor has also been anticipated and a number of different corn varieties provided. These varieties, according to the Michigan Agricultural College, have been classified as A, B, C, D and E. "A" and "D" are types that will make good silage in southern counties, and might be good for grain in a long season, while "B" and "C" are types especially adapted to Michigan. The varieties included under "E" are mixed early and medium yellow dents.

In detail, these differences are as follows:

A.—Medium Yellow Dent.

This corn was grown in Delaware on light land and matures there in 100 to 110 days. As grown in Delaware the ears are about seven to nine inches long, having rather small cobs and shallow kernels. Stalks are of medium size and about eight to nine feet high. This corn is not of a pure type but runs fairly even for common yellow corn. This corn is thought by experts of the Ohio Experiment Station to be suitable for the production of ear corn in Ohio. Indications are that on well drained land and under favorable conditions it may mature in the southern tiers of counties in Michigan. For ensilage purposes in southern Michigan this corn is probably superior to any other corn available this year from outside that state.

B.—Early Yellow Dent.

This corn was grown on very sandy land in Delaware and matures there in ninety to 100 days. As grown in Delaware ears are six to eight inches long, having small cobs and shallow flinty kernels but it is not a true flint corn. Stalks are slender, about seven feet high. This corn is not a pure type but is variable as to color, size and flintiness. It is, however, the earliest yellow dent corn available now in quantity. The fact that larger and later corn grows on the same soil as this early yellow dent indicates that this corn is an early type.

C.—Early White Dent.

This is a flinty dent, growing on sandy soil in Delaware and of about

Boys' Working Reserve Making Good

U. S. Boys' Working Reserve,
Michigan Division, Detroit.

I am delighted to inform you that the young man you first sent me has proven to be one of the best men we ever had on the farm.

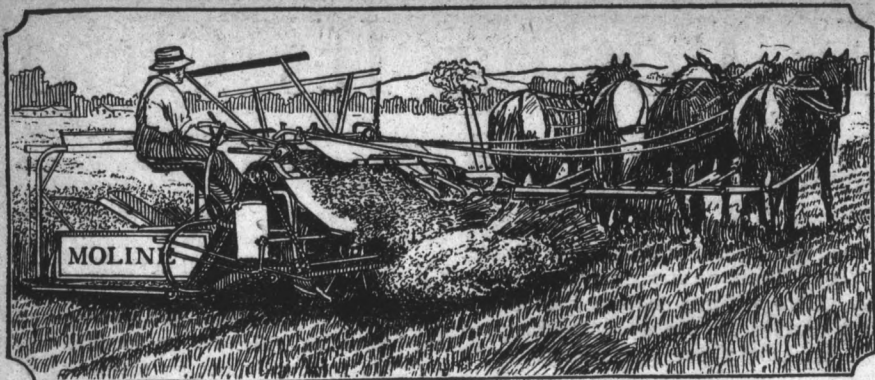
The second boy that is now working in the cow barn, also seems to be working out fine. He had had little or no experience in milking or with cows and the foreman of the cow barn is rather impatient, but I think he is working out fine, and will be glad to let you know just how he does do.

The other young man is an excellent example of what you can furnish the farmers.

He is intelligent, clean, interested in his work, anxious to learn, and he already had a very good working knowledge of gas engines and other machinery so that, as I stated before, he has proven to be one of the very best men we have ever had.

I thought this information would be valuable to you and you are at liberty to use it in any way you choose, of course.

Very truly yours, (Signed) E. LeROY PELETIER.



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THE Moline Binder has a record of over 50 years of good, honest service wherever grain is grown. In difficult work, in continuous running without stops or breakdowns—in short, in an emergency, Moline superiority is apparent.

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When you buy a Moline Grain Binder you get the benefit of 50 years' service, the lightest draft, the greatest stability, the strongest construction and the greatest reliability in a grain binder—you get crop insurance.

A typical instance of Moline performance under unusual conditions is reported by Jerry Rivard of Boubonais, Ill., as follows:

The Moline 8-ft. Binder bought of you I used in cutting 110 acres of grain. I cut seven acres of new ground where I did not think it could do the work, being very trashy ground, and the men present insisted I was doing wrong to try to cut it with a binder, but the Moline Binder went through, cutting all. I never missed a bundle and never broke anything. I consider this remarkable, considering the condition under which the test was made.

We have many letters such as this on file, all equally enthusiastic over the work of the Moline Binder.

The frame of the Moline Binder is extra strong, making it particularly good for tractor use.

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has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year.

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E. A. STROUT FARM AGENCY, Dept. 101, 150 Nassau St., New York, N. Y.

320 Acres, in solid chunk, 280 acres cleared and under cultivation, good clay loam soil, lays nearly level, well drained, 60 acres not cleared good hardwood timber, also good pasture, small stream through one corner, on main road, five miles to good town, good ten-room frame house with good basement, good barn 100 x 60 with basement, all necessary outbuildings, well and windmill, water to both house and barn, good orchard, close to school, buildings painted, free and clear of incumbrances, crops go with place, and should bring four to five thousand dollars this fall. Price \$30 an acre, half down and any reasonable time on the remainder. Write W. F. UMPHREY, Ewart, Mich.

FARMERS: Come up and let me sell you a farm on Our Grand Old Prairies. No stumps or stones, GREATEST GRAIN & STOCK COUNTRY IN THE WORLD. One good crop puts you on Easy Street. U. S. Needs Food, prices are high, big profits accordingly. Do Your Bit. Write J. B. STREETER, Devils Lake, N. Dak.

For Sale Avery 5-10 Tractor

with 2 bottom plow, both in first class condition. Price \$500. Have bought larger Avery Tractor which is the reason for selling. Lewis Barnard, S. S. Clare, Mich.



WILL YOU TAKE A KOGER BEANER

On 10 Days Free Trial?



Koger Bean and Pea Thresher for use with Waterloo Boy, Fordson and other Tractors and Gas Engines.

Threshes any variety of cow peas; navy, kidney, soy or wax beans from the mown vines, and breaks less than two percent. This is guaranteed.

Can be had with grain attachment to thresh wheat, oats, barley and rye in a clean, successful way.

J. M. Rogers says "I threshed 6,780 bushels of beans with my little beaner and a 6 H.P. Engine in 10 days—white, navy, black and wax mostly. Best work ever done in this section—she's a peach."

Made in 3 sizes—16 and 20-inch for 4 to 12 H.P. gas engines; 30-inch for 10 to 18 H.P. tractors. Prices \$250 to \$550.

To demonstrate to you the efficiency of this "beaner", we'll ship it to you on trial. Write today for catalog and particulars of our free trial proposition.

The Arbuckle-Ryan Company, 222-34 Cherry St., Toledo, O. Headquarters for Tractor Machinery.

IRON AGE

Farm, Garden and Orchard Tools Answer the farmer's big questions: How can I grow more crops with least expense? How can I cultivate more acres and have cleaner fields?

IRON AGE Riding Cultivator

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.

Bateman Mfg. Co., Box 24D, Glenloch, N.J.

the same size and earliness as B, but are not at all flinty. the corn is white and uniform in color. E.—Mixed Early and Medium Yellow Dent.

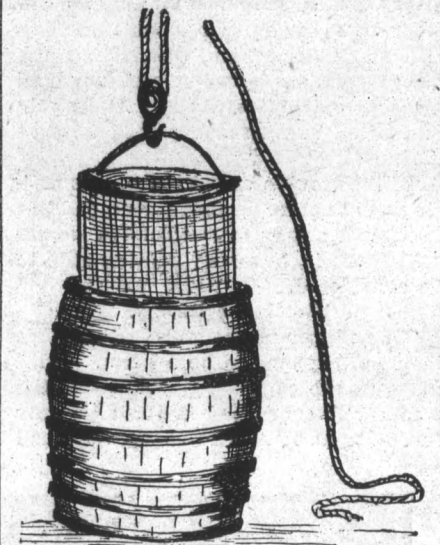
D.—Medium White Dent. This is larger and somewhat later than C, and of about the size and earliness of A. It is uniform as to color but not as uniform as to type as is C, some ears having kernels that are quite flinty while on other ears they

A number of cobs in Delaware contain mixtures of medium and early yellow dents. In most cases the prevailing type is the medium dent with ten to fifty per cent of early and flinty dent ears mixed with the larger corn.

Practical Suggestions

TREATING POTATO SEED.

Where treating potatoes by the immersion method, growers will find the plan which I have endeavored to illustrate, a great labor-saver. The solu-

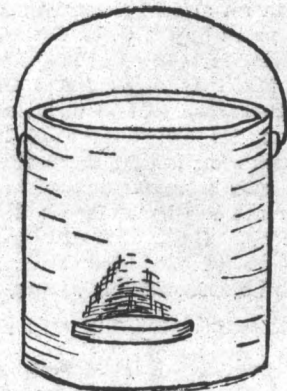


one side to form a clapper. On the bottom of a stick, or handle, is fastened a board a half-inch smaller each way than the size of the pump body. On the top side of this is fastened at the center a piece of leather the exact size of the inside of the pump. This affair acts as the plunger and should lay near the bottom of the pump on the down stroke. Spout is made as shown in the sketch. A piece of wire strainer can be tacked on the bottom. —C. E. R.

CHICK WATERING FOUNTAIN.

Here is a little water fountain which is as handy as the proverbial pocket in a shirt. We have several of these home-made fountains which are used in the brooders for the chicks.

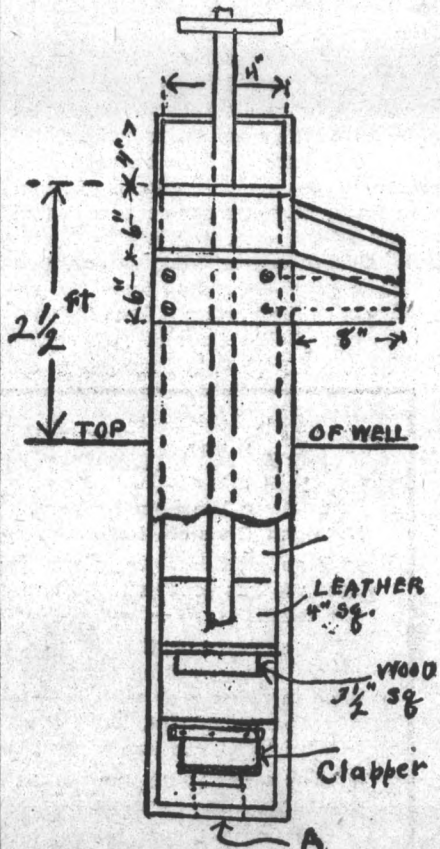
They are made of one-gallon and half-gallon friction top tin cans. The can has a slit cut one inch from the bottom about two and a half inches long for the gallon cans. The tin just above the slit is bent into the can, then a narrow piece of tin is soldered



tion is placed in the barrel. The potatoes in bushel lots, are dumped into the wire cage, raised by means of rope and pulleys and then lowered into the solution for the required time. They are then pulled out by means of the rope and arranged to dry while another batch is treated.—D. K.

SHALLOW WELL PUMP.

For wells not more than six or eight feet deep, and springs, a handy pump can be made. By its use it will be considerably easier than dipping out with a pail and the water also can be carried to a tub by a spout. The pump is

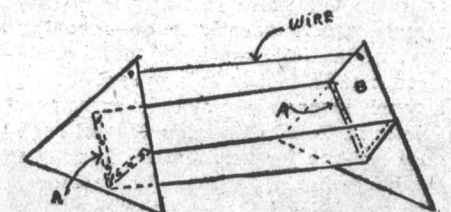


across the top of the part shown at (A) so as to come a little above the bottom of the bent-in part. The top is sealed up by soldering around it. With the bail on the can it is convenient to clean and refill.

FEED TROUGHS.

The little troughs shown in the drawing are mighty handy to have for feeding the young chicks in the brooders. They are made of light tin and can be made by a boy handy with a tin shears and a hammer. The most convenient sizes are from eight to twelve inches long.

The trough is made of a flat piece of tin, bent up in the center. At each end where it is bent in the center snip out



a triangular piece and bend up about an inch of the tin as shown at (A), and punch little holes in it so it can be riveted to the end of the trough (B). Now cut out the end pieces (B) triangular in shape and rivet them onto the trough. The wide bottoms formed by the triangular end pieces prevents the troughs from being tipped over in the litter in the brooder. The ends may be made of wood if desired. Put a piece of No. 9 wire across the top (C), to stiffen the ends to facilitate handling. —J. L. J.

made of three-quarter inch planed boards nailed or screwed together to make a box arrangement about two and a half feet longer than the well is deep. At the bottom on the inside a seat, "A," is formed by screwing on four strips of wood. On one of these a square piece of leather is screwed on

Cheese Prices and Production

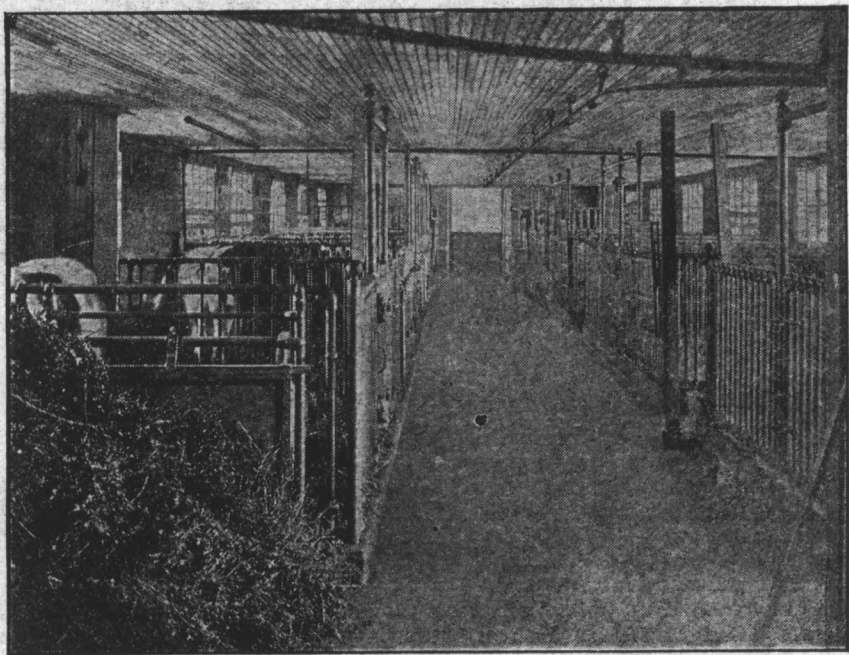
THE present wholesale price of cheese at the factory is twenty-one cents. The selling price allowed by the food administration based on pre-war advances over cost is from thirty to thirty-two cents. The milk producer after delivering at the factory is receiving around seventeen and a half cents per pound, or around \$1.75 per hundred pounds of milk. This price is thirty cents below the condensation price, which is \$2.05, and also the price named by the United States representative for milk at Chicago, based on cost of production.

There is no profiteering by the dairyman on milk sold for cheese making, for he is loser by two and a half cents per pound of cheese on the above named prices. The cost of milk production is reasonably similar, for whatever purpose may be its final use, and for this reason, the milk used for cheese making is not being adequately paid for. In other words, the base of the cheese industry, under these circumstances,

Approximately two pounds of butter or two pounds of lard would have to be handled, to equal the gain on one pound of cheese. This means a greater utilization of the food values in milk, which are not recovered in buttermaking.

The United States Food Administration is to make a campaign aided by the Michigan Milk Producers, to increase consumption of milk products. It is my opinion that the actual gain to the retailer could be increased by lowering the margin per pound in selling, followed by increased sales. Or if this is impossible, would it not increase cheese production to take two and a half cents per pound of distribution, and add this to milk production, and conform to the United States Food Administration's price on milk production, which is basic of the industry.

The reduction of price below a profit in production curtails output, and this in turn increases the cost and reduces the food supply. The allowance of



Maternity Barn at Long Beach Farm.

starts food production below cost. Some value might attach to the whey, but owing to swine shortage, it is not used greatly, and its value is negligible.

The cheese maker receives from three to four cents per pound for manufacture. A cheese box costs fifteen or sixteen cents. With a large volume of business and a well equipped factory, this rate may compensate the cheese manufacturer. However, the shrinkage of milk flow usually reduces the volume except for about three months of the year.

The addition of all these items must make twenty-one cents on today's market, regardless of the accuracy of actual mathematical calculation. Freight and drayage charges, together with the commission of the jobber and wholesaler, make the price on the basis of food administration reports of cost to the grocer, twenty-two to twenty-three cents per pound. The price to the consumer, then, must not exceed thirty to thirty-two cents. To strike an average, thirty-one cents is used as the consumer's price. Then the percentage of contribution would be in round numbers as follows:

	Per Cent.
To produce milk.....	55.5
To manufacture into cheese.....	12.6
Transportation and commissions..	6.3
Retailing charges	25.2

While there is some wastage in handling cheese, the waste and shrinkage is exceeded in the actual loss from unavoidable causes in handling milk before manufactured into cheese.

Compared with other sale allowances for example, the advance price over cost of sugar would compel selling eight or nine pounds of the latter to equal the return in one pound of

profit in production curtails output, and this in turn increases the cost and reduces the food supply. The allowance of profit from the top downward is not the rule in business, and is submerging the dairy industry. What should be done is to fix a basic price for milk and allow proper compensation for services on the base price.

Mangels for Cows

If I were to contract mangel wurzels in a large quantity to be delivered into my cellar for feeding purposes next winter, how much could I afford to pay for them per bushel or per ton? We have always fed brewers' grains until now, but of course cannot get them now. We had an idea that we could feed the mangels with silage, hay and some grain and get as good a ration as before. Could you give us about the right ration to feed to dairy cows?

Wayne Co.

L. L. L.

MANGEL wurzel beets are richer in protein than the corn silage and contain 1.1 per cent of digestible protein while there is only 0.9 per cent in corn silage, but mangel wurzel beets do not contain as much carbohydrates, starch and sugar, as corn silage. The beets contain 5.4 per cent of digestible carbohydrates while the silage contains 11.3 per cent; beets contain 0.1 per cent of fat only while corn silage contains 0.7 per cent. However, beets are enough richer in protein to make them as valuable a food, ton for ton, as corn silage and the succulency of the beets is quite as valuable if not more so than the succulency of corn silage. Beans are practically uniform in quality while corn silage varies greatly in this respect,



THE "ACID" TEST OF VALUE

At an auction sale the buyer makes the price.

Auction prices are apt to be lower than the real value warrants, rather than higher.

In any case, auction prices represent the estimate of value placed on the article by the buyer and not the seller.

During the past few months the cow owner's appreciation of the unusual values offered in De Laval Cream Separators has been demonstrated in a most remarkable way.

From one state after another have come reports of the sale of De Laval machines at farm auctions—machines which had been in steady use for several years—at prices, in most cases, only two or three dollars less than the sale price when new; sometimes at practically the same price at which the machine was sold when new; and, in several instances, at even more than the original list price.

In February, at a Missouri auction sale, a De Laval in use two years was sold for \$1.25 above the original price. In Kentucky a farmer paid for a De Laval \$2.00 more than the original price, at an auction sale. Last January, in West Virginia, a second-hand De Laval sold at auction for \$2.50 less than the original catalog price. On January 15th, in Ohio, a De Laval machine in use a year was sold at auction for exactly the same price it brought when new, and at another point in Ohio a De Laval in use several months brought several dollars more at auction than the original price. In the province of Ontario, early in April, a De Laval in use since 1916, brought at auction a price \$5.00 higher than the owner paid for it when new.

In contrast with these prices paid for De Laval machines at farm auctions, it is interesting to note that when other makes of cream separators are offered they are usually listed simply as a "cream separator," and not by name. Often there is no bid for such machines and their usual auction prices run from \$10 to \$15. We have never heard of one that sold at auction for half its original cost.

Perhaps you may not have had an opportunity to learn of the cleaner skimming, easier turning, the great durability and the splendid service given by the De Laval machines, but here is the strongest and best sort of evidence that those who do know cream separators appreciate that the man who buys a De Laval gets good and generous value for the purchase price. And further, that even after a De Laval has been several years in use, it is practically as good as new.

If you are without a cream separator or in need of a new or better one, why not see the local De Laval agent immediately? If you don't know him, address the nearest De Laval office as below, for any desired particulars.

THE DE LAVAL SEPARATOR CO.

165 Broadway, New York

29 E. Madison St., Chicago

ROSS Low Speed Light Running

Our 68th Year

SILO FILLERS Larger Capacity Less Power

Whatever your requirements are we have a size to suit, 4 H. P. and Larger.

We can show you The Ross will operate with Less Power and Less Speed and still produce Larger Capacity. Our selling plans make this possible.

No Limit to our Guarantee because there is No Limit to the ability of The Ross. Write your own guarantee if you please.

Buy now, Cost you Less. You can have the machine any time without Cash investment in full prior to Silo Filling Time.

THE E. W. ROSS CO., Box 114, Springfield, Ohio. 68 Years' Experience
Machinery and Repairs carried at convenient points

No Silo too High for The ROSS




Winter Problem solved by the Hive with with an Inner Overcoat. Wintered 100% perfect, no loss of bees winters of 1916-17-18. The Inner Overcoat did it. Send for free 48 page catalogue of bee keepers supplies. Bees Wax Wanted.

A. G. WOODMAN CO., Dept. M. F., Grand Rapids, Michigan.



Four Miles or Twenty

Are You Working Your Farm at a Twenty-Mile Pace or at Four Miles?

Manufacturers and merchants have come to realize that their business can't go any faster than their delivery and hauling facilities will permit.

What good does it do to produce a large volume if it can't be hauled promptly?

A farmer is in the same situation.

Getting products to market promptly is just as necessary for rapid, economical farm production as it is for the manufacturer or merchant.

The farmer who uses horses to haul his produce at a four-mile pace is sure to lag behind his neighbor, who is hauling at a twenty-mile pace with trucks.

You don't need to wait until you can afford an expensive truck. **Detroit Universal Truck Units** will put your farm in the twenty-mile class, and at a very small expense.

Detroit Units can be attached to any chassis in a few hours time, making a thoroughly reliable, economical truck of one, two, or three tons capacity.

A Ford chassis will make an excellent one-ton or two-ton truck. Larger cars will make the two and three-ton sizes.

Perhaps you have an old car, with the motor and chassis still in good condition, or know where you can get one cheap.

Investigate this proposition today.

Let us send you complete information showing how, for a small expense you can speed up your haulage this year and boost your production and profits.

Specifications

Made in 1½, 2 and 3 ton models. Fit any chassis. Work can be done in one day. The famous Russell Internal Gear Axles are used in all models, providing the high road clearance so necessary to farm work. Other parts standard—equally high grade.

Prices

Prices run from \$400. for the 1½ ton model, to \$675 for the 3-ton model. Made in Detroit, by people who know how. Prompt deliveries—short shipping distance.

Detroit
UNIVERSAL
TRUCK
ATTACHMENTS

Manufactured and Sold by

The Parkview Sales Company, 1685 Gratiot Ave., Detroit, Mich.

Boxes or Bodies
Can be Built to
Suit any Farm
Needs.



This is the Truck we Built for One Progressive Farmer.

Is Your Truss a Torture?

Are you suffering from rupture without any hope of relief? Get the **Brooks Rupture Appliance** on free trial and know the comforts of a sound man.

The automatic air cushion clings closely without slipping or chafing. Guaranteed to comfortably retain the hernia. Draws and binds together the parted tissue and gives Nature a chance to knit them firmly.

As specialists of 30 years' experience we have perfected a comfortable, sure relief from hernia in the **Brooks Rupture Appliance**. Endorsed by thousands of physicians. Sent on trial to prove its worth. Made to your measure. Durable—cheap.

Write today for measure blanks. **BROOKS APPLIANCE CO.**
494 State St. Marshall, Mich.

CEMENT STAVE SILOS

ARE BEST

BUILD YOUR OWN

We furnish staves, hoops, doors. Cheaper and Easier to build than wood or tile. Stock limited. Write now.

LESLIE H. BONINE, Vandalia, Michigan
Member National Cement Stave Silo Ass'n

FOR SALE—On account of the Draft I sold my dairy herd and have an Omega Milker, 3 unit with all pipe line, used just four months.
E. J. Williams, Cassopolis, Michigan.

Michigan Farmer Club Rates

By getting your neighbors to subscribe you can get your subscription at a reduced rate. We will accept yearly subscriptions on the basis of our two, three and five-year rates as follows:

- 2 yearly subscriptions...\$1.50
- 3 yearly subscriptions....2.00
- 5 yearly subscriptions....3.00

You will find it easy to interest your neighbors in the Michigan Farmer. Send all orders direct to

The Michigan Farmer,
Detroit, Michigan



MORE PROFIT

Get our booklets and let them show you why you don't get the full profit on your butterfat. They tell you of the waste, the reason for the loss of the precious golden globules you want to sell.

These books with money facts for you are yours for the asking.

They cost you nothing—impose no obligation. Get them today! And know for yourself why you should own a

SANITARY MILWAUKEE CREAM SEPARATOR

We have facts proving the separator gets as high as 99% butterfat. There's a real reason for this superiority. You, too, should get the facts about this factory tested and guaranteed "Milwaukee." Use a post card—NOW!

THE VEGA SALES COMPANY
(Formerly, The Vega Separator Company)
103 E. South Street
FOSTORIA, OHIO

B-V-T-Silo

Built of everlasting Brazil Vitrified Fire Clay. Reinforced with steel ribs bedded in cement. You'll never have to rebuild it. Your neighbor has one. Ask him. Send for Booklet D

Brazil Hollow Brick & Tile Co.
Brazil, Indiana

Binder Twine—Granges, Farmers Clubs get our price. Farmer agents wanted. Write us. **THEO. BURT & SONS**, Melrose, Ohio

therefore I would reason that a ton of mangel wurzel beets, everything considered, is well worth as much as a ton of silage.

But this doesn't get us any nearer to answering the question because it is difficult to state the value of a ton of corn silage. There is no market for it, nothing to fix the price, and the only value we can give is its comparative food value with other feeding stuffs. Now, timothy hay is such a product and has a market value. Of course, in timothy hay the water is evaporated so that a ton is worth much more than a ton of corn silage. The real food value of any substance depends upon the dry matter it contains and not on the juice or succulency of the plant. This juice or succulency of the plant may be of great benefit in keeping the digestive organs of the animal in good condition. It is undoubtedly this one reason why we get such good results with corn silage or with mangel wurzel beets—on account of the high digestibility and the palatability of the two substances but when you consider their

food value we have got to figure in the terms of dry matter that they contain. That is the weight of the substances after the moisture has been eliminated.

Now, the food value of corn silage compared with the food value of timothy hay would warrant us in saying that one ton of timothy hay is worth as much as three tons of corn silage; then corn silage is equal in value to one-third of a ton of timothy hay. If timothy hay is worth \$21 a ton, corn silage would be worth \$7 a ton for feeding purposes. And consequently if a ton of mangel wurzel beets is equivalent to a ton of corn silage a man can afford to pay as much for ton of beets as he would pay for a ton of corn silage or one-third ton of timothy hay.

One thing that a man can safely figure on and that is that he can afford to pay something for the succulency in mangel wurzel beets because it makes the whole ration more appetizing and it keeps the cows in better condition and you can get more out of the other food in the ration, by having this succulent food as a part of the ration.

Sunflowers for Silage



Harvesting Our Sunflower Crop.

A GREAT many farmers are rather skeptical in regard to using the Russian sunflower for silage, but it is certainly worthy of a trial on any farm. Last year I had three acres of sunflowers and ensilage corn mixed. Some of it was nearly all sunflowers as the corn rotted while the sunflower seed, which will stand more wet weather, grew fine.

The sunflower is hardier, will yield a heavier tonnage and with seed corn as scarce as it is this year will furnish a fine substitute for next winter. I

started filling silo with clear corn then used sunflowers and corn, and finished with corn which gave me a chance to compare feeding values.

In feeding the sunflowers I could not see any difference in the milk flow, and the cows seemed to like it just as well.

They can be cut with binder and go through the ensilage cutter as easily as corn, but are heavier to handle. I would recommend mixing about three pounds of seed with the corn per acre. **Oakland Co.**

R. H. HYDE.

Milk News from Field Secretary

THERE will be a meeting of the Detroit Area Milk Commission on Friday, May 31, in the Chamber of Commerce, Detroit. All parties having business with the Commission should be on hand at 1:00 p. m.

May Milk Price and Surplus

The May milk prices and surplus fixed by the Detroit Commission Committee are as follows:

Eighty per cent at \$2.45 per cwt; twenty per cent, surplus, at \$2.00 per cwt; average, \$2.36.

It had been hoped in the early part of the month that there would be no surplus for May—inasmuch as some of the buyers had closed some of the up-state plants, thus shutting off a large amount of milk from the Detroit market. But later on the flow increased and when the survey was made by the committee it was found that, while many of the smaller dealers were wanting more milk, some of the larger distributors were having quite a large amount of surplus; in one instance as much as thirty per cent. Other large cities about us are obtaining their milk supply at prices ranging from \$1.80 to \$2.30 per hundred pounds, and in one instance, to a large milk buyer in a nearby city the producers have said,

"Take our milk and use it to the best advantage and give us what you can afford to."

That Abominable Test.

Perhaps there is no one source of annoyance that is so manifest at all times as the milk test. Many times the apparent difficulties are imaginary and a little consideration and a little charity would save a vast amount of criticism and unrest. Sometimes, however, there is a reason for the unrest, criticism and acquisition on both sides.

The Michigan Milk Producers' Association is continually on the alert to forestall any trouble and to iron out the difficulties that have arisen. For this purpose both Commissioner Woodworth, of the State Dairy and Food Department, and Prof. Anderson, of the M. A. C., have been appealed to and both departments have detailed a man to assist in establishing an equitable basis of adjustment. Both departments now have a man on the field working for us, in the name of the state, to help solve these problems.

It is the sincere desire of the Association to cause both the buyer and the seller of milk to come close to the right line—the line of fairness and justice—

(Continued on page 667).

Saving Garden Labor and Space

COMPETITION is so strong, and efficiency so essential, in these days, that several factors must combine to spell success for the small farmer who can neither afford to own or pay tax upon a large farm; and of these factors two stand out pre-eminently as the ones of prime importance—economy of space and labor, and judicious marketing.

When I began gardening independently I supposed most truck required more room than I have ever accorded it since, simply because I had heard that it did; but the extra labor of keeping unoccupied spaces free of weeds, was always particularly disagreeable to me; and I could see no difference between vegetables grown close enough together to cover the ground at maturity, and those allowed considerably more space.

Good Production Despite Drought.

My garden never produced more abundantly than this year, despite the summer's drought, and as the illustration shows, I have practically no vacant spaces, though the ground is fully

row, gave nearly a bushel of ripe onions. From the two rows of beets coming next I sold more than a hundred bunches of beets, which left the rows plenty thick enough to mature well. Later I sold a bushel or two, but reserved a generous winter supply for ourselves and my flock of fifty hens. By the way, the only criticism ever given my bunch of beets was that they were too large and, after testing the quality, we heard no more about that. A little less than four rows of Prize-takers and Yellow Globe Danvers gave four or five bushels of ripe bulbs, and I thinned and sold bunch onions for weeks during the summer.

The Surplus is Sold.

Thirty feet of carrot rows was thinned for bunching and about a dollar's worth sold; those left till maturity grew to fourteen to eighteen inches around, and there were practically no small ones. These will be hung on nails in my poultry house all winter. We began cooking cabbage in July, and early in August I began to sell it. From seven rows of corn about eighty feet



Intensive Gardening that Paid.

occupied by vegetables rather than weeds. I allowed just a foot between rows of carrots, beets, and onions; but between the adjacent rows of onions I found nine inches just as satisfactory. Sweet corn rows were planted two feet apart, and hills a little less than two feet apart in the row. Cabbages were set about two feet by two feet, and where hens destroyed one end of two rows of beets which had a row of onions between, the vacant space was filled with cabbage, and both grew so luxuriantly that, when fully matured, the ground was practically covered with big onions, alternating with big, thrifty cabbage heads.

The Bean Crop Spoiled.

In only one instance has my method of close planting proven detrimental to the highest development of any crop, and that was an accident. I planted one row of sweet corn very early but the season continued so cold that it didn't come up, so I planted another row two feet beyond, leaving this space for late cabbage. This time I alternated the hills with pole beans, with a view to hiding the unsightly poles among the corn. Usually this proves a very good arrangement for just one row, but later my first corn came up beautifully. That particular brand of early corn sells here as high as thirty cents per dozen, so I thought best to sacrifice my beans a little, rather than to pull it up. They grew well but did not produce quite as heavily as when not shaded by the corn.

Good Production.

My first row of vegetables next the house—sixteen tomato plants and five cucumber hills—gave an abundant supply of both for home use and a few to sell. If the whole row had done as well as the three tomato plants set out first, I could have sold several bushels, but the hot, dry weather nearly cooked the later ones. A row of Yellow Globe Danvers running directly through the mixed row—about forty feet of onion

long, I sold fifty-three dozen ears, besides furnishing a family of five for a month or more.

Marketing.

I never intended this for a market garden at all; it was planted exclusively for home consumption and I sold only the surplus. Even the corn was meant for a long succession, but the season proved so hot and dry that all of it came on at once. August 19 we made up our first good auto load, including all cucumbers, cabbages, eggs, blackberries, and apples we had to spare; several bunches of carrots, beets and onions, and a big pail full of my mother's sugar cookies. We are four miles from the nearest summer resort town and, with the car, we can rush in vegetables on the early market, freshly picked and still dewy.

Gets Premium Prices.

At the street market we found an eager crowd ready to buy our stuff like hot cakes. Sweet corn, in particular, was at a premium, and while others sold at fifteen cents, people gladly paid from twenty to thirty cents for ours; indeed, they began by making their own prices, and we sold duplicate orders to many who had already bought inferior specimens. Later we graded carefully, making fifteen, twenty, twenty-five and thirty-cent grades. We have previously shipped eggs and poultry but shall never do so again during the summer season; it cannot but benefit both consumer and producer to deal direct whenever possible—they get better food and we get better prices.

We have a thriving farmers' cooperative organization under way, with a business in prospect which will buy everything the farmer sells and sell everything the farmer buys; but, for a time at least, I believe it will still pay to huckster, though we shall by all means patronize, and do all in our power to boost, the cooperative association.

New York. MRS. E. ANDERSON.

DISSTON

SAWS AND TOOLS

A \$200,000,000 Woodlot

THE farmers of this country own a \$200,000,000 woodlot. How much money will you make on your woodlot? Coal will be mighty scarce next winter. Many a factory, many a family will have to use wood. True, as sure as you're a foot high. Sell all the wood you can cut. Use a Disston Cross-Cut Saw for felling and for cutting cordwood lengths.

The greenest or hardest of timber can't make a Disston Cross-Cut Saw quit. It stands up to the hardest kind of work and then comes back for more. Thrust pressure won't buckle it. Its blade, of Disston Crucible Steel, delivers long years of service. It has the right temper. It has the right hardness. The steel in Disston Saws or Tools is made right here in our own plant, because no other kind would do.

We make many patterns of Disston Cross-Cut Saws for one man or two. These can be had in wider or narrower blades with the tooth you like best. Find the name Disston on saws and tools and you'll know you're getting quality through and through. Disston Cross-Cut Saws are the choice of the best woodsmen, as Disston Handsaws are the choice of three out of four carpenters.

Modern farming demands Disston Saws and Tools. Sold by all progressive hardware dealers the world over. Send today for free copy of "Disston Saws and Tools for the Farm."

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SEPARATORS SPREADERS AT ENGINES

Direct from Galloway's Factories
Learn how Galloway can save you big money on your Separator, Engine, Spreader, Tractor, and other farm implement. You know of others who have traded with him and got great values. This year buy from Galloway and make money by saving money. When you buy from Galloway you buy direct from the factory. All waste, all unnecessary expense, is saved when you buy direct from Galloway's factories. The saving on your year's supply will amount to hundreds of dollars.

FREE Book! Write Today!
Send at once and get Galloway's 1918 Free Book. Let it be your buying guide. It will point you on the highest grade implements at very lowest prices. We ship from St. Paul, Chicago, Kansas City, Waterloo, Council Bluffs, Spokane.

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Farm Implement Manufacturing Specialists
Galloway Station 17 WATERLOO, IOWA

IRON AGE

Farm, Garden and Orchard Tools
Answer the farmer's big questions. How can I get my crops sprayed when help is scarce? How protect my crops against bugs and blight?

IRON AGE Traction Sprayer
meets the need for a fast-working, high-pressure field sprayer. Covers 4 or 6 rows—55 or 100 gal. tank. Write today for free booklet.
Bateman Mfg. Co.
Box 24R
Grenloch, N. J.



For Sale -- Moline Tractor
Model (B), equipped with two 14-inch bottoms and carrying truck. Used only 30 days and in good condition. Address V. SITTS, Mason, Michigan.

HOFSTRA KILLS POTATO BUGS

—Cabbage Worms, Tomato Bugs, many Other Garden Insects
Why let bugs eat up your garden? Spray plants with HOFSTRA—kills bugs off and kills 'em! NOT a poison. Guaranteed to kill Potato Bugs, Cabbage Worms, Tomato Bugs and many other Garden Insects. Also Chicken Mites, Fleas, Flies, Roaches, Mosquitoes, Ants, Bed Bugs.

FREE If your dealer hasn't HOFSTRA yet, send 25 cents and dealer's name, for 25c package and 10c loaded gun, FREE. Postage paid.

HOFSTRA MFG. CO.
309 NOGALES, TULSA, OKLA.

Get Cash

For Your Empty Bags
Don't throw away a single bag—they're worth money to you. Prices are way up now. Cash in on all you have. But be sure you get our prices before you sell a single one. We guarantee most liberal grading. Over 20 years in business is your assurance of a square deal every time. We buy any quantity. Freight paid on all shipments to Werthan. Find out what real satisfaction is. Write quick, stating what you have. Address
WERTHAN BAG CO.
61 Dock St. St. Louis, Mo.

Seed Buckwheat \$5

Per 100 pounds. Bags extra at 35c.
Young-Randolph Seed Co., Owosso, Mich.

SEED CORN

Early Y. D., 100-day variety & Kaufmann's 90-day Yellow; Pa. grown. Germination good. Graded corn shipped upon approval. Price \$8 per bu. C. H. & J. Graves, Antwerp, O.

SEED BEANS New Prolific, an improved white navy pea bean. Yield last season 19 bu. 100% germination, college test. Pick less than one pound from machine and harvested without rain or frost \$9 per bu. Bags 45 cts. E. S. Christensen, Coral, Mich.

FOR Sale: Late Potatoes Seed Potatoes free from scab. Blight proof; 80c per bu. Sacks free, 10 or more bu. 75c. **GEO. BILLS, Hale, Mich.**

Hairy Vetch

THE advantage of hairy or Russian vetch as a soiling crop lies in its extremely rank growth, its power to extract atmospheric nitrogen and the fact that it adapts itself to being grown between other crops without interfering with the regular farm routine. For such purposes it may be sown in corn ahead of the cultivator the last time the field is worked. It does not appear to get very much hold the balance of the season and in this way may lead to disappointment. But it is working on the job just the same and in the spring it takes hold rapidly and comes to maturity in a hurry.

There is practically no danger of winter-killing since the plant comes of an ancestry accustomed to the bleak winters of Russia. Some time between the first of May and the middle of June, depending upon the season and the latitude, the vetch field becomes a solid mat of luxuriant vegetation. It may get so rank that disking must be resorted to before it can be plowed. Its effect in mellowing and lightening a stiff soil is remarkable.

The problem of inoculation must be met with vetch as with many other legumes. However, less difficulty appears to be experienced in this regard than with alfalfa, especially if a soil is somewhat low in lime. Vetch ripens very unevenly so far as the seed is concerned. On some plants the seed pods may be bursting at one end of the cluster while at the other end the plant may still be in flower. Consequently in growing it for hay, if one does not keep close watch of it and cut it before the first maturing pods are ready to burst open, seed will be spilled and the plant will make its appearance the following season. We have seen one field of "volunteer" vetch which was impossible to tell from a field especially cultivated to this crop.

Illinois.

ORIN CROOKER.

ENLIST SCHOOLS TO PROTECT WHEAT.

The aid of high school pupils of the state, and particularly those who are members of classes in botany, is being sought by the Michigan Agricultural College in the campaign now in progress to wipe out the high-bush barberry. Letters containing instructions showing how the offending shrubs can be identified and destroyed, have been mailed to all the schools.

The barberry against which the extermination measures are being directed is the variety known as "high-bush." The Japanese barberry, which is free from the sins of its "high-bush" relative, is not concerned in the matter at all, and according to the pathologists, should not be destroyed.

The high-bush variety helps to spread stem rust of wheat, a disease which annually destroys much of this food crop.

MAY HAVE LICENSE REVOKED.

The way of commission men these days is not strewn with roses. George A. Prescott, State Food Administrator, will recommend to Washington that the license of the Standard Fruit Co., of Wayne county, be revoked, due to failure to carry out contracts with farmers for onions which were allowed to spoil and for which the company is alleged to be responsible. While the authority of the state food administrator does not permit him to revoke licenses, he has the privilege of making the recommendation to the authorities in Washington that such licenses be withdrawn. Other commission houses in the Michigan metropolis and elsewhere are being investigated.



How the Armies' need for meat was answered

IN a fighting man's ration, meat is the important item. Twenty ounces of fresh beef, or its equivalent, is called for daily.

To supply the meat needs of an army that was suddenly expanded from 100,000 to 1,500,000 is a tremendous task. Added to the needs of the Allies, it is a staggering one.

The American stockman and the American packer may justly take pride in the way they have met these needs.

During 1917, stockmen sent to market nearly 2,000,000 more cattle than during 1916. Yet at the end of 1917, the Department of Agriculture reports more cattle remaining on American farms than at the beginning of the year. The production of hogs has also been increasing. All of this in spite of high feed prices, and scarcity of labor.

How the packers have done their part is shown by the fact that in one week, Swift & Company was called upon to supply the Allies and the American Armies abroad 24,000,000 pounds of meat and fat—enough to

have fed America's peace-time army for more than six months.

An order of this size means the dressing of 13,000 cattle and 200,000 hogs.

To move the finished products, 800 freight cars were needed. Of these 650 were from the Swift refrigerator fleet.

Three days after the order was received by Swift & Company, shipments began, and the entire amount was rolling seaward within a week.

Since January 1, 1918, over 400 carloads of our products per week have been shipped abroad on war requirements.

The nation's meat supply machinery has stood the test.

Not once has there been a failure on the part of the American farmer or the American packer to supply the government's needs.

On their part, Swift & Company performs their service without governmental guarantee of profit and with a limit of 9% return on capital employed in the Meat Departments, which means about 2 cents on every dollar of sales.

Swift & Company, U.S.A.



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.

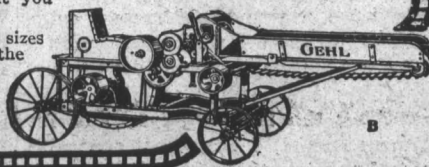
Gehl Cutters have positive safety device, best knife adjustment, strongest built all steel frame and other valuable features not found in others. Some of the seven sizes of Gehl Cutters can be run by a 4 h. p. gasoline engine. In addition, any recent model of the Gehl Cutter can use the

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.



Only \$2 DOWN ONE YEAR TO PAY

\$29 Buys 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.

30 DAYS' FREE TRIAL Earns its own cost and more by what it saves now in use in cream. Postal brings Free catalog folder and "direct-from-factory" offer. Buy from the manufacturer and save money.

ALBAUGH-DOVER CO., 3165 Marshall Blvd., CHICAGO

Buy a SILO \$75 to \$150

Freight Prepaid. Stronger, safer, better than Silos costing three times our price. 25, 50, 60, 75 and 95 ton sizes at the lowest prices ever made on reliable silos. Our patented construction makes expensive foundations unnecessary. Makes perfect ensilage. Storm Proof. Easily, quickly erected. Strongly endorsed by thousands of users. Shipped from Kansas City. Write for free illustrated catalog.

JONES SILO CO., 147 Friend Bldg., Kansas City, Mo.

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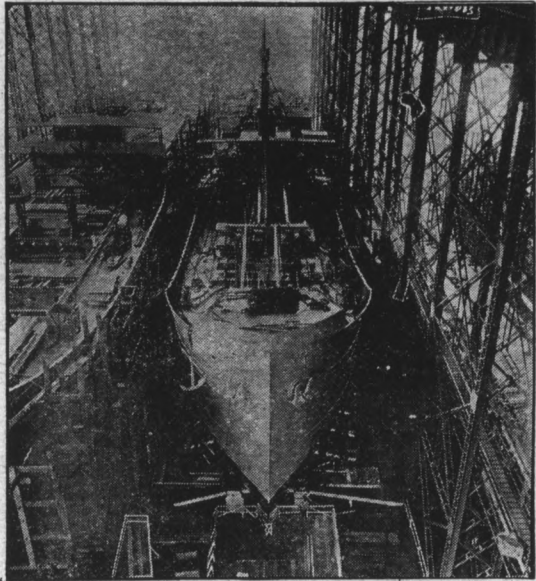
Magazine Section

LITERATURE
POETRY
HISTORY and
INFORMATION

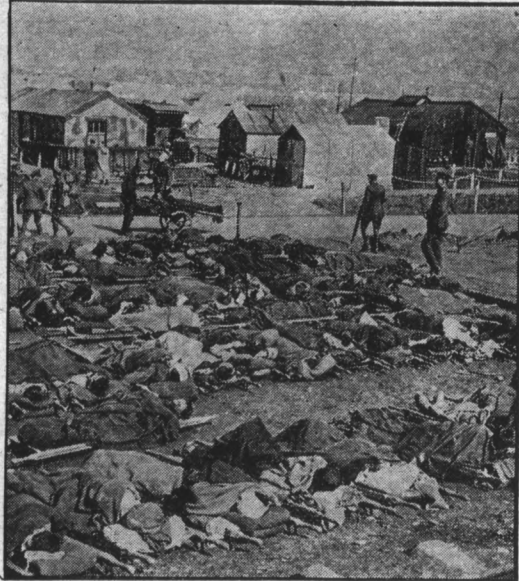
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AND *LIVE STOCK* JOURNAL
PUBLISHED WEEKLY. ESTABLISHED 1843.

The FARM BOY
and GIRL
SCIENTIFIC and
MECHANICAL

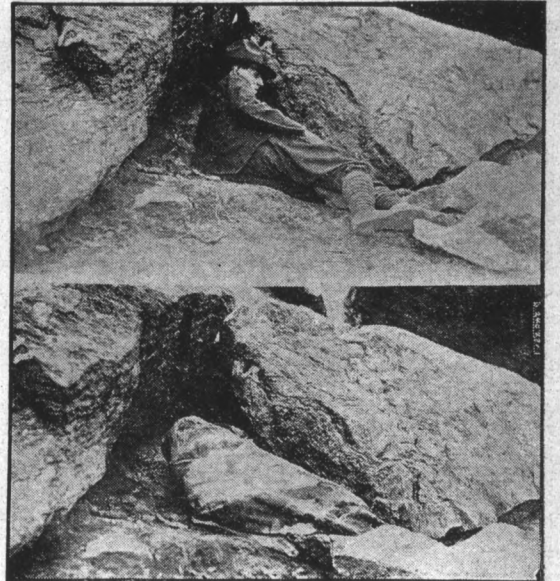
WORLD EVENTS IN PICTURES



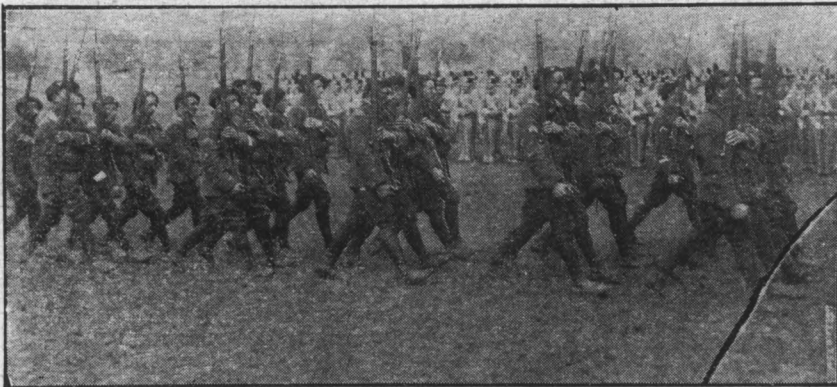
Collier "Tuckahoe" built in twenty-seven days, sets world record for speedy ship construction.



Wounded in great drive awaiting transportation to the hospitals.—(British Official Photo).



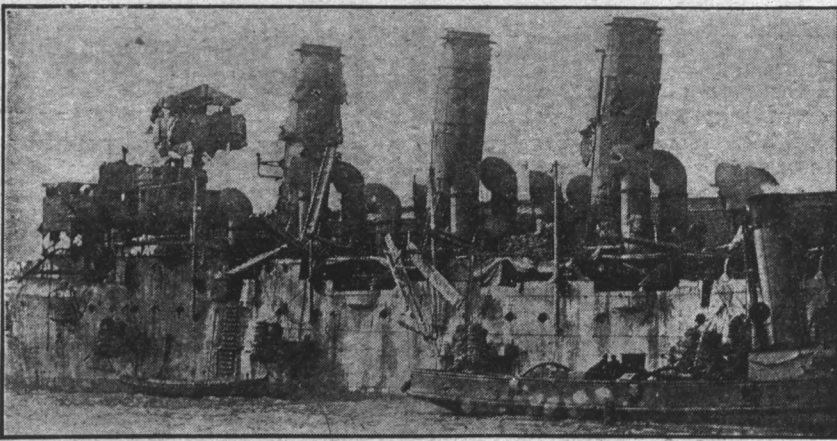
How the soldier camouflages himself to deceive the enemy is illustrated in these two pictures.



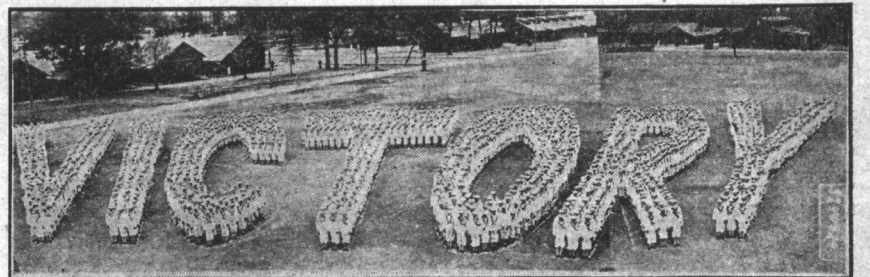
French war veterans who aided Liberty Loan Drive visited West Point and reviewed the cadets, who are the best drilled troops in the world.



British troops and tanks in French village on their way to meet the attacking Germans.—(British Official Photo).



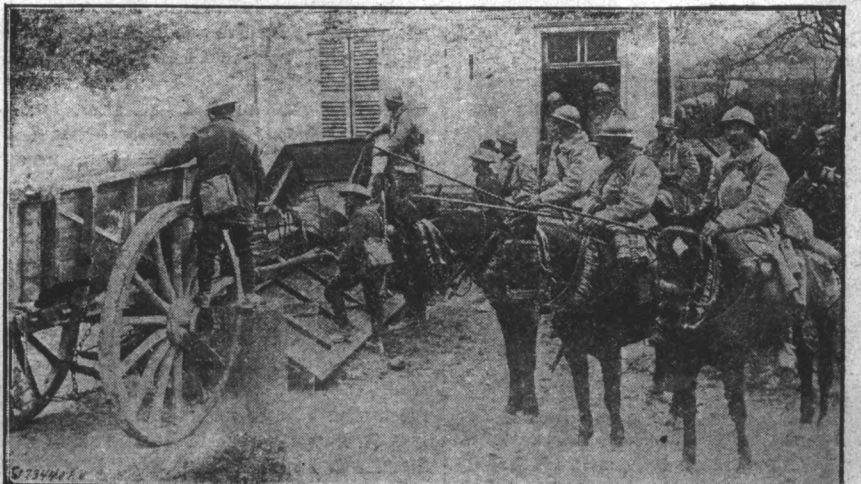
British Cruiser Vindictive, battered by German shells, returns to home port after raids on U-boat bases at Zeebrugge. Since the photo was taken this cruiser has been sunk and now blocks Ostend channel.



Jackies at Naval Training Station spell out their watchword, "Victory," in huge letters of living men. The white clad men and the green parade ground made a striking picture at a recent demonstration.



British and French armies uniting their efforts against the enemy are here shown on the way to the front lines.—(British Official Photo).



French Cavalry and British Tommies working together on western front, are here shown waiting for the enemy.—(British Official Photo).

Steady Power

Steam Still Furnishes the Most Dependable Farm Power

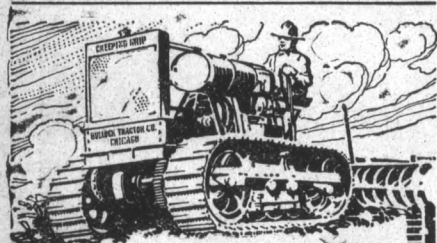
THE Nichols-Shepard Steam Engine is representative of the best that can be produced.

The design and mechanical construction of this engine are right by the test of use and years.

From the little 13 to the giant 25 h. p., over three times the rated power is easily developed, and it is always there when you want it.

The Gas Engine is all right for the man who wants one, and who has had experience with them. The Steam Engine, however, is the most simple and consequently the most dependable. Any one of a half dozen different things may stop a gas engine which cannot be found without experience, but all know enough about the steam engine to keep it running. The Nichols-Shepard Steam Traction Engine, one of the Red River Special Line, is always dependable. Write for circulars.

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



UNFAVOURABLE weather conditions, and rough or mucky soil are but mere incidents to the owner of a

BULLOCK CREEPING GRIP

Like the British Battle Tank, of which it is an offspring, it will "Go Over the Top" of any soil in any weather. Therefore, the CREEPING GRIP is on the job every month of the year. It increases your profits because it works when there is work to do, and because it eats no high-priced grain when standing idle.

The BULLOCK CREEPING GRIP promises to do more and better work than three men and six horses on any farm. Will you give it a chance to make this promise good? A three-bottom tractor—15 h. p. on draught. Write for catalog today.

BULLOCK TRACTOR COMPANY
1818 Diversey Parkway, Chicago, U. S. A.

The Everlasting Silo with the Ironstone Block

Under our special proposition you can save \$25.00 to \$50.00 on an Everlasting Silo and get a silo that is

GUARANTEED for the Life of the Purchaser

Triple wall design of blocks of ironstone, vitrified glazed tile, self-reinforced and interlocking, with double lock, cement mortar joints. Extra steel reinforcing is laid directly against the block and does not depend on mortar to hold in place. Built to give real service. Write for more complete information and special money-saving proposition. Shipped direct to purchaser.

Lewis McNutt
23 South Walnut St.
Brazill Indiana



Seed Buckwheat \$5

Per 100 pounds. Bags extra at 35c.

Young-Randolph Seed Co., Owosso, Mich.

Seed Corn: Early 90 day Yellow Dent, 90% Germ. Guaranteed \$6.50 bu. Samples free. **THEO. BURT & SONS, Melrose, Ohio.**

A FLYING FIGHTER

by L.T. EMROBERTS R.F.C.

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Synopsis of Preceding Chapters.

F. M. Roberts, an American, born in Duluth, Minn., with an inherited love of adventure, was up in the foothills of the Rockies, drilling for oil, when the war broke out. In October, 1914, he started on a trip to Calgary, and on the way learned of the great conflict taking place in Europe. Reaching Calgary, he enlisted in the Tenth Canadian Infantry Battalion. On account of his knowledge of mechanics he was given a position as driver of a heavy motor truck or "lorry," and later was made sergeant of a mechanical transport section. After months of training they were sent to England and Roberts was later selected by draft for the mechanical service in France. At the second battle of Ypres he suffered severely from a gas attack and was sent to an English hospital to recover. In August he returned to France where he was placed in charge of a motor transport division, carrying supplies from the railheads to the front lines.

Running the Gauntlet.

Hauling material at night for the Engineers in a neighboring sector, we had to use a road on which several dispatch riders had been killed by a spy. It had been announced that two weeks' leave of absence in England would be given the man who caught the spy, and of course everybody was on the lookout for him. Every nook and cranny in that part of the country had been searched, but nobody had been found. The only person ever seen near the road was a peasant plowing his fields.

About a week after that I met a sergeant of the police whom I knew well and he asked me to come with him the next morning to headquarters. I was there at six o'clock and at six-thirty that same peasant was marched out in the little square behind the chateau and blindfolded. Sentence of death was then read to him and for the first time in my life I saw a firing squad march out. It was over soon. A bullet through the heart put an end to the peasant, and he was buried without ceremony as a traitor to France and the Allies.

The sight impressed me greatly and for the first time I realized fully what it meant to be a traitor. I went back to the ammunition dump a very thoughtful man, realizing how little a life mattered in this great struggle.

That afternoon, the weather being for once favorable, both sides sent up their captive balloons. I counted as many as twenty of them. Most of them were Germans. We had a few ourselves, but the Germans were better equipped in that respect. The aeroplanes also sailed about.

I envied the flyers. Here was I in mud up to my knees either in trenches or on the roads and getting very little out of the war but lots of hard work. The other fellows were sailing around in the clean air while I had to duck shells all the time and run chances of being caught by the machine guns and snipers. Of course the aviators were also being shelled, but they never seemed to get hurt. I had seen some of them hit trees and other obstacles upon landing or getting off the ground, but the game had always appealed to me strongly. To me flying seemed the very acme of adventure and I had no notion, of course, how good the German anti-aircraft batteries were. Flying "fish-hooks," burning "onions," as we term a certain type of shell used by the Hun, and forced landings were things unknown to me. Of the cold above the clouds and the chances one took in having to land behind the German lines I had heard very little.

But I was willing to take a chance for all that, so long as I could get out of the mud and had an opportunity to

stay indoors at night. The mechanical transport service was famous for mud and night work. I was so thoroughly sick of them both that I was willing to do anything to get away from them.

During the next few days I tried to gather information as to how I could get into the Royal Flying Corps. I got no satisfaction, however, for nobody seemed to know exactly how so exclusive a circle could be invaded. Nevertheless, my ambition to get into the aviation service grew stronger each day, and each bit of information I could secure was welcome.

Christmas of 1915 came around, and every man at the front was looking forward to it on account of the presents and better food from home which the holiday season would bring. The officers of the unit were to give us a turkey dinner. The day before Christmas we were paraded and each man received a pair of socks, a piece of good maple sugar, and three packs of cigarettes. From some other source we received a deck of cards and a small box of chocolate. Many of the boys also received Christmas boxes from home, but I was not one of them.



Thirty-five Hundred Loaves of Bread for the Boys.

On the same afternoon I witnessed an event that to me seemed really worth while. Some Canadians were to be decorated by the French for deeds of valor. We were away north of the French lines, but that made no difference to the poilus, who also were to attend the ceremony. They came down in lorries just as they had left the trenches and they did not have a holiday appearance. There were about five hundred of them.

After the French soldiers had been lined up with bayonets fixed, the men to be decorated, twenty-eight in number, were marched into the square that had been formed. This done, some of our own troops marched up, headed by a band that was playing the Marseillaise. The enthusiasm was great. Those men had gone through every hardship one can imagine, and to see some of the comrades honored seemed to cheer them all. The poilus and our own men were not exactly a clean looking lot. There was an unwashed look about their bewhiskered faces and on the mud-covered gray coats could be seen many a blood-spot. But the men were as steady as rocks and presented arms with a snap that was really inspiring.

As the British forces came to attention the French band struck up the "Maple Leaf Forever," and followed this by "Old Canada." Then the French and British generals pinned the decorations on the Canadians and kissed each

War Demands

Saving of Sugar,
Saving of Fuel,
Use of other
Grains with Wheat
—No Waste.

Grape-Nuts

answers every demand. It's an economical, nourishing and delicious food, a builder and maintainer of Vigor and Health.

Try it.
"There's a Reason"



SAVE 1/3 ON FUEL

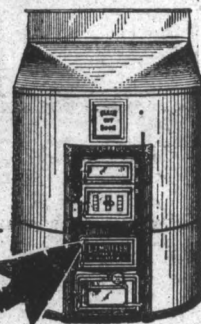
with this Pipeless Furnace

It kept thousands of homes warm last winter. Exclusive features of construction make it the only furnace which fully incorporates the correct principles of pipeless heating. Heats entire house from one register, providing constant circulation of warm, moist air through every room. Better health, solid comfort, safety and economy will be yours with the

MUELLER PIPELESS FURNACE

Quickly installed in any home, old or new, with or without cellar. No waste heat, does not heat cellar and spoil fruits or vegetables. Burns hard or soft coal, coke or wood. Sold under binding guarantee. Write for free booklet "Heating Your Home" and name of nearest Mueller dealer.

Michigan Hardware Co.
Grand Rapids, Mich.
Distributors for Michigan



APPLETON Silo Filler

Two FREE Books

Its new features save you money. For years famous for dependability, great capacity and light running, the Appleton now has new features which make it the biggest labor, time and money-saving silo filler. Get the free catalog describes these improvements. Write today.

APPLETON MFG. CO.
420 Fargo St., Batavia, Ill.



For Sale. 40 horse gasoline or kerosene engine in A-1 condition. **The BUNDAY BEDDING CO., Lansing, Mich.**

Please Mention The Michigan Farmer When Writing to Advertisers

of them on the cheek, while our kilted band played the march past. When it was all over the generals again saluted each other and the troops dispersed. The men who had been decorated did not seem to know what to do with themselves. Just then the gang who had watched it all rushed upon the poor unfortunates and carried them shoulder high to the nearest cafe.

It had been a most impressive affair. There is something in those French soldiers and even in the peasants that make one conscious of the fact that the French are indeed a noble race. They were already beginning to feel the great strain of the war, and though they showed plainly that it was telling on them, they were bearing up wonderfully. I used to ask them whether they were anxious for peace; always the said yes, but with the terms of ourselves and our allies—the terms of the victors. Otherwise they were willing to fight to the last and I think they have shown that spirit all the way through.

Christmas evening we had the turkey dinner. Those who were in the front lines had theirs the next day. The front was quiet. At twelve o'clock on Christmas eve all firing had ceased and only an occasional star shell reminded us that night that war was still on. These shells are sent up to guard against surprise attack. We wished one another all the good things of the season and we even included the Huns, who were about seventy-five yards away. They had hoisted up a placard over the parapet on which was inscribed the words Merry Christmas. It was a sight that touched the hearts of many of us and one that we will not forget in a hurry.

We were a rather melancholy crew those days. Everybody's thought seemed to be very far from the trenches.

Somebody would shout:

"Hey, mate, what are you thinking

BONNY BOYS AND TRUE MEN.

BY M. B. RANDOLPH.

Sons of Vet'rans South and North,
And ye of the Golden West,
Soon to warfare you go forth
At honor's stern behest;
The call of the East comes over the sea,
The cry of child and woman,
In the name of Christian chivalry,
In the name of all that's human,
Forth you go, O sons of the free,
Bonny boys and true men.

You'd smile at helmet of Navarre,
The lance of Charles the Bold,
For greater perils those ye dare
Than they e'er knew of old;
The gruesome craft whose missile falls
From clouds on earth below,
The mighty guns that belch their balls
For miles upon the foe,
Each dark device that holds its place
In making ghastly slaughter,
The liquid fire, the gas, ye face,
The perils of the water,
Yet forth ye go to righteous war
In name of all that's human,
Under Freedom's guiding star,
Ye bonny boys and true men.

As men of old went forth to smite
The foe in holy city,
So ye go forth in manhood's might
Urged on by manhood's pity
To rescue in this new crusade
The old, the child, the woman
Who come within our banner's shade,
Ye bonny boys and true men.

'Tis true no cross our standard bears
As those in older strife,
Yet many a lad the symbol wears
Upon his cleanly life;
Flower of our nation South and North,
Sons of the Blue and the Gray,
Side by side ye rally forth
In the name of Liberty.
Let no ungodly hate be yours,
No mean, unmanly spite,
Let yours the courage that endures
All hardship for the right;
Be yours the hand that heals the wound,
That calms the wild unrest,
That passes cup to captured one
As to an honored guest,
Yet strike with might the heartless Hun
In the name of all that's human,
And strike till Freedom's war is won,
Ye bonny boys and true men.

about?" and back would come the answer:

"Aw, shut up!"

Many of us would have given a great deal to be home that night, especially when at one o'clock in the morning the Christmas truce came to an end with the bark of the rifles and the tut-tut-tut of the machine guns. Soon the field artillery and the "heavies" woke up again, and before long an intense bombardment of the sector was on. When daylight came the ambulances were busy carrying out the wounded and dying and many were buried on Christmas Day.

That afternoon I received two letters from home and two others from friends in England, which was really a big mail. I also received a very small box about the size of a jeweler's case and very neatly done up. I was curious to know what it contained, and upon opening it found Turkish cigarettes—lady size, or about the dimensions of a wooden match. They had been sent me by a lady with whom I had had tea in England and who had promised to send me cigarettes. I sat down and finished the lot, all of them making just one good smoke. I ended the day with a visit to a dugout where we had a game of poker in which I won twelve dollars, which was a lot of money, seeing that our pay was only a franc, or twenty cents a day.

This meant that I had in my pockets a fair percentage of the company's pay-roll. I knew that I would have to loan out a considerable share of it before long and that very little of it would ever be paid back.

With some of my winnings I managed to secure a bath, something which is pretty hard to get in Flanders, since the natives do not seem to bathe very often. In Flanders the bath is taken in a wooden tub in the kitchen, and one has to scout around until some peasant woman is found who is willing to rent her kitchen for that purpose. Taking a bath is quite an event in that part of Europe. I was once billeted in a peasant woman's house where nobody had taken a bath for seven months. The woman had the habit of washing the children's faces in the same water in which she had washed the dishes. After that I took no chance on her cooking, and a partner of mine, Will Askey, and I took turns attending to our food.

During our first months in France we had near us a Gurka or Indian regiment. And it was funny to see the little brown men in camp or in action. They were very interesting. The Gurkas eat a funny cake made by themselves of flour and water and you could walk into a Gurka camp most any time and see some of them squatting in a circle making their funny little biscuits of flour and water which, when cooked, had no taste whatever.

They also drank a lot of coffee of the French kind, which is about seventy-five per cent chickory and twenty-five per cent coffee, but it isn't bad to drink at that.

The Huns had a wholesome fear of these little Gurkas, for they are wicked fighters, and they used to call them the "little black devils." The Gurkas, when ordered over the top, climbed over the parapet, dropped their rifles and pulled out their "kukries," a sort of heavy knife which is curved and looks for all the world like a hand-scythe for cutting corn.

This knife was carried in their mouths by the Gurkas, who, crawling up to the Hun lines on their stomachs, would bounce into the Hun trenches and without a word the silent slaughter would start. They would cut a Hun's throat, then cut off his ears as a keepsake, and one can imagine the terror the Hun must have experienced when he saw those wicked little beady eyes full of murder looking at him.

When the Gurkas returned, they would take their German ears, dry (Continued on page 661).



"Lafayette, Here We Are"

Through remote French villages resounds the unaccustomed tramp of American soldiers. But a little while ago and these men were in the quiet of their homes in a peaceful country. Today, in a strange land, they are facing the world's bloodiest struggle.

Pershing at the tomb of America's old time friend months ago reported, with true soldier eloquence, "Lafayette, here we are." And it is for us of the great American democracy to rally all our might to the support of our army and our allies.

From our shores to the battlefields of France are thousands of miles which must be bridged with ceaseless supplies to our troops. Every day calls for action here, no less than there. Cooperate! Sacrifice! These are the watchwords sent over the land by the Government.

In this national effort the Bell System has served with every other essential industry in order that communication, manufacture and transportation may be kept at the peak of efficiency to provide the munitions, ordnance and supplies so urgently needed.



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Woman and Her Needs

At Home and Elsewhere



An Urgent Appeal

THE following, sent out by the Food Administration, tells us how we can best help win the great war.

Cut down the consumption of wheat by at least one-half.

Households keep within a weekly allowance of one and a half pounds of flour and all other wheat products per person.

Corn cannot be shipped now. During the next two months, the season of germination, there is too much spoilage in shipment.

Going without wheat is an inconvenience—nothing worse—for homes in comfortable circumstances.

It is no hardship—no danger. Physiologists all agree that a wholesome diet need not include wheat. The south fought the Civil War three years on corn. Early New England did without wheat five years at a time with no ill effects.

Going without wheat is perhaps more expense, certainly more work. Not a hardship but a burden. Who shall bear the burden?

Shall we ask the women of France to do it? Do you know what it means to them?

The women of France are doing their own work, doing the nation's work, even doing the work of teams in the field.

The men are gone—all but the younger boys, the aged and the invalids. In almost every home is a cripple or one dying of tuberculosis—an added care.

French homes have not baked bread for hundreds of years. They have not even ovens nor baking tins in their kitchens. They rely on the bakery.

If you ask them to bake their own bread—for the bakery cannot supply quick breads—the women of France must add another hour to their long day of toil.

Will you ask them to do that? Or shall our homes carry the extra burden of doing without wheat?

Bread and milk make a meal; so will mush and milk.

Bread and gravy go together; potatoes and gravy are just as nourishing.

Toast and fruit are fine for breakfast; but any other cereal with fruit will stay the stomach as effectively.

Griddle cakes, muffins, all sorts of quick breads can be filling and appetizing without any wheat.

After all, what we have to do is to eat less bread. Often we eat it to convey other food; we even use bread to push mouthfuls upon the fork.

There is one test: Wherever bread is used for convenience that is the place to leave it out.

Habit tells us to use bread; the body tells us only to provide sufficient nourishment. We must learn to think in terms of nourishment and not let habit hinder us.

Changing our habits is none too easy. But it is no easy task to win the war.

Going without wheat wherever we can is one thing we can do to win the war—perhaps the largest contribution we can make.

take their children for expert examination they can help in work that is of vital importance to the purpose of Children's Year, to "get a square deal for children, and save 100,000 babies."

As soon as the baby is born his food becomes a matter of paramount importance, most of all to himself, as he loses no time in telling everyone about. Happy that baby who is supplied with breast milk, which is the best food for a baby throughout the greater part of the first year of life. A recent investigation made by the Children's Bureau shows that of certain babies who had been exclusively breast-fed during the first six months of life, only a little more than two per cent died during the first year of life, while the proportion of babies dying who had been artificially fed during the same period was about six times as great. The nervous, unhappy, overworked, sick or worried mother is very likely to have a depleted milk supply, but in many cases upon the removal of these conditions the milk returns and all goes well. In some cases milk may be restored under skillful management even after it has apparently disappeared. It is wise, therefore, to make sure that every means to conserve the supply has been tried before subjecting the baby to the risk involved in artificial feeding, especially in the first three months of his life.

TEXTILE TESTS.

The laws of this country offer no protection to the purchaser of materials. Therefore to protect themselves women should know a few practical tests to determine the content and value of materials. The object in making these tests is to discover if cloth is adulterated, artificially dressed or misrepresented in any way. The following tests from Extension Circular No. 41, Principles of Sewing, University of Missouri College of Agriculture, Columbia, may be used in any home:

1. If water is dropped on cotton and linen goods, the moisture spreads rapidly on linen but will remain unabsorbed on the cotton for some time. This is not always a safe test as cotton and linen are often heavily sized with dressing which prevents the water from being absorbed.

2. A much safer test may be made by dropping glycerine on cotton and linen. Linen will become transparent but cotton will not be affected.

3. Crushing cotton and linen materials in the hands will show the difference in the materials as linen wrinkles more than cotton.

4. Cotton and wool mixtures when moistened, wrinkle more than pure wool materials.

5. Material may be tested by pulling out threads and examining the ends. Cotton fibers are short with fuzzy ends,

while linen fibers are long with uneven ends, usually pointed. Wool fibers are short, kinky and stiff; fibers of reeled silk are long, straight and lustrous, while fibers of spun silk are short and easily broken.

6. Sizing may be discovered by rubbing the material between the hands to see if the dressing will come out. Washing will also remove dressing.

7. Each fiber has a characteristic burning test which may be easily distinguished.

a. Cotton burns quickly with flame.

b. Linen burns like cotton, but is not as inflammable, as it has less oil in the fiber and less air in the woven cloth.

c. Wool burns slowly, gives off an odor like burnt feathers and leaves a gummy residue.

d. Silk burns more slowly and with less odor than wool. It leaves a crisp ash. Silk leaves more ash when it is weighted.



THREE WHEATLESS SPONGE CAKES.

Barley Sponge Cake.

1½ cups barley flour.
1 cup sugar.
4 eggs.
1 tablespoon lemon juice.
½ teaspoon salt.

Corn Flour Sponge Cake.

1 cup corn flour.
1 cup sugar.
4 eggs.
2 tablespoons lemon juice.
½ teaspoon salt.

Rice Sponge Cake.

¾ cup rice flour.
1 cup sugar.
4 eggs.
2 tablespoons lemon juice.
½ teaspoon salt.

Directions for Mixing.

Separate the yolks and whites of the eggs. Beat the yolks until light, add the sugar, salt and lemon juice. Fold in alternately the flour, sifted before measuring, and stiffly beaten whites.

These cakes are all very nice and light, texture and color good. Barley has characteristic flavor. The corn flour cake is especially tender and all are of good texture. The extra lemon juice is used with rice and corn because these flours have a slightly starchy taste.

HOW SWEET IS SYRUP?

A cup of syrup is not as sweet as a cup of sugar. The following table gives the sweetening value of different amounts of corn syrup:

One cup of sugar equals one and three-fifths cup of corn syrup.

Three-fourths cup of sugar equals one and one-fifth cups of corn syrup.

One-half cup sugar equals four-fifths cup corn syrup.

One tablespoon sugar equals one and three-fifths tablespoon of corn syrup.

Half syrup and half sugar give better results in cooking than all syrup. With one cup of syrup use one-fourth cup less liquid.

Start the Baby Right

THE essential features of good care for expectant mothers are proper and sufficient food, rest, freedom from overtaxing forms of work and from worry, medical supervision of her general condition and prompt attention to small ailments as they arise. A prospective mother needs a light, nutritious diet of digestible foods such as she likes and her appetite demands. Fried and greasy foods, heavy puddings, and all heavy or underdone pastries, or an excess of any one article should be eliminated from her diet, as well as anything which she does not readily digest. It is also important that the expectant mother should drink a sufficient quantity of water each day.

During the last eight weeks before the baby comes the mother should as far as possible, be spared all forms of heavy and taxing labor, in order that her strength may be built up in anticipation of the coming demand upon it. The baby's proper development also depends largely upon the mother's condition at this time, since the baby gains half his weight in the last eight weeks of pregnancy. The mother's ability to nurse her baby depends largely upon the care she has during these last weeks and immediately after confinement.

The mother should be under the care of a good doctor as long before the birth as possible in order that he may watch for and correct any untoward symptoms that may arise. It is exceedingly important that the ailments of pregnancy be dealt with in the beginning before they develop into more serious matters. At the first appearance of swollen hands and feet, or persistent headache, or pain in any part, of hemorrhage, or of spots before the eyes, a good doctor should be called.

The Children's Bureau, Washington, D. C., will send to anyone asking for it a pamphlet giving simple directions to mothers-to-be. The Bureau will, upon application, furnish information to associations or communities as to starting prenatal clinics or consultation centers for mothers, where the services of a good doctor are made readily available for all mothers.

The establishment of such centers is one of the ways in which communities can give their children protection. Indeed, if all the mothers in a community realize how important such clinics are for the well-being of their children, and combine in forwarding efforts to establish and maintain centers where mothers can go for advice before their babies are born and to which they can

bring before they develop into more serious matters. At the first appearance of swollen hands and feet, or persistent headache, or pain in any part, of hemorrhage, or of spots before the eyes, a good doctor should be called.

Mothers, and the Child Welfare Program

The Federal Government, through the Children's Bureau, U. S. Department of Labor, is asking particularly of mothers a patriotic service which will demand the united efforts of a great many American women for the year. This work is to make the children grow up strong in mind and body, able to "carry on." The third of our population who are children today will soon be men and women who must take their part in the gigantic tasks of reconstruction after the war—tasks which civilization and democracy demand shall be well done.

them and string them around their necks as our old North American Indians hung scalp locks around their belts. And if a Gurka had to go to a hospital, you could take his clothes or anything else he had, but you could not touch the string of Hun ears he wore around his neck. All the Canadians liked the Gurkas very much, for they were excellent fighters, and we all hated to see them taken away to another and warmer front where the climate was more suitable for them, and where it was easier to procure certain kinds of food which they could not get along without.

I was still hoping that sooner or later I might get into the Royal Flying Corps, but the chances did not seem very good. I was still living in the mud and working chiefly at night for the reason that during the day German artillery made all roads of approach to the position impossible. Neither the mud nor the night work looked good to me, but for the time being there seemed to be no getting away from them.

One night about six o'clock I received orders to report at an engineer's dump known as Hyde Park Corner. I was to bring two lorries which were to be loaded with barbed wire and steel pickets. At the dump I was told to proceed to R. E. Farm, the road to which took us through a shell-torn village. On entering the village we had to leave the main road because that lay in full view of the enemy. At the other side of the village the road was re-entered at a point where there was a screen of sacking, on one side of which were painted in large letters the words: "Danger! In full view of the enemy."

About fifty feet from the screen an old woman used to keep a coffee wagon from which she sold refreshments to working parties who used to wait behind the screen until darkness made it possible for them to get to the front.

This particular night Fritz had a hunch that somebody was going to pass the place behind the screen. Just as I was approaching the coffee wagon the Huns began to send over shells and the third one landed right underneath the wagon and blew it, the lady, and the old horse into Kingdom Come.

It was bad enough to have the old lady and the horse killed, but to lose the coffee stall and that cafe complet was really the worst of all. Cafe complet in this instance meant that a liberal shot of rum went into each cup of coffee.

We would have to do without that now, and the thought exasperated us. Fritz had been guilty of an unforgivable sin, as anyone would have concluded from the language that was used by the boys. In the meantime the shells were still coming and it seemed extremely risky to continue on the road, which was so narrow that only one truck at a time could pass over it. There was a side road, but that had three feet of mud on it, nor were we inclined to run back three-quarters of a mile to get another road. The sentry near the screen let us pass, but I knew that the lorries would have to get up better speed if they were to cross the danger zone unhurt.

By means of a governor, the speed of the lorries was being limited to fifteen miles an hour. But we had discovered that if the ball in the governor was held up we could get as much as twenty-five miles out of the motor. I was heading the column and knew that if my lorry went faster the others would know what to do, so I climbed in front of the machine, lifted the hood and held up the ball in the governor. It did my heart good to see the speed the motor was giving the car now. The other drivers followed my example and before long we were tearing down the road with the shells falling all about.

(Continued next week).

"By the Way"

I'M SORRY; I WAS WRONG.

There may be virtue in the man
Who's always sure he's right,
Who'll never hear another's plan
And seeks no further light;
But I like more the chap who sings
A somewhat different song;
Who says, when he has messed up
things,
"I'm sorry; I was wrong."

It's hard for anyone to say
That failure's due to him—
That he has lost the fight or way
Because his lights burned dim.
It takes a man aside to throw
The vanity that's strong,
Confessing, "Twas my fault, I know;
"I'm sorry; I was wrong."

And so, I figure, those who use
This honest, manly phrase,
Hate it too much their way to lose
On many future days.
They'll keep the path and make the
fight,
Because they do not long
To have to say—when they're not
right—
"I'm sorry; I was wrong."



and she said —!—!—!

WON'T STAND FOR IT.

"I can imagine what will happen the first time a German pulls that 'kamerad' cry on a Yankee soldier."

"Well, what will happen?"

"He'll look him in the eye and say: 'Where do you get that comrade stuff?'"—Judge.

A man who marries his best friend's sweetheart usually feels like apologizing to his friend—at first.

We are betting dollars to doughnuts that the next world's fair won't be held in Berlin.

Stand behind the boys at the front—but not too far behind.

He knows a dozen languages
And that is much too many—
He talks in every one of them
And doesn't think in any.

WHAT IT MEANT.

Sunday-school Teacher.—What does this verse mean where it says: "And the lot fell upon Jonah?"

Little Harvie.—I guess it means the whole gang jumped on him.

Short circuit on corn bread, the wheat won't go around.

HEAT.

Heat is a product of fire, summer, love, marriage, friction and disputes.

Heat does many marvelous things: It makes water boil and evaporate; it changes the hardest metals to liquid; it adds zest to an argument; it makes a man change his winter underwear; it wilts collars and makes the laundry business good; it makes clothing more difficult to stand and to understand, yet easier to see through; it makes the summer girl more interesting to look at; it makes our meals esculent; it makes the young man's fancy turn to thoughts of cooling beverages; it makes the swain murmur passionate words of endearment, give and extract promises of eternal fidelity and take other steps which put him in cold storage for the rest of his life.

Fans, fire extinguishers, poor drafts, ice cream, vacations, mountains, bathing suits and marriage are among the most common antidotes for heat.

Heat is supposed to be energy, but a careful observation of the effects of excessive summer heat on human beings will fail to disclose the slightest connection between heat and energy.

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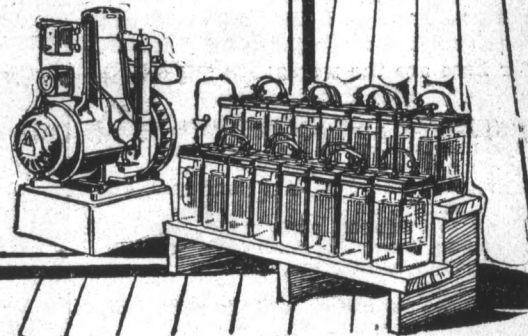
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32x3 MILLER	14.50
32x3 Non-Skid KOKOMO	16.00
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Yes, it is a fact that

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is a blend of the finest growths of the best gardens—only, and it has remained unchanged for more than 25 years.

B399

Our Boys and Girls

At Work and play

A New War Garden Song

IN the southern states the school children are singing a new song. It is called the "War Garden Song," and is of special interest to boys and girls because it was written by a pupil in one of the Lexington, Kentucky, public schools. The name of this youthful composer is Joe Lee Davis, and he is only twelve years old. The song isn't being circulated, though, just because it was written by a boy. It's a good song, a timely song, and a song which will help to make the country's gardens now. Whether all of this is true or not you can judge for yourself, for here are the words:

War Garden Song.

To the Tune, "Over There."

"Johnnie, get your hoe, get your hoe,
get your hoe;
Mary, dig your row, dig your row, dig
your row;
Down to business, girls and boys,
Learn to know the gardener's joys.
Uncle Sam's in need, pull the weed,
plant the seed,
While the sunbeams lurk, do not shirk,
get to work.

All the lads must spade the ground;
All the girls must hustle 'round.

CHORUS:

Over there, over there;
Send the word, send the word over
there
That the lads are hoeing, the lads are
hoeing,
The girls are sowing ev'rywhere.
Each a garden to prepare,
Do your bit so that we all can share,
With the boys, with the boys, the
brave boys,
Who will not come back 'till it's over,
over there.

OVER THERE!"

It is very likely that this song will be sung not only in the south, but all over the country, for the Department of Agriculture is reported to have planned its general distribution in the form of a government bulletin. In that case it will come to be not only a garden song, but a war song for the whole juvenile army of America.

Young Davis seems to have had a

real inspiration when he penned the lines of his song. He and his mates had been singing the popular war melody, "Over There," and the tune was running in his head. Accordingly, when his teacher suggested writing a song as a classroom assignment the words naturally fitted themselves to that tune. The song made an appeal to the teacher, and was given to the children of the school to sing. Nobody dreamed that it would go any farther; but when the pupils of other schools in



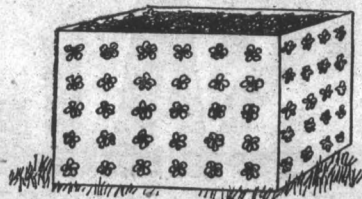
A Fine Crop of Alfalfa.

the city heard it being vociferously rendered, they immediately clamored for the privilege of singing it, too. As a result eight thousand of Lexington's boys and girls assembled for a big garden rally on April 2, and sang it to the public as well as for the Department of Agriculture visitors.

Naturally it spread to schools in other cities, until it was being sung with zest all through the state. Now it promises to be the rallying call for juvenile garden makers throughout the land.

War Strawberry Box

SINCE the word "war" is coupled onto nearly everything now-a-days, it is certainly not out of place in this instance, for there was never a more conservative idea. And while the plan will be welcomed most by persons who are compelled to conserve garden space, yet it will be found both profitable and interesting for all. Secure a strong box any size desired—the larger the better. In the sides and



ends bore holes with an inch and a half bit in rows each way, about eight inches apart. In each hole plant a strawberry plant. I heartily recommend the fall-bearing varieties, since they can be planted as late as June 1 and will produce a good crop the same season. And by covering the box on frosty nights with an old quilt or anything

available the plants will fruit until severe weather sets in. However, the covering should be removed when there is no danger of freezing.

The box should be filled with good rich soil free from grass and weed seeds. After the holes have been bored proceed as follows: Fill the box with dirt to the first row of holes. Insert the plant in holes, allowing the crowns to show out of the soil. Cover roots with dirt and fill to second row. Proceed in this way until box is filled. While being filled the soil should be well firmed after each row is planted. Otherwise the dirt will settle and force

the plants from the holes. It is understood that the top of box is planted in strawberries, too. Depending, of course, on height of box, about five times as many plants can be grown as on a similar space in the garden.

If the box is whitewashed before being filled it will add greatly to its appearance, and the finest flower bed need not be put to shame by its being among them. Frequent watering will be necessary in dry weather. Well rotted manure, if pulverized and thoroughly mixed with soil, adds greatly to growth of plants and size of fruit.

Mrs. C. F. G.

Letters from Our Boys and Girls

I have lived all my life on a farm. We have raised mostly small fruit and garden truck, so I have had a good chance to help in both these lines of farm work. Last year I raised onions, pumpkins and popcorn for my crops, and for the poor season I did fairly well. But this season the call for more food to help feed our soldiers set me to thinking, so I borrowed \$16 on a year's time, \$4 I paid for two hen turkeys, and the remaining \$12 I used to purchase a thoroughbred Poland China sow pig.

From the two hens I managed to raise sixteen turkeys. Fourteen of these I sold at Thanksgiving for \$25.25, keeping for next season's work three of the best hens and one gobbler. Out of the \$25.25 I paid my debts with interest, and now own my Poland China pig. I have paid for her feed by picking berries and doing odd jobs, and hope to raise more pigs from her this spring. In connection, I have done

I live on a farm in Oakland county near one of the lakes and the Huron river runs through our farm. I wanted to earn some money for Christmas, so I borrowed my daddy's traps and started to trap muskrats. When the season opened, one Friday night after school I went down the river in a boat and set my traps.

When I got to where I wanted to set my traps I found lots of runways. The next morning I went to my traps, and when I got to the last one I found I had a muskrat, so I took him home. He was a very big one; my dog got scared of him and ran under the house. I laid him down by the kitchen stove and he started to come to life. My mother did not like this, so she made me come out and kill him. So after breakfast I skinned him. It was a good hide.

Then it was quite a few mornings before I got another, but one morning I went to my traps and I had two more, so I took them home and skinned



Canning Team Demonstration at the State Fair in Detroit Last Fall.

some gardening, but haven't been very successful, as the season was unfavorable.

I intend to take up bee culture next year. We have four swarms, and father has made me an offer to work on shares, giving me half the proceeds. So you see I am busy and also happy, as we have a Boys' Club, plenty of skating and coasting in the winter, bicycle riding and hikes in summer. Altogether, the farm seems a pretty good place to live. I am thirteen years of age.

LESLIE PAULSON.

Then a few mornings after this I got another; he was a big one. One night I set some traps down by the bridge, and that night my big Collie dog started to bark. The next morning I went to my traps and I had another one. I guess my dog must have heard him squeal. So I skinned him. Then in about two days I sent the skins away to Des Moines, Iowa, and in about a week I got a check for \$2.65. And that is how I got my Christmas money. I am ten years of age.

WM. C. MORGAN.



Wallace Krueger, Potato Champion of Marquette County and Upper Penin.

Care of Spring Ducks

By E. W. GAGE

MORE and more farmers are taking up with ducks, and many tell us that this is the easiest money in poultrydom. Of course, this is an individual matter, but the fact remains that ducks are becoming more and more popular on the markets, and the prices paid for duck meat is continually on the increase. But the fact that caring for ducks is so unlike the care of chickens, it would seem timely to give a few of the important items.

Ducks are great layers, producing an astounding number of eggs. I had a pen of ten ducks, of Indian Runner strain, that produced not less than ten eggs per day during the hatching season, and on several occasions laid eleven eggs. The eggs will hatch successfully in incubators, more so than will hens' eggs. The eggs should be turned regularly twice each day, and must not be more than ten days of age when placed in the machine. The eggs demand more moisture than hens' eggs,

Oyster shells, granulated bone and fine grit are always kept before the birds.

One of the large duck farms where the feed is all bought except the green stuff, the claim is made that it costs five cents for food alone and from six to ten cents per pound for labor and food to raise a duckling to ten weeks—a marketable age, after which age they fall away in flesh and the profit is less. Each duck should pay a profit of fifty cents when properly raised.

No expensive grains are needed for ducklings, but they must never be fed musty, spoiled grains. After they are five weeks old they can be left out in the open air unless the weather is bitter cold and stormy.

Ducklings need fresh air, and should have a dry bedding of some kind. The houses must be so that no draughts will enter during the early age, nor during the night when the ducks are resting.

Do not forget the water in feeding ducks. It adds volume to the food and



A Source of Profit on the Farm.

and the ducklings are slower in coming out of the shell than chicks.

Very few people understand the care ducks should receive. The beginner is very enthusiastic at first, but when he finds that poultry methods fail, that the ducks "just die," he becomes discouraged, and quits. The main trouble is that the little fellows contract diarrhea, which kills them off by the bushel every night. And if kept in the sun without shade, they will be sunstruck and die. The pens should be placed so that shade and sun are combined, and little trouble will follow, rations being proper.

Feed when Young.

The ducklings should not be fed until thirty-six hours old. Then feed the following mash, barely wet with skim-milk or water: One measure of cracker or stale bread crumbs; one measure of middlings; one-half measure bran; five per cent sand. Feed four times daily. The first forty-eight hours keep a supply of food and water before the ducklings day and night, but have the water in vessels which will allow the beaks to enter, and not get the ducks wet. After they have been in the brooders for forty-eight hours give the regular rations.

From one week to five weeks old feed the following growing mixture four times a day: Four measures of bran, three measures of middlings; one measure of corn meal, three measures of fresh green stuff or two of dry clover steamed, five per cent sand, five per cent fine ground beef scrap. Mix all together dry and wet up with cold water or skim-milk to make crumbly mash.

Feeding for Market.

From the fifth to tenth week, when the ducks should be ready for market, feed the following mash three times a day: Two measures of corn meal, two measures of middlings, one measure of bran, one measure of green stuff, ten per cent beef scraps, five per cent sand. At any time if the ducklings show any signs of looseness of the bowels add a little ground charcoal to the mash.

makes feeding cost less because it makes the same amount of feed more filling. But such breeds as Indian Runners should not be allowed any more water than poultry, as they are "dry land ducks," and too much water will kill them. The Pekin ducks will do better in swimming holes, but this may be arranged by using an old vat, on farms where there is no creek, and a creek is a dangerous thing, as there are minks and other animals that will prey upon the flock at night and kill off the best of the stock.

Sorting them Out.

Drakes may be sorted from ducks by the curled tail feather, which curls upward. A duck quacks, a drake does not. These become noticeable when the ducklings become four weeks of age. The ducks should never be handled as hens. Always carry them by the necks.

Making money with ducks is not easy. It demands hard work, persistence, and careful watching, but the fact still remains that ducks can be turned into ready money in ten weeks, which is not possible with chickens, and the fact that ducks are more prolific layers, that the eggs hatch easier, and that the care which ducks should receive is not greater, should cause a larger number of farmers to enter this business.

POULTRY FEED SHORTAGE IN BRITISH ISLES.

Eggs are very scarce in Great Britain because of the poultry feed shortage. When warned that grain for feeding their fowls was not coming in, poultrymen freely disposed of their flocks. In March eggs retailed at two dollars per dozen, which put them beyond the reach of people of average means. The British egg shortage has naturally resulted in additional demands for meat.

Most All Farmers Take It.

"Do not know of ten farmers in this community who are not subscribers to your valuable paper."—W. F. H.

Auto Thieves

Steal Many Cars from the Streets of Detroit

During the past two years many automobiles have been stolen that were left unattended on the public streets of Detroit. The police officers and insurance companies have made every effort to cope with these conditions. Many gangs have been broken up and prosecutions made, and a large number of auto thieves have been sent to prison.

The automobile owners have been requested to cooperate. It seems like extreme carelessness for any automobile owner to drive a nice car to the city and leave it unattended on the streets. This evil has caused a great deal of discussion among insurance companies and underwriters. Some feel that the owner should assume his own risk, and others that the owners should suffer a discount in case of loss where the car is stolen from the streets.

It is hoped that the coming summer, automobile owners will do their part in either having the car watched or else placed in a garage.

A reasonable man should do his part, and not leave all the responsibility on the police officers and insurance companies.

Advertisement.

POULTRY



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We will hatch your eggs at 5c per chick hatched, and for less if you get a poor hatch. We furnish container for eggs to be sent us and boxes for your chicks. Both sent parcel post.

Our Capacity—Two-thirds of a Million or 40 Tons of Eggs Every Three Weeks

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A Federation of Interests

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\$5.50 per 50; \$11 per 100. S. C. White and Brown Leghorns. Bro for egg production. Safe arrival guaranteed. Express or parcel post. Catalogue free. Wolverine Hatchery, Box 202, Zeeland, Mich.

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Barron English 240 egg strain White Leghorns, heavy winter layers, large size birds. Hatching eggs \$2 per 100. Chicks \$13 per 100. Guarantee satisfaction. Devries Leghorn Farms and Hatchery, Box A, Zeeland, Mich.

Baby Chicks by Parcel Post. Bred-to-lay S. C. White Leghorns, \$12 per 100. Barred Plymouth Rocks \$15 postpaid. Hatch every week. Order direct from this adv. Sunnybrook Poultry Farms, Hillsdale, Mich. C. G. Burroughs, Prop.

Barred Plymouth Rock eggs for hatching from full blood stock prize-winning strain \$1.50 per 15. J. A. BARNUM, Union City, Mich.

Barred Plymouth Rock Eggs \$5 per 100, baby chicks from June 15th to June 15th \$12 per 100. Purebred. H. H. Pierce, Jerome, Mich.

Barred Plymouth Chicks \$15 per 100, parcel post. Pure Bred Poultry Farms, Lawrence, Mich.

BARRON Strain S. C. White Leghorns Bred to Lay Bred to lay vigorous stock. Eggs and Chicks, prices right. Bruce W. Brown, R. 3, Mayville, Mich.

PUFF Leghorns, Cockerels at reduced prices. Eggs from a great laying strain, \$1.50 up, per setting. Cheaper by the hundred. Dr. William Smith, Petersburg, Mich.

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Choice Chicks Season of 1918 heavy breeds and Leghorns \$2 for 10, \$3 for 15, \$4 for 20. Eggs per setting of 15, \$1.50; per 100, \$15.00. Crescent Egg Company, Allegan, Mich.

Chicks from our Bred-to-Lay White Leghorns, Ferris and Young strains \$12 per 100; from our Barred Rocks, Thompson strain, \$18 per 100. RUSSELL POULTRY RANCH, Petersburg, Mich.

Chicks, We ship thousands, booking orders now for spring delivery, free booklet. FREEPORT HATCHERY, Box 12, Freeport, Mich.

Chicks and eggs, standard bred stock, Leghorns, Minorcas, Spanish Rocks, Reds, Orpingtons, Wyandottes, Campines, Houdans, Polish, Scotch Greys, Tysons Poultry Farm, Fenton, Mich.

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250,000 for 1918. \$10 per 100 and up. Purebred. Hatched right. Strong guarantee. 10 leading varieties. Hatching eggs. Big brooder offer. Western Branch, Augusta, Kansas. Free catalog. Stamps appreciated. Rubens Reliable Hatchery, 333 W. Fremont St., Fostoria, O.

Fowlers Buff Rocks Booking orders now at a \$2 for 15. \$4 for 30; \$5.50 for 50; \$8.00 for 100. H. B. FOWLER, Hartford, Mich.

Ferris White Leghorns A real heavy laying strain, trapped 17 years, records from 200 to 264 eggs. Get our special summer prices on yearling hens, breeding males, eggs for hatching, 8-week-old pullets and day old chicks. We ship C. O. D. and guarantee results. Catalog gives prices; describes stock, tells all about our farm and methods; results you can get by breeding this strain. Send for your copy now—it is free. GEORGE B. FERRIS 924 Union, Grand Rapids, Mich.

FOR Sale thoroughbred Barred Rock eggs for hatching, 200 egg strain trap nested stock. \$1.50 per 15. H. B. PROCTOR, Grand Haven, Mich.

FOR SALE—S. C. White Leghorn Chix \$12 per 100; hens \$1.25, Ferris 200 to 264 egg strain. Herbert Hammond, Williamston, Mich.

Hatching Eggs—Plymouth Rocks (all varieties) Anconas, Pekin and Bona Ducks, Sheridan Poultry Yards, Sheridan, Mich.

IMPROVE YOUR POULTRY My Bred-to-Lay Young's Strain S. C. White Leghorn and Ancona chicks are great money-makers. 100,000 strong, husky chicks @ \$11 up per 100. Chicks sent by mail. Arrival and satisfaction guaranteed. Prompt shipment. Get my catalogue at once. W. VAN APPELDORN, R. 7, Holland, Mich.

John's Big beautiful hen hatched Barred Rocks, good layers 30 eggs \$3, 100 \$8, hatch guaranteed. Prepaid by mail. Photos circulars. John Northon, Clare, Mich.

LAYBILT S. C. W. LEGHORNS Large, great layers, pure white. Proved egg type from like ancestry. Not the "Best in the World" but none better for beauty and laying ability—Laybilt Leghorns mean either better quality the same price, or the same quality at a less price.

Day Old Chicks. Prepaid Delivery Parcel post or Express. Will hatch every week. \$12 per 100. Guaranteed delivery. Prices prepaid. Everfresh Egg Farm, Ionia, Michigan

Pine Crest White Orpingtons, hens and pullets \$3.00 each, eggs special price \$5 per 15, utility \$12 per 100. MRS. WILLIS HOUGH, PINE CREST FARM, Royal Oak, Mich.

RHODE ISLAND REDS and Plymouth Rocks Males 6 to 12 lbs., according to age \$3 to \$8; P. R. hens weight 5 to 10 lbs., eggs 15 for \$1.50; 100, \$8; Mammoth Bronze Tom Turkeys 8 to 35 lbs. according to age \$2 to \$5, 10 eggs \$4. J. Morris & J. Barsan, Vassar, Mich.

ROSE COMB Brown Leghorns from winners at Fairs. Eggs \$1.50 per 15, \$8.00 per 100. Mrs. CLAUDIA BETTS, Hillsdale, Mich.

R. I. REDS, both combs. Chicks & eggs. Most popular strain in Michigan. Write for catalog. INTERLAKES FARM, Box 39, Lawrence, Mich.

SILVER Spangled Hamburg eggs for hatching \$2 per hundred. The greatest layers on earth as well as the handiest and most economical to raise. RIVERVIEW FARM, Vassar, Mich.

Single Comb Black Minorca cockerels, sired by a 10 lb. cock bird. A few more P. O. fall pigs. R. W. MILLS, Saline, Mich.

SILVER Golden & White Wyandottes. Four Golden cockerels \$2.00 each. Eggs 15, \$2.50; 30, \$5 by P. O. post prepaid. C. W. Browning, R. 2, Portland, Mich.

S. C. Brown Leghorns. Heavy layers. Eggs 15-\$1.10, 30-\$2.00, 45-\$3.00, 100-\$5.50 prepaid by mail. FLOYD ROBERTSON, R. 1, Lexington, Indiana

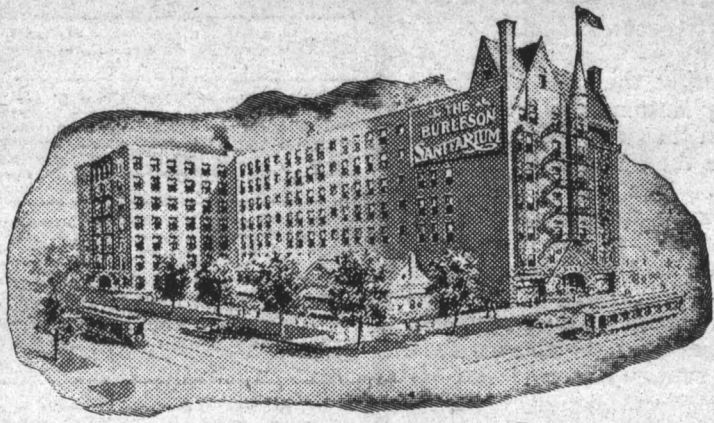
Single Comb Brown Leghorn eggs for hatching, 15 eggs \$1.50; 100 eggs \$3. Frank Camburn, R. 4, Saline, Michigan.

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White Wyandotte eggs for hatching also baby-chick out of choice stock; send for a 1918 circular. DAVID RAY, 709 Norris St., Ypsilanti, Michigan.

M. B. Leghorn cockerels. Also Herkshire, both sex. Stamps appreciated. Chase Stock Farm, R. 1, Marlette, Mich.

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Trojan-Ericas and Blackbirds only Breeders of the dam and former owners of the sire (our herd bull) of the Grand Champion Bull at the International Chicago for 1917.

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For Sale 5 Imported in dam Registered Guernsey heifers, 8 months old, also bull calves. E. A. Black, R. 3, Howard City, Mich.

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When you need a herd sire remember that we have one of the best herds in Michigan, kept under strict sanitary conditions. Every individual over 6 mos. old regularly tuberculin tested. We have size, quality, and production records backed by the best strains of breeding.

Write us your wants.
R. BRUCE McPHERSON, Howell, Mich.

A Good Note accepted in payment of finely bred registered Holstein bull calves. Quality of the best, and at prices within reach of all. Write.
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I Always Have Holsteins To Sell

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

L. E. CONNELL, Fayette, Ohio

OK Leaf Farm. Herd sire Lenawee Pontiac Calamity King offer Registered Holstein bull calves from A. B. 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 \$2.51—315 days milk 23782.3, butter 926.775.
E. H. GEARHART & SON, R. 4, Marcellus, Mich.

Letters from Our Readers

KIND READER:—

We would like a word from you regarding any of the important issues that confront Michigan farmers. Whether you think as we do or not, we would be glad to know your opinion. In writing make your letters brief—short ones are more interesting.

Sincerely yours,

THE EDITORS.

Farmers' Rights

NORTH DAKOTA has a young farmer, representing his district in the lower house of congress, who has been speaking right out in meeting. He says that while we have been handing out to the corporations and industries an entire haystack, or \$4,500,000,000, the farmers would be tickled to receive one straw.

The vital thing in this war is food. Food comes from the farms. The labor problem is growing very serious on the farms, with young men going into the army and navy and into the war industries where the manufacturer is paid "all that it costs, plus ten per cent profit," which means, of course, high wages. How can the farmer, who hires his help and runs all the risk of bad weather, short crops and low markets, compete with manufacturers whose expenses are guaranteed, plus a profit? While the government has thousands of millions, as Congressman Baer says, to finance big corporations that are manufacturing war material, this same government cannot spare a few millions for the farmer whose work is quite as important in winning victory in the present conflict.

At bottom the trouble is that the farmers are not organized and the scattered voices that are raised in protest here and there fall on empty air. The farmer is independent. He likes to be let alone. He has always had the rough end of the stick, the big end of the burden, and to this day he is inclined to spurn even the well meant, bonafide offers of assistance from all sources. However, the question is, is it not time now to guarantee him a fair return for his work, as corporations are guaranteed, and to help him finance his enterprise as the corporations are financed?

People in cities as a rule have very wrong ideas of the farm situation. Because some farmers are buying automobiles it is assumed that all farmers are getting rich. They should talk with the farmers who went into onions and beans and potatoes quite extensively last season, and should ask them also about their corn crop. They might ask Michigan farmers about their crops in general for the past three years. Better still, these city people might strip off their good clothes and go out into the deep country and try it and be disabused of some of their notions. After fighting bad weather, bugs and disease, soil conditions, poor seed, market uncertainties and a few other hazards they would come to have very wholesome respect for the farmer.

The farmer, every inch of him, is a patriot in this war. He is willing to go ahead anyhow, assuming all the risks of his business, and raise every pound of food stuff that he can in this great crisis. But it does seem as though this great government of ours should be quick to recognize the greatest industry of them all, that of the manufacture of food on the farms, and the fact that the farmers have rights, along with the other manufacturers in these strenuous days.

buy directly from the mill, but the chances are ten to one that the miller has controlled his entire output, and the ultimate consumer is held up for any old price that the retailer sees fit to charge.

Quite a good many people nowadays are eating a ration of bran as a part of their breakfast, and, of course, it is, in most cases, doing them good. I own up to a liking for it, and last fall was able to get some at the mill, and when the supply gave out during the winter sent for more, but could not get it. The stores keep it in package form, and one can get it that way, if they pay the price. We got a package a few days ago, put up by a well known manufacturer of breakfast foods. I looked it over and noticed that the printed statement was that the package contained a pound and four ounces, net weight. The price paid was twenty cents, or a cent an ounce, \$320 a ton. There ought to be a way to reach these people who are taking advantage of the war conditions to make a profit of several hundred per cent. It's worse than highway robbery. If the retailers charged any such prices for bran, as a stock food, they would be haled into court and made to pay the penalty, but as they are only robbing the people who are eating bran and saving flour, I suppose they will be allowed to continue the process.—A. L., Eaton Rapids.

CAN'T PAY DEBTS, AND WHY.

My greatest problem as a farmer has been the maintenance of my credit in the face of a constant stream of debts and obligations that are ever maturing. And it is not at all comforting to know that the commercial people are busy taking my measure and publishing my record among themselves for their convenience.

I maintain that no man can commence farming as I did, without capital and make any material progress without incurring many little debts and obligations.

All debts, taxes, interest, depreciation of buildings and tools, maintenance of an increasing family according to American standards, all constitute certainties.

On the other hand all his resources—crops, stock, health of himself and family, constitute uncertainties. Crop failure or any misfortune may wreck him at any time.

The business world is becoming more and more relentless—itself founded on a system of exactness, it demands promptness from the farmer, but the farmer cannot in turn command nature and the elements. There you are.

The present war has shown more plainly than ever before how dependent national existence is upon the soil. If society is vitally dependent on the farmer it should insure him against misfortune.

If government ownership of the land is too socialistic, and some system of crop insurance is impractical, why not have the government establish prices for all commodities—that would eliminate the uncertainties of a fluctuating market at least.—F. D., Galien, Mich.

Teach economy. That is one of the first and highest virtues. It begins with saving money.—Abraham Lincoln.

WHEAT BRAN PRICES.

I cannot see wherein the buyer gets much benefit from the price fixing in feeds. Of course, one should eliminate the jobber and retailer, if he can, and

CATTLE

"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.

Parham's Pedigree Stock Farm offers Reg. Holstein cattle, Chester White Swine, extra bargains in calves and fall pigs. Bulls half price. R. B. PARHAM, Bronson, Mich.

A Few Fine Bulls For Sale

Bigelows Holstein Farms, Breedsville, Mich.
\$50 gets 1 mo. old son Pontiac Hesperia 2d. 14 lb. granddam 30.21 lb. Herd free of tuber. Terms 1868 April adv. for females. M. L. McLAULIN, Bedford, Mich.

Stonyhurst Stock Farm

Has a few fine bulls for sale. Are offering one this week from a 21.79 lb. Jr. 4 and sired by Pet Johanna Sir Hartog whose daughters are just coming fresh. One at 2 1/2 years has a 25 lbs. record. This youngster is 3 mos. old finely marked, straight and weighs 350 lbs. his full sister has just made at 1 year 11 mos. 17.64 of butter, 456.5 milk 7 day. Priced Cheap. F. A. BARNETT & SONS, Rochester, Mich.

The Pontiac Herd

"Where the Champions come from"

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

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

HOMESTEAD FARMS

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Holsteins--A herd of high class Holsteins; Young Bulls, Calves, Bred Heifers and cows.

Will you write to us for full description and photographs?
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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.

HOLSTEINS

High producing cows are the big profit makers. The highest producing cows in the world are pure bred.

They hold all records for production of milk and butter fat. They average three times as much as scrub cows. Let us show you. Send for free booklets. The Holstein-Friesian Association of America, Box 164, Brattleboro, Vt.

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 7 days 24.13 milk 534 lbs. W. B. Reader, Howell, Mich.

HOLSTEINS of quality. Bull calves from dams with records high as 31 lbs. in 7 days. Also collier 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 bull. Sired by son of Maplecrest Pontiac Application. Yearly record 1914 lb. butter. Also Percheron Stallion. J. E. Turrell & Son, Charlotte, Mich.

For Sale 5 splendid, registered Aberdeen Angus 2 yr. old females. Or would exchange for good registered Holstein females. Robert Smith, Caledonia, Mich.

HOLSTEINS--16 grad., all 3 years old, fresh, also 4 to freshen soon. Apply W. L. KLEIN, Farmington, Mich., 1 mile west of electric car at North Farmington.

HEREFORDS

6 bull calves for sale, Perfection Fairfax and Prince Donald breeding.

ALLEN BROS., PAW PAW, MICH.

Herefords Bob Fairfax 494027 at head 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 of Royal Majesty. Come and see them or write for particulars. THE WILDWOOD HERD, Alvin Balden, Capao, Mich., Phone 143-5.

Maple Lane R. of M. Jersey Herd. For sale one four-year-old cow, also bull calves and heifer calves sired by a grandson of the Pogo 90th of Hood Farm. IRVIN FOX, R. 3, Allegan, Mich.

For Sale Jersey Bull Goldie's Foxhall No. 161985. Dropped March 22, 1917. Solid color, black tongue & switch. A fine individual large of his age, will sell cheap. Also a young cow & several bred heifers, all of solid color. NEWMAN'S STOCK FARM, R. 1, Marietta, Mich.

Michigan Shorthorn Show and Sale

To be Held in the City of Flint

on
Monday, June 3rd

75 HEAD

35 Bulls and 40 Cows

A great many cows with calves by their side and safely in calf again.

All those in the market for good general purpose cattle that are right, are invited to attend.

Catalogues on Application

W. W. Knapp, Mgr., Howell, Mich.

Andy Adams, Auctioneer

BROOKWATER FARM

2 Bulls
Ready for Service

Sired by butter bred bulls and out of high testing dams.

The Producing Kind
with Jersey type and capacity. Prices reasonable. Also a few bred gilts (Durocs) and boars.

Brookwater Farm,
Herbert W. Mumford, Owner,
J. Bruce Henderson, Mgr.
Ann Arbor, Mich.
R. 7.

REGISTER OF MERIT JERSEYS

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, Capao, Mich.

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

Jerseys for sale Ready for service bulls Majesty, breeding. WATERMAN & WATERMAN Meadowland Farm, Ann Arbor, Mich.

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

For Sale A fine, dark, solid color Jersey bull 18 mos. old. Double grandson of Royal Majesty and out of R. of M. cow. O. & O. DEAKE, Ypsilanti, Mich.

BIDWELL SHORTHORNS

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.

For Sale Registered Jersey Cattle of both sex. Smith & Parker, R. 4, Howell, 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.

O. 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.

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

Shorthorns Maxwilton Monarch 2nd. 38722 half brother to 5 Grand Champions in service. JOHN SCHMIDT, R. 5, Reed City, Mich.

SON of Harthorth Welfare heads our herd of milk-Sing Shorthorns comprising Chiffley of Olay bred cows, young bulls ready for sale and service, write us Liddel Bros., R. 2, Clinton, Mich., Macon Phone.

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.

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

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

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

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

Scotch Shorthorns: 1 Red Bull 14 months old; 1 red bull calf 3 months old.
W. C. OSIUS, Hillsdale, Michigan.

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

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

HOGS
DUROCS Orion Chief Perfection No. 63945, and Jennings Pilot Wonder No. 73373. Two outstanding boars of big type and excellent quality. All selected large type smooth sows. Thrifty, smooth, large boned spring gilts from these herd boars and choice sows at very reasonable prices. The Jennings Farms, Bailey, Mich.

50 Duroc Sows and Gilts
for fall farrowing, bred to Orion's Fancy King 83857 the biggest pig of his age ever shown at International. 1 mile N. E. of town. Visitors welcome 7 days in week. Newton Barnhart, St. Johns, Mich.

DUROC JERSEYS
E. D. HEYDENBERG, Wayland, Mich.

Duroc fall boars sired by Crimmon Critic T. Satisfaction and Brookwater Principal, priced right. Bred sows all sold. M. O. TAYLOR, Milan, Mich.

Durocs Can spare two or three bred daughters of Joe Orion 2nd the \$5000 boar. Lake, Mich. A. FLEMING.

Choice Duroc Jersey Gilts For Sale.
CAREY U. EDMONDS, Hastings, Mich.

DUROCS service boars, bred sows, fall pigs. Express paid. J. H. BANGHART, E. Lansing, Mich.

Duroc Jerseys for sale. Service boars & spring pigs also Shorthorn bulls, calves, milking strain. CHAS. BRAY, Okemos, Mich.

Raise Chester Whites

Like This
the original big producers



I HAVE started thousands of breeders on the road to success. I can help you. I want to place one hog from my great herd in every community where I am not already represented by these fine early developers--ready for market at six months old. Write for my plan--More Money from Hogs. G. S. BENJAMIN, R. F. D. 10, Portland, Michigan

Spring Pigs for sale. Pairs and trios not akin. Breeding and prices on request. J. D. ORANE & SON, Plainwell, Mich.

Chesters Early spring pigs either sex in pairs or trios. One extra good fall boar. F. W. ALEXANDER, Vassar, Mich.

Crandell's Big Type O. I. C's
Champion herd everywhere shown in 1917. Herd headed by five champion boars. Our sows won Senior, Junior and Grand Champion prizes at Illinois, Missouri, Ohio and Michigan 1917. Special prices on all spring pigs. Get our catalog it is free.
Crandell's Prize Hogs, Cass City, Mich.

BRED GILTS and SERVICEABLE BOARS
J. CARL JEWETT, Mason, Mich.

O. I. C's all sold except some fall gilts. Order O. J. THOMPSON, Rockford, Mich.

O. I. C's Last spring gilts bred for next spring farrow also last fall pigs either sex and not skin. Good growthy stock 1/4 mile west of Depot, Citizens phone 124. Otto B. Schulze, Nashville, Mich.

O. I. C's Big type serviceable boars. Spring farrowed boar pigs. Bred gilts to farrow July and Aug. G. P. ANDREWS, Dansville, Mich.

O. I. C. gilts bred for Aug. and Sept. farrow. Spring pigs will soon be ready to ship. F. O. BURGESS, Mason, Mich. R. F. D. 3.

O. I. C's Large type, spring pigs bred from State Fair winners at prices that will please you. Clover Leaf Stock Farm, R. 1, Monroe, Mich.

A Great Opportunity

We are offering one of our herd sires, Big Type Poland China Yearling Boar. His sire a prize winner at Kansas State Fair. His dam a prize winner at Missouri, Iowa, Kansas and Nebraska State Fairs. A splendid individual and perfectly marked. Spring pigs for sale.
HILLCREST FARM, Kalamazoo, Michigan

FOR SALE

Smooth Jumbo a grandson of Peter Mow's old boar Smooth Jumbo a 600 lb. yearling. A top notcher fit to head any herd. Also some nice bred gilts at \$50. If you get one you will have to hurry.
J. C. BUTLER, Portland, Michigan.

Large Type P. C. no public sale this year; 50 sows and gilts all queens of the breed go at private present. W. J. HAGELSHAW, Augusta, Mich.

Big Type P. C. Big boned fellows from Iowa's greatest herds. Special prices on spring boars. E. J. MATHEWSON, Burr Oak, Mich.

Nothing for sale at present. Spring pigs are coming fine. Eaton Rapids, Mich. O. E. GARNANT.

Large Type P. C.

Bred gilts and boars all sold nothing to offer at present. W. E. LIVINGSTON, Farms, Mich.

LEONARD'S Bred sows all sold, fall pigs, orders booked for spring pigs at weaning time. Shipped C. O. D. E. R. LEONARD, St. Louis, Mich.

P. C. Sows For Sale. Bred for April farrow. Prices reasonable. A. A. WOOD & SON, Saline, Mich.

Large Type P. C. fall gilts, size 800 lb. yearling to be bred to 1000 lb. 2 year old for July & Aug. 2 extra good fall boars. WM. J. CLARKE, R. 7, Mason, Mich.

BIG TYPE Poland Chinas: Bred sows all sold. Have a few fall pigs. Prices right. L. W. BARNES & SON, Byron, Mich.

L. S. P. C. all sold out, except the largest farrow. H. O. SWARTZ, Shoolcraft, Mich.

Hampshire Boars at a bargain. Book- ing orders for Spring pigs. JOHN W. SNYDER, R. 4, St. Johns, Mich.

HAMPSHIRE PIGS-- We have some very choice spring pigs, Messenger and General Allen blood line, perfect belt and good bone. Write your wants. L. D. O'BRIEN, R. 2, Jackson, Michigan.

HORSES

Percherons, Holsteins, Angus, Shropshires, Durocs
DORR D. BUELL, Elmira, Michigan.

Percheron Stallions and mares of reasonable prices; inspection invited. F. L. KING & SON, Charlotte, Mich.

No more Registered Percherons for sale at J. M. HICKS & SONS, R. 2, Williamston, Mich.

FOR SALE Two Registered Percheron stallions and two Percheron mares at the right price. E. J. ALDRICH, Tekonsha, Mich.

Shetland Ponies, Fox Hounds, Young Coon Hounds and Belgian Hares. W. E. LEOKY, Holmesville, Ohio.

LATEST MARKET REPORTS

SECOND EDITION.

The markets in this edition are revised and corrected on Thursday afternoon, May 23.

WHEAT.

No wheat is reaching the Detroit market at the present time and other cities are receiving very meagre supplies. The new crop is showing improvement in a larger part of the winter wheat districts, although in a few sections of the more northern states the prospects are not as good as they appeared to be a few weeks past. A year ago No. 2 red wheat was quoted at \$3.02 per bushel on the local market. Present quotations at Detroit are:

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

CORN.

The feeling in this market is gradually becoming more bearish although futures are firm due to faith in heavier exports after July. The outlook for the new crop is very encouraging. Not only will the fields be put in unusually good tilth, but despite the scarcity of seed corn, farmers have given much closer attention to the selection of the seed than ever before. A year ago the local quotation for No. 3 corn was \$1.73 per bushel. Latest local prices for cash corn are:

No. 3 corn.....	\$1.40
No. 3 yellow.....	1.55
No. 4 yellow.....	1.45
No. 5 yellow.....	1.30
No. 6 yellow.....	1.25

The Chicago prices are advanced over those of last week. Present values are:

June corn.....	\$1.40½
July corn.....	1.41½

OATS.

The following appear to be the outstanding features of the oat market situation in this country: Receipts at primary elevators are decreasing, cash oats are ruling firm in the majority of the markets, futures, particularly July, are weak, due undoubtedly to the very large acreage and excellent condition of the growing crop. Little information is available on the exports of this grain, but inquiries are now being made by seaboard agents for export offerings. One year ago standard oats were quoted locally at 75½¢ per bushel. Present Detroit prices are:

Standard.....	79½¢
No. 3 white.....	79
No. 4 white.....	78

RYE.

About the only activity noted in this market is a little bidding by exporters who, however, are not anxious enough for the grain to give any firmness to the trade. Cash No. 2 rye is quoted on the Detroit market at \$2.05 per bushel.

BEANS.

Michigan farmers are marketing their beans quite liberally at the present time, and as a result of these new supplies on the market, prices have sagged during the past week. The local basic price for immediate and prompt shipment is \$10.25 per cwt. At Greenville, Mich., the elevators offer \$8.75 per cwt. Chicago is handling a very limited volume at about steady prices.

Mich. pea beans, h. p....	\$12.00
Red kidneys.....	10.00@13.00
Brown Swedish.....	10.50@11.00

FEEDS.

There is a probability that with the heavy manufacture of corn products, an increased amount of hominy feeds will be available at lower prices than have obtained during the past months. Detroit feed prices in 100-lb. sacks are reported on the market as follows:

Bran.....	\$37.00
Standard middlings.....	39.00
Middlings, fine.....	45.00
Cracked corn.....	65.00
Coarse corn meal.....	64.00
Chopped feed.....	53.00

HAY.

Hay is in sufficient supply and buying is not active. It is a quiet and easy market. Detroit quotations are:

No. 1 timothy.....	\$20.00@20.50
Standard.....	19.00@19.50
Light mixed.....	19.00@19.50
No. 2 timothy.....	18.00@18.50
No. 1 clover.....	16.00@16.50

Pittsburgh.—Market dull and draggy

and only the better grades wanted, ruling prices being:

No. 1 timothy.....	\$24.00@24.50
No. 2 timothy.....	21.50@22.50
No. 1 light mixed....	20.00@21.00
No. 1 clover mixed....	15.00@16.50

FLOUR.

Per 196 lbs. in eighth paper sacks, in jobbing lots:	
Straight winter....	11.25
Spring straight....	11.40@11.75
Rye flour.....	12.50

POTATOES.

The general potato situation showed some improvement during the present week. Eastern markets were especially firm in the demand for old stock. While Detroit had an easy tone early this week the deal now shows a firmer feeling, with the quality of the offerings generally in good condition. Indianapolis seems to be getting adequate supplies at present, as is also the case with Pittsburgh and Cincinnati. Jobbing prices for Michigan stock U. S. Grade No. 1, sacked, and the present condition of the respective markets as collected over the wire by the Bureau of Markets Detroit Office, are as follows:

Detroit (steady).....	\$1.16
Cleveland (moderate).....	1.35@1.40
Buffalo (steady).....	1.35@1.40
Pittsburgh (weaker).....	1.20@1.35
Columbus (higher).....	1.40@1.45
Cincinnati (steady).....	1.35
Indianapolis (fair).....	1.25

At country points in Michigan prices are now ranging as low as 50¢ for the round whites U. S. Grade No. 1 in bulk at side tracks, with top prices around 60¢ and a few higher. The same grade is bringing 75¢@90¢ at country loading points in Oregon.

BUTTER.

While prices are not much changed from last week, a slightly easier tone prevails in the butter trade, due to a general increase in production over practically the entire country as pastures are unusually good. Inactivity of many milk condensaries is obliging producers in some instances to make butter instead of selling their milk. Food Administration issues rules and regulations for the storage of butter and cheese, this week, following which there is likely to be a greater interest in the storage of butter for future consumption. Local prices are about the same as a week ago. The Detroit exchange quotes extra fresh creameries at 41½¢@42¢; a few houses offer premiums above these figures. Fresh creamery firsts are quoted at 40½¢. The New York trade rules about steady with receipts for last week showing a considerable increase over the previous week, but less than a year ago, and the total since May 1 is nearly ten per cent under the receipts for the same period of 1917. Best creameries were quoted Wednesday at 45½¢@60¢; extra do 44½¢@45¢; firsts 42¢@44¢; packing stock 29½¢@30¢. The Chicago market is also steady with creameries unchanged at 35¢@42¢. In Philadelphia creameries are 45½¢ for extras and fancy at 50¢.

CHEESE.

While the buyers have been holding back recently and merely taking enough cheese for their immediate requirements, excepting that prices would be declining by this time, they have been disappointed and are obliged to replenish supplies at the old figures. Local trade is about steady with last week, flats ranging from 21¢@23¢ for new and from 24¢@25¢ for old; Daisies 21½¢@22½¢; Limburger 21¢@22½¢ for new and 25¢@26¢ for held stock. The Philadelphia market is from easy to steady, with full creams quoted at 22¢@25¢. The New York trade is steady with state fresh specials at 23¢; average run do 22¢@22½¢.

EGGS.

The Department of Agriculture has issued a communication urging store keepers and hucksters not to accept washed eggs for shipment in case lots. All such eggs should be sold locally for immediate consumption. Shipments to the largest markets have substantially increased the past week, resulting in a fractional decline in values. Michigan eggs are bringing 32½¢@33½¢ from the jobbers in Detroit, with occasionally lots going one and two cents above these figures; current receipts quoted

at 31½¢@32¢; storage packed at 35¢ a dozen. In Chicago fresh firsts are being quoted at 31¢@32½¢; miscellaneous lots, cases included 30¢@31½¢; storage packed 33½¢@35¢. The New York trade is steady with fresh gathered extras at 36¢@37¢; do storage packed firsts 34½¢@35½¢.

WOOL.

The War Insurance Board has approved of the following cities as distributing centers for fleece wools. Detroit, Chicago, St. Louis, Louisville, Boston, New York, Philadelphia, Baltimore and Wheeling, W. Va. As previously announced the prices as fixed by the government for the 1918 clip is to be the same as obtained July 30, 1917, which for Michigan fleeces has been determined at \$1.20@1.25 on a scoured basis.

GRAND RAPIDS.

No old potatoes were offered by the farmers on the city market Monday morning. Carlot movement through the state has shown some improvement during the past week, with quotations at country loading stations ranging from 50¢@60¢ for No. 1 round whites in bulk. Quotations on beans range from \$9@10.

DETROIT CITY MARKET.

Our representative reports a lively city market this week with the bulk of the offerings consisting of truck crops. Prices were found as follows: Potatoes 70¢ per bu; carrots 80¢; parsnips 75¢; lettuce 90¢; radishes \$1.75; asparagus 70¢@90¢ per dozen; eggs 40¢@42¢; dressed poultry 35¢@36¢ per lb.

LIVE STOCK DETROIT

May 22, 1918.

Cattle.

Receipts 1239. Good prime steers steady, while butchers rule 15¢@25¢ higher. Best heavy steers.....\$16.50@17.00 Best handy wt. butch. strs 13.50@14.75 Mixed steers and heifers 12.50@13.50 Handy light butchers.....11.50@12.50 Light butchers.....9.00@11.25 Best cows.....10.00@12.00 Butcher cows.....8.50@9.50 Common cows.....8.00@8.25 Canners.....7.00@7.50 Best heavy bulls.....9.75@12.00 Bologna bulls.....7.75@9.00 Stock bulls.....7.00@8.00 Light off-color stockers...7.00@8.00 Good stockers, deborned...9.50@10.50 Milkers and springers...55@115

Veal Calves.

Receipts 967. Market is strong. Best.....\$14.50@15.00 Others.....10.00@13.00

Sheep and Lambs.

Receipts 1,354. Market steady. Best lambs.....\$16.00@16.25 Fair lambs.....15.00@15.25 Light to common lambs...10.00@11.00 Fair to good sheep.....10.00@12.50 Culls and common.....7.00@8.00

Hogs. Receipts 3,007. Good pigs steady at \$18; mixed \$17.80, or steady with Monday.

BUFFALO.

May 22, 1918.

Cattle.

Receipts today two cars; market today is steady with Monday and Tuesday at the following prices: Prime heavy steers.....\$16.75@17.75 Best shipping steers.....16.25@17.00 Fair to good.....14.75@15.75 Plain and coarse.....13.00@14.25 Native yearlings.....14.75@15.75 Best handy steers.....13.25@14.25 Fair to good kinds.....12.25@13.25 Handy strs and hfrs mixed 11.75@12.50 Western heifers.....12.25@13.75 Best fat cows.....11.75@12.50 Butcher cows.....8.75@9.75 Cutters.....7.75@8.50 Canners.....5.00@6.25 Grazing cows.....7.50@8.00 Fancy bulls.....11.50@13.00 Butcher bulls.....10.00@11.00 Common bulls.....8.50@9.50 Best fdg strs, 900-1000 lbs 10.50@11.50 Medium feeders.....9.50@10.50 Light common.....8.00@9.00 Stockers.....8.50@9.50 Milkers and springers...\$65@150

Hogs.

Receipts 10 cars. Market is higher

today and the trade is strong at the new level of prices.

Medium to heavy.....	\$18.25@18.50
Yorkers.....	19.00@19.10
Pigs.....	19.00@19.10

Sheep and Lambs.

Receipts four cars. Market is strong at steady to higher prices.

Top lambs.....	17.50
Yearlings.....	14.00@15.50
Wethers.....	14.00@14.50
Ewes.....	12.50@13.50

Calves.

Market rules steady at the following prices:

Tops.....	\$15.25@15.75
Fed calves.....	7.00@8.50

CHICAGO.

May 22, 1918.

Cattle.

Our cattle market here on Wednesday was weaker with receipts totaling 7,000. Prices for the day ruled as follows:

Native steers.....	\$10.50@17.65
Stockers and feeders....	9.25@13.10
Cows and heifers.....	7.30@14.60
Calves.....	8.00@14.00

Hogs.

Receipts on Wednesday were 19,000. Prices are higher than on Tuesday of this week and the market is holding strong with trading active.

Bulk of sales.....	\$17.45@17.90
Light.....	17.45@17.95
Mixed.....	17.20@17.95
Heavy.....	16.50@17.75
Roughs.....	16.50@16.85
Pigs.....	14.75@17.60

Sheep and Lambs.

The estimated receipts for Wednesday was 4,000. The market is ruling about steady at the following range:

Lambs.....	\$13.25@16.50
Sheep.....	9.75@14.75

HAPPENINGS OF THE WEEK.

(Continued from page 650).

Saturday's explosion at Oakdale, Pa.—Administration leaders are discussing the war revenue act in Washington.—United States government warns all unnaturalized German men and women not to go boating on any river, canal, lake or seashore this summer, and not to go within 100 yards of canals, wharfs, piers, warehouses, elevators and terminals.

Tuesday, May 21.

East of Loere and just west of Mont Kemmel the French have advanced their line over a two-mile front. Near Rheims they have also gone as far as the third line trenches of the enemy. All along the front before Amiens heavy artillery firing is reported.—Germans have lost several aeroplanes in the sectors defended by American troops.—General Von Buelow is reported to have been definitely located in command of a new army before Arras.—In Italy fighting is brisk on the mountains east of the Brenta river.—French troops have taken the offensive near Ochriba in Macedonia.—President Wilson signs bill and proclamation which calls for about 1,000,000 men who have reached the age of twenty-one since June 5 last, to register for military duty on the fifth of next month.—Reports show Michigan to be the first state in the Union to subscribe its full quota of \$3,000,000 for the national Red Cross.—Charles W. Fairbanks, former vice-president, is critically ill at his home in Indianapolis.

Wednesday, May 27.

Michigan soldiers are reported in the first line trenches.—British aviators bombard the fortress of Metz and Coblenz.—One thousand German aeroplanes have been brought down since German offensive started in March.—Austria is rushing men to Italy.—The Turkish troops operating in Asia Minor have mutinied.—Allies thrusts on western front delays German offensive.—British casualties for the week ending May 21 total 36,677.

Thursday, May 28.

Sinn Fein leaders arrested in connection with the German-Irish plot will be executed.—Extraordinary activity by the aerial squadrons is noted between the armies in France.—French gain ground on the Somme front.—German troops are being redistributed along the entire front.—President Wilson proposes to Allies that tremendous resources of Siberia be conserved by cooperation with Russia and the use of American capital.

MILK NEWS FROM THE FIELD
SECRETARY.

(Continued from page 654).

in this great problem. While we desire and propose to see that our members receive a fair compensation for their milk, and a fair test for the butter-fat, yet we realize that if this great industry is stabilized and given the dignity that it should have in Michigan, it will require good milk and honest dealing from the milk producers of the state, and your Association is going to exercise itself just as energetically to weed out the dishonest producer as we are the dishonest buyer.

Recently a producer was very insistent upon an equitable adjustment with his buyer. He demanded, and received the cooperation of the representative of the Michigan Milk Producers' Association. The buyer yielded to a settlement far in excess of the Milk Commission's findings. Within six hours after the time of this settlement this milk producer boasted that he had "pulled one over" on the Michigan Milk Producers' Association and the buyer, and that he had been skimming his milk the entire month past. This kind of contemptible, petty thievery is ruinous to our market and will bring the entire milk industry into disrepute. It is the purpose of your Association to protect the great majority of its members, who are honest, against dishonesty either within or outside of its own membership. The fellow who is skimming or watering his milk need expect no quarter when he is caught.

It is now a good time to be real producers for the dairy industry. All should at this time be determined to improve their herds by the weeding out of unprofitable animals and the holding, against a seeming present loss, of the better animals of the herd. We are confident that the dairymen who now weeds his herd carefully and builds intelligently, working not only for today but for years to come, will have every reason to be satisfied in the future.

Milk meetings were held recently at Morenci, Metamora and Birch Run, and a commission meeting at the Hotel Cadillac, Detroit.

MICHIGAN LIVE STOCK NOTES.

Farmers interested in the improvement of Shorthorns met at Reed City and formed the Osceola County Shorthorn Breeders' Association with officers as follows: President, Charles Carlson, Leroy; vice-president, Spencer Postal, Evart; secretary-treasurer, Jno. Schmidt, Reed City. Breeders owning over 350 head of registered Shorthorns were present and Osceola county is one of the leaders in this breed of cattle. In is planned to encourage use of pure-bred sires and the raising of Shorthorn calves by the boys' and girls' clubs, to bring in buyers from outside and to hold sales from time to time.

The Tri-State Live Stock Dealers' Association held its annual meeting at Hillsdale and re-elected these officers: President, Frank E. McConnell, Coldwater; vice-president, David Cortright, Homer; secretary, R. W. Rowe; treasurer, John Bowditch, Pittsford. On account of the government running the railroads no action was taken in regard to transportation.

Seventy-seven head of registered Holstein cattle were sold May 15 at the fourth annual spring consignment sale, Grand Rapids, under the auspices of the West Michigan Holstein Breeders' Association. A feature was the sale of a ten days' old calf donated by Dudley E. Waters, of Maryland Farm, for Comstock Park auxiliary of the Red Cross, the calf bringing \$306.60.

The milk strike at Muskegon was settled by a mediation board of three members, representing the farmers and dealers, while Carl Young, county food administrator, was the third man.

Veterinary.

CONDUCTED BY W. C. FAIR, V. S.

Exostosis.—I have a three-year-old colt that has a bunch on the inside and lower part of knee joint which one of our local Vets. calls "spavin on knee." Whatever this bunch is, it makes him quite lame when trotted. What can be done for this ailment and work the horses? J. B. B., Hastings, Mich.—Apply one part red iodide mercury and eight parts lard occasionally. This bunch is doubtless a splint situated high up and perhaps interferes with the lower portion of joint. It is perhaps needless to say that an animal in this condition should not be driven faster than a walk, but doing farm work where the footing is not hard will do no particular harm.

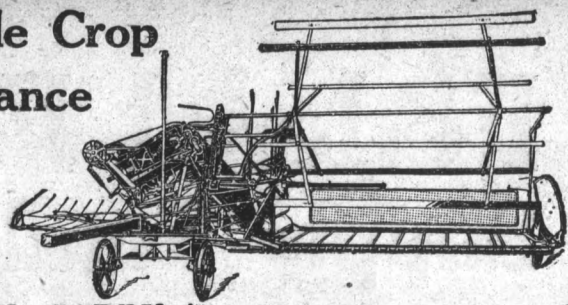
Forage Poisoning.—I would like to ask about a peculiar ailment that my lambs have. The oldest of my lambs are now about three or four weeks old, and I never had such a fine lot before. The best of these lambs seem to be taken suddenly sick, are hardly able to walk, just drag along and some of them are unable to walk at all and have the appearance as if they were partially paralyzed. Their heart action is fast, they breathe quick, but they seem to feed well. They lie on the ground as if nothing ailed them, but are unable to get up, but when assisted on foot and help up they get a little milk. Now I would like to know what is the cause of this ailment. Ever since I have been farming I have never had this sort of an experience with lambs. I have a suspicion that feeding silage is perhaps the cause. My ewes were fed four or five bushels daily and I had fifty head. This was their morning feed; at noon they were fed oat straw and in the evening a bushel of oats with mixed clover and timothy hay. When the lambs took sick I discontinued feeding silage and turned the ewes out on grass; since the ewes have had three days on grass I am inclined to believe that the lambs are a little better. I gave them one to two drops of homeopathic tincture of aconite and one to two drops of homeopathic tincture nux vomica. G. W. S., Jr., Ann Arbor, Mich.—During the past thirty days the writer has received several letters from sheep raisers asking information regarding this same lamb ailment and in each case the ewes had been fed on silage for some little time, and after making a change in their ewes' food supply, the lambs began to recover, unless they were exceedingly weak. Give each lamb three drops of tincture cinchona, five drops tincture gentian at a dose in a tablespoonful of milk or water four times a day. The lambs should be kept warm and dry. Doubtless the fresh air and sunlight will do them good; but remaining outdoors all night or during storms will have a bad effect upon them until they recover and regain lost strength.

The price fixed was twenty-one cents a gallon on the farm, or twenty-three cents delivered. The farmers were asking for twenty-six cents and twenty-eight cents.

Myron Van Patten, of Litchfield, Hillsdale county, shipped a load of 222 lambs which netted him \$3,411.83. They were bought last fall and averaged fifty-six pounds apiece. After the winter's feeding they averaged ninety-one pounds without the wool, and an average of seven and a half pounds of wool apiece.

The Houghton County Live Stock Association has received a shipment of 350 ewes and seventeen lambs from Montcalm county and two cars were unloaded at Houghton and one at Chasell. They will be divided among ninety farmers. Pure-bred rams will be brought in and it is planned to start a wool and mutton industry in the county that will develop to large proportions.

The United States Food Administration has warned the Chicago packing houses not to advance the prices for hog products over those quoted on May 1. This order was issued with the explanation that the packing companies have accumulated substantial quantities of pork products to meet the present demands. The instructions also declare that any contemplated increase in prices in the future must first be submitted to the food administration for its approval.

Whole Crop
Insurance

YOU CARRY insurance as a matter of course. It is good business to be protected from loss, so you keep your policies in force and pay the premiums regularly.

But there is one kind of insurance you may not know about, which requires no premiums, on which you realize every year, and which this year is fully as important as any other insurance you carry. **When your crops are ready for cutting, International Harvester binders and twine insure the harvesting of the whole crop.** No matter whether the grain be heavy or light, tall or short, standing or down, lodged and tangled, an International Harvester binder cuts and binds it all without waste. That is what we mean by whole crop insurance.

Champion, Deering, McCormick, Milwaukee and Osborne harvesting machines and binder twine, always efficient, are better than ever this year when every bushel of grain is needed. Remember this when you come to buy your binder and twine for the season's work. Remember, too, that the larger sizes conserve labor. An 8-foot is better than a 7, and a 7 better than a 6 or 5. Buy the largest binder you can use, and buy a new machine if there is any question about the efficiency of the old one. A new International Harvester binder is absolutely reliable.

Through ninety branch houses and over 30,000 local dealers, we give the farmers of this country prompt service on harvesting machines, twine, and repairs. You can be sure of having your new machine on time by placing your order with the local dealer as soon as possible, or writing us now for catalogues.

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A Dip that is standardized, of uniform strength and **GUARANTEED.** One gallon makes 70 gallons of dipping solution.

For Scab, Ticks and Skin Troubles

Dr. Hess Dip and Disinfectant cleans and makes the skin healthy. It is more than a Dip—it is also a Disinfectant. Use it freely about stables, hog pens and poultry houses to destroy disease germs and maintain good health conditions. Also for home use, in garbage cans, sinks, cesspools. Sold by 28,000 dealers on a money-back guarantee.

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Ashland Ohio

Those Growing Pigs

will do well if fed a slop composed of skimmed milk, butter milk, or, sweet milk, with

Dickinson's Rival Hog Feed

or use water to make the slop if milk is not available.

Dickinson's Globe Chick Feed

makes strong chicks. Ask your dealer or write **ALBERT DICKINSON CO., 605 Chamber of Commerce, Detroit, Mich.**

EARLY White Pea Beans, hand picked, 1 bu. \$7.50; 4 bu. \$27.20 per bu. sacks free, or mail your bags at \$7 per bu. Chester Whites and Polled Durhams ready to ship. Frank Bartlett, Dryden, Mich.

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 its 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 their country. Applications should be made at once to Miss C. A. Wheeler, Principal of Mount Sinai Hospital School of Nursing, 1500 East 105th Street, Cleveland, Ohio.

DEATH TO HEAVES! NEWTON'S

STANDARD REMEDY FOR HEAVES, COUGH, DISTEMPERS AND INDIGESTION COMPOUND Cures Heaves by correcting the cause—Indigestion. Prevents Colic, Staggers, etc. Best Conditioner and Worm Expeller. 26 years sale. Three large cans guaranteed to cure Heaves or money refunded. The 1st or 2nd can often cures. \$5.00 and \$1.00 per can at dealers' or prepaid by parcel post. Booklet free.

THE NEWTON REMEDY COMPANY, Toledo, Ohio

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\$3 Package guaranteed to give satisfaction or money back. \$1 Package sufficient for ordinary cases.

MINERAL HEAVE REMEDY CO., 406 Fourth Ave., Pittsburg, Pa.

EGGS

We are always in the market for fresh eggs. \$2.00

Write us for particulars.

AMERICAN BUTTER & CHEESE COMPANY, Detroit, Mich.

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

FRUIT

We want your entire crop. Write for rubber stamp. The E. L. Richmond Co., Detroit

DOGS

Scotch Collie Pups For Sale. Pure bred stock, O. E. Hawley, R. 3, Ludington, Mich.

For Sale at farmers' prices, choice Collie pups; Sired by a son of K.K. Hector. Natural heelers. Chas. A. Beatty, R. 2, Box 2, Milford, Mich.

SHEEP

KOPE-KON FARMS.

Coldwater, Mich.

Hampshires & Shropshires. It's a wise man who orders his ram for August delivery now.

About July 1 we will offer for sale choice Shropshire Rams. **ARMSTRONG BROS., R. 3, Fowlerville, Mich.**

Some Good Breeding Ewes and registered RAMS for sale. **Barnard Sheep Ranch, R. 5, Clare, Mich.**

Federal Farm Loan Bonds Supply Funds To Finance Farmers

The Federal Farm Loan Act has these big, vital, national purposes:

- To provide capital for agricultural development.
- To create standard forms of investment based upon farm mortgage.
- To equalize rates of interest upon farm loans.
- To furnish a market for United States bonds.
- To create depositaries and financial agents for the Government.

IN carrying out these purposes Federal Farm Loan Bonds offer safe and sound long term investments for the thrifty, based on the assembled farm mortgages of America; increase farm production, and make it easier for farm tenants to buy and own farms.

Federal Farm Loan Bonds are issued by twelve regional Federal Land Banks. These banks and the entire system are examined, supervised and operated by the Federal Farm Loan Board, a bureau of the Treasury Department at Washington. Every Federal Farm Loan Bond is the obligation of the Federal Land Bank which issues it, and also of all the other eleven Federal Land Banks. Every Federal Farm Loan Bond is based upon massed and aggregated farm mortgages pledged as security. No mortgage is made for more than fifty per cent of the value of the farm as fixed by a Federal Land Bank Appraiser appointed by the Federal Farm Loan Board in Washington. The Treasury motto on farm loans is "safety first."

All loans are made through cooperative organizations of farm borrowers, termed National Farm Loan Associations, very similar in character to city building and loan associations. Each mortgage is guaranteed by the Association. In addition to the security of the farms themselves, each mortgage is backed by the resources of all the twelve Federal Land Banks, including a cash subscription by each association to the stock of the Land Bank equal to five per cent of all loans, and in addition thereto there is a five per cent double liability on the part of the borrowers. No farm loan security has ever been offered so strengthened and buttressed by Government inspection and control, and such adequate resources back of the obligations.

Federal Farm Loan Bonds bear five per cent interest, payable semi-annually, May and November, and, in the language of the Federal Farm Loan Act, "shall be deemed and held to be instrumentalities of the Government of the United States, and as such they and the income derived therefrom shall be exempt from Federal, State, Municipal and local taxation." It will be noted that this exemption is complete. Interest on these bonds need not be included in income tax returns. These bonds are issued in denominations of \$25, \$50, \$100, \$500 and \$1000 and in either coupon or registered form. They are due in twenty years and redeemable after five years.

The buying of Federal Farm Loan Bonds is not only a profitable transaction but is a patriotic act. This system enables the small farmer to borrow money on terms as favorable as the large farmer. For the first time in the history of American agriculture the farmer, through the issue of Federal Farm Loan Bonds, is enabled to secure the capital which he has so badly needed.

All mortgages issued under this Act are paid off in installments, so that with every interest payment there is paid an installment of the principal, and when the last interest payment is made the mortgage is extinguished. Each mortgage grows smaller year by year and the security is to that extent rendered greater. The standard form of mortgage now prevailing runs for thirty-five years, and the first effect of the taking out of a mortgage in the Federal Farm Loan System is to put the farmer in easier circumstances so as to enable him to

extend his operations, become a greater producer, buy more machinery, intensify his farming, supply himself with livestock, and otherwise take a stronger financial position. He becomes a better customer of the bank, of the store, and of the manufacturer.

Money is loaned under this system only for certain specific purposes, all connected with the development of agriculture. Land owners who rent their farms out cannot borrow under the Act. The financial pressure of the system is exerted always in the direction of strengthening the position of the actual farmer as against the landlord. Loans may be made for the following purposes and for no other:

To provide for the purchase of land for agricultural uses.

To provide for the purchase of equipment, fertilizers and live-stock.

To provide buildings and for the improvement of farm lands.

To liquidate certain outstanding indebtedness of the farmer.

Such operations as the provision of necessary buildings, machinery, seeds, clearing, tiling, draining, fencing, etc., are carried on by farmers borrowing under this system on a large scale, and always with increased farm efficiency in view. The farmer who has financed himself through a Federal Farm Loan mortgage is at once relieved of anxiety as to the falling due of his mortgage. He knows exactly what he can do for thirty-five years in the future. The interest rate to him at present is five and one-half per cent per annum, plus a one per cent amortization charge, so that by the payment of six and one-half per cent per annum his loan is extinguished in thirty-five years.

Lack of capital and lack of skilled, reliable labor are the two greatest drawbacks to agricultural progress. Federal Farm Loan Bonds are doing their part to remove both these obstacles. With sufficient capital, labor-saving machinery and up-to-date equipment, will come a great increase in the farmers' productive power.

Whatever increases the earning power of the farmers of your community directly contributes to your own prosperity. The Federal Farm Loan System then is your affair as it is that of every American citizen. Put your shoulder to the wheel and start the sale of Farm Loan Bonds in your community. Buy as many yourself as you can afford and talk them to your friends and neighbors.

Federal Farm Loan Bonds are printed in the Bureau of Engraving and Printing in Washington, and have the same protection against counterfeiting that is enjoyed by the currency in your pocketbook.

In the language of the Farm Loan Act, Federal Farm Loan Bonds "shall be a lawful investment for all fiduciary and trust funds and may be accepted as security for all public deposits." You can offer your banker no better collateral.

You can buy Federal Farm Loan Bonds at 101 and accrued interest. Order through any bank, trust company, broker or express agent, or write to any one of the twelve Federal Land Banks:

Springfield, Mass. Louisville, Ky.
Baltimore, Md. New Orleans, La.
Columbia, S. C. St. Louis, Mo.

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