

# MICHIGAN FARMER

AND  
**LIVE STOCK**  
PUBLISHED WEEKLY.

**JOURNAL.**  
ESTABLISHED 1843.

The Only Weekly Agricultural, Horticultural, and Live Stock Journal in the State.

VOL. CXLIX, No. 24  
Whole Number 3971

DETROIT, MICH., SATURDAY, DECEMBER 15, 1917

\$1.00 A YEAR  
\$3.00 FOR 5 YEARS



Something of Interest to You on Page Two



# A Word from the Editors

## We've Got to Co-operate to Solve the Farm Labor Problem

EVERY substitute for man-labor must be considered. Perhaps you have figured out some method or contrivance which has helped you in your work. If so, tell the rest of us about it, so that we can make use of it. To stimulate interest in this important matter

We will pay two dollars each for the twenty-five best labor saving suggestions;

And one dollar each for all others we use.

Here's a chance to do your fellow farmers good and get paid for it besides. If you can illustrate your ideas by photos or sketch, so much the better.

All that is necessary to make you eligible for this contest is that you be a subscriber to the MICHIGAN FARMER.

You will find an addressed envelope in this issue,—use it to send in your subscription, and send your labor saving idea with it. If you are a subscriber, hand the envelope to some friend who is not a MICHIGAN FARMER subscriber. Tell him about this contest,—he may have some ideas the rest of us ought to know about. Tell him about the new features which start in this issue. We will send sample copies to friends whose names and addresses you send us.

Send in your contest letters before January 15th, because the contest closes then. Let us hear from you now.

THE MICHIGAN  
FARMER  
Detroit

THIS page has been reserved to tell you the new features we are introducing in the MICHIGAN FARMER, and of the increased usefulness of our practical departments.

The world-wide demand for food makes greater efficiency on our farms imperative. We gain in efficiency by adopting the little ideas suggested by the experience of others. The greater the number of these available, the greater will be our opportunity for advancement.

### The Practical Departments

The MICHIGAN FARMER has already written five hundred progressive farmers for their experiences. We are also appealing to all of our readers for worth-while ideas. Besides, county agents, extension workers and other rural leaders are sending us suggestions resulting from their wide experiences and observations. This vast fund of information will be made available to you in the practical departments of the MICHIGAN FARMER.

### Send Your Problems for Solution

Not only are we gathering these experiences on how things have been done, but we likewise appeal to our readers for a statement of their problems. In our wide acquaintance will be persons who can assist in the solution of these problems. These questions and answers will be featured in the MICHIGAN FARMER because of their bearing upon the efficiency of our farmers during these critical times.

### For Home Efficiency

But efficiency in the field is no more important than efficiency in the home. Little hints and suggestions will be gathered from the experiences of our household readers, domestic science experts, teachers, etc., and published in our women's department. Here will also be published practical articles on cooking, sewing, and other household activities. Renewed interest in knitting and sewing has led to the introduction in this department of a special Needlework Service. Conservation day suggestions will be a feature of coming issues to assist the housewife in complying with the demands of the Food Administration.

### Our Boys and Girls

Then we have a still greater obligation. A prominent social leader recently said that the destiny of our nation was dependent upon whether we can retain our young people on the farms or not. We recognize this as a vital necessity, and have established a special boys' and girls' department to interest them in the farm, the farm home and the rural community. Boys and girls in our own State have accomplished remarkable results in growing crops, feeding animals, canning, sewing, baking, etc. For instance, one boy grew 142 bushels of potatoes on a quarter of an acre of land. Another showed his father how to grow corn. And a girl holds the Michigan bean championship. Articles on how these crops and many others were produced will be a feature of this department.

### Other Attractive Features

"How the World's Business is Done," a series of articles by the well-known Farmer and Banker, Comfort A. Tyler, will make some very interesting reading for our boys and girls. Then the 25,000 Boys' and Girls' Club members in the State and the thousands of others who will soon be initiated into the local organizations, will be delighted to learn that the page dealing with this very important work is to be in the hands of that matchless worker and Club organizer, E. C. Lindeman, Michigan state leader of Boys' and Girls' Clubs.

These are some of the things provided for our readers during the coming year. In considering them, however, we do not want farmers to lose sight, for a single moment, of the fact that the primary object of the MICHIGAN FARMER is to aid in the practical work of making the farm pay in the broadest sense of that term. Nevertheless in adding these other features we are giving our subscribers a journal that will interest and instruct every member of the farm home.

THE EDITORS.

## A New Department for Our Boys and Girls

WE'VE started a "Boys' and Girls'" department that's going to have heaps of interesting things in it for you. We want you to use this department in every way possible. Besides the many interesting features we have already secured for it, we would especially like to have you write your experiences on the farm. We are so eager to have you do this that

We will give one dollar each to the fifty boys or girls who send us the best stories of their experiences.

Just write your story as if you were writing it to a friend. Your own way of telling the story usually is the best way. Send some pictures with it if you have them, as pictures are always interesting.

There is only one requirement necessary for entering this contest,—one of your family must be a MICHIGAN FARMER subscriber. If there is no MICHIGAN FARMER coming to your family, you can still take part in this contest by getting someone to subscribe; or if the subscription expires soon, urge a renewal. Tell the folks to use the enclosed envelope to subscribe.

Keep your eye on our "Boys' and Girls'" department. Tell your boy and girl friends about it,—they'll be interested. We'll mail them sample copies if you will send us their names.

And don't forget to send that prize letter before January 15th, because the contest closes then.

THE MICHIGAN  
FARMER  
Detroit

## Two Great Serial Stories for Mich. Farmer Readers

### "Inside the Lines"

By Earl Derr Biggers and Robert Welles Ritchie

### "The Grizzly King"

By James Oliver Curwood



The Hero and Heroine.

EVERY student of current literature will tell you that these authors are among the very best in America today. Prominent publishing houses rejoice when they are able to close a contract for a book from any of them. The Michigan Farmer therefore feels that it has scored another victory in the story line by securing for its readers the above serials to add to its list of good stories.

"INSIDE THE LINES" is a war narrative depicting the intricate spy systems that the warring nations of Europe are obliged to contend with, incidentally relating an international romance that is fraught with the most baffling handicaps.

James Oliver Curwood's "THE GRIZZLY KING" takes the reader through unexplored fastnesses of the Canadian Rockies and gives a most fascinating account of a giant grizzly's first experience with man.

Not one member of the family should miss a paragraph of either of these two great stories. Both start in this issue. Turn to pages 571 and 581.



The Grizzly King.

It Will Pay You to Read The Michigan Farmer in 1918



# The 1917 International---A National Food Camp

THE 1917 International Live Stock Exposition, aside from being the world's greatest live stock show, deserved the slogan which has this year been given it as "the nation's food camp." In every department of the show the entries were more numerous and of even better quality than usual, meeting with lavish praise from the thousands of stockmen and visitors which thronged the ringside and exhibition stables throughout the week. Final figures for attendance are not available at this writing, but it is confidently predicted that it will reach a new record for the show.

As usual, the interest of visitors centered around the historic fat steer contest, which was this year won by Merry Monarch, a pure-bred Shorthorn, bred and shown by Purdue University of Indiana. The winner of the Grand Championship is a steer of wonderful quality and finish, as will be noted from the accompanying photograph.

## How the Grand Champion Was Fed.

Speaking of the record made by this steer, Dean Skinner, of Purdue University, described the manner in which he was fed as follows:

"Merry Monarch was dropped in pasture the summer of 1915 and run with his dam until snow came," said he. "He never had an extra nurse cow and was not pampered at any time. The first winter found him with his stall mate, who was a close second, in a big box stall munching clover hay, corn silage and receiving a light ration of cracked corn, ground oats and a little oil meal.

"The following summer he continued to receive the same grain ration while running on a bluegrass pasture. About the first of January, 1917, his grain ration was gradually increased. He was fed twice daily until June 1 and since then has received three feeds daily, consisting of cracked corn, ground oats, a little ground barley. About September 1 cooked rye was fed in the evening, while the amount of corn was gradually decreased.

"During the last six weeks his ration consisted of six to eight pounds of cracked corn, three to five pounds of ground oats, a light feed of cooked rye, about ten pounds of good corn silage in two feeds and a little clover hay once daily. The gains on this steer were gradually averaging from forty to sixty pounds per month during the past six months. This steer was never off feed and during the past two years was used in the judging classes of the college throughout the college year."

Merry Monarch is a Secret, by Lavender Sultan 345171. He weighed 160 pounds at the ringside at two years and five months of age. Something of the character of the competition which he encountered is evidenced by the fact that this steer did not win the championship in the Shorthorn steer classes, that honor going to a yearling Shorthorn steer of similar breeding also exhibited by Purdue University. This institution won all firsts on steer exhibits in this breed, all of them being sired by Lavender Sultan, a grandson of the famous Whitehall Sultan.

In the contest for championships by ages the champion Shorthorn steer lost out to Liberty Bond, a grade Hereford calf shown by W. L. Yost of Kansas. Merry Monarch, however, won the championship in the two-year-old class by a narrow margin over a splendid pure-bred Hereford from the Kansas Agricultural College. In the splendid line-up of steers for the premier honor, the contest narrowed down to Merry Monarch and Liberty Bond, whom many critics thought to have a strong claim to the grand championship. However, the Canadian judge, Capt. T. E. Robson, found this runner-up somewhat lacking in depth and smoothness of covering which would have put him at the head of the line. The grand

champion, in the words of Capt. Robson is "a wonder for depth and smoothness, and is in the pink of condition." This is the second time Purdue University has won the highest honors of the show in the fat steer contest. Merry Monarch was recognized by all critics as an outstanding steer, and the decision was a popular one.

## The Grand Champion Carload.

The grand championship in the carlot classes was won by Edward P. Hall, of Mechanicsburg, Ill., with a wonderful load of Angus yearlings. This is the fourth time that Mr. Hall has won this honor at the International, he having previously won in 1910, 1912 and 1916. In all Mr. Hall had on exhibi-

tion seven loads of Angus steers, comprising 130 head. These were all purebreds but not registered and were in such excellent condition that with the seven loads he won the grand championship, the reserve championship and the third best load. Mr. Hall gives much credit for his winning to the co-operation of Angus breeders in his own and neighboring states, from whom he secured the animals to be fitted for this contest.

## How the Champions were Fed.

Mr. Hall described the method of fitting them as follows:

"I got these cattle in October, 1916, after they had been weaned. I started them on a small feed of corn, oats and

clover hay, gradually working them to a full feed of corn, with about one-third of oats. This feed lasted over the winter. In April, when the grass was ready, I took the oats away from them, and started feeding cottonseed meal, corn on grass, gradually increasing the cottonseed meal ration until the calves were getting two pounds a day. On July 1, I started giving the calves molasses feed, and kept increasing it until they were getting two pounds a day. This ration was continued until the end of the feeding period. I had a patch of sorghum, and as soon as it was ready for feeding, I gave it to the calves. After the frost came, I gave the calves all of the clover hay they would eat. On September 1, I supplemented the corn, cottonseed meal, and molasses feed with ground barley, it making up about one-fourth of the ration.

"I had the calves eat all of the commercial feed they would, but still gave them all of the corn they cared for.

"On my farm at present I have 130 head of calves which were picked from Angus breeding herds. These calves will be fed out for the show next year."

The seven loads of cattle exhibited by Mr. Hall won him a total of more than \$2,000 in prizes awarded in the show ring.

## Fat Hogs.

In this section of the show the Berkshires were winners of premier honors. In the fat barrow class Hood Farm, of Lowell, Mass., "brought home the bacon," with the grand champion barrow and the grand champion pen of barrows, both of Berkshire breeding. The grand champion fat barrow was a senior yearling, fitted to the pink of perfection. The grand champion pen were also yearlings.

Reserve grand champion fat barrow went to the well-known Hampshire breeder, R. C. Runkle, of Littleton, Ill., on a senior yearling of notable smoothness and quality. The reserve grand champion pen of barrows went to Ohio University on yearling Duroc-Jerseys.

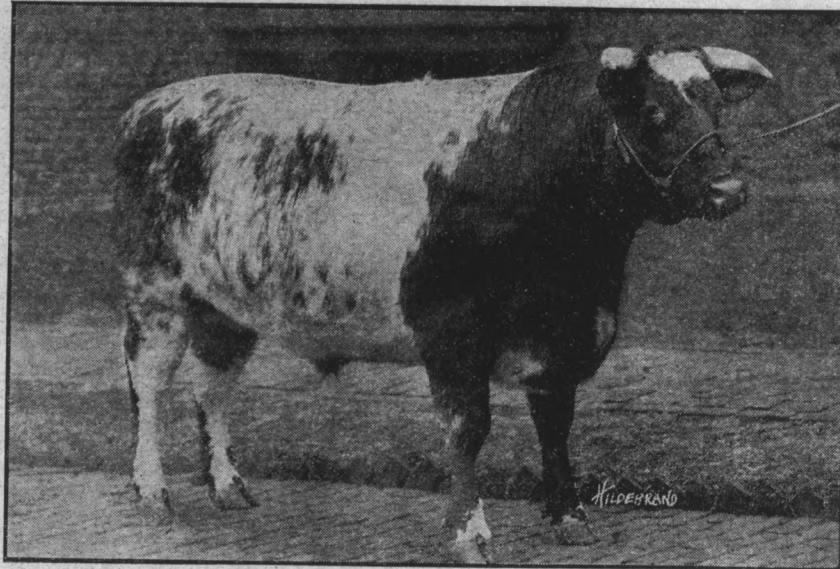
The absence of several old-time exhibitors from the breeders' ranks left the way clearer this year for the colleges, and they made the most of the gap. In Poland-Chinas this was particularly true, and here the biggest gains, annexing championship single barrow, the champion pen going to the Iowa State College on junior yearlings.

The champion Duroc-Jersey barrow came from the Ohio College and won in a strong field. Chester Whites were more largely in the hands of breeders than any other breed, except Hampshires, and champion pen of barrows was won by an Indiana breeder, J. K. Milner, of Thorntown. University of Illinois got the champion barrow. In Hampshires breeders got both championships, pen going to Simon Albrecht, of Tiskilwa, Ill., and single barrow to R. C. Runkle, of Littleton, Illinois.

In the carlot classes for fat hogs the Berkshire breed scored another victory, the championship being won by a load of Berks, bred, fed and exhibited by T. E. Berner, of Augusta, Ill. Besides winning the premier awards of the hog show, this load took first in Class 247, which called for hogs weighing 250 pounds and under 350 pounds. There were only three classes for hogs in the show, the weights ranging from 150 to 350 pounds. There were no hogs over the 350-pound limit.

In Class 248, for hogs weighing 200 pounds and under 250 pounds, G. E. Phillips, of Delavan, Ill., took the first prize with a lad of Duroc-Jersey hogs. In Class 249, hogs weighing 150 pounds and under 200 pounds, D. M. Brown, of Delavan, Ill., took the blue ribbon with his Duroc-Jersey hogs.

(Continued on page 564).



Merry Monarch, Grand Champion Fat Steer at the 1917 International.

## A Great Shorthorn Show



Maxwalton Commander, Grand Champion Shorthorn Bull at the International.

THE exhibit of Shorthorns at this year's International was one of the most spectacular in the history of the show, and the crowd at the ringside when these grand classes were being judged showed the popularity of this breed among International visitors. Such a grand exhibition of reds, whites and roans has never competed in the ring of this or any other show in America, if indeed anywhere in the world. This represents the consensus of opinion of many annual visitors at the International. Undoubtedly, the exhibits in the Shorthorn breeding classes was one of the attractive features of the entire show. Herewith is presented a cut of the grand champion Shorthorn bull, Maxwalton Commander, shown by F. A. Gillispie & Son, of North Muskogee, Okla. Maxwalton Commander is just past four years old.

His sire is the celebrated champion of champions, Avondale, and his dam Imported Roan Lady Thirty-six. The grand champion won in a class of ten aged bulls from which Judge W. A. Dryden, of Brooklyn, Ont., said the picking of a winner was one of the knottiest problems he has confronted in his extensive experience as a Shorthorn critic. The chief competitor for grand championship was the rich and mellow senior bull calf Sunrise, shown by S. G. Eliason, of Montevideo, Minn. In this same class second place went to an entry of Anoka Farms, of Waukesha, Wis. The competition in the other Shorthorn breeding classes was just as keen, breeders and critics alike joining in the statement that the average high quality of the exhibits was the best ever seen in any American show.



# The Michigan Farmer

Established 1843.

Copyright 1917.

## The Lawrence Publishing Co.

Editors and Proprietors

39 to 45 Congress St. West, Detroit, Michigan  
TELEPHONE MAIN 4525.NEW YORK OFFICE—381 Fourth Ave.  
CHICAGO OFFICE—111 W. Washington Street.  
CLEVELAND OFFICE—1011-1015 Oregon Ave., N.E.  
PHILADELPHIA OFFICE—261-263 South Third St.M. J. LAWRENCE..... President  
M. L. LAWRENCE..... Vice-President  
E. H. HOUGHTON..... Sec.-Treas.I. R. WATERBURY..... Associate  
Burt Wermuth..... Editors  
FRANK A. WILKEN.....  
ALTA LAWSON LITTELL.....

E. H. HOUGHTON..... Business Manager

### TERMS OF SUBSCRIPTION:

One Year, 52 Issues.....\$1.00  
Two Years, 104 Issues.....\$1.50  
Three Years, 156 Issues.....\$2.00  
Five Years, 260 Issues.....\$3.00  
All sent postpaid.  
Canadian subscription 50c a year extra for postage.

### RATES OF ADVERTISING

45 cents per line agate type measurement, or \$6.30 per  
inch (14 agate lines per inch) per insertion. No adv't  
inserted for less than \$1.35 each insertion. No objec-  
tionable advertisements inserted at any price.Member Standard Farm Papers Association and  
Audit Bureau of Circulation.Entered as second class matter at the Detroit, Mich-  
igan, post office.

DETROIT, DECEMBER 15, 1917



### CURRENT COMMENT.

To the average man living on a farm and responding to the call for increased production of food stuffs as best he may under the handicap of difficult labor conditions and during the past year unseasonable weather, isolated as he is from war activities and the fevered hastening of needed preparations, it is difficult to bring home a realization of the crisis which the country is facing, and the responsibilities and obligations of the farmers of the country in connection with the war. One has, however, but to meet an intelligent observer who has visited the war zone, or a returned soldier from the front, to have these facts impressed upon him in a way not to be overlooked or forgotten. In the not distant future the truth will be brought home to all of us in this way, yet there is a possibility that this process may be too slow for the most desirable result of prosecuting the war to an early and successful finish, which will preserve the honor of our nation and make the world perpetually safe for democracy.

If every reader of the Michigan Farmer could have been present at the recent meeting of the Michigan State Association of Farmers' Clubs at Lansing, and listened to Dr. Wilbur, chief assistant of National Food Administrator Hoover, he would quickly have gotten the right viewpoint regarding the responsibility and duty of American farmers in helping to bring this war to an early termination. Without minimizing the handicaps under which the farmers of Michigan and the United States are striving to meet the demand for increased food production, he contrasted their lot to that of the farmers of Belgium, of Northern France, of Roumania, of Poland, of Northern Italy, and other devastated sections of Europe's wide-flung battle front. He brought home the fact that wherever war exists, there the farmer loses his all, his home, the safety and perhaps the very lives of his family, and more than likely his own liberty and every blessing which makes life in any sense worth the living.

Dr. Wilbur emphasized the fact that during the coming year America's

greatest contribution to the war must be in food stuffs and materials rather than in men, and that not only the armies but the civilian population of our allies must be fed and clothed and otherwise enabled to exert their full power in holding the present battle line until our armies may be massed in force to aid them. He further emphasized the fact that unless the required aid is given to enable the accomplishment of this result, the conditions which now obtain in the devastated countries mentioned may easily be brought home to the farmers of large sections of the United States, and that at no distant date.

Not, we believe, because of any inherent lack of patriotism or loyalty, but rather because they do not realize the situation in which we as a people are placed at the present time, there remain many farmers as well as many people of other callings who permit the personal business hardships or difficulties which the war has already brought to them to overshadow the larger issues which are of greater importance to them in common with all mankind. Truly, the difficulties and handicaps which confront the farmers of Michigan and the country are many and varied, but it is our duty rather to minimize them or their effect upon the all important problem of increased production by doing our very best, no matter how unfavorable the conditions with which we are confronted, rather than to exaggerate or bemoan our hardships.

Patriotic action rather than criticism other than of a purely constructive nature should be our line of action. The problem of increased food production will be a more serious one for the farmers of America next year than it has been this, but let us approach it with the same spirit and the same determination to win with which our boys will go to the battle front. It is only by such united support that they will be able to win with minimum losses.

### Conservation of Materials.

If the average farmer would take an inventory of unused equipment, he would in many cases be surprised at the quantity of material lying about which might be made more useful if again turned into the regular channels of trade. Farm equipment is constantly wearing out and breaking down. Then,

sibly useful parts saved for the repair of other equipment, and the residue sold for junk.

The amount of material which would be again turned into useful channels by the general adoption of this suggestion is much greater than is generally appreciated, and is too important a factor under present conditions not to be given the attention which it merits. Implements which remain serviceable but may not be of a size or type adapted to present needs on the farm should be offered for sale to other farmers, either at auction or at a fair price, to the end that they may contribute something to the campaign for increased food production in which suitable machinery and equipment is more important than ever before.

Aside from the patriotic reason for turning all idle materials found on the farm into useful channels, there is an excellent business reason for the same course. All kinds of material will command a higher price now than ever before in the memory of the present generation, and it will be profitable as well as patriotic to take steps toward turning it to some future profitable account.

### Secretary Houston's Report.

In his annual report just made public, Secretary of Agriculture Houston points out the year's results in agricultural production, aggregate more than 5,500,000,000 bushels of cereal grains, while meat products have gained slightly. He emphasized the fact, however, that while farmers have responded generously with increased production, the results do not justify any let-down in activities, but should inspire us to greater efforts for the coming year.

In summing up the live stock situation a very creditable increase in the number of cattle is noted, with about a corresponding decrease in the number of sheep and a still greater decrease in hogs. It is estimated in the report that the number of hogs, which during recent years has shown an upward tendency, decreased 4,000,000 in 1916, or from 67,453,000 to 62,747,000. An encouraging feature of the outlook, however, is that the number of hogs on the farms at the present time is estimated to be greater than it was at the beginning of the European war. The number of hogs varies from year to year far more widely than is true

of live stock. Nationwide campaigns for increased production of hogs and poultry are contemplated, for the reason that these lines of production promise the quickest returns.

Extensive plans are also under way for the transfer of large numbers of cattle from localities where there is a shortage of feed to areas where feed stuffs are relatively abundant. Various other phases of the nation's agriculture are, of course, taken up in the secretary's annual report, but the meat situation is, as above noted, given primary consideration because of its unquestioned importance in the present emergency.

### HAPPENINGS OF THE WEEK.

#### Foreign.

Last Thursday morning, Halifax, Nova Scotia, was nearly destroyed by the explosion of a munition ship's cargo in the harbor. The Norwegian ship Imo rammed the Mont Blanc, causing the high explosives aboard the latter to let loose. The concussion was so great that buildings in that part of the city nearest the harbor were leveled to the ground, while surrounding cities and the country for a distance of fifty miles felt the effects of the disaster. No official report has been made upon the number of dead, but estimates vary from 2,000 to 4,000. Officials state that from twenty to twenty-five millions of dollars will be required to relieve the unfortunate people. Aid is being rushed with all possible haste from this country and Canada.

The European War.—Stubborn fighting by the Italian forces, with the help of the French and English troops who are now facing the enemy in Italy, has apparently saved the day against the big drive of the Teutonic invaders last week in a final effort to break through the defenders' line and gain a position in the plains beyond, before the winter snows make further operations impossible. Thus the battle of Asiago is virtually suspended with the enemy checked if not defeated in his main design to reach the Brenna Valley. English troops are fighting around the heights of Montello on the upper Piave river. On the eighth a fleet of Italian airplanes attacked the Teutonic positions, dropping 2,000 bombs which observers report, did extensive damage.—During the past few days things have been quiet in northern France. However, last week, following massed attacks by the Germans on the Cambrai front, the British officials eliminated salients that were difficult to hold without sacrificing a large number of men, and now much of the new British lines in this sector rests upon the famous Hindenburg line built by the Germans. Dispatches state that the railroads in the Rhine district of Germany are crowded with trains of troops and artillery moving toward the west. Civilians are not permitted to travel and the front is closed.—In Mesopotamia British and Russians are driving back the Turks. Reports indicate that in Asia Minor the Russians have not ceased operations here, as is the case along most of the front in Europe. The Palestine campaign is progressing favorably to the British troops.—The Bolshevik government of Russia is now considering proposals for the arrangement of an armistice with the central powers, during which time terms for peace are to be deliberated upon. Political parties opposed to the extremist element now in power, are organizing a new rebellion to crush the Bolshevik faction. Konilorf and Kalendines, with constitutionalists and imperialists, are together in this action to thwart the government's armistice proposals.

#### National.

Organization for a third Liberty Loan campaign to be started some time after February 1, is being discussed in Washington by Secretary McAdoo and representatives of local committees.

The cold weather is causing great suffering. In most of the northern cities there is a scarcity of coal and thousands of people are without heat in their homes. Police reports for the city of Detroit indicate that fully 2000 families faced the cold spell with no fires. The thermometer fell below zero over a majority of the northern states.

It is predicted at Washington that the economic situation between the United States and the northern Europe neutral countries will be amicably settled so that these countries will soon be able to secure food from America. It is believed by the inter-allied board that reshipment of rations to Germany has been reduced to a minimum.

## We Want Your Cooperation

In this issue is an envelope enclosed primarily for the convenience of the large number of our friends whose subscriptions expire soon. However, of our many readers whose subscriptions do not expire for some time we ask the cooperation of putting these envelopes to good use.

Your neighbors will be interested in our plans to make the Michigan Farmer of greater service to the Michigan rural family. Tell them about our new features—let them read the announcement on page two. They undoubtedly realize the necessity of keeping informed in these strenuous and ever changing times and will appreciate your bringing these practical features to their attention. Please hand the enclosed envelope to someone you have interested.

We thank you for your cooperation in this matter.

too, our system of crop rotations may be changed so that equipment once deemed necessary remains idle, either taking up storage room or deteriorating further by exposure to the elements.

Materials of all kinds, but particularly steel and some other commonly used metals, are very scarce and high in price at the present time, due to the immense quantities of such materials required for war supplies, and the absolute necessity of giving war needs first consideration. This shortage of material will be felt in the farm equipment field quite as soon as in any, in fact, it has already been felt by every farmer who has had to purchase new machinery during the past year, in the increased price required to purchase any kind of implements or equipment. Under these conditions every worn out, hopelessly broken or obsolete implement should be at once torn down, pos-

of the larger meat animals, and with the cooperation of producers the number can be increased with corresponding rapidity.

Attention is called in the report to the fact that the gain in population of the country in the ten years from 1908 to 1917 was 13,000,000. When this is taken into consideration along with the fact that there has been a net decrease in the live stock maintained for the same period it would attract serious attention, even under normal conditions when the demands for meats and fats were not as rigid as is the case at the present time.

It has been observed that there is a close relationship between the production of live stock and the supply of feed stuffs, and the report calls attention to the large production of feed stuffs this year, and to the fact that the same should conduce to more satisfactory conditions to the producer



# Help Hoover with Broilers---By R. G. KIRBY

**T**HE present situation indicates that the meat shortage may become very serious and poultry meat can be quickly produced at a profit on the farm. Many large poultry plants have suffered severely from the high price of poultry feeds and some of them have practically discontinued business. At the same time there are few farmers possessing the evidence that their flocks are financial failures if the birds have been given proper care. The farm is the right place to produce poultry meat in times when the welfare of the country depends so much on an adequate supply of meat of all kinds.

## Red Meat Short.

In a message to the American poultry Association and the producers of poultry and eggs in the United States, Herbert C. Hoover states: "We are short of red meat. Our soldiers and our allies require more than ever before. We are advocating in every household, every hotel and restaurant, the substitution of poultry for red meat. Increased production of poultry can be effected much faster than beef, pork and mutton. While we want increase in the latter, we must have a quick response in poultry products. There is a great waste of poultry feeds from every household and every farm. It requires little labor. Cannot the poultry raisers of the country help us by providing the increased supply we need?"

## It's Up to the Farm Poultry Raisers.

The large commercial poultry plant will have its own problems of production which will not be discussed here. In general the increase in poultry products must come from the farm and a large production of broilers early next year will be of great help in reducing the meat shortage. The writer disagrees with Mr. Hoover in two of his statements. He suggests that there is a great waste of poultry feeds from every farm and says that "it requires little labor." Some farms probably waste feeds that could be used for poultry, a great many farms save all of the waste and practically raise their poultry on such products. The farmer who thinks raising poultry requires no labor or worry should not attempt the business as a few years of experience will prove that the poultry business requires the same amount of energy or effort demanded by other lines of farming. Little labor with the poultry will usually mean little profit and it is more apt to mean serious losses. It will not pay to advise farmers to increase their poultry production this spring by recommending it as a vocation requiring little labor. It is far better to emphasize the fact that it is profitable but the profits can only be gained by the maximum of energy and watchfulness.

## Equipment for Producing Broilers.

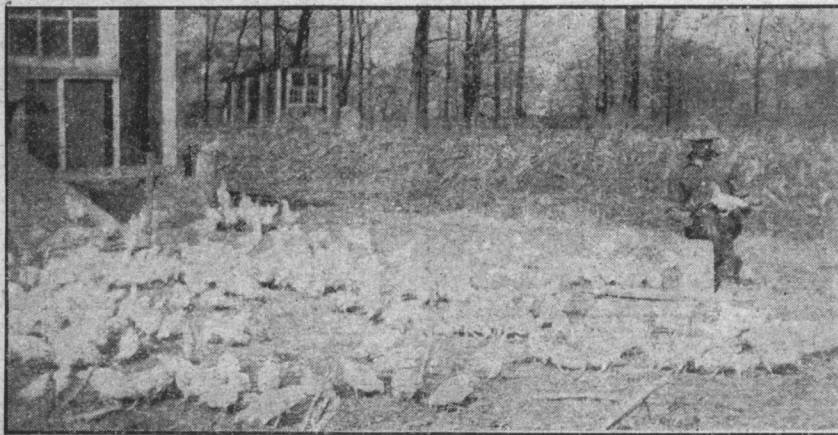
The farmer is the man to produce the increased supply of poultry. How shall he do it? In the first place, broilers to be the most profitable must be vigorous and early hatched. This means foundation stock of a good laying strain so that an abundance of eggs will be produced during January and February as well as in March and April. The eggs for hatching should be from hens. It is next to impossible to raise the finest chicks from eggs laid by pullets. Some breeders do very well in producing broilers from Leghorns. Many farmers find by experience that they can produce better broilers with less worry by using the meat-producing breeds, such as the Rocks, Wyandottes and Reds.

There will seldom be enough hens wishing to set in the months of February and March to hatch many broilers. This means that an incubator is necessary. The farmer with a dry cellar large enough for incubator work is lucky. Some breeders obtain good results by running the machines in dif-

ferent rooms of the house. It is often easier to obtain good hatches early in the season. There is less danger of the machine over-heating and producing devitalized chicks than in the late spring or summer. The machine may run ten or twelve degrees too low for several hours without seriously injuring the eggs. Allow it to run too high for a short time and it may ruin the hatch. Early hatched broilers bring the best prices and the pullets from such flocks will lay in the fall. All of the early hatched birds obtain the benefits of a long growing season. When the range is ready to receive them in the spring they are large enough to gather a great deal of their own food. If they are confined and forced for a rapid growth they can be marketed early in the season when the farmer may have little if any income from other sources.

## Efficiency in Broilers.

Incubator hatching requires a system of artificial brooding. The oil brooders will give the best service in the spring if they are placed in a colony house to



A Vigorous Bunch that will Make Good Broilers.

give additional protection from storms. Coal-burning colony brooders used in colony houses will each care for 200 or 300 chicks at a minimum expense for fuel. Some breeders are using a device for burning oil in the stoves formerly used for coal and find that the oil produces a more even heat and reduces the danger of the fire dying out on a cold night. Some breeders hatch early and plan to have enough setting hens ready to take care of the incubator chicks when they are ready for brooding. The old hen will keep them in fine condition if she is not given more than twelve or fifteen chicks and the mortality is usually quite low if proper feeding methods are used.

In brooding chicks, overcrowding must be avoided, it will result in stunted and sick birds. In broiler raising the success depends on the skill in keeping the chicks constantly growing from the day they leave the shell until the time for marketing.

## Feeding the Broiler Chicks.

We like to starve the broiler chicks until the oldest of the hatch are about sixty hours old. This will insure the younger birds being plenty old enough for food assimilation. Some breeders have advised feeding at twenty-four hours old. In that case we find that many chicks which come out late will be fed too soon and this will result in death. The brooder house floor is the daily playground of the early hatched broiler chicks and it must be kept in a sanitary condition. An inch of sand covered by clover chaff will be satisfactory. Some form of litter is usually desirable to prevent toe-picking and keep the chicks busy. Some breeders use only a sand floor but we have found a litter best over the sand. The chicks obtain more or less green food from picking at the leaves in clover chaff.

Green food is too frequently neglected by the farmer feeding early hatched chicks. Finely chopped onion scatter-

ed in the litter will waken up the chicks and give them lots of exercise on a cold stormy day. Sprouted oats furnish one of the finest kinds of green food.

Fine grit, charcoal and fresh water are important in the chick's ration. Buttermilk and sour milk promote a rapid growth and seem to have an influence in keeping down bowel trouble. Sour milk must be fed in clean dishes or it will cause trouble and we had just about as soon throw sour milk away as to see chicks eat it when it has become contaminated with dirt. Dirty feed is poison to young chicks, especially when they are confined to the narrow limits which are often necessary during cold weather in the late winter and early spring.

## Wheatless Rations.

Because of war conditions poultrymen will probably have to do their best without wheat. Wheat has formerly been one of the best feeds for growing young chicks. Last year we did fairly well with most of the chicks by substituting oats for the wheat.

Steel cut oats can be fed at an early age. Rolled oats are one of the finest feeds to keep young chicks growing. When they begin to feather out we have been able to feed some boiled oats with apparently good results. Oats can be soaked over night to soften the husks and then boiled in the morning before feeding.

They make quite a bulky feed which is good to stretch the crops of young birds and increase their capacity to eat lots of feed, which results in rapid growth. Poultry cannot be injured by eating too many oats if they are fed after being soaked and boiled.

Whenever the days are still and the sun is bright it pays to get the early



A Good Weight.

hatched broiler chicks out on the ground. The touch of the earth seems to stimulate them and prevent the trouble known as leg-weakness. When the chicks cannot go outside the brooder house some breeders place large clumps of moist sod in the house and the chicks enjoy scratching in the earth. It seems to help them to grow stronger.

## Marketing the Broilers.

Broilers that have been poorly fed do not meet with favor on the best

markets. It pays to fatten them. We have had good success in fattening Barred Rock broilers by confining them and feeding plenty of corn meal mixed with sour milk. The principal of fattening the broilers is to increase the feed consumed and reduce the exercise. Young poultry on free range often travel too far and work too hard to take on fat. Some breeders allow the broilers to range until they begin to develop a frame and then they confine the birds and give them forcing rations. Others confine the broiler chicks and give them plenty of feed to induce a rapid growth from the start. The farmer should remember that milk is one of the most valuable and necessary elements in a fattening ration and he should not try to fatten fowls without it.

## Shipping Broilers.

When broilers are shipped dressed the two-pound size will require a box 16x15x3½ inches for a dozen birds. Broilers weighing twenty-five to thirty pounds per dozen birds will require a 17x16x4 inch box. They should be neatly packed in boxes made of clean wood in order to attract attention on the market. Even the finest of milk-fed broilers might be seriously discriminated against if they were shipped in a careless, dirty appearing package.

When broilers are shipped alive in crates, a crate should only contain eighteen birds weighing from two to three pounds, or twenty birds weighing from one to two pounds. Over-crowding of crates is against the law and of course it is also not for the best interests of the shipper. A standard crate should be three feet long and two feet high. The height for broilers is one foot.

## The Outlook.

The present outlook for the poultry business has discouraged many breeders. The necessity for meat products is not a myth and if the farmers can raise more poultry and assist the government in that way, it is their duty to turn out as many pounds of poultry meat as their time, capital and equipment will allow. The fallacy of thinking that broiler raising is going to be a get-rich-quick business should be corrected. The fact that there is money in poultry even at the present price of feed should be emphasized. Broiler raising is as safe as any branch of farming if the farmer does not take all of Hoover's advice and believe that "it requires little labor." Farmers know that it requires a great amount of attention and time if the business is successful.

Here's hoping that the weasels, hawks, digestive troubles and feed bills find us prepared to fight a good fight. And luck, sometimes it surely seems that there is luck in the poultry business. Here's hoping that luck is on the side of everyone of us when it comes to growing a big flock of early hatched chicks and broilers.


## RIGHT RATIONS FATTEN FOWLS QUICKLY.

Proper fattening of fowls for market—by which is meant the most economical putting on of flesh in the fewest possible days—is an art requiring full appreciation of the food needs of the bird, the department of poultry husbandry of the Michigan Agricultural College has found in the course of many experiments. In fitting fowls for killing the method of handling, as experienced poultryman know, is distinctly different from that employed where the fowls are kept for egg production.

If chickens intended for fattening are confined in a darkened room, or in crates, they will require rations which will fit them for market in at least fourteen days. Some that have been

(Continued on page 584).





## Ammunition

Every furrow is a trench in which the farmer can fight for his country as effectively as the man at the front. It is equally important that he has no defective ammunition. Every sack of


## Royster's Fertilizer

is made with the scientific precision of a high explosive shell. The same rigid inspection by expert chemists is given to Royster's Fertilizers as is given to the ammunition sent to the front.

The experience, the skill and the strict enforcement of high standards which for 35 years have built the Royster success will be concentrated upon making every sack of fertilizer that bears the F.S.R. brand a missile of production to combat those of destruction.

**F. S. ROYSTER GUANO COMPANY**  
Mid-West Sales Division  
Toledo, Ohio

## MORE WORK FROM YOUR HORSES



Heavy spring work takes the surplus flesh from the horse. His collar no longer fits. His neck and shoulders chafe and gail. He can't do his full share of work and you lose money. Prevent these evils by using TAPATCO Pads.

### A NEW AND BETTER HOOK ATTACHMENT

Consisting of wire staple, reinforced with felt washer (note where arrows point). This gives the hook a better hold and prevents pulling off. The weakest point is made strong and life of pad greatly lengthened.

Found Only on Pads Made by Us.  
Look For The Felt Washer.  
SOLD BY DEALERS EVERYWHERE  
**The American Pad & Textile Company**  
GREENFIELD, OHIO  
Canadian Branch: Chatham, Ontario.

Pat. in U. S. Dec. 1, 1914.  
Pat. in Can. Apr. 6, 1915.

## Wet Beans

We buy them. Send exact sample in tin can. culls to sell.  
**W. L. IRELAND & CO.,** Grand Ledge, Mich.

## WANTED SEED CORN

EARLY VARIETY  
**FARMERS ELEV. & PRO. CO.**  
BAD AXE, MICH.

## SOY BEANS WANTED

We are in the market for soy beans, also clover and timothy seed. Send samples and price to  
**O. M. SCOTT & SONS CO.,**  
226 Main St., Maryville, Ohio.

**We Want to Start 100 New Agents**  
(men and women) this month, taking orders for trees & shrubbery for spring delivery and offer special inducements for quick action. Pay weekly. Write for outfit.  
**Perry Nursery Co.,** Rochester, N. Y.

## LIME

Pulverized lime-rock for "sour" soils. Write for LOW PRICES DIRECT TO YOU and we will send sample and full particulars. Write to office nearest you.  
**LAKE SHORE STONE COMPANY,**  
Muskegon, Mich., and South Haven, Mich.

**AGRICULTURAL LIME** Northern Hydrated Limestone, also pulverized burned lime, all made from high calcium limestone. Guaranteed to be the best on the market. Your inquiries solicited. Samples furnished on request. **Northern Lime Co.,** Petoskey, Mich.

Please Mention The Michigan Farmer When Writing to Advertisers

## FARM WHERE WINTER IS ALMOST WINTERLESS

In the "Land of Perpetual Harvests", where sunshine, good soil and satisfying crop returns make life worth living. Land is cheap, PLUS a climate that doubles its productiveness in the

### NATION'S GARDEN SPOT

Virginia, the Carolinas, Georgia, Alabama & Florida

Write for information now to

Wilbur McCoy, Dept. F | G. A. Cardwell, Dept. F

A. & I. Agent | A. & I. Agent

Jacksonville, Fla. | Wilmington, N. C.

### ATLANTIC COAST LINE RAILROAD

The Standard Railroad of the South.

## Maple Syrup Makers

You get best Results with our **Champion Evaporator**

Quick work, fuel saving, durability and

**BEST QUALITY OF SYRUP**

Write us for CATALOGUE.

**Champion**

**Evaporator**

Company, Makers,



Tell number of trees you tap.

Hudson, Ohio

## Annual Gathering of Fruit Growers

THE Michigan State Horticultural Society held its forty-seventh annual meeting December 4-5-6 in Grand Rapids. It was the third annual meeting to be held consecutively in Grand Rapids, but next winter the state society will go to Detroit. It is planned to hold a four-day meeting there, cutting out the evening sessions, with a great apple shown in connection. Probably 300 to 500 bushels of apples will be exhibited and 100 growers at the Grand Rapids meeting pledged fruit for the Detroit show. The society has never been flush with money and the offer made by the Detroit Chamber of Commerce of free hall rent and other inducements won the day for the metropolis. Beginning on December 1 of this year, both the annual and the life membership fees in the society are doubled, making them \$2 and \$10 respectively, and this action is expected to help the organization financially. As another economical stroke the executive board voted to cut the pay of the secretary in two, making it \$300 per annum. As a result of this action the hard working and efficient secretary for the past four years, Robt. A. Smythe, of Benton Harbor, declined reelection.

### Officers Elected.

The roster of officers for 1918 is as follows: President, Chas. A. Bingham, Birmingham; vice-president, James Nichol, South Haven; secretary, Geo. E. Lowe, Bangor; treasurer, J. Pomeroy Munson, Grand Rapids; directors for three years, Prof. C. P. Halligan, East Lansing; E. J. VerDuen, Novi. The hold-over members of this executive board are F. H. McDermid, Battle Creek, E. O. Ladd, Old Mission, James Nichol, South Haven, and George A. Hawley, Hart.

The February, or winter meeting of the society will be held in South Haven.

### Federated Packers Meet.

The annual meeting of the Michigan Fruit Packers' Federation was held Tuesday afternoon, following the regular session of the growers, and the following officers were reelected: President, James Nichol, South Haven; vice-president, John H. Crane, Fennville; secretary-treasurer, George L. Port, Coloma. Fifteen of the local associations of growers have supported the Federation during the past year, paying membership fees of \$10 each, and the reports made by delegates at this first annual convention were unanimously in favor of continuing the Federation. Later it is expected that a co-operative central selling agency will be established and as a step to this end it was voted to incorporate the Federation under laws of the state. It is expected that the central selling agency will have headquarters in Benton Harbor. President Nichol referred to the war as a means of introducing our fruits in Europe and to the largely increased tonnage we shall have to move our fruit after the war is over. Officials of the North American Fruit Exchange who were present stated there was not the least desire on their part to get control of the Federation. "You are the boss and we are your servants," was the attitude taken by them. The North American does not care to take over the selling the coming year on the same basis as last year.

### The Business Meeting.

Reports of Secretary Smythe and Treasurer Henry Smith were read and adopted. They showed that 132 life members at \$5 each, and 181 annual memberships have been received during the past year. The cash balance on hand is \$887.12. Trustees of the Lyon Memorial Fund held a meeting December 4, with the following officers present: President, C. J. Monroe, of South Haven; secretary, Jas. Satterlee, Lansing; treasurer, Charles W. Garfield, Grand Rapids. Treasurer Garfield re-

ported that through the failure of the Morill Orchard Company, in which a \$1,000 bond was held, the funds this year are \$7,600, as against \$8,600 a year ago. The bond was a lien on the real estate and was considered perfectly safe at the time it was taken. The Texas property of the company has been sold to satisfy the creditors. The experiment station at South Haven is being continued on the old basis.

### The Awards Made.

First cash prize for display of fruit was won by Roy Munson, of Grand Rapids, and J. W. Pickett, of Caledonia, won second prize. In canned fruits Mrs. Ralph Ballard, of Niles, and Miss Grace Cummings, of Grand Rapids, took first money. In the special prizes offered, Roy Munson, of Grand Rapids, won first prizes for best plate collection of fruit, best Grimes' Golden and best Wagners in bushels. Oscar Braman, of Grand Rapids, won first prizes for best box fancy apples, best three bushels of three varieties and best Greenings. E. Frue, of Hopkins, won first on the five-plate display of apples. J. W. Pickett, of Caledonia, won first on best two bushels of apples and best Baldwins. The judging was done by Prof. Halligan, F. H. McDermid and C. W. Waid.

### Student Contests.

A feature as usual, was the annual speaking contest for cash prizes awarded by the society, with nine seniors in horticulture at the Michigan Agricultural College giving five-minute talks, and the entire audience as judges. The winners, with their subjects, were in the following order: G. I. Blades, East Lansing, "Toxic Residues of Arsenical Sprays;" P. J. Hoffman, Cowan, Penn., "Desirable Varieties of Grasses for Lawn Purposes;" E. S. Anderson, East Lansing, "European Grapes for America."

Interesting displays were made of spray material, graders and orchard accessories. Some of the exhibits failed to arrive, however, in time for the show because of the shipping conditions. The college made an impressive display of apples in quantities showing beneficial effects of spray and dusting to keep the fruit clean.

Kent Co.

ALMOND GRIFFIN.

### TROUBLE DEPARTMENT.

#### Fertility for Onions and Cabbage.

I have four acres of muck that I am going to put half into onions and half into cabbage. What will I use for fertilizer?

T. M. Y.

It is very difficult to advise regarding the fertilizing of this piece of ground, unless one knows the character of the growth of plants that are grown on it.

Usually for muck soil, thorough preparation, starting with fall plowing, is very essential for onions. Muck is very rich in nitrogenous matter, which is the chief essential for the growing of good onions.

If the soil is in need of a fertilizer at all, it would probably be acid phosphate and some form of potash. However, the potash is unobtainable now on account of war conditions, and, therefore you will have to limit yourself to the use of phosphate.

We are sure that if you are thorough in the preparation of your soil, getting it in good mechanical condition and providing for thorough drainage, you will have success in growing both cabbage and onions.

### MAKE YOUR 'PHONE PAY FOR ITSELF.

Make your phone pay you a profit by using it for us to interest your neighbors in the Michigan Farmer. This will prove a pleasant and profitable pastime for some member of your family. For information write

**THE MICHIGAN FARMER,**  
'Phone Dept., Detroit, Mich.



## The Bean Crop

**N**OW that threshing is in progress we can get some definite information as to yields. Previous estimates have been all guess-work, and in many cases the guess appears to have been far from correct, as guesses on yields, before the beans were pulled, have gone wrong by more than half.

As an example of the bean grower's troubles we will take a twelve-acre field here. The bean maggot got the first crop, and the field was replanted July 3. Seed was \$7.50 and \$9 per bushel. Owing to the cold season they made a slow growth, as did all fields. In the early fall this field looked as well or better than the average, and the pods showed up nicely. They were killed by the frost of October 6, and then they were rained on nearly every day for the remainder of the month. Fine weather began November 3, and at two o'clock of the seventh the beans were all in the barn. They were none too dry, but it seemed risky to leave them out any longer. It was intended to let them remain in the mow for several weeks, but the machine came into the neighborhood, and cleaned up the other jobs, and it looked like a case of "now or never," so they were threshed the nineteenth. They proved dry enough to thresh out good, and the yield from the twelve acres was 107 bushels. Some fields in the neighborhood gave less than five bushels to the acre.

### A Test of Quality.

The next morning after threshing I took a quart of the beans, just as they came from the machine, and hand-picked them. I made three grades. No. 1 good white beans, though all were not as white as they should be, and I doubt if one in ten would be suitable for seed. No. 2 were not so white, and many not plump, but were mature enough to keep in good condition. The third grade consisted of culls, only suitable for feed. Discolored beans, green beans, and some half-grown. What surprised me was that there was scarcely a trace of anthracnose in the lot, and after the repeated soakings from rain and snow during most of October, I expected to find a lot of diseased beans. There were twelve ounces of No. 1, five ounces of No. 2, and nine ounces of culls from the quart. To try them out the five ounces of No. 2 were put to soak over night, and then boiled next day. They cooked up nicely, and could not be told from any good beans from their appearance, and when it came dinner time and we ate them, I doubt if an expert could have told from the taste that they were not beans of the best quality. I know they were good. As a certain well known writer said of pigs, beans is beans this year, and the consuming public should not be too critical if the dry beans are not all snow white. They will look all right after cooking, and they will taste all right, too. Every bean that is eatable should be saved this year, for they will all be needed before another crop is grown. The No. 2 grade will have to be sold at less than the No. 1 brings, but as an article of food they will be equal, or very little inferior to the No. 1, about the only difference will be in the appearance before cooking.

As for the prices. The first beans sold here brought \$8 a bushel but the price has dropped to \$7, and if the growers are wise they will hold for an advance, which seems sure to come later. Some of the dealers are at their old trick of trying to scare the grower by stories of the fine crop in California, that is sure to force prices down later, so the Michigan grower should hasten to sell before the drop comes. We have heard such tales, or something similar before, and should not be frightened. A well informed grocer, in town said, several weeks ago, that beans would go higher this year than last, and they sold for \$10 a bushel last spring.

Every grower should, if possible, arrange to have his beans hand-picked before selling, thus saving the culls for feed.

Eaton Co.

APOLLOS LONG.

## The Seed Corn

**T**HERE has been a great deal of talk about saving seed corn, but even at the expense of possible repetition, there are some things that still should be said. The majority of farmers have not been impressed with the absolute necessity of saving their seed corn this year. Officials who are able to make a reliable estimate assert that the seed corn situation of the middle western states is in very bad shape and that where heretofore they have had corn for themselves and much to spare, this year they will have about one-third enough seed corn to plant their own acreage. The case of the corn belt states east of the Mississippi river is in about the same condition and when it comes down to the actual truth of the matter there are only a few spots in the corn belt that will have sufficient seed maturing so that they will be able to replant the same acreage they had this year, together with some additional for next.

### Home-grown Seed is Best.

Moreover not only will it be impossible to buy seed corn from those who have a surplus this year, but it is a fact that the importation of seed corn from locations far away where it has been grown each year causes a great loss of corn when we compare the actual crop with the crop that might have been produced if the seed corn had been raised and selected on the home farm or in the community.

The difference of a half-inch in the length of seed corn that has been selected makes a difference between soft corn and hard corn. If it takes eighty days to mature an eight-inch ear of corn it takes ninety to mature a nine-inch, and a hundred to mature a ten-inch ear of corn, and if we plant a nine-inch ear in a locality having a growing season of eighty-five days, we will have an immature or a chaffy ear or possibly an ear that is so wet that it spoils in the crib.

### Drying Seed Corn.

It is a fact that under the rather favorable conditions of the last few days corn is not drying as it should. In order to withstand the rigors and inclement weather of winter, seed corn should be absolutely bone dry. The old settlers tell us that in the early days they allowed the seed corn to remain out doors all winter, often merely tying the husks together and throwing the ears over the limb of a tree, but in the same breath they go on to state that unless corn is absolutely bone dry when it goes into the winter it cannot stand such treatment. This treatment accorded to ears that are only partially dry results in weakened and dead germs; kernels that are unfit to buoy up the expectant hopes of a crop season.

We have ordinarily believed that seed corn dried out of doors has better vitality than that dried in a kiln, but we are now convinced that the opposite is the case. Kiln-dried seed corn is more dependable than that allowed to dry naturally.

The seed corn situation is a very critical one and this crisis should be impressed upon every man who has the possibility of selecting more seed corn than he has already secured. This seed corn must of necessity be dried with artificial heat. The one characteristic that should be kept in mind when selecting the seed for a certain locality is to be sure that the ears are mature and that the tips are covered with corn, thus signifying that a definite relation has been established between the size of the ear and length of the growing season.

Indiana.

I. J. MATHEWS.

# Don't Drive Home an Empty Wagon

One farmer wrote us in July: "Our farmers have been told they will have to do without fertilizers because of scarcity,—but we are not going to do without, and I want your prices."

He didn't propose to drive home an empty wagon.

To ensure a supply of plant food for the farmers in the war emergency, the whole fertilizer industry has been and is now using every resource.

There is a shortage of freight cars in which to move phosphate rock from the South as well as fertilizers to the farmers; a shortage of ships to bring nitrate of soda from Chile; a shortage of burlap for bags; a shortage of ships to bring Spanish pyrites for manufacturing sulphuric acid. The Fertilizer Associations comprising 95% of the manufacturers of the country, maintain headquarters at Washington, co-operating with the Government to solve the problems confronting the industry that supplies the plant food which produces the country's foodstuffs.

To name all the manufacturers who have rendered service to the Government in this splendid spirit would be to print a directory of the trade.

The fertilizer situation changes daily in some detail or other. Farmers therefore should keep in touch with our nearest local agents, and order their fertilizers early. It is likely to be a long time before the price of any fertilizer or other commodity will come down.

Order now to ensure delivery. Don't drive home an empty wagon.

If we have no agent in your town, we want one. Write us for agent's name or ask for an agency yourself. It is paying 50,000 others. Why not you?



### READ THIS BOOK

No matter how many other books about fertilizer you have read, read this one. It is a new and different book. There isn't any advice in it for one thing. Probably you have about all the advice you need already. This is just a common sense book. You will read it and say: "That's so! Why haven't I thought of that before." If you are using fertilizers you are probably making money with them, but are you making enough? How do you know? By making little changes here and there, as you sometimes shift your farm labor and teams, perhaps you can make more. This book may help you. It costs nothing.

### SEND THIS COUPON

Send me "How to Make Money with Fertilizers." I expect to use.....tons of fertilizer this season. MF 1  
My Name.....  
My Post Office Address.....  
My County.....State.....  
My Crops for 1918.....

The American Agricultural Chemical Co.

SECRETARY'S OFFICE

2 Rector Street, New York, N. Y.

We ship from 60 different centers east of the Mississippi. This means good service for you wherever you live.



## WELLMAN'S QUALITEED FEEDS

### For Live Stock Increase Your Profits and Lower Your Costs

**Qualiteed Poultry Feed**--All grades of scratch grains, little chick feed and mashes.

**Qualiteed Dairy Feed**--When anything better is made, we will make it.

**Qualiteed Hog Feed**--For growing pigs and fattening hogs.

**Qualiteed Calf Meal**--Start them right. Calves fed on our meal show the fastest growth and best health.

**Qualiteed Horse Feed**--Kiln dried and milled. Has thirty per cent advantage over whole grains.

**Qualiteed Feeders Favorite Dairy Feed**--The finest of the sugar feeds.

Carload Prices on Split Cars  
Ask Your Dealer

**E. L. Wellman,**  
Feed, Grain and Beans  
Grand Rapids, Mich.

## More Pork On Less Feed

You can help save the feed and do an act of patriotism, at the same time increase your own profits if you use a Heesen Cooker. 60,000 farmers in America are doing it. In some cases they have saved nearly 50% in feeding cost.

### HEESEN FEED COOKERS,

Tank Heaters and other farm equipment make money for farmers everywhere, add convenience and keep stock free from disease. Write for "Growthy Porker's" message, giving valuable facts about cooked food.

HEESEN BROS. & CO. Box No. 710 Tecumseh, Mich.



**MINERAL HEAVE** over 50 years  
**COMPOUND**  
**CURES HEAVES**

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

**Country Boy** 6 Mos. Only 10c  
**BOYS** You want The Country Boy, a large 9x12 magazine chock-full of dandy stories of adventure and how boys make money. Big pages on corn clubs, chicken raising, Bird Club, etc., illustrated. The real boys' paper. Just the kind of reading matter you'll enjoy. This fine magazine sent 6 months on trial for only 10c (Canada 20c).  
THE COUNTRY BOY, 323 Washington Square, Philada.

**LEARN AUCTIONEERING** at World's Original and become independent with no capital invested. Every branch of the business taught in 5 weeks. Write today for free catalog.  
**JONES' NAT'L SCHOOL OF AUCTIONEERING,** 28 N. Sacramento Blvd., Chicago, Ill. Carey M. Jones, Pres.

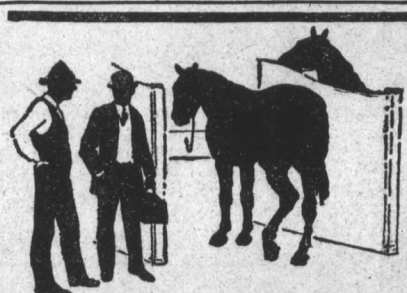
Rabbits for sale. Young stock of all kinds. Reduce the high cost of living by growing your own meat. Small space required. A. L. Wilson, Scottville, Mich.

**Cedar Post** stumpage for sale cheap. Will allow buyer five years to cut same.  
W. L. KINNEY, MARION, MICH.

### FERRETS

**2000 Ferrets** They hustle rats and rabbits. Price list and booklet mailed free. N. E. KNAPP, Rochester, Ohio.

**2000 Ferrets For Sale**  
Price list free. C. J. DIMICK, Rochester, Ohio.



**Pronounced Incurable—  
Save-The-Horse Did The Trick**  
"Last May," writes Fred C. Nichols of Jefferson, N. Y., "my horse had a bad ankle, a large wind puff, and it had been hurt and turned hard. Save-The-Horse has taken it all off. I was told it was incurable. Have used several treatments but Save-The-Horse is the best ever."

## SAVE-TH-HORSE

Grade Mark, Registered  
was made for the stubborn, so-called incurable cases of Ringbone, Thoropin, SPAVIN—or Disease of Shoulder, Knee, Ankle, Hoof or Tendon—when all other remedies have failed; and is sold under signed Guarantee to cure or return money. Always keep a bottle ready for any emergency. Send today for FREE 96-page Save-The-Horse BOOK on diagnosing and treating all lameness—result of over 22 years of success; also write for sample of contract and expert veterinary advice. All FREE.

### TROY CHEMICAL CO.

20 State Street, Binghamton, N. Y.  
Druggists everywhere sell Save-The-Horse with Signed Guarantee, or we send it direct by Parcel Post Prepaid.

## THE 1917 INTERNATIONAL—A NATIONAL FOOD CAMP.

(Continued from page 559).

### Fat Sheep.

The quality of the carlot exhibits of fat sheep was declared by visiting sheep men to be the best they had ever seen shown at the International. In this division a load of Shropshire lambs exhibited by A. J. Knollin, of Soda Springs, Idaho, won the grand championship. Mr. Knollin's range lambs took the blue ribbon in this class.

R. E. Catton, of White Pigeon, Mich., was the winner in the range sheep class.

Heart's Delight Farms, of Chazy, N. Y., had the blue ribbon winners in the native lamb class.

The Flossmoor Farms of Flossmoor, Ill., again won the championship for yearling native wethers.

### Winners Bring Record Prices.

Two dollars and ten cents per pound was the final bid on Merry Monarch, the grand champion fat steer, in the sale ring. This is the highest price ever paid for an individual steer. The steer was first purchased in the auction ring by the American Shorthorn Breeders' Association at \$2.05 per pound. Immediately after the sale, Secretary Harding of the Shorthorn Association jumped to the platform and announced that the steer would be resold and the proceeds donated to the Red Cross. Armour & Co. were the successful bidders, getting the champion at \$2.10 per pound, and making a new world's record for beef on foot.

The grand champion Angus yearlings, in the carlot division, brought \$42.50 per hundred pounds and weighed 1090 pounds. This is nearly twice the former record price. The cattle were purchased by the Irwin Brothers for the Congress Hotel, of Chicago. T. A. Newton, of the Newton Packing Co., of Detroit, were strong bidders for the prize steers, his last bid being forty-two cents per pound.

The other fat carlot exhibits sold at prices ranging from \$14.50 to \$20 per hundred pounds. Thirty-six loads of yearlings averaged \$18.22 per cwt., making a new record.

### The Horse Show.

In point of numbers the horse exhibits were near those shown in previous years. That in point of excellence the exhibits at this year's show were better than those ever seen in a single ring was the opinion of many veteran exhibitors and judges. The excellent quality of the young stuff shown is the final answer to pessimistic prophesies that with importations cut off, American breeders would not be able to keep up the standard of excellence in the draft breeds. This was equally true in all of the breeds represented, including Belgians, Percherons, Clydesdales, Suffolks and Shires.

### Belgians.

The Belgian classes were first in the ring on Monday morning. The judges were Eli Sprunger, of Michigan, Harry McNair, of Illinois, and Prof. W. H. Pew, of Iowa. In the classes for foals Jupiter's Model, shown by Charles Irvine, of Iowa, was first in the stallion class, and Hazel, shown by J. C. Ritchie, of Iowa, won in the filly class. In the yearling filly class keen interest was manifested because the decisions in this class place the futurity winner. Paramount Lula, shown by C. G. Good, of Iowa, finally won over two contestants owned by Karl Umer, an Indiana farmer. The winner was sired by Farceur, the \$47,000 stallion recently purchased by Mr. Good, this being the highest figure ever paid for a draft stallion in America. In the three-year-old class Irvine also won first and second place on two Farceur fillies. In the four-year-old mare class Crouch & Son won in the first and second place on Queen and Mattie. In the five-year-old

class the Crouch entry, Suzette, was placed first, and the Irvine entry, Leontine, next.

In the Belgian stallion futurity class John Du Bois, shown by Frank P. Fox, of Indiana, was the winner. Second went to Clarion Dubalcon, a Lefebure entry, and third to a blue roan shown by C. G. Good. In the four-year-old class the show was small, but the winner, Irvinedale Rowdy, also won the breed championship. The aged class was a large one and of uniformly good quality, great interest attaching to the placing of the winner. First place went to Loeser Bros., of Indiana, on Baron. More than ordinary interest was attached to the judging of this and other Belgian classes, owing to the big string of Michigan horses represented. The Owosso Sugar Company had a grand entry which remained a contestant until the winners were placed. This concern's entries were also strong contenders in other Belgian classes and the fourth prize went to their entry in the five-year-old class for mares.

### Percherons.

The Percheron classes brought equal enthusiasm from the crowd on Tuesday and succeeding days. Prof. Curtiss, of Iowa, Harry McNair, of Illinois, and Robert Graham, of Canada, were the judges. In the classes for foals first and second on stallion foal went to the Dunham entries, Launfall and Lancelot, both of which were by the noted sire Lycee. Third went to Elkhart, shown by Ernest Francis, an Indiana farmer. In the filly class another of Lycee's get of similar type won first. In the yearling filly class first prize went to Lgoceo, a daughter of the great sire Logas. In the strong two-year-old class a Crouch entry won first, and Dorothy B, a Bowman entry, was second. In the aged classes there was strong competition. Altogether the Percheron show was a good one, and illustrated the fact that American breeders are constantly becoming more self-dependent in maintaining a high standard of this breed in America.

### Other Draft Breeds.

In the Clydesdale classes judged on Wednesday, visitors from the middle west took less interest, for the reason that most of the entries were from the east. All the classes were well filled, and many admirers of the breed studied them from the ringside.

Shires were judged on Thursday, the classes being smaller than those in the other breeds, but considerable quality was displayed. The exhibits in these breeds were not, however, so attractive to the Michigan contingent as those in the Belgian and Percheron classes, on account of the predominance of the former breeds in this state.

### The Breeding Classes.

The exhibits in the breeding classes of cattle, sheep and hogs were quite as attractive as those in the horse show; in fact, quality seems to have been the slogan of every exhibitor, and practically no unfinished stuff was to be seen in any class. This uniform excellence was an important factor in the attractiveness of the show as a whole. In the Angus classes the entries of Dwight Cutler, of Detroit, from his Woodcote Farm, attracted favorable attention and comment, and won a liberal proportion of prizes in the various classes. In the swine department the entries of Chester Whites made by Adams Bros., of Litchfield, Mich., won much recognition and many prizes.

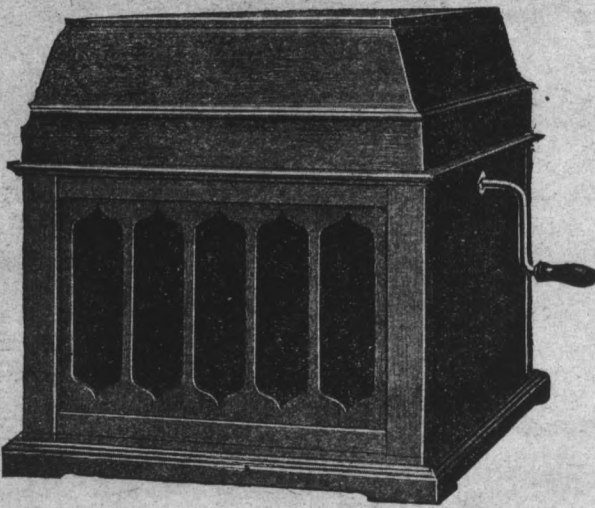
Albert Strauss of Pike county, Iowa, was on the Chicago cattle market a short time ago with 21 head of prime yearling steers and heifers of the Angus breed, which averaged in weight only 950 pounds and found a quick buyer at \$17 per 100 pounds. He raised and fed them, having weaned them last they were fed last year's corn, but October and fed them on oats, clover hay and shelled corn. On the start they were finished on corn that was two years old.



# EDISON'S LIFE-LIKE PHONOGRAPH

## THE NEW DIAMOND

# AMBEROLA



Model 50, Edison Diamond Amberola

### Music You Can Have with the Amberola

Here are a few selections taken at random from the Edison Blue Amberol Record Catalog. They will give you an idea of what a treasure-house of music you will have to draw on when you get your Amberola.

<b>ACCORDION</b> Amoureux Waltz Carnival of Venice—Variations Italian Army March My Sweetheart Waltz	<b>ORCHESTRA</b> Destiny Waltz Every Little Movement—Madame Sherry In the Shadows Last Waltz
<b>BAND</b> American Eagle March Aida March Coronation March—Prophete Father of Victory March Gems of Scotland Invitation to the Waltz Jolly Fellows Waltz Loin du Bal March Religioso Medley of War Songs Messenger Boy March Sextet—Lucia di Lammermoor	<b>OVERTURES</b> Morning, Noon and Night in Vienna Overture Orpheus Overture Ruy Blas Overture Beautiful Galatea Overture Light Cavalry Overture Overture Oberon Poet and Peasant Overture Rienzi Overture
<b>CONCERTINA</b> The Butterfly Catch Me If You Can, Dance Merry Widow Waltz	<b>PATRIOTIC</b> Battle Cry of Freedom Star Spangled Banner Where Do We Go From Here? It's a Long Way to Berlin, but We'll Get There We're Going Over Over There Laddie Boy Send Me Away With a Smile Good-Bye Broadway, Hello France I May Be Gone For a Long, Long Time U. S. Army Bugle Calls—No. 2 Good-Bye, Good Luck, God Bless You Medley—Waltz U. S. Army Bugle Calls—Part 1
<b>CORNET</b> Bride of the Waves Come Sing to Me A Dream Nightingale Song The Rosary	<b>PICCOLO</b> Nightingale Through the Air Will o' The Wisp—Polka SACRED Abide With Me Beyond the Smiling and the Weeping Crossing the Bar Dreams of Galilee Glory Song I Love to Tell the Story Jesus, Lover of My Soul Lead Kindly Light Nearer My God to Thee One Sweetly Solemn Thought Shall We Gather at the River? Tell Mother I'll Be There What a Friend We Have in Jesus Where is My Wandering Boy Tonight?
<b>FLUTE</b> Hear Me, Norma—Norma Long, Long Ago	<b>VOCAL QUARTETS</b> Bridal Chorus—Lohengrin Down on the Mississippi Moonlight Bay Little Cotton Dolly In the Golden Afterwhile Moonlight on the Lake
<b>HARRY LAUDER</b> I Love a Lassie Just a Wee Deoch and Doris Roamin' in the Gloamin' She's My Daisy	<b>VOCAL DUETS</b> Dancing Down in Dixie Land Ever of Thee I'm Fondly Dreaming Grandfather's Clock Juanita (Old Spanish Melody) Love's Melody Me and Mandy Lee
<b>MARIMBA BAND</b> Blue Danube Waltz Garden Dance Messenger Boy March Sari Waltz	
<b>INSTRUMENTAL MEDLEYS</b> Hawaiian Hula Medley Medley of Southern Plantation Songs Money Musk Medley—Virginia Reel Selections from Red Mill When it's Apple Blossom Time in Normandy Medley—Turkey Trot	
<b>INSTRUMENTAL QUARTETS</b> Dream of the Tyrolienne (Herd Girl's Dream) Flower Song Hearts and Flowers Serenade	
<b>OLD TIME SONGS</b> Carry Me Back to Old Virginia Just Before the Battle Mother Killarney Lost Chord Love's Old Sweet Song	

Don't miss this opportunity! We have made special arrangements with the Edison Laboratories, and have secured the personal consent of Thomas A. Edison, the master inventor, to offer you the use of one of Mr. Edison's 1918 Model New Diamond Amberolas and any twelve of the famous Edison Records in your home ON FREE TRIAL for a period of three days. The reproducer of the New Diamond Amberola is the genuine Edison Diamond-Point reproducer. The records we offer are the famous Edison Blue Amberol Records that are almost unwearable and unbreakable.

Don't hesitate one moment to mail the coupon at the bottom of this page and find out all about the

## ABSOLUTELY FREE TRIAL OFFER

which permits you to have Thomas A. Edison's marvelous invention, the New Diamond Amberola, on trial in your home without costing you one cent or obligating you in any way.

Once you have Mr. Edison's wonderful Diamond Amberola in your home you will never let it go out again, so real, so life-like are its reproductions. It is hard to believe that an invention can be so nearly human. When you come in from the fields or home from town all tuckered out, and when the evening meal has been cleared away, you go into the sitting room and put a record on the Amberola. At the first note of Anna Case singing "Annie Laurie," Albert Spalding playing "My Old Kentucky Home," or any other favorite melody, you settle down in your favorite chair for an evening of the keenest enjoyment. No need to go outside for entertainment—you can have your fill right under your own roof and it won't make any difference to you whether it is as cold as Greenland or whether there is a blizzard raging outside. You run the whole show to suit yourself. Why longer deny yourself this delightful, inexpensive entertainment and recreation?

### HOW TO GET THE AMBEROLA ON FREE TRIAL

Look over the list of dealers below, and pick out the name of the one nearest you. Fill out the coupon and mail it to him. He will send you the beautiful Amberola booklet, "A Master Product of a Master Mind," and the Blue Amberol Record Catalog, from which you may select the instrument you prefer and any twelve records for FREE TRIAL. If, after you have tried them, you feel that the enjoyment the Amberola gives you is worth more than the small amount you would have to part with to keep it, you may remit in cash or arrange convenient terms with the dealer. If, for any reason whatever, you do not care to keep the Amberola and records, simply notify the dealer, who will cheerfully take them back. You risk nothing, you do not obligate yourself in any way. **RESOLVE NOW** that you will not turn this page before you have filled out the coupon.

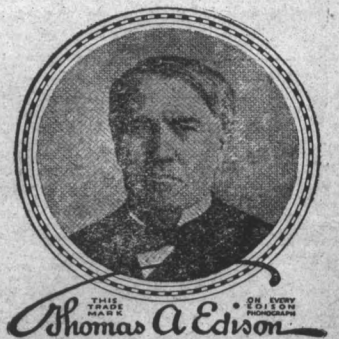
*You'll want the beautiful booklet, "A Master Product of a Master Mind," anyhow. It is FREE. Just ask for it.*

If you will write the nearest Edison dealer *at once*, it may not be too late to have an Amberola in your home for Christmas. As a Christmas gift that will be appreciated by the entire family, the New Edison Diamond Amberola is ideal because there is hardly a person who does not like some kind of music.

THE PHONOGRAPH COMPANY, 256 WOODWARD AVE., DETROIT, MICH.

### MICHIGAN DEALERS WHO GIVE FREE TRIALS

ALPENA—Howe & MacDonald	CRYSTAL—Rinne & Mottes	KALAMAZOO—Monroe Music House	SAGINAW—J. E. Anderson Co.
BATTLE CREEK—Chas. E. Roat Music Co.	DETROIT—Bayley Music House	LANSING—M. J. & B. M. Buck	STURGIS—E. J. Namey
BAY CITY—Fowley's Drug Store	FLINT—Brownson-Myers, Inc.	LAPEER—J. N. Gardiner	SUNFIELD—E. E. VanAntwerp
Kahn's Music & Jewelry Store	GRAND RAPIDS—Wegner Bros.	LUBINGTON—Joseph Sahlmarm	TRAVERSE CITY—John P. Scott
I. W. Kopec	HILLSDALE—Goodrich & Hallock	MANISTEE—Martin Anderson	WEST BRANCH—Peoples Drug Store
BIG RAPIDS—W. A. Stillwell	HOLLAND—Cook Bros.	MONROE—Joseph Bros.	WOODLAND—John Bulling
BOYNE CITY—Watson Drug Co.	HOPKINS—Wolfinger & Gilligan	NASHVILLE—H. D. Wotring	YPSILANTI—Geo. D. Switzer
BUCHANAN—Emerson & Hamilton	HUBBELL—McDonald Bros.	ONTONAGON—H. Levine	
CALUMET—McLorgan & Pearce	IONIA—Krainbrink & Fuller	PERRY—J. C. Cottrell	
CARO—C. E. Mudge	IRONWOOD—Wm. D. Triplet	PLYMOUTH—Beyer Pharmacy	
CHEBOYGAN—W. W. Kathan	ITHACA—J. L. Barden	PONTIAC—Thomas Furniture Co.	
CLARE—Floyd Kirkpatrick	JACKSON—Desnoyer & Pen-dleton	PORTLAND—Crane Drug Co.	



WRITE YOUR NAME AND ADDRESS IN MARGIN  
BELOW AND MAIL COUPON TO NEAREST  
EDISON DEALER

Please send me the Amberola Book and particulars about your FREE TRIAL  
offer on Edison Amberolas



## Handle Water By Machinery

Figure the total cost of the labor-saving machinery you use in seeding and harvesting. It is money well spent, though you use this machinery only a few weeks in the year. Yet you still lug water by hand just as your grandfather did. Cut out this hard work and waste of time. Put in a water system and handle water BY MACHINERY. The

### Milwaukee Air Power Water System

works every day of the year and supplies tons of water "Direct from the Well" for cooking, scrubbing, washing—for watering the stock, for the bathroom and the dairy. It pays for itself in a year or two.

You can have hot and cold, hard and soft water anywhere you want it. Just turn a faucet. No pumping and carrying. No stale stored water and NOTHING TO FREEZE.

The MILWAUKEE PUMPS are remarkably simple and the whole system is as reliable as any other farm machinery. It is the best investment you can make.

Get this FREE Catalog

Also ask for the Information Blank, which enables you to learn just what a water system for your place will cost. Send postal today.

Milwaukee Air Power Pump Co.  
868 Third Street  
Milwaukee, Wisconsin

## No Money In Advance

### A FULL YEAR TO PAY



Nothing to pay for 60 days—then only first small payment if you accept our offer on famous Majestic Engine.

Most powerful engines for their H. P. rating. Any size you want. Fewest parts, most durable, most economical. You can prove it before you buy or send a penny. Thousands of Majestic Engines in use.

**30 Days Free Trial** We will send any size engine you want. Send no money in advance, take 30 days' trial, then if satisfactory keep the engine, make first payment 60 days after its arrival, pay balance in payments 30 days apart. Return the Majestic at our expense if not the best engine you ever saw. Send post card now for FREE CATALOG, prices, no money in advance easy terms and our special offer. Let us send you valuable inside facts about gas engines—all free. Write now.

4043 LaSalle Street  
THE HARTMAN CO., Dept. 1002 Chicago

## KITSELMAN FENCE

Get It From the Factory Direct

**HORSE-HIGH, BULL-STRONG, PIG-TIGHT.**

Made of Open Hearth wire heavily galvanized—a strong durable, long-lasting, rust-resisting fence. Sold direct to the Farmer at wire mill prices. Here's a few of our big values:

26-inch Hog Fence—24¢ a rod  
47-inch Farm Fence—35¢ a rod  
48-inch Poultry Fence—37¢ a rod

Special Prices on Galv. Barbed Wire and heights of Farm, Poultry and Lawn Fence at money-saving prices. It's free. Write for it today.

KITSELMAN BROS. Box 278 Muncie, Ind.

**FREE**

Wonderful Money Saving Fence Book. Over 150 styles. Gates—Steel Post—Barbed Wire. DIRECT FROM FACTORY—FREIGHT PAID. All heavy DOUBLE GALVANIZED WIRES. 13¢ per rod up. Get free Book and Sample to test.

THE BROWN FENCE & WIRE CO.,  
Dept. 49 Cleveland, Ohio

**FREE**

Don't buy until you get our prices and learn all about the best and cheapest fence to buy.

Keystone Steel & Wire Co. 2554 Industrial St., Peoria, Ill.

## BIG PROFITS NOW

In sawing lumber with our up-to-date saw mills. Make your engine earn money all year. Start now when the price of lumber is highest ever known, and the demand enormous. Don't miss the chance to make big money. Write for our FREE catalog C and prices.

R. R. Howell & Co., Mfrs., Minneapolis, Minn.

## Pick Your Own Beans

with one of our Lohr & Wildt bean pickers. Price \$5.50 Vassar. Why pay thirteen cents a pound for having your beans picked? Write The MILLER CO.

Vassar, Mich.

When writing to advertisers please mention The Michigan Farmer.

# Limitations of Direct Marketing

By JAS. N. McBRIDE, Michigan's Market Director

THERE is a story of a man who tried to change all the levels of his town to conform to the correct trade, and to straighten out the streets that deflected from right angles. Long established but diverse grades and angles resisted him to the end. Custom had so well established these conditions that the change could not be made. In like manner there are those who chafe under the fact that goods on their way to market travel a somewhat roundabout way.

The amount of direct marketing is relatively small although much effort has been made to increase it. The express companies at the time the parcels post was apparently going to cut into their business, established direct marketing. If one wants to try an express company now, he can consign his produce with or without any direction or destination and there will be no charge for selling or return of the money; just the transportation charges. You can also order them to buy anything you may want in the city, described as carefully as you can, and no charge beyond that noted above for the service. The express companies have handled peaches, fish, pecans and other products to great advantage, where the volume was reasonably concentrated, however, the business has not been great.

### Experience of U. S. Parcel Post.

The United States Post Office Department has done almost everything to secure parcel post service in food-stuffs. The rate is reasonable and deliveries prompt, but the volume here has been disappointing. These conditions are explainable when one analyzes the situation. The carload unit is the profitable one for industry where the volume is large. This great country allows, if not compels, collection in carloads, which make necessary personal attention in storage, handling and delivery.

A survey of the stocks on hand in the average retail grocery store discloses that eighty-five per cent are not susceptible of direct marketing but had

been manufactured, processed, or changed in form after leaving the producer. When the original producer has parted with his raw material, it appears on the grocers' shelves as butter, cheese, soap, cured meats, etc. The other fifteen per cent is susceptible of direct marketing, like vegetables, fruit, eggs, etc. These products just named are, however, not usually furnished the season through by the same grower, for when the supply of one grower or community is consumed, the trade seeks additional supplies in more remote places. This is the opportunity of the carload handler. The success of citrus fruit distribution has been and is because it can go to the consumer in its original form and does not have to be manufactured and will supply nearly the season through. California has established no special superiority in other lines of distribution than the citrus fruits. But California has kept that success so well in the mind of the public that the unthinking assume all industry is possible of similar operations. When one finds the citrus fruits and also the tropical in a general grocery stock, together with the eighty-five per cent of manufactured goods, there is left a rather small volume of goods for direct local marketing.

### Chain Stores Make Good.

The chain stores have figured this out and they seem to make good their claims that, with their facilities they can handle the whole line more economically than can the direct seller.

Then comes the direct personal touch or clientage. This is the field of the peddler, who is really an economic factor in selling and delivering. The peddler gets an assortment; usually a greater variety than it would be possible for any one producer to grow. He becomes an established tradesman, knowing his clientage and suiting his supply to their financial needs, tastes, and racial peculiarities. He has service reduced as cheaply as is possible. He cares for his own horse, selects his own goods on the general market, pays cash, keeps no books, and seems to have an added sense of gauging the load to dispose of at the minimum of waste. With the local grocery, which must supply the manufactured goods, and we will say the direct marketing possibilities as a side line, and the keen, personal cheap service of the peddler, it is little wonder that direct impersonal marketing has made little headway.

### Financiers Recognize Present System.

The farmer in this respect, has followed in about the same way that the manufacturer has. For example, the canner sells his product to the jobber, and he to the wholesale merchant, and the latter to the retail grocer. The mail order houses have made less inroads on the grocery trade than in other lines. This fact is rather strong confirmation of the difficulty of changing the situation. It is one of the inexplicables that since eighty-five per cent of the farmers' output must be manufactured, like flour, meats, feeds, textiles, leather, soap, canned goods, sugar, etc., that attention has been focused on the other fifteen per cent. The viewpoint of Mr. Hoover is most logical in that he devotes attention to the big portion and disregards the less part.

It is also noticeable that the great aggregations of capital have devoted their attention to the lines which are manufactured from the farmer's raw material. Whatever may be the reform and savings that may be made in direct marketing it is the very minor portion of the agricultural output that the remedy or reform can be applied to. Limited information on the subject has

made direct marketing a feature of plans and proposals in spite of the fact that it has been so limited in practice.

Th diversion from real consideration of market reforms that have been most effective in Europe has been largely accomplished by devotion to direct marketing, and to the adherence to the well worn platitude of "supply and demand making the price." A recent market conference in Chicago presided over by a university president after giving up four days of time to market subjects, solemnly resolved that they recognized the immutable law of "supply and demand." A convention that was assembled to reform the something that could not be changed, was rather unique, if not puzzled in mind. The use of the phrase noted has been used to obscure the fact that supply and demand are but two views of the same thing.

The important question is, then, whose view shall be taken, in the matter of price. There is the same apparent fairness in leaving the matter to supply and demand as there was in the choice given to the Indian, as to whether he should take the buzzard or the turkey. The Indian was shrewd enough to note that the white man always said buzzard to him. On the supply and demand theory—the seller has not seen clearly that it was the viewpoint, or the interpretation, of supply and demand by the buyer that made the price.

How Denmark broke away from this theory and put another in practice will be noted in the next article.

### LIVE STOCK NEWS.

Frank Johnson who was in the Chicago live stock market a short time ago for the purpose of buying some nice feeding cattle weighing around 700 to 800 pounds, remarked that the corn in his county was all soft and would have to be fed to stock held on the farms without any delay. Mr. Johnson said he was planning on wintering his stock on the soft corn and grass them in the spring, feeding them next autumn. The pig crop in his district varies a great deal, being good in some places and poor in others. Mr. Johnson said: "Now that the government has issued a statement of what it intends to do for the farmer, I expect the farmers of Bureau county will respond to the call by raising more hogs."

"Whatever the government says goes with us fellows," said Charles Laughlin, of Berrien county, Mich., who appeared in the Chicago market recently for the purpose of purchasing some springers, which he planned on getting a calf crop from and marketing the dams in the following autumn. He remarked that corn in that district was seriously damaged by the frosts, and it has to be fed at once to live stock on the farms where grown. Mr. Laughlin added: "We are glad to help Uncle Sam, and when he asked for more meat, our farmers, despite the fact that feed is short, started to produce more cattle, hogs and sheep. We have answered the call, as every farmer should."

Fixing the minimum price of packing hogs at \$15.50 has been a powerful factor in advancing corn values in the markets of the country, as it has caused more farmers to begin carrying hogs and other live stock. At times recently corn for December delivery has sold as much as 25 cents a bushel higher than a year ago, while the spread in prices for corn has been the widest ever known. This arises from the fact that much of the crop of corn is seriously damaged, with no end of soft corn and a serious scarcity of choice corn. Low grade corn has sold on the Chicago market as low as 50 cents a bushel, while high-grade corn has brought as high as \$2.25 on the same day. A vast quantity of new corn is unmarketable and has to be fed on the farms to stock, and large numbers of cattle and hogs have been turned into corn fields in Illinois, Indiana and Iowa. In Illinois and Indiana a great deal of frost bitten corn will bring the farmers as much as 50 cents a bushel, the food administration bureau having arranged to sell it to distillers for manufacturing alcohol for war munitions.



## Six Minute Pudding

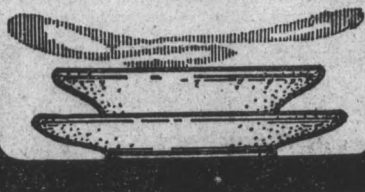
Here's a new one—a most delicious desert that can be made in a hurry.

To one and one-half cups of milk add one cup of

### Grape-Nuts

and one level tablespoonful of sugar, boil six minutes, cool and serve with milk or cream. Add raisins if desired.

Get a package of Grape-Nuts from your grocer and try this pleasing recipe.





## Feed Facts For Every Dairyman

Here are three out of hundreds of endorsements of International Special Dairy Feed, that prove our claim that International will produce more milk at a lower cost than any other feed.

### Read This Startling Story

**International Sugar Feed Co.,**  
Dundee, Ill.  
Gentlemen:—  
Beechwood Anna Hengerveld II was fed for an A. R. O. test. She started in one day and gradually increased daily to 81.1 pounds. She made 24.02 pounds of butter in this one week.  
Her feed during this week's test consisted of one-half International Special Dairy Feed, one-sixth middlings, one-sixth dried malt, one-sixth corn meal, and 2 pounds of alfalfa hay. She had all the corn stover, alfalfa hay and ensilage she could clean up.  
(Signed) A. H. KRAHN

### Saved \$50 Per Month

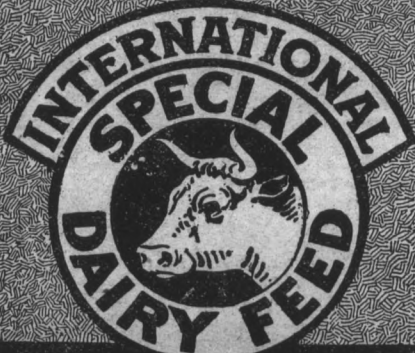
**International Sugar Feed Co.,**  
Lisbon, N. H.  
Gentlemen:—  
Six months ago we bought four cars of International Special Dairy Feed and three more since.  
I have been feeding it to my own herd of fifty cows in the place of wheat feeds and find a saving of 75 cents to \$1.00 per day on feed and have produced more milk daily.  
I have saved on the whole \$40.00 to \$50.00 per month.  
(Signed) EUGENE E. CLARKE

### Averaged 6,000 Lbs. Per Cow

**International Sugar Feed Co.,**  
Libertyville, Ill.  
Gentlemen:—  
I wish to state that I was milking from 30 to 40 cows—all grade cows. My milk production for the year was 229,731 pounds—an average of nearly 6,000 pounds per cow.  
My grain ration during this period consisted of three-fourths International Special Dairy Feed and one-fourth yellow gluten.  
I have never before or since found any ration to equal International Special Dairy Feed.  
(Signed) J. W. PARKYN

### Try a Ton Today

If your local dealer does not sell International, avoid substitutes and write to us.  
**International Sugar Feed Co.,**  
Minneapolis, Minn.



**It Makes More Milk**

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

**\$29** Buys the New Butterfly Jr. No. 2. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 35 quarts per hour. Made also in five larger sizes up to No. 8 shown here.  
30 Days' Free Trial. Earns its own cost if saves in cream. Postal brings free catalog, folder and "direct-from-factory" offer. Buy from the manufacturer and save money.  
**ALBAUGH-DOVER CO. (INC.)**  
1165 Marshall Blvd. CHICAGO

### BUTTER CHEESY AND STRONG.

I am having some trouble making butter. Can you give me some suggestions as to keeping cream from turning bitter and the butter tasting like cheese? I mean a trifle strong. I have made butter for about fifteen years, and was born on a farm, so it's not a new business to me, but try as I will I cannot make butter that is marketable right now. I have one cow, churn twice a week, get cream to the right temperature before churning, and especially clean about the pans, pails, etc. In fact, I do exactly as I have done before but with poor results.

Oceana Co.

A. M. B.

Cheesy flavor in butter may be due to the fact that the butter is not properly washed free of curd. If considerable curd is left between the granules, and is worked in with the salt, the flavor will be impaired. Bacteria thrive in this portion of the butter, and as the curd is broken down, a characteristic flavor of cheese becomes apparent.

Another cause of strong butter and of bitter cream may be in the feed. Where the butter is churned from the milk of one cow, this is more often noticeable. If the bitter flavor is apparent in the milk as soon as drawn, it is probably due to the feed of the cow. If, on the other hand, the flavor becomes noticeable some time after the milk has been drawn, it is likely due to a diseased condition of the cow's udder, and cannot be changed without drying up the cow. If account of these causes is taken, the remedy can undoubtedly be applied.

F. A. HAGADORN,

Instructor in Dairy Mfrs., M. A. C.

### A BALANCED RATION.

Will you kindly advise me what is necessary to add to feed to secure a balanced ration for milch cows? I have clover hay, oats and beets as principal feed. Have some cornstalks and oat straw.

Washtenaw Co.

J. D. H.

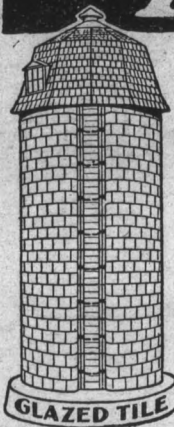
A ration composed of clover hay, oats, and with enough beets to furnish succulency, is a mighty hard ration to beat for results and at the present prices for all foods, I don't see how you are going to get a ration that will be any more economical.

There is no better roughage than clover hay. So far as nutriment is concerned, it is a balanced ration in itself, containing proteins and carbohydrates in just about the right proportion. There is nothing as a roughage better or cheaper.

No one has yet discovered any better grain ration for dairy cows than ground oats. Usually you can buy by-products from other grains like wheat bran or gluten feed, brewers' grains, etc., so one can afford to sell oats and buy some of these foods and thus cheapen his ration, but this year oats are about the cheapest food on the market. I don't know of any food that a man can buy where he will get any more for his money today than oats, and when you come to getting results for dairy cows you can safely put them up against anything. They are worth more than their food analysis would seem to indicate. There is a certain something in oats that you don't find in any other food. It seems to have the effect of a tonic and stimulates an animal to do its best. Not only that but there is no danger of a cow getting so she doesn't like ground oats. They seem to taste better day after day and they will eat practically all you care to give them and they are safe to feed. There isn't any food unless it is wheat bran that you can feed with greater safety than you can ground oats.

Of course, you haven't corn silage but this lack is very well supplied by beets. Beets will take the place of corn silage in every respect. Usually we would recommend for a farmer to raise corn silage in place of beets because he can raise so many more tons to the acre that it makes it a cheaper food, but when it comes to getting results, ton for ton, beets will hold their

## Put Your Faith In A Kalamazoo



A silo is a permanent investment, therefore purchasing a silo is not a question of paying a few dollars more or a few dollars less, but of getting a silo that is right—in design, in material, in construction.

"Kalamazoo" is the answer. For more than twenty-seven years thousands of successful farmers in all parts of America have put their faith in

### Kalamazoo TILE AND WOOD SILOS

"The World's Standard"

Last year alone upwards of six thousand new purchasers of silos unanimously decided in favor of the Kalamazoo. And those who bought twenty or more years ago still swear by the Kalamazoo because time and experience have proven conclusively that Kalamazoo silos are right, from every standpoint. There's a big dollar's worth of value in every dollar of the cost whether you buy a glazed tile or a wood stave Kalamazoo.

They're built to meet the needs of farmers who know and appreciate the feeding value of ensilage and know how a silo should be built to make and preserve ensilage right. Kalamazoo Silos excel in design, material and workmanship—combining every desirable feature a silo should have and embodying the knowledge acquired through long experience in silo building.

ing. You can't go wrong in buying a Kalamazoo.

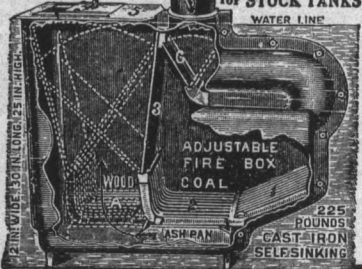
**GLAZED TILE SILOS**—"Permanent as the Pyramids"—fire-proof, frost-proof, storm-proof, moisture-proof, acid-proof, decay-proof, vermin-proof. Galvanized reinforcing. Require no paint, no upkeep expense or repairs. First cost is the last cost. Easy to build—and once built your silo problem is solved forever.

**WOOD STAVE SILOS**—Your choice of four of the best time-defying woods. Kalamazoo Silos are manufactured complete ready to set up. Quickly and easily erected by inexperienced home labor. All Kalamazoo Silos, whether wood or tile, have the famous Kalamazoo Galvanized Steel Door Frames and continuous doors which are universally recognized as the best ever designed.

Write Today for our free descriptive booklet and details of our easy payment plan. If interested in an Ensilage Cutter, ask for Kalamazoo Cutter Catalog.

**KALAMAZOO TANK & SILO CO. DEPT. 223 Kalamazoo, Mich.**

### COW BOY SURE HEATER



### DON'T WASTE GRAIN

SAVE IT this winter by heating the water for your stock with Coal, Wood or Cobs in a **COW BOY TANK HEATER**

Quickest to heat; strongest draft; adjustable grates; ashes removed without disturbing fire; keeps fire 24 hrs. Absolutely Safe; pays for itself in 2 months with 4 Wood, Steel or Concrete Tanks of any size. Most reliable, practical, efficient and durable Tank Heater manufactured.

"Purchased 3 of your Tank Heaters last Winter, worked very satisfactory and are well worth their cost. Every Stockman should use one."  
(Signed) W. H. PEW,  
Professor of Animal Husbandry, Iowa State College, Ames, Iowa  
Get a Heater early. Write at once for illustrated circulars and dealer's name.  
**THE WILLS MFG. CO., 56 Seventh St., Mendota, Ill.**

### A Better Feed-Mill GUARANTEED

The greatest invention in feed mill history—has won out in all contests. You will not know what a feed mill can actually do until you see a United Mill grinding. United grinds all grains—oats in hulls—corn on cob—better, finer, faster and cheaper than with any other mill produced.

### UNITED Ball Bearing-Shear Cut

Takes less power. Has self-sharpening, self-aligning, oscillating, noiseless, long life grinding plates. Force feed instead of gravity. Great capacity. Non-clogging, unbreakable. Learn why the United is America's Greatest Value. Write today.

**UNITED ENGINE COMPANY**  
Dept. F-91  
Lansing, Mich.



Sores, cuts, chaps, bruises, cracks, bunches, cow pox, fever spots and other udder troubles promptly clear up when Bag Balm is used. Sold by druggists and feed dealers in large 50c. packages. Booklet, "Dairy Wrinkles," free.

**BAG BALM**  
MADE BY THE ROW-KURE PEOPLE  
Dairy Association Co., Lyndonville, Vt.

### Quaker City Feed Mills

Grind corn and cobs, feed, table meal and alfalfa. On the market 50 years. Hand and power. 23 styles. \$4.80 to \$40. FREE TRIAL. Write for catalog.  
**THE A. W. STRAUS CO.**  
Dept. 6-3727-31 Filbert St., Philadelphia, Pa.  
Dealers—Write for contract.

### BOWSHER

#### FEED MILLS GIVE BEST RESULTS

Handy to operate, lightest running. Crush ear corn (with or without shucks) and grind all kinds of small grain. 10 sizes 2 to 25 H. P., capacity 6 to 200 bushels. Conical shaped grinders—different from all others. Investigate.

Write for Catalog that tells all about them, with free folder about values of different feeds and manures.

**D. N. P. BOWSHER CO.**  
South Bend, Ind. 1B

### SELF-OILING WINDMILL

With INCLOSED MOTOR Keeping OUT DUST AND RAIN—Keeping IN OIL

**SPLASH OILING SYSTEM** Constantly Flooding Every Bearing With Oil, Makes It Pump In The Lightest Breeze And Prevents Wear

**OIL SUPPLY REPLENISHED ONLY ONCE A YEAR**

**DOUBLE GEARS**—Each Carrying Half the Load Every feature desirable in a windmill in the **AUTO-OILED AERMOTOR** Gasoline Engines—Pumps—Tanks Water Supply Goods—Steel Frame Saws

**WRITE AERMOTOR CO. 2500 12TH ST., CHICAGO**

### SAW YOUR WOOD

**RUNS EASY** No Backache weighs only 45 lbs. **SAWS DOWN TREES** EASILY CARRIED

With a **FOLDING SAWING MACHINE**, 9 CORDS by ONE MAN in 10 hours. Send for Free catalog No. E 44 showing low price and latest improvements. First order secures agency. **Folding Sawing Mach. Co., 161 W. Harrison St., Chicago, Ill.**

**Free Catalog** in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today. **Electric Wheel Co., 35 Elm St., Quincy, Ill.**



own, and when it comes to the question of digestibility and palatability, there is no succulent food that is superior to beets, and so I think that J. D. H. has got for this year the foods right at hand that will give him the best results in quantity of milk and in cost of production.

He could feed one feed of cornstalks a day until they are gone and then one feed a day of oat straw. Such a roughage feed with clover hay and ground oats, ought to balance up his dairy ration very satisfactorily. He will get just as good results as he would with anything.

The cows may be forced to give a little more milk if you add gluten feed or cottonseed meal or oil meal, giving them extra protein. But with the ration you have these foods would furnish more protein than the animals really require and while you can get an increased yield of milk it would increase the cost of the ration.

COLON C. LILLIE.

#### A RATION WITH CORNSTALKS.

In the Michigan Farmer two weeks ago you gave a ration which included soft corn. I have little or no corn, about six acres of cornstalks, lots of oats, some barley and hay. Two of my cows are mature grades which have produced from 1,200 to 1,400 pounds of milk up to last month. The test has been from 4 to 4.4. One is now fresh, the other will be about April 1. The others are fresh heifers. Can you recommend a bulletin or book on the subject of feeds and bran to make up a balanced ration?

Kent Co.

L. B.

While cornstalks do very well for a supplemental food in a ration they are not very good to be fed as the main roughage food. They contain too much crude fiber. In other words, there is such a large per cent of them that is indigestible, and yet, we want to feed cornstalks and get all the value out of them that we can, but to get best results they should only be fed as a supplemental food, making the main dependence on hay or corn silage for the roughage. Soft corn, stalks and all, would be a much better food than the cornstalks alone. With hay as the main dependence and then with cornstalks as a supplemental food you can get along very nicely for the roughage.

Plenty of oats and barley make a splendid grain ration. Under normal times, these foods are so high-priced compared with the by-products of other grains like wheat bran, gluten feed, brewers' grains, etc., that we can well afford to sell them and use the money to buy these by-products. Now, however, under these abnormal war conditions, oats and barley seem to be about as cheap foods as we can get and there is nothing better for cow food. If I had plenty of barley to go with oats I would grind them equal parts. If you have more oats than barley then you could mix two-thirds oats and one-third barley.

Unless your hay is clover hay or alfalfa hay, these foods will hardly furnish a sufficient amount of protein and I would add a food rich in protein to the grain ration. You can use wheat bran, mixing your grain ration 300 lbs. of oats to 100 lbs. of barley and 100 lbs. of wheat bran, or you could substitute 100 lbs. of gluten feed and it would be a little better. Then if you will feed your cows about one pound of grain per day for every three pounds of milk they give, I think you will get good results. If you have been feeding sparingly of grain it would be well to begin with a smaller ration and gradually increase it until the cows are accustomed to the larger portions.

COLON C. LILLIE.

Because you are the king of a nation it does not follow that you are to gather for yourself all the wealth of that nation.—Ruskin.

In this issue appear the first installments of "Inside the Lines" and "The Grizzly King." See pages 571 and 581.



Jolie Topsie De Kol, H. F. 149723  
Age 5-11-12 (City of Cleveland, Owner)  
Semi-Official Year Test  
29221.5 lbs., Milk 3.52% 1032.37 lbs. Fat



Royalton De Kol Violet, H. F. 86460  
Age 10 Years (H. A. McQuillan, Owner)  
Semi-Official Year Test  
29959.6 lbs. Milk 3.46% 1036.45 lbs. Fat

## Year tests that Count

These wonderful semi-official records are only a few of a large number of genuine high production tests made under normal conditions with UNICORN DAIRY RATION used as the entire or largest part of the grain ration. They are in no sense forced or freak records as shown by the normal fat percent and the perfect health of these cows and all herds fed on Unicorn Dairy Ration.

Every breeder knows Ajax Flakes (made exclusively by us for years.) Conditions forced us to withdraw it from the market except as one of the ingredients of Unicorn. You will find Unicorn equally efficient as your ration or ration base.

If you have good cows that you want to make even better

### Unicorn Dairy Ration

offers you the chance, without extra cost, in fact most likely at a considerable saving.

With an average cow we guarantee a reduction in the feed cost of your milk. Give them a chance - if fed right with Unicorn Dairy Ration they will surprise you.

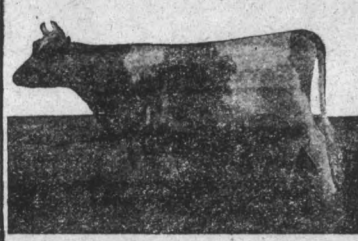
Unicorn can be obtained by any dairyman or breeder east of the Missouri river no matter where located. Every bag is equally uniform and good no matter where you get it.

Write for information and **FREE** copy of Cow Testers' Manual.

Chapin & Co., Dept. M Chicago



Abbie of Riverside,  
Champion Guernsey of Michigan  
Fred Gleason, Owner  
14201 lbs. Milk 5.72% 813 lbs. Fat



Follyland Nancy A. R. No. 5266  
Best 2 year old in New York  
Follyland Farm Guernseys  
12270 lbs. Milk 5.81% 712.6 lbs. Fat

### Easy to figure the Profits

Where in Western Canada you can buy at from \$15. to \$30. per acre good farm land that will raise 20 to 45 bushels to the acre of \$2. wheat—it's easy to figure the profits. Many Western Canadian farmers (scores of them from the U. S.) have paid for their land from a single crop.

Such an opportunity for 100% profit on labor and investment is worth investigation. Canada extends to you a hearty invitation to settle on her

#### FREE Homestead Lands of 160 Acres Each

or secure some of the low priced lands in Manitoba, Saskatchewan or Alberta. Think what you can make with wheat at \$2. a bushel and land so easy to get. Wonderful yields also of Oats, Barley and Flax. Mixed Farming and cattle raising.

The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature and particulars as to reduced railway rates to Supt. Immigration, Ottawa, Canada, or to

**M. V. McINNES,**  
178 Jefferson Ave., Detroit, Mich.  
Canadian Government Agent.

### Build with Natco

A Hollow Tile that's fire-safe, wind, weather and vermin proof. Natco buildings "Last for Generations"—save painting and repairs. The glazed walls are as easy to keep clean as the household crockery. Reduced repair, coal and insurance bills make Natco buildings truly economical. Ask your building supply dealer for free building plans, but write direct for new illustrated "Natco on the Farm" book—1918 Edition—It's free!

23 Factories assure a wide and economical distribution.

**National Fire Proofing Company, 1115 Fulton Bldg., Pittsburgh, Pa.**

### WITTE

"Kero-Oil" Engines

Immediate Shipment—All Styles—2 to 22 H.P.—No Waiting—Big Factory—Big Output—Prices most favorable. Write for my terms and prices—Cash, Payments or No Money Down.—ED. H. WITTE, Pres.

**WITTE ENGINE WORKS**  
2192 Oakland Ave., Kansas City, Mo.  
2192 Empire Bldg., Pittsburg, Pa.

**I Save You \$15 to \$200**

We want to Buy **BARLEY** Send us Samples

**YOUNG-RANDOLPH SEED CO., Owosso, Mich.**

**TIMOTHY SEED** \$4.00 per bushel. High purity and germination, first class in every way. Timothy-Alsike Mixture \$4.50 per bushel, 45 lbs. Bags extra at 25c. each.

**YOUNG-RANDOLPH SEED CO., Owosso, Mich.**

### OF KNOWN VALUE

#### STANDARD FARM PAPERS

#### BEST FOR THE READER

#### THEREFORE BEST FOR THE ADVERTISER

	Guaranteed Circulation	Rate Per Agate Line
Michigan Farmer, Detroit, Mich. (Rate 40c per line.)	230,000	\$1.17
Ohio Farmer, Cleveland, Ohio. (Rate 60c per line.)		
Pennsylvania Farmer, Philadelphia, Pa. Rate 30c per line.)	50,000	.30
Indiana Farmer, Indianapolis, Ind.		
The Progressive Farmer, Birmingham—Raleigh Dallas—Memphis. Breeder's Gazette, Chicago, Ill.	174,121	.80
Prairie Farmer, Chicago.	90,000	.70
Hoard's Dairyman, Ft. Atkinson, Wis.	113,500	.60
Wisconsin Agriculturist, Racine, Wis.	67,820	.45
The Farmer, St. Paul, Minn.	62,000	.35
The Farmer's Wife, St. Paul, Minn.	140,000	.60
Wallace's Farmer, Des Moines, Ia.	750,000	3.00
Pacific Rural Press, San Francisco, Cal.	71,000	.40
	28,000	.17½
<b>Total</b>	<b>1,776,441</b>	<b>\$8.54½</b>

These publications are conceded to be the authoritative farm papers of their individual fields. For further information address

**GEORGE W. HERBERT, Inc.**  
Western Representative, 1341 Conway Bldg., CHICAGO, ILL.

**WALLACE C. RICHARDSON, Inc.**  
Eastern Representative, 381 Fourth Ave. NEW YORK CITY.



# Magazine Section

LITERATURE  
POETRY  
HISTORY and  
INFORMATION

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

The FARM BOY  
and GIRL  
SCIENTIFIC and  
MECHANICAL

This Magazine Section forms a part of our paper every week. Every article is written especially for it, and does not appear elsewhere

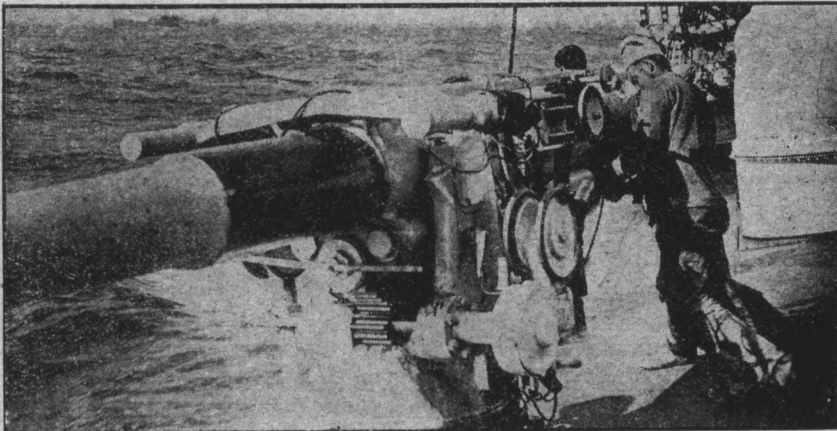
## WORLD EVENTS IN PICTURES



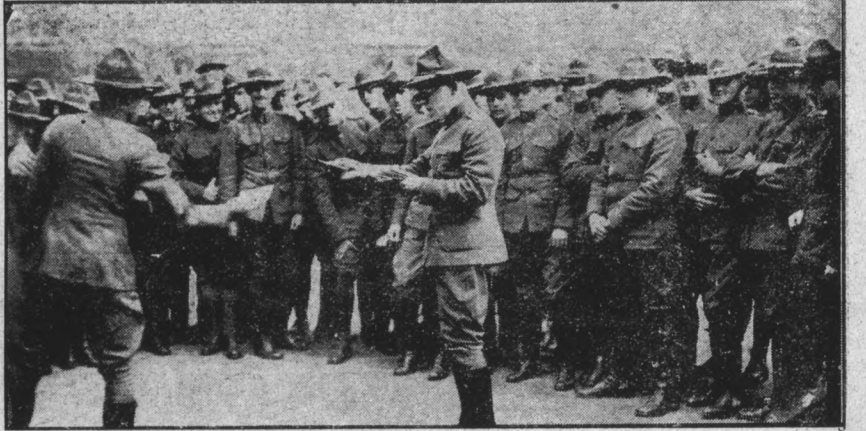
Remarkable Photograph of a French Raiding Party Making a Successful Attack on the German Lines in the Campaign Sector.



The Easy Marching Stride and the Free Play of the Shoulder Muscles of the American Soldiers Are Commented upon Wherever they go in France.



A Warm Welcome Awaits the U-Boat that dares to Poke its Periscope Above the Surface within Range of this American Gun.



Distributing Mail Among American College Men in an Aviation Section Undergoing Training "Somewhere in France."



Lone French Lancer on Guard to Detect Slightest Movement of Enemy.



Making Steel Helmets in an American Manufacturing Plant for Our Soldier Boys to Wear on the Fighting Lines in Europe.



Brig.-Gen. Scriven Visits Italian Front for American Government.



An Italian Mobile Anti-aircraft Gun Displaces Larger Ordnance in Guarding Venice from Foe, Whether he Comes by air or Overland.



American Congressmen See Teacher Give Instructions to Blind Scholar who is Learning to Operate a Typewriter.



## CATTLE

**FOR Sale** One registered Holstein bull calf. Sire's twenty nearest dams have 7 da. records av. 25.58 lb. butter. Dam to be tested. A finely marked, growthy individual. Long View Farm, R. 3, Box 10 A, Rochester, Mich.

**2 CHOICE** Holstein bulls nearly old enough for service. No. 1 born January 24, 1917, sire's dam, grand-dam and great grand-dam's semi-official records average 342 lbs. butter. Dam of calf 18 lbs. butter 7 days as senior 2yr. old, average per cent fat 4.3. No. 2 Sired by 23 lb. bull and out of a 14 lb. junior 2-yr. old. O. L. BRODY, Owner, Port Huron, Mich. Chas. Peters, Herdsman, Three Rivers, Mich.

## Butter Fat Counts

Holstein Bull Calves from a 30 lb. 6.53 Sire. Dam are grand daughters of the King of the Pontiacs. Their dams grand daughters of Sadie Vale Concordia ch. first 30 lb. cow. Edwin S. Lewis, Marshall, Mich.

Most Milk Per Dollar  
Pure Bred **HOLSTEIN COWS**

Give largest yields of milk and butterfat of any breed. They give the greatest return for every dollar spent. Write for information—free—we sell nothing.

THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA, Box 164, Brattleboro, Vt.

## How Would You Like

a son of a 30 lb. bull from a daughter of Traverse Cadillac Lad? That is what we offer you this week for \$50. Can you beat it? E. M. PIERCE & SON, Manchester, Mich.

**Holstein** Bull Calf born Mar. 7, fine individual a prize winner from 29.62 lb. Sire and 23.30 lb. 4 yr. old dam. Price low. A. F. LOOMIS, Owosso, Mich.

**Holstein** cows for sale, 10 head highest class, registered stock. Write for particulars to E. P. KINNEY, Lansing, Mich.

**Reg. Holstein** bull and heifer calves for sale Extra heavy milking dams. C. L. HULETT & SON, Okemos, Mich.

Bull calves sired by a double g-son of Friend Hengerveld De Kol Butter Boy from dams of the greatest yearly record breeding. Write for photos and prices & etc. Ontonagon Valley Holstein Farm, Bruce's Crossing, Mich.

**Reg. Holstein** Bull Calves Pontiac Korndyke and Hengerveld De Kol Breeding at Farmers Prices. John A. Rinke, Warren, Mich.

Fine Reg. Holstein bull calf. Born Nov. 28, about half white. Mother & father's dams have A. R. O. records. Price \$30. Chas. L. Cook, Box 77, Fowlerville, Mich.

Owosso Korndyke Hengerveld, grandson of Friend Hengerveld De Kol Butter Boy, 4 yrs. old, three nearest dams av. 27.75 lbs. for sale or exchange, bull calves from A. R. dams. John Hutchinson & Son, Millbrook, Mich.

**Reg. Holstein** bull calf strong in Segia. Korndyke & R. De Kol blood. Nicely marked. First check for \$50 takes him. M. H. Chamberlain Jr., Romeo, Mich.

**HEREFORDS****ALLEN BROS.**

PAW PAW, MICH.

**Herefords** Bob Fairfax 494027 at head of herd. Stock for sale. Both sexes either polled or horned. EARL O. McCARTY, Sec'y Mich. H. B. Ass'n, Bad Axe, Mich.

**FOUR HEAD** HEREFORD BULL CALVES ready for service. Eligible to register. HERTLER BROS., Saline, Mich., on Electric Car Line.

**Hillside** Farm Jerseys for sale. Yearling bull backed on both sides by Register of Merit dams. His four nearest dams average over 600 lbs. of butter. C. & O. DEAKE, Ypsilanti, Michigan.

**Jersey Bulls for Sale** from high-producing dams, with testing Assoc. records, also on semi-official test. O. E. Wehner, R. 6, Allegan, Mich.

**Jersey Bulls For Sale** Ready for service. Raleigh -- St. Lambert breeding. Waterman & Waterman, Packard Rd., Ann Arbor, Mich.

**Lillie Farmstead** Jersey Cattle. 3 bulls, ready for service, on both sides by Register of Merit dams. On next fall. Colon C. Lillie, Coopersville, Mich.

**For Sale** Two registered Jerseys bull calves. Splendid individuals. Good pedigrees. Priced to sell. Long View Farm, R. 3, Box 10 A, Rochester, Mich.

**FOR Sale** 3 cows, 3 yrs. old with records, 1 heifer, 2 yrs. old, 2 heifers 1 yr. old, 2 heifer calves, 1 bull 6 mo. old out of an imported daughter Noble of Oakland. For price and pedigrees write. FRED A. BRENNAN, Sec., Capac, Mich.

**FOR Sale**—Maple Lane R. of M. Jersey Herd R. of M. cows and their daughters all records 500 and 600 lbs. For sale bulls and bull calves out of these cows. IRVIN FOX, Allegan, Mich.

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

**FOR SALE** Registered Jersey bulls, ready for service. SMITH and PARKER, R. 4, Howell, Mich.

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

**FOR Sale**—Reg. Short Horn Bulls by Maxwalton 2nd, a son of Avondale, from 1 to 12 mos. old. John Schmidt, Reed City, R. No. 5, Michigan.

**Shorthorns**—Dairy or beef bred. Breeding stock all ages for sale at farmers prices. C. W. Orum, Secy. Cent. Mich. Shorthorn Breeders' Ass'n., McBride, Mich.

**SHORTHORNS** Maple Ridge Herd, Established 1887. No stock for sale. J. E. Tanswell, Mason, Michigan.

**BIDWELL SHORTHORNS** For Beef and Milk.

5 Bulls ready for service, 15 months to 2 years, for sale; also good Scotch-topped cows and heifers. Modern, sanitary equipment. One hour from Toledo, Ohio. N. Y. O. E'y. Visitors Welcome. Write us.

**BIDWELL STOCK FARM** Box B, Tecumseh, Michigan.

**Shorthorns** for sale, 5 bulls Scotch top 10 to 14 mos. 3 roan, 1 white, 1 red, price \$150 to \$250. 1 son of Maxwalton Sultan, 19 mos. \$350. O. Carlson, Leroy, Mich.

**Bates Shorthorns** the original milk strain young bulls 8 mos. old for sale. Price \$150 to \$200. J. B. HUMMEL, Mason, Mich.

What Do  
Hirth-Krause  
Shoes Mean to You?

Hirth-Krause shoes are marketed under several trade marks. The two illustrated here are our leaders.



The "Rouge-Rex" trade mark is on Hirth-Krause shoes for the man who works. We have a large tannery where we tan all the leather which goes into "Rouge-Rex" shoes. We know the quality of the leather, perfected in our tannery, by our own process and for that reason when we say that "Rouge-Rex" shoes are the best you can possibly get for the money, we are ready and willing to back up our statement with an absolute guarantee of good service, perfect fit and durability.

Hirth-Krause shoes under the "Playmate" trade mark are made for the miss and little man with growing feet.



They are made for those who take many steps a day and who demand absolute comfort from the shoes they wear.

Hirth-Krause shoes under any trade mark are always the biggest possible values for the money. No matter what you pay for your shoes or where you get them, you cannot get better shoes for the money anywhere than from the Hirth-Krause dealers. We urge you to buy Hirth-Krause shoes for all the members of your family. The Hirth-Krause line is complete and you will have no trouble in finding shoes to suit your requirements.

If you do not know who your nearest Hirth-Krause dealer is, kindly write us and we will tell you where you can get Hirth-Krause shoes.

**HIRTH - KRAUSE CO.**

Hide-to-Shoe Tanners and Shoe Mfgs.

Grand Rapids, - Michigan

**APOLLO ROOFING**

Made from highest quality APOLLO-KEYSTONE Copper Steel Galvanized Sheets, in all standard patterns of Formed Roofing and Siding Products.

These products are fireproof, durable, reasonable in cost, satisfactory—accept no substitute. Sold by weight by leading dealers everywhere. Look for the Keystone added below Apollo stencil, indicating that Copper Steel is used. APOLLO-KEYSTONE Copper Steel Galvanized Sheets are unexcelled for Roofing, Siding, Culverts, Silos, Closets, Tanks, Flumes, Sheds, Bins, and all forms of exposed sheet metal work. Write for a free copy of our "Better Buildings" booklet containing building plans and valuable information. AMERICAN SHEET AND TIN PLATE COMPANY, General Offices: Frick Building, Pittsburgh, Pa.

**Shorthorns.** Bulls 9 mos. to 12 mos. old from osnable. COLLAR BROS., R. 2, Conklin, Mich.

**Milking Shorthorns.**—Bull calf 5 mos., by a Grandson of General Clay, dam by a son of General Clay. \$150. A few females. S. E. BOOTH, Morrice, Mich.

**Registered** Shorthorn calves sired by Diamond King 2nd, 49475, both sexes \$150. Twenty cows. WM. J. RELL, Rose City, Mich.

**For Sale** Shorthorns Bulls 6 mo. to 2 years old from good milking cows. R. B. Clyde Station, H. J. DeGarmo, R. 6, Milford, Mich.

**Shorthorns** both sexes, herd catalogue mailed free. CHARLES R. HORRIE, Hart, Mich.

**HOMESTEAD FARMS**

We have for immediate delivery the following thoroughbred registered stock: Shorthorn Durhams, Milking strain Scotch topped, one roan cow, Marv Bell, 13419, seven yrs. old, with calf by Maplewood Martin, 53704. One heifer calf, Apr. 19, 1917, registered. Bates milking strain. Advance orders for spring calves, both sexes. Holsteins—Bull 6 weeks old. Sire Bell Boy Rosalind, 148544; Dam Queen Caroline 2nd, 161807, H. F. H. B. well marked. Also spring calves. Jerseys—advance orders for bull calves. Blood lines on application. Registered Hogs—A limited number of Hampshires and Duroc Jerseys. Write for full description: let us know what you want. HOMESTEAD FARMS, Bloomingdale, Mich.

**SHORTHORNS.** Butterfly Sultan, half brother to International Sr. Champion, in service. For good bulls, cows, and heifers. W. B. McQuillan, Howell, Mich.

**For sale:** Reg. Shorthorns. Two Roan bulls, one 15 mos. one 9 mos. and one Red heifer 13 mos. old. J. A. BATCHELOR, Howell, Mich.

**Cattle For Sale**

9 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 Shannum, Fairfield, Iowa. R-3.

Additional Stock Ads. on Page 596

How the World's Business Is  
Transacted - By COMFORT A. TYLER

**I**N this new department of the Michigan Farmer, which the editor has chosen to name "How the World's Business is Transacted," the writer, who is not entirely a stranger to the readers thereof, hopes to make plainer to the young folks of the family some of the things that look intricate and difficult to those who have never taken the time or had the chance to give it especial study.

I well remember as a boy how I looked with something of awe, upon the man who stood behind the wicker in the village bank. I thought he must be some kind of a different "animal" than those who went to and fro in the ordinary every-day business, and I hope in this series of articles to make plain to every boy and girl that this is not so, and that they will find him very human indeed and usually the most willing man whom they have ever met, to chat with them when he has the time, and give them any and all information of which he has knowledge. I want also to have them remember that while the banker no doubt knows a lot of things that they do not know, that they, on the other hand, also know a lot of things that he does not know, and that just as likely as not he may gain as much from the little visits as do you. This being so, I want our boys and girls to edge right up to him with their wants and needs just as readily as they would to the sweet little girl that sells you candy at the counter in the "Palace of Sweets."

It seems to me that the bank and banker of today is a far different outfit, than when I was a boy. Whether this is really true, or whether it is because I know him better and have some small knowledge of his "inside" life, his joys and his sorrows, his pleasures and his perplexities, I am not quite sure. What I do believe is, that there is no man more willing or more anxious to render service to his community, to be really useful to his patrons, to help them over the hard places, to glory over their successes or to regret their failures (sometimes he has several reasons for regretting their failures) than is the banker of today, and especially is this true of the banker in the smaller places and country towns. He knows more about you than any other man in the community. He will give you honest advice in an emergency, he will warn you against yourself or your despoiler and you may well make him your friend. It has been my good fortune to become acquainted with many bankers in my business life and with this knowledge I repeat that no man in the community will be a more faithful friend or will do more for you than will the banker.

I wanted to spend the most of our time in the first article in making these observations because I have frequently found that many times there is a feeling with our Farmer boys and girls that they must hold a little aloof from the banker. Don't do it my friends, cultivate him instead, edge right up, rub elbows with him, see how much he knows about calves and colts and lambs and pigs and chickens, and no doubt you will find that you have aplenty "on him" along that line and that he will be glad to know some of the things you can tell him. Then when you have become acquainted he will also be glad in turn to tell you many things about business methods, that you do not know. The time is past, if indeed it ever existed, when the farmer boy can afford to do business in a helter skelter, unsystematic way and I am just as anxious that our girls

shall learn all of these things, as the boys.

I am a little sensitive, in fact, along this line, for my boys were all girls, you know, and I expect I love them just as well as if they had been boys—and I think they know more about business than some whole families of boys I have seen. Why? Because they learned it, and I want the whole Michigan Farmer family of boys and girls to learn business methods in a business-like way and the best way in the world to learn it is to do the business you have to do in the right way, in the right place, at the right time, and in our future articles we shall endeavor to tell you first something about what money is, what it is for, what a small part it really plays in the world's business, what confidence does in the business world, and how to build up and establish confidence for yourself in the little sphere in which you move, for no one moves in a very wide circle. The world is small and we never get very far away from ourselves.

With this little declaration of our aims we will await eagerly the space to begin our real work and if from time to time we do not make entirely plain or clear to you, that which we undertake, both the writer and the Michigan Farmer wants you to write the department and ask any and every question you can, the answer to which will make it plainer. Now don't think your questions will seem simple, it is the simple things that look the hardest sometimes. Ask questions about the things you do not understand and in this way only we shall be able to be useful to you. We expect to visit with you each week from now on, and will look forward with great pleasure to our renewed acquaintance with Michigan farm boys and girls.

## A WINTER BOY.

BY LALIA MITCHELL.

I like cold dasy and frosty ways  
And heaps of drifted snow;  
I like to hear the sleighbells clear  
Ring out where'er I go.



To skate and slide and coast and glide  
Is such a lot of joy;  
And that's the way, my parents say  
With each true Winter Boy.

I do not quake when tempests make  
The forests bend and bow,  
No in-door play for me today  
I'm happy hearted now.  
A fort of snow, of guns a row,  
Surrender! and Ahoy!  
Through storm or shine the world is mine  
For I'm a Winter Boy.



# Inside the Lines

By EARL DERR BIGGERS & ROBERT WELLES RITCHIE

Copyright by The Bobbs-Merrill Co.

## First Instalment of Our New War Serial

### CHAPTER I.

Jane Gerson, Buyer.

**I** HAD two trunks—two, you ninny! Two!

The grinning customs guard lifted his shoulders to his ears and spread out his palms. "Mais, mamselle—" "Don't you 'mais' me, sir! I had two trunks—deux trons—when I got on board that wabby old boat at Dover this morning, and I'm not going to budge from this wharf until I find the other one. Where did you learn your French, anyway? Can't you understand when I speak your language?"

The girl plumped herself down on top of the unhasped trunk and folded her arms truculently. With a quizzical smile, the customs guard looked down into her brown eyes, smoldering dangerously now, and began all over again his speech of explanation.

"Wagon-lit?" She caught a familiar word. "Mais oui; that's where I want to go—aboard your wagon-lit, for Paris. Voila!"—the girl carefully gave the word three syllables—"mon ticket pour Páree!" She opened her patent-leather reticule, rummaged furiously therein, brought out a handkerchief, a tiny mirror, a packet of rice papers, and at last a folded and punched ticket. This she displayed with a triumphant flourish.

"Voila! Il dit 'Miss Jane Gerson'; that's me—moi-meme, I mean. And il dit 'deux trons'; now you can't go behind that, can you? Where is that other trunk?"

A whistle shrilled back beyond the swinging doors of the station. Folk in the customs shed began a hasty gathering together of parcels and shawl straps, and a general exodus toward the train sheds commenced. The girl on the trunk looked appealingly about her; nothing but bustle and confusion; no Samaritan to turn aside and rescue a fair traveler fallen among customs guards. Her eyes filled with trouble, and for an instant her reliant mouth broke its line of determination; the lower lip quivered suspiciously. Even the guard started to walk away.

"Oh, oh, please don't go!" Jane Gerson was on her feet, and her hands shot out in an impulsive appeal. "Oh, dear; maybe I forgot to tip you. Here, attende au secours, if you'll only find that other trunk before the train—"

"Pardon; but if I may be of any assistance—"

Miss Gerson turned. A tallish, old-young-looking man, in a gray lounge suit, stood heels together and bent stiffly in a bow. Nothing of the beau or the boulevardier about his face or manner. Miss Gerson accepted his intervention as heaven-sent.

"Oh, thank you ever so much! The guard, you see, don't understand good French. I just can't make him understand that one of my trunks is missing. And the train for Paris—"

Already the stranger was rattling incisive French at the guard. That official bowed low, and, with hands and lips, gave rapid explanation. The man in the gray lounge suit turned to the girl.

"A little misunderstanding, Miss—ah—"

"Gerson—Jane Gerson, of New York," she promptly supplied.

"A little misunderstanding, Miss Gerson. The customs guard says your other trunk has already been examined, passed, and placed on the baggage van. He was trying to tell you that it would be necessary for you to permit a porter to take this trunk to the train before time for starting. With your permission—"

The stranger turned and halloed to a porter, who came running. Miss Gerson had the trunk locked and strapped in no time, and it was on the shoulders of the porter.

"You have very little time, Miss Gerson. The train will be making a start directly. If I might—ah—pilot you through the station to the proper train shed. I am not presuming?"

"You are very kind," she answered hurriedly.

They set off, the providential Samaritan in the lead. Through the waiting-room and on to a broad platform, almost deserted, they went. A guard's whistle shrilled. The stranger tucked a helping hand under Jane Gerson's arm to steady her in the sharp sprint down a long aisle between tracks to where the Paris train stood. It began to move before they had reached its mid-length. A guard threw open a carriage door, in they hopped, and with a rattle of chains and banging of buffers the Express du Nord was off on its arrow flight from Calais to the capital.

The carriage, which was of the second class, was comfortably filled. Miss Gerson stumbled over the feet of a puffy Fleming nearest the door, was launched into the lap of a comfortably upholstered widow on the opposite seat, ricocheted back to jam an elbow into a French gentleman's spread newspaper, and finally was catapulted into a vacant space next to the window on the carriage's far side. She giggled, tucked the skirts of her pearl-gray duster about her, righted her chic sailor hat on her chestnut-brown head, and patted a stray wisp of hair back into place. Her meteor flight into and through the carriage disturbed her not a whit.

As for the Samaritan, he stood uncertainly in the narrow cross aisle, swaying to the swing of the carriage and reconnoitering seating possibilities. There was a place, a very narrow one, next to the fat Fleming; also there was a vacant place next to Jane Gerson. The Samaritan caught the girl's glance in his indecision, read in it something frankly comradely, and chose the seat beside her.

"Very good of you, I'm sure," he murmured. "I did not wish to presume—"

"You're not," the girl assured, and there was something so fresh, so ingenious, in the tone and the level glance of her brown eyes that the Samaritan felt all at once distinctly satisfied with the cast of fortune that had thrown him in the way of a distressed traveler. He sat down with a lifting of the checkered Alpine hat he wore and a stiff little bow from the waist.

"If I may, Miss Gerson—I am Captain Woodhouse, of the signal service."

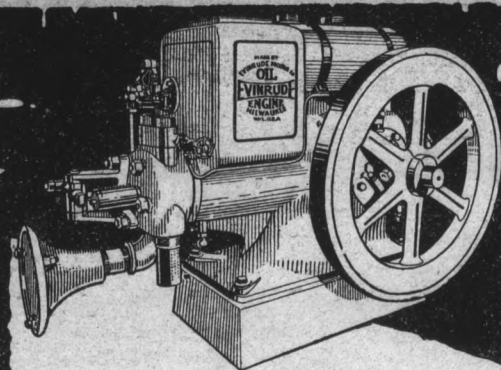
"Oh!" The girl let slip a little gasp—the meed of admiration the feminine heart always pays to shoulder straps. "Signal service; that means the army?"

"His Majesty's service; yes, Miss Gerson."

"You are, of course, off duty?" she suggested, with the faintest possible tinge of regret at the absence of the stripes and buttons that spell "soldier" with the woman.

"You might say so, Miss Gerson. Egypt—the Nile country is my station. I am on my way back there after a bit of a vacation at home—London, I mean of course."

She stole a quick side glance at the face of her companion. A soldier's face it was, lean and school-hardened and competent. Lines about the eyes and mouth—the stamp of the sun and the



**SAVES 4/5 of the FUEL COST**

**If you could feed today's \$20 pork on yesterday's 50 cent corn, your profits would automatically increase.**

**If you could run your gas engine today on yesterday's 10 cent gasoline, there would be another immediate increase in your profits because of an immediate decrease in your cost of production.**

**With the new Evinrude Oil Engine you use kerosene and low grade fuel oils—the cheapest fuels obtainable—and realize a clean saving of four-fifths of the fuel cost. Every atom of fuel is converted into energy.**

**Consider what that means. You get the same efficiency and power from these low priced fuels that you do from costly gasoline, yet four-fifths of the cost is saved, a four-fifths which goes directly into your pocket as added profit.**

**Combined with the economy factor are other features which make this the ideal farm power.**

**OIL EVINRUDE ENGINE**  
(unconditionally guaranteed)

**is heir to none of the usual gas engine difficulties. No carburetor or mixing valve, batteries, magneto, timer or spark plug to cause annoyance or create expense. It can be operated by the hired man or your boy as easily as by yourself.**

**The fuel is introduced directly into the cylinder by a patented spraying device and ignited by the high temperature generated by compression. The engine starts readily, even in zero weather and will run without attention as long as there is fuel in the storage tank.**

**Tear out this page, write your name and address on the margin, and mail to us for catalog and fully descriptive literature.**

**DEALERS. Responsible dealers are invited to write for full information as to exclusive territory.**

**Evinrude Motor Co., 726 Evinrude Block, MILWAUKEE, WIS.**  
Also Manufacturers of the Evinrude Detachable Rowboat and Canoe Motor

**STARTS and RUNS on KEROSENE, FUEL OIL or ANY OIL THAT FLOWS**

## The Farmer's Concrete Mixer SHELTON Batch Mixer Price \$11.50 Up

The Sheldon was designed especially for the farm. Highly praised by users. Farmers everywhere call it the ideal mixer. Used today all over the United States. A big success. Small enough to be easily moved—big enough to keep 6 men busy. Low in price. Build your own silo, tanks, troughs, floors, foundations, buildings, etc., out of concrete with a Sheldon Batch Mixer.

### Read What These Sheldon Owners Say

"I and my hired man laid a feeding floor for my hogs, 24x24, in one day; also put floor in my cow barn. My neighbor liked it so well I am not able to keep it at home."—ANDREW CHRISTENSEN, Hancock, Minn., R. 1.

"We have used the mixer during past year for putting in cement foundations for a complete set of farm buildings, including silo, and like it very much."—DANA WRIGHT, Jamestown, N. D.

"Last year I bought a cement mixer from you with which I am well satisfied. It did not take long for it to pay for itself and I surely can recommend it to anyone needing a big mixer at a small price."—Wm. E. BAKER, Martinsburg, Ill.

"I am more than busy with my Sheldon Concrete Mixer. Have more work than I can do. Got 400 a day when I work out."—Jesse L. WITTE, Wellsville, N. Y.

"The machine works fine. Have already got the job of mixing concrete for the bridge in this township—JOHN ROSS, Spartansburg, Pennsylvania.

"Last spring we purchased of you a set of castings to make a concrete mixer. It was constructed per the plans furnished and it surely worked great."—D. M. BAKER, Freeport, Ill.

### FREE PLANS

Make your own concrete mixer. You can do it at a cost so low you can not afford to mix concrete by the shovel method. Along with our iron parts we send Free Plans and permit for making your own machine. A good way to get a practical mixer at a small expense. Or, we will sell you the complete machine, ready built.

**Make Big Money at Concrete** If you buy a Sheldon Mixer for your own use, you can make many times its cost in a season by renting it to your neighbors. Or, if you want to go out with the mixer on contract, you can easily earn \$8 to \$20 a day. Our customers are doing it right now. The jobs go to the man with a Sheldon Mixer every time.

**Write For Our New FREE Catalog** Shows our full line of mixers which are sold direct to you on strong guarantee. Thirty days trial privilege. No other like it. Patented. Two styles, hand and power. Mixes 2 1/2 cubic feet a minute. One man can operate it, but it will keep 2, 3, 4, 5 or 6 men busy. Continuous chain drive. Tipping dump. Easily and quickly moved. All parts guaranteed. Does work equal to \$400 mixers. Be sure to get the catalog. Write today.

**SHELDON MANUFACTURING COMPANY, Box 770 Nehawka, Neb.**

### My New Special Offer

I want to tell you about my co-operative plan by which you can get my time-tried, thoroughly proven Sheldon Batch Concrete Mixer at little or no cost to you. I want ten men in every county to accept my special co-operative offer right now. Are you going to be one of the ten? Write and say. "Send me special offer."

The Sheldon will pay for itself on first small job. Takes the backbone out of concrete. Makes possible those many small improvements that add so much to the value of your land.

The useful gift—



AT YOUR DEALER'S At the Price You like to pay.

## HALLMARK SHIRTS

### FOR CHRISTMAS

Typify true economy—Fit well—Look well—And do wear.

Colors are indanthrene—We guarantee they will not fade—Will last as long as the shirt.

Fabric and Detail Quality Kept Up

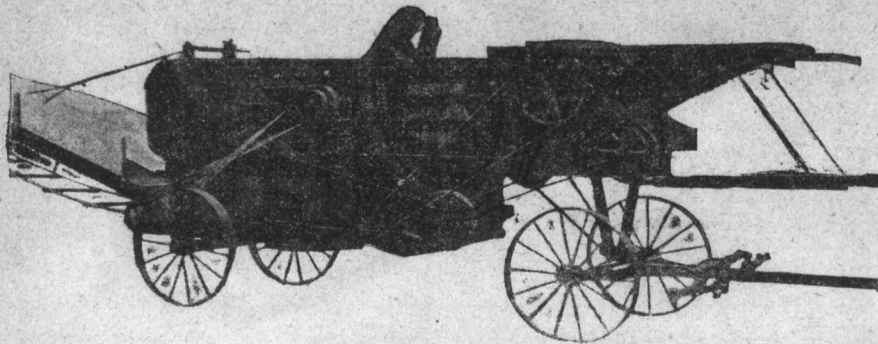
You will find just the colors and patterns you wish at your own dealer's.

HALL, HARTWELL & CO., Makers, Troy, N. Y.

When Writing to advertisers please mention The Michigan Farmer.



# MARKET YOUR BEANS



## At Once By Threshing Them With a BIDWELL BEAN THRESHER

The Junior size is just right for your Gas engine or Tractor. Buy one NOW, join with your neighbor in securing one. Orders filled promptly from our Lansing warehouse.

**J. M. PRESTON CO., Lansing, Mich.**

### Farms and Farm Lands For Sale

#### Salesman Wanted

We wish to secure the services of a few reliable men in several sections of Michigan, Wisconsin and Indiana to act as local representatives.

The capital, business methods and reputation of the largest farm agency in the world will be behind you and your success assured. Unless you have been successful in other ventures, and have the respect and confidence of your townsmen, do not apply. Experience not necessary, but must own an automobile.

Our business is paying capable men \$2,000 to \$5,000 yearly. State all particulars in first letter regarding your age, business experience and if you are a property owner. All communications treated confidentially.

**E.A. STROUT FARM AGENCY,**  
Established 1900  
118 N. La Salle St., Chicago, Ill.

**WE** have the following lands and stock for sale. 15,000 acres of fine unimproved lands, well located, easy terms. 250-acre tract of land situated 5 mi. from Gladwin, on daily mail route. All fenced with woven wire, 10 acres of each tract under fine state of cultivation with 3 acres in fruit, 35 acres more in each tract brushed, logged and burned. Sheep Ranch of 300 acres, all fenced, living water, 66 acres of this ranch cleared, 25 acres of which is under fine state of cultivation with fruit. House 18x26. Sheep shed and barn 64x80 built this season. 165 hd. of Sheep, with clover hay, grain and straw sufficient for wintering same. Also 150 head of yearling steers, Herefords and Angus.

**McCLURE-STEWART LAND CO.,**  
GLADWIN, MICH.

### Do You Want a Farm

where largest profits are made? The South's great variety of crops and wonderful productive climate make it the most profitable farm section of America. It is the place for the lowest cost most production and dairy farming. It grows the largest variety of forage crops. Good lands, in good localities, as low as \$15 to \$25 an acre. Let us show you locations that will give the highest profits. M. V. RICHARDS, Commissioner, Room 78, Southern Railway System, Washington, D.C.

**A Small California Farm** earns more money with less work. Raise the crops you know about—alfalfa, wheat, barley, etc.—also oranges, grapes, olives and figs. Ideal for dairying, pigs and chickens. No cold weather; rich soil; low prices; easy terms; good roads; schools and churches. Enjoy life here. Newcomers welcome. Write for our San Joaquin Valley, also Dairying and Poultry Raising Illustrated folders, free. C. L. Seagraves, Industrial Commissioner, Santa Fe Ry., 1957 Ry. Exch. Chicago.

**For sale two farms in Calhoun Co. Mich.** 180 A. has good house, new barn 46x96, 40 A. wheat. 185 A. has good bldgs. 10 A. Ry. Both ideal for mixed farming or stock. Well fenced, abundance of water. Will sell separate or together. Must be sold before March 1st 1918 to close an estate. For terms and prices address W. B. Cady, Litchfield, Mich. or E. D. Gouger, Grand Rapids, Mich.

**For Sale 120 acre farm in Boardman Twp., Kalamazoo Co., Mich.** 30 acres wood timber, balance farming land. Small orchard, small fruit. Buildings and fences in fair condition. 3 mi. from town, 8 mi. from county seat. On county road and R. F. D. 4 mi. from school. 40 rods from church. If interested, write R. J. McNair, Union, New York.

**For Sale—140 Acres Black Land** Improved, leveled, good buildings, Railway Station one mile, good town 3 miles, School adjoining farm, good location eastern Mich. Bargain part cash. Geo. H. Corbin, Grand Rapids, Mich.

### FARMS FOR SALE

Send for our list.  
**GEHRKE & JENSEN, Inc.,**  
242 Woodward Ave., Detroit, Mich.

**120 ACRE** farm for sale. All fenced; running water; excellent stock farm; one mile from good town on railroad in northeastern Michigan. Particulars write, Box C. 91, Michigan Farmer, Detroit, Mich.

**HAVE** you a farm or property to sell? and will pay 2% after sale is made, or are you looking to buy a farm in any state? Write **GRASSEY FARM AGENCY,** 212 Lewis St., Lynn, Mass.

**A FINE** opening for a good stock or dairy farm. Write **D. W. SHEPHERD,** Delton, Mich.

**Buy a farm in sunny prosperous Arkansas** Three Draw Co. Farms of 225, 255 & 453 acres for sale by the owner. **J. F. BARBER,** Monticello, Ark.

**FARM—**Sacrifice price. 240 acres improved; 100 bottom, 100 timber, colonial buildings, excellent schools, churches, roads and climate. Stock or grain proposition; \$30 per acre. Easy terms. **A. MACDONALD,** BLACKSTONE, VA.

**For Rent** on shares. One of most productive Michigan. Great opportunity for right party. Address **N. A. COLE,** 39 Westminster Ave., Detroit, Mich.

**HAVING** sold our farm we will sell our 3 Unit Hiram man milking machine, also one New Manton Campbell Vetch separator. Prices on request. **J. J. HOUGHTBY & SON,** R. 2, Rochester, Mich.

**To be sure of your INDIANA SILO Order NOW!**

**THE** Nation is mobilized for war service. Raw materials are being fast diverted for Government use. To make sure of having an Indiana Silo next year, order now. It will cost nothing to do this and it will save you much money later on.

This is no time for experiments. You need a proved, practical silo. You need an Indiana Silo. Sixty thousand Indiana Silos are now in use. Every owner is a booster.

The war is demanding the products of the farm. An Indiana Silo will make your corn go twice as far. It means you can feed twice as much stock or keep the same number of head on half the grain. It means cheaper costs for producing beef and pork. It means increased production of milk and butter. It means money for you and victory for the cause.

Write today for catalog and our special offer to early buyers. Address nearest office.

**THE INDIANA SILO COMPANY**  
582 Union Bldg., . . . . . Anderson, Indiana  
582 Silo Bldg., . . . . . Kansas City, Mo.  
582 Indiana Bldg., . . . . . Des Moines, Iowa  
582 Live Stock Exchange Bldg., Fort Worth, Texas

**FREE BOOK Send for it**

**To Have and to Hold Power**

The standard handbook on gas engine compression. Every farmer who runs an automobile, engine, tractor, etc., ought to have it.

It tells how McQuay-Norris **Lean-Piston** Rings give more power, save gas, reduce carbon.

**McQuay-Norris Mfg. Co.**  
2877 Locust St. St. Louis, U.S.A.

### THREE FARMS FOR SALE

200, 114 & 86 acres. All adjoining. Three miles from Albion, Mich. Brick house, good barns. Best soil for hay grain, beans, stock. No ditch or marsh. For printed description, or inspection phone, write, or call on **E. I. VAN SICKLE,** Albion, Mich.

imprint of the habit to command—had taken from Captain Woodhouse's features something of freshness and youth, though giving in return the index of inflexible will and lust for achievement. His smooth lips were a bit thin, Jane Gerson thought, and the out-shooting chin, almost squared at the angles, marked Captain Woodhouse as anything but a trifler or a flirt. She was satisfied that nothing of presumption or forwardness on the part of this hard-molded chap from Egypt would give her cause to regret her unconventional offer of friendship.

Captain Woodhouse, in his turn, had made a satisfying, though covert, appraisal of his traveling companion by means of a narrow mirror inset above the baggage rack over the opposite seat. Trim and petite of figure, which was just a shade under the average for height and plumpness; a small head set sturdily on a round smooth neck; face the very embodiment of independence and self-confidence, with its brown eyes wide apart, its high brow under the parting waves of golden chestnut, broad humorous mouth, and tiny nose slightly nibbled upward: Miss Up-to-the-Minute New York, indeed! From the cocked red feather in her hat to the dainty spatted boots Jane Gerson appeared in Woodhouse's eyes a perfect, virile, vividly alive American girl. He'd met her kind before; had seen them browbeating bazaar merchants in Cairo and riding desert donkeys like strong young queens. The type appealed to him.

The first stiffness of informal meeting wore away speedily. The girl tactfully directed the channel of conversation into lines familiar to Woodhouse. What was Egypt like; who owned the Pyramids, and why didn't the owners plant a park around them and charge admittance? Didn't he think Rameses and all those other old Pharaohs had the right idea in advertising—putting up stone billboards to last all time? The questions came crisp and startling; Woodhouse found himself chuckling at the shrewd incisiveness of them. Rameses an advertiser and the Pyramids stone hoardings to carry all those old boys' fame through the ages! He'd never looked on them in that light before.

"I say, Miss Gerson, you'd make an excellent business person, now, really," the captain voiced his admiration.

"Just cable that at my expense to old Pop Hildebrand, of Hildebrand's department store, New York," she flashed back at him. "I'm trying to convince him of just that very thing."

"Really, now; a department shop! What, may I ask, do you have to do for—ah—Pop Hildebrand?"

"Oh, I'm his foreign buyer," Jane answered, with a conscious note of pride. "I'm over here to buy gowns for the winter season, you see. Paul Poiret—Worth—Paquin; you've heard of those wonderful people, of course?"

"Can't say I have," the captain confessed, with a rueful smile into the girl's brown eyes.

"Then you've never bought a Worth gown?" she challenged. "For if you had you'd not forget the name—or the price—very soon."

"Gowns—and things are not in my line, Miss Gerson," he answered simply, and the girl caught herself feeling a secret elation. A man who didn't know gowns couldn't be very intimately acquainted with women. And—well—

"And this Hildebrand, he sends you over here alone just to buy pretties for New York's wonderful women?" the captain was saying. "Aren't you just a bit—ah—nervous to be over in this part of the world—alone?"

"Not in the least," the girl caught him up. "Not about the alone part, I should say. Maybe I am fidgety and sort of worried about making good on the job. This is my first trip—my very first as a buyer for Hildebrand. And, of course, if I should fall down—"

"Fall down?" Woodhouse echoed, mystified. The girl laughed, and struck her left wrist a smart blow with her gloved right hand.

"There I go again—slang; 'vulgar American slang,' you call it. If I could only rattle off the French as easily as I do New Yorkese I'd be a wonder. I mean I'm afraid I won't make good."

"Oh!"

"But why should I worry about coming over alone?" Jane urged. "Lots of American girls come over here alone with an American flag pinned to their shirt-waists and wearing a Baedeker for a wrist watch. Nothing ever happens to them."

Captain Woodhouse looked out on the flying panorama of straw-thatched houses and fields heavy with green grain. He seemed to be balancing his words. He glanced at the passenger across the aisle, a wizened little man, asleep. In a lowered voice he began: "A woman alone—over here on the Continent at this time; why, I very much fear she will have great difficulties when the—ah—trouble comes."

"Trouble?" Jane's eyes were questioning.

"I do not wish to be an alarmist, Miss Gerson," Captain Woodhouse continued, hesitant. "Goodness knows we have had enough calamity shouters among the Unionists at home. But have you considered what you would do—how you would get back to America in case of—war?" The last word was almost a whisper.

"War?" she echoed. "Why, you don't mean all this talk in the papers is—"

"Is serious, yes," Woodhouse answered quietly. "Very serious."

"Why, Captain Woodhouse, I thought you had war talk every summer over here just as our papers are filled each spring with gossip about how Tesreau is going to jump to the Feds, or the Yanks are going to be sold. It's your regular midsummer outdoor sport over here, this stirring up the animals."

Woodhouse smiled, though his gray eyes were filled with something not mirth.

"I fear the animals are—stirred, as you say, too far this time," he resumed. "The assassination of the Archduke Ferd—"

"Yes, I remember I did read something about that in the papers at home. But archdukes and kings have been killed before, and no war came of it. In Mexico they murder a president before he has a chance to send out 'At home' cards."

"Europe is so different from Mexico," her companion continued, the lines of his face deepening. "I am afraid you over there in the states do not know the dangerous politics here; you are so far away; you should thank God for that. You are not in a land where one man—or two or three—may say, 'We will now go to war,' and then you go, willy-nilly."

The seriousness of the captain's speech and the fear that he could not keep from his eyes sobered the girl. She looked out on the sun-drenched plains of Pas de Clais, where two villages, hedged fields, and squat farmhouses lay all in order, established, seeming for all time in the comfortable doze of security. The plodding mannikins in the fields, the slumberous oxen drawing the harrows amid the beet rows, pigeons circling over the straw hutches by the tracks' side—all this denied the possibility of war's corrosion.

"Don't you think everybody is suffering from a bad dream when they say there's to be fighting?" she queried. "Surely it is impossible that folks over here would all consent to destroy this." She waved toward the peaceful countryside.

"A bad dream, yes. But one that will end in a nightmare," he answered. "Tell me, Miss Gerson, when will you be through with your work in Paris and on your way back to America?"

"Not for a month; that's sure. May-



be I'll be longer if I like the place." Woodhouse pondered.

"A month. This is the tenth of July. I am afraid—I say, Miss Gerson, please do not set me down for a meddler—this short acquaintance, and all that; but may I not urge on you that you finish your work in Paris and get back to England at least in two weeks?" The captain had turned, and was looking into the girl's eyes with an earnest intensity that startled her. "I can not tell you all I know, of course. I may not even know the truth, though I think I have a bit of it, right enough. But one of your sort—to be caught alone on this side of the water by the madness that is brewing! By George, I do not like to think of it!"

"I thank you, Captain Woodhouse, for your warning," Jane answered him, and impulsively she put out her hand to his. "But, you see, I'll have to run the risk. I couldn't go scampering back to New York like a scared pussycat just because somebody starts a war over here. I'm on trial. This is my first trip as buyer for Hildebrand, and it's a case of make or break with me. War or no war, I've got to make good. Anyway"—this with a toss of her round little chin—"I'm an American citizen, and nobody'll dare to start anything with me."

"Right you are!" Woodhouse beamed his admiration. "Now we'll talk about those skyscrapers of yours. Everybody back from the states has something to say about those famous buildings, and I'm fairly burning for first-hand information from one who knows them."

Laughingly she acquiesced, and the grim shadow of war was pushed away from them, though hardly forgotten by either. At the man's prompting, Jane gave intimate pictures of life in the New World metropolis, touching with shrewd insight the fads and shams of New York's denizens even as she exalted the achievements of their restless energy.

Woodhouse found secret amusement and delight in her racy nervous speech, in the dexterity of her idiom and patness of her characterizations. There was a new sort of girl for him. Not the languid creature of studied suppression and feeble enthusiasm he had known, but a virile, vivid, sparkling woman of a new land, whose impulses were as unhindered as her speech was heterodox. She was a woman who worked for her living; that was a new type, too. Unafraid, she threw herself into the competition of a man's world; insensibly she prided herself on her ability to "make good"—expressive Americanism, that—under any handicap. She was a woman with a "job;" Captain Woodhouse had never before met one such.

Again, here was a woman who tried none of the stale arts and tricks of coquetry; no eyebrow strategy or maidenly simpering about Jane Gerson. Once sure Woodhouse was what she took him to be, a gentleman, the girl had established a frank basis of comradeship that took no reckoning of the age-old conventions of sex allure and sex defense. The unconventionality of their meeting weighed nothing with her. Equally there was not a hint of sophistication on the girl's part.

So the afternoon sped, and when the sun dropped over the maze of spires and chimney pots that was Paris, each felt regret at parting.

"To Egypt, yes," Woodhouse ruefully admitted. "A dreary deadly 'place in the sun' for me. To have met you, Miss Gerson; it has been delightful, quite."

"I hope," the girl said, as Woodhouse handed her into a taxi, "I hope that if that war comes it will find you still in Egypt, away from the firing-line."

"Not a fair thing to wish for a man in the service," Woodhouse answered, laughing. "I may be more happy when I say my best wish for you is that

when the war comes it will find you a long way from Paris. Good-by, Miss Gerson, and good luck!"

Captain Woodhouse stood, heels together and hat in hand, while her taxi trundled off, a farewell flash of brown eyes rewarding him for the military correctness of his courtesy. Then he hurried to another station to take a train—not for a Mediterranean port and distant Egypt, but for Berlin.

#### CHAPTER II.

From the Wilhelmstrasse.

It would be wiser to talk in German," the woman said. "In these times French or English speech in Berlin—" she finished, with a lifting of her shapely bare shoulders, sufficiently eloquent. The waiter speeded his task of refilling the man's glass and discreetly withdrew.

"Oh, I'll talk in German quick enough," the man assented, draining his thin half bubble of glass down to the last fizzing residue in the stem. "Only just show me you've got the right to hear, and the good fat banknotes to pay; that's all." He propped his sharp chin on a hand that shook slightly, and pushed his lean flushed face nearer hers. An owl's caution fought the wine fancies in his shifting lynx eyes under reddened lids; also there was admiration for the milk-white skin and ripe lips of the woman by his side. For an instant—half the time of a breath—the flash of loathing made the woman's eyes tigerish; but at once they changed again to mild bantering.

"So? Friend Billy Capper, of Brussels, has a touch of the spy fever himself, and distrusts an old pal?" She laughed softly, and one slim hand toyed with a heavy gold locket on her bosom. "Friend Billy Capper forgets old times and old faces—forgot even the matter of the Lord Fisher letters—"

"Chop it, Louisa!" The man called Capper lapsed into brusque English as he banged the stem of his wineglass on the damask. "No sense in raking that up again—just because I ask you a fair question—ask you to identify yourself in your new job."

"We go no further, Billy Capper," she returned, speaking swiftly in German; "not another word between us unless you obey my rule, and talk this language. Why did you get that message through to me to meet you here in the Cafe Riche tonight if you did not trust me? Why did you have me carry your offer to—to headquarters and come here ready to talk business if it was only to hum and haw about my identifying myself?"

The tenseness of exaggerated concentration on Capper's gaunt face began slowly to dissolve. First the thin line of shaven lips flickered and became weak at down-drawn corners; then the frown faded from about the eyes, and the beginnings of tears gathered there. Shrewdness and the stamp of cunning sped entirely, and naught but weakness remained.

"Louisa—Louisa, old pal; don't be hard on poor Billy Capper," he mumbled. "I'm down, girl—away down again. Since they kicked me out at Brussels I haven't had a shilling to bless myself with. Can't go back to England—you know that; the French won't have me, and here I am, my dinner clothes my only stock in trade left, and you even having to buy the wine." A tear of self-pity slipped down the hard drain of his cheek, and splashed on his hand. "But I'll show 'em, Louisa! They can't kick me out of the Brussels shop like a dog and not pay for it! I know too much, I do!"

"And what you know about the Brussels shop you want to sell to the—Wilhelmstrasse?" the woman asked tensely.

"Yes, if the Wilhelmstrasse is willing to pay well for it," Capper answered, his lost cunning returning in a bound.

(Continued on page 577).

## Crammed Full of Extra Value!

That's Hanes Winter Weight Underwear. Look at the big features in the illustration, then balance up with this:

Hanes is made form fitting—pre-shrinking keeps it true to size and shape—its natural elasticity makes it "give" with every movement—there's no itching, ripping or flaring, just warm and comfortable.

The answer is the finest underwear value in the world and at such popular prices.

**Test it yourself.**  
Ask a Hanes dealer for this underwear and see if it isn't the biggest value you ever saw. If you don't know a dealer, write us.

**Here's the Best Bet For Your Youngsters**  
A new union suit for boys—too strong and elastic to knock out at the knees and warm and cozy enough for the coldest days. Washing can't fade it. Its value can't be duplicated. Look these two big values over at your dealer's. Ask him for

**Greatest Winter Underwear** **HANES** **Sold at Popular Prices**  
ELASTIC KNIT UNDERWEAR

**P. H. HANES KNITTING CO.**  
Winston-Salem, N. C.

**GUARANTEE**  
We guarantee every seam on Hanes Underwear.

## NEVER SLIP

**RED TIP**  
**CONSERVATION.** Conserve time, money and your horse's strength by using **RED TIP CALKS**

They will enable your horse to travel on slippery, icy roads and streets in absolute safety. They can be adjusted in a few minutes and make you ready for the road any time—day or night—eliminating danger and delay. **NEVERSLIP CALKS NEVERSLIP SHOES** always have Red Tips. always have Red Heels.

Get them from your horseshoer now.  
Booklet C. will be sent free on request.

**THE NEVERSLIP WORKS, New Brunswick, N. J.**

## Smoke Your Own Meat

Don't sell all your hogs and pay big butcher bills. Save some of them and have good, clean, sweet hams, bacon, sausage for your own table when wanted—and at less than half market prices. You can do it easily with the National Giant Smoke House. This wonderful Smoke House is portable, can be operated in basement or kitchen, same as a stove—or on the back porch, or in the yard—anywhere. Made in 3 sizes. Runs on sawdust and cobs and little hickory bark for seasoning. Gives better, cleaner, sweeter meat than you've ever had before. The

**NATIONAL GIANT PORTABLE SMOKE HOUSE AND SANITARY STORE HOUSE**

Is a great success. Positively the best way of smoking Hams, Bacon, Sausages. Meat cannot over-heat. Air-cooled conveyors regulate temperature. After smoking meats, use for store house. Absolutely bug and mite proof. Keeps meat sweet all summer. Worth its price many times over for this feature alone. The National Giant Smoke House is made entirely of heavy galvanized sheet steel, strong reinforcing. Fireproof. Guaranteed. Send for

**FREE BOOK**  
which gives prize-winning recipes for curing Hams, Bacon, Sausages at home; also get our low prices on 2, 5 and 10-hog size Smoke Houses.

**PORTABLE ELEVATOR MFG. CO.**  
272 McClun Street Bloomington, Illinois

**Get This Free Book**  
Hog Killing Days  
With Recipes for Curing and Smoking Hams, Bacon, Sausages

## RAW FLURS

Quick Action Brings Best Results! Write for Price-list & ship to George I. Fox, 167 W. 25th St. N.Y. (FORMERLY 7th AVE)





### Hosiery That Pleases Everybody

Fleece-lined hosiery, to be comfortable, must be heavy. That's why Mother always buys Durable-DURHAM Fleece-lined Hosiery for everybody in the family. It has the substantial weight to protect in the coldest weather, the fleece is soft and silky and the cost is but 25 cents a pair.

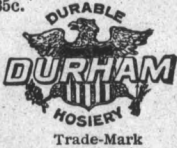
### DURABLE DURHAM HOSIERY FOR MEN, WOMEN AND CHILDREN

Is Made Strongest Where the Wear is Hardest

Not only is Durable-DURHAM made in fleece-lined, but also for all occasions and all seasons. It gives better wear, feels better and looks better. That's because of the strongly reinforced heels, soles and toes; the full-length legs; the wide elastic top that can't be pulled off or torn by garters; the smooth, seamless and even feet and toes; the correctly marked sizes, and the way the famous Durham dyes are fast—colors will not fade or turn green from wearing or washing; quality is uniform throughout.

Durable-DURHAM Hosiery is made in all weights for all seasons of the year and sells for 15, 19, 25 and 35c.

Ask your dealer to show you our women's 35c and men's 25c silk-mercerized hosiery with the patented anti-run stitch.



DURHAM HOSIERY MILLS, Durham, N. C.

Now Ready  
**NEW** Stove  
Book  
**FREE!**



### Bring Our Stove Exhibit to Your Door

Mail a postal for our new book showing full line of Kalamazoo products. Get wholesale prices—learn how hundreds of thousands have saved money getting "A Kalamazoo Direct to You."

**Write Today** High-priced fuel makes Kalamazoo savings bigger than ever this year. Get your new stove now and save more in fuel bills. Quick shipment—big stocks—no waiting. We pay the freight. Cash or easy payments—30 days' trial. Ask for catalog No. 113.

**KALAMAZOO STOVE CO.**  
Mrs. Kalamazoo, Mich.  
We manufacture Stoves, Ranges, Gas Ranges, Furnaces, Kitchen Cabinets, Tables.



**A Kalamazoo Direct to You**

### GUARANTEE Against Reduction IN PRICES

Government prices on steel and iron do not affect contracts which the mills had before prices were fixed by the government. As these contracts are at much higher prices, and will take the output of the larger mills for many months we do not see any possibility for lower prices on stoves and furnaces than those we now quote. But if by any chance should we be able to reduce our prices before July 1st, 1918, we guarantee to refund you the difference between the new price and the price you pay. Write today. Kalamazoo Stove Co., Mrs., Kalamazoo, Mich.

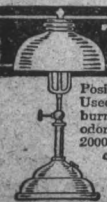


### Beacon Lamp FREE

**Lights Your Home Like Day.** 100 Candle Power Incandescent pure white light from (kerosene) coal oil. Beats either gas or electricity. **COSTS ONLY 1 CENT FOR 6 HOURS**

We want one person in each locality to whom we can refer new customers. Take advantage of our Special Offer to secure a Beacon Lamp FREE. Write today. AGENTS WANTED.

HOME SUPPLY CO., 28 Home Bldg., Kansas City, Mo.



### The "BEST" LIGHT

Positively the cheapest and strongest light on earth. Used in every country on the globe. Makes and burns its own gas. Casts no shadows. Clean and odorless. Absolutely safe. Over 200 styles. 100 to 2000 Candle Power. Fully Guaranteed. Write for catalog. AGENTS WANTED EVERYWHERE.

**THE BEST LIGHT CO.**  
280 E. 5th St., Canton, O.



## Woman and Her Needs At Home and Elsewhere

### When Shall We Rest?

**M**OST of the things I studied in school I've forgotten. But there is one sentence in our old "First Book of Physiology," that still sticks in my memory. I can almost see the words away down towards the bottom of the right hand page:

"It is wrong to work so hard as to be always tired."

They've been running over and over in my mind recently, and I can't help but think what a lot of sinners, both men and women, there are in the world. For, although it's a pretty fair world as worlds go, it must be confessed that there are a great many people who are always tired, not counting the ones who were born that way.

Among the farm women I wonder how large a per cent ever feel rested and ready for anything? Of course, not all are overworked, but as a class I believe that next to the society woman, who is tired out having a good time, the farm women are the hardest working women in the world. For, while those near to towns and main roads are using electricity more and more, and some are utilizing gas engines to help out in farm work, there yet remains enough to be done to keep more than one pair of hands busy. We don't have the spinning and weaving and butter-making that our grandmothers did. But on the other hand, neither do we have the help they did. Those worthy ladies, as a rule, had daughters to help them, and if they didn't they could hire a neighbor's girl for fifty cents a day. Mostly, we don't have the daughters. Or if we do they are off to college, or at town clerking in a store, or perhaps working in some other woman's kitchen for six or seven dollars a week. So it is up to the farmer's wife, in the majority of cases, to do her work alone.

And how is she to do all that is expected these days without being tired out? We read reams on efficiency. Experts tell us to cut out all unnecessary work. Writers of beautiful thoughts urge us to drop everything and go out and commune with nature. But the fact remains that there's a certain amount of work to be done, and if we leave it and hie us forth to view a sunset, we find it waiting for us when we come back. No one has done our task while we were communing.

"I wouldn't be dominated by the tyranny of things." "There is something else in life besides housework." "Why don't you let it go?" Haven't you heard those things until you were tired? Yet the babbling brooks who babble them at you never offer to do the things you "let go," nor offer any suggestions as to how you're going to get time for anything but housework. Except to tell you to "let it go."

Suppose you do let it go. The ones who've been loudest in urging you to take things easy are also loudest in demanding why things are not done. Suppose you cut out baking cakes and pies and doughnuts and cookies. Suppose you have dessert just once a week. That lessens your work more than a little. But is your innovation greeted with loud huzzas? Or does the family demand in concert the reason for desertless days, and wail long and loudly for the flesh pots of Egypt?

There are a lot of free advice dispensers going about telling women how their work should be done. Possibly some of the advice is good. In many

homes methods might be improved. But when all is said and done, with all improvements and aids to housekeeping, the average housekeeper in a country home is overworked. Every woman should have at least two hours a day free to rest or play. How many get it? If you do take it you are tormented with the thought of the stockings waiting to be darned and the buttons to sew on, and the living-room curtain that needs a stitch in the lace and the

silver that is tarnished and the cupboard shelves that need wiping off and the can of fruit that looked as though it was beginning to work and should be brought up and tended to and the comfort that needs a new lining and the—but why enumerate? It tires me just to think of it. I have a friend who says that every morning she sees enough work ahead of her to take forty-eight hours to do it if she didn't stop even to eat, say nothing about sleep. Most women of families are similarly placed. Will somebody please lead us back to the simple life?

DEBORAH.

## Hoover Sweets for Christmas

By JULIA R. DAVIS

At this time when we are urged and commanded to be economical in our use of sugar, it is well to prepare Christmas sweets which can be made without any, or a very small amount of that scarce article.

The fairly plentiful materials that are suitable for making sweets are syrup, maple sugar, honey, popcorn, and all kinds of nuts. Sugary dried fruits will also help. Chocolate and cocoa are always safe to use. The following are some tested recipes which call for only a minimum of sugar.

**Stuffed Dates.**—Stuffed dates are a most wholesome sweet, and quickly made, too. The dates must be first picked apart, washed in warm water and dried in an old napkin. Remove the seed from each with a sharp knife, slip a nut in its place, press together, and sift over with granulated sugar. Leave standing awhile on oiled paper to become firm.

**Chocolate Dates.**—Prepare dates as described for stuffed dates. Slit each date lengthwise, just far enough to allow the kernel's being extracted without bruising the fruit. Grate one-fourth pound of good chocolate, add an equal quantity of confectioners' sugar, and two tablespoonfuls of boiling water. Boil until a soft ball forms in cold water. Before removing from the fire, add a few drops of vanilla extract. Place the pan inside a larger one, half filled with boiling water, to keep the chocolate fluid while the dates are being filled. Take up a little of the mixture on a teaspoon, open the date and pour it neatly in. When filled, press the sides gently together. Place in a cool place to harden.

**Stuffed Figs.**—Chop fine any kind of nuts. Mix with half the quantity of well washed and dried currants. Open figs at one side, and pack with mixture, rounding the fig to look like a pear. Close the opening, then at one end of the fig stick a clove to look like blossom end, and at the other a stick of cinnamon bark for the stem. Dust lightly with powdered sugar.

**Parisian Sweets.**—Pick over and remove stems from one pound of figs and stones from one pound of dates. Mix with one pound of English walnut meats, and force through a meat chopper. Work, using the hands, on a board dredged with confectioners' sugar, until well blended. Roll to one-fourth of an inch thickness, using confectioners' sugar for dredging board and pin. Cut with a sharp knife in three-fourths inch squares. Roll each piece in confectioners' sugar, and shake to remove superfluous sugar. Place in layers in a tin box, putting paper between each layer. These confections may be used at dinner in place of bonbons.

**Sugared Popcorn.**—Put two table-spoons of butter in a sauce pan, and when melted add two cups of brown sugar, and one-half cup of water. Bring to the boiling point, and let boil for sixteen minutes. Pour over two quarts of popped corn, and stir until every kernel is well coated with sugar.

**Taffy.**—Dissolve half a cup of sugar in four tablespoons of cider vinegar, mix with two cups of molasses, and cook very slowly in a kettle large enough to prevent the mass from boiling over, until a little dropped in cold water hardens, then stir in a heaping teaspoon of butter, and a half teaspoon of baking soda dissolved in a tablespoon of hot water. Stir up, remove from fire, and flavor with a teaspoon of vanilla, or lemon extract; turn into a greased pan, and when cool enough to handle pull until bright with floured or greased hands. When light enough, pull into narrow strips and cut off in pieces the right size for a mouthful with a pair of greased scissors. Wrap each of these in a little twist of paraffin paper.

**Fruit Cheese.**—Stone a pound of dates, add to them a pound of figs, half a pound of blanched almonds, half a pound of pecans and half a pound of Brazilian nuts. Any nuts at hand may be substituted for the ones named. Put the mixture through a meat-chopper, and pack into tumblers. Keep in cold place. This may be rolled into tiny balls and dipped in chocolate, cut into blocks and used as a sweetmeat, or cut into thin slices and put between bread and butter, or crackers, to serve in the place of cake.

### CONSERVATION DAY SUGGESTIONS.

**Meatless Day.**—Breakfast, creamed codfish; dinner, cheese roll; supper, corn oysters.

**Wheatless Day.**—Breakfast, apple corn bread without wheat; dinner, Old Virginia batter bread; supper, oat meal muffins.

**Chese Roll.**—One-half cup of rice, one cup of milk, one tablespoon each of chopped onion and parsley, three-fourths cup of grated cheese, one-half cup of mashed potato, pepper and salt to taste. Cook rice in milk with chopped onion and parsley, then add mashed potato, pepper and salt. Form into roll, brush with fat drippings, brown in oven.

**Corn Oysters.**—To two cups of corn, add two eggs, one tablespoon melted butter, half a teaspoon of salt and pepper to taste. Stir in enough flour to shape in small cakes and fry either as fritters in hot deep fat, or in a little



butter or bacon drippings in the frying pan.

Mix two cups of corn meal, two tablespoons of sugar, three-fourths spoon of salt, on teaspoon of soda, one teaspoon of cream of tartar, add one and two-thirds cups of milk and beat thoroughly. Then add three tart apples, pared and sliced, pour into a well-buttered shallow pan and bake for thirty minutes in hot oven, or until apples are soft. This is also nice made with cooked, dried apricots.

Old Virginia Batter Bread.—Stir one pint of corn meal into one quart of scalded milk, stir and cook to a mush. Allow to cool a little, add one teaspoon of salt, one teaspoon of sugar and the beaten yolk of one egg. Then fold in the white, beaten stiff. Melt two tablespoons of shortening in a baking pan, pour in the mixture and bake for forty-five minutes.

Oatmeal Muffins.—Stir one cup of rolled oats and one tablespoon of fat into one cup of hot milk. Boil for one minute, then let stand until lukewarm. Soften one yeast cake in one-fourth cup of lukewarm water, add one tablespoon of sugar. Combine the two mixtures. Add one cup of rye flour and one teaspoon of salt and beat thoroughly. The batter should be as stiff as for drop biscuits. Cover and set to rise until light, about an hour. Fill well-greased muffin pans two-thirds full. Let rise until light and bake for twenty-five minutes in moderately hot oven.

Crisp Corn Cake.—Sift two cups of yellow corn meal, one-half teaspoon of soda and one-half teaspoon of salt, then stir in one and one-half cups of sour milk. Add a beaten egg and beat batter for five minutes. Lastly, add one tablespoon of hissing hot fat. Pour into hot greased pie plates in very thin sheets and bake in quick oven until brown.

Corn Meal and Hominy Bread.—One cup of cooked hominy, one cup of milk, one tablespoon of melted butter, one cup of corn meal, two eggs, one and a half teaspoons of salt. Mix and bake for thirty minutes in moderate oven. This serves six people.

Golden Chips.—Two pounds of pumpkin, two cups of white syrup, half cup of lemon juice, two ounces of ginger root. Cut a small sweet pumpkin into narrow strips. Remove peel and seeds and cut into thin slices. Arrange the pumpkin in a preserving kettle in flat layers. Pour over it the syrup and lemon juice, cover, and let stand for twenty-four hours. Add the peel of one lemon shredded fine and the ginger root. Cook until the pumpkin is tender, then pour it into an earthen jar. In a few days pour the syrup from the pumpkin. Boil to reduce and thicken it, and pour it hot over the pumpkin.

#### LIBERTY CANDIES.

What about Christmas candies? Must candy be omitted from the Christmas box for the boy at camp and the girl at school or from the little one's stockings?

Before answering, let us face a few business facts. Our allies, France and Italy, are now dependent on the American sugar bin and the bottom of the bin is in sight. According to an authoritative bulletin, "the present period is one in which stocks are nearly depleted in the United States and the countries on which it draws."

Do these business facts mean no Christmas candy? Not if you are clever in combining fruits and nuts. Such sweets keep fresh a long time and are just the kind for Christmas boxes. They are delicious for desserts, are wholesome and universally liked. One cup of white sugar is enough for five pounds of these liberty candies.

Popcorn Candy.—For making popcorn candy either honey, maple syrup, molasses, white cane syrup or corn sy-

rup may be used instead of sugar. To one cup of syrup allow one tablespoon of vinegar. Boil together until syrup hardens when dropped in cold water. Pour over freshly popped corn and mold into balls or fancy shapes for the Christmas tree. Little popcorn men will please the children. Mark in the features and outlines with melted chocolate.

Crystallized Fruits.—Use your own preserves. Peach, pear, apple, quince or watermelon rind will do. Drain from the fruit all syrup possible. Cut any size desired, sprinkle with sugar, and dry in the warmer or a very slow oven. It may be necessary to sprinkle the fruit again with sugar during the drying. When dry enough not to be at all sticky, sprinkle with sugar and pack in layers with wax paper between. This fruit may be used for dipping in bitter chocolate for bitter-sweets.

Bitter-sweets.—An attractive variety of candies may be made by dipping sweet fruits in bitter chocolate. Use for this purpose dates, citron, candied orange peel or crystallized fruit. Melt unsweetened chocolate in a double boiler. Keep the chocolate just warm enough to prevent solidifying. With a silver fork drop pieces of fruit in chocolate. See that each piece is completely coated, then remove to waxed paper to harden.

Stuffed Dates.—Use the best dates. Remove the stones. Fill with peanuts, walnuts, hickory nuts or any nuts available. Peanut butter makes a good filling that is different. Press dates in shape and roll in granulated sugar, chopped nuts, or a mixture of cocoa and powdered cinnamon.

Fruit Paste.—Put through the meat chopper enough cherry, peach or quince preserves to make a half-pint with the juice. Heat fruit and add two tablespoons of gelatine, previously softened in a very little cold water. Stir well, and continue stirring until it begins to cool and thicken, then pour into oiled dish to make a layer one inch thick. Let dry slowly, sprinkle with sugar and place in a box with waxed paper between the layers. A mixture of dried apricots and dates may be used for this paste. Wash the apricots and soak over night in enough water to cover. Pour off water, bring it to a boil, pour over apricots, and let stand until cool. Put the apricots and dates through meat chopper, and proceed with the proportions as given.

Chocolate Dainties.—Put through the meat chopper one-half cup each of dates, figs and nut meats. Add one tablespoon of orange juice, a little grated orange peel, and one square of melted unsweetened chocolate. Mould into balls and roll in chopped nuts or granulated sugar. This mixture may be packed in an oiled tin, put under a weight until firm, then cut in any shape desired.

Maple Creams.—Boil one cup maple sugar with one cup of water until it forms a soft ball when dropped in cold water. Remove from the fire and stir rapidly until it becomes creamy. Form into balls the size of marbles and put nut meats on either side. Lay on wax paper to cool.

Soil for flowers should contain a good deal of organic matter. One-third well-rotted manure, and two-thirds soil make a good mixture. Good drainage is also important. If a tin can is used punch several holes in the bottom, then put in a layer of coarse gravel, broken crockery or coal and the soil on that. Most plants should be well watered one or two times a week. The roots coming out through the holes in the flower pot usually indicates that the plant is becoming root bound and that it should be put into a larger pot. Plant lice can usually be washed off with soapsuds.—Agr. Ex. Dept., N. D. Agr. College.



For Bread  
For Cake  
For Pastry

## You Need But One Flour

A good, all-around flour will make more than good bread. It will make delicious cake and pastry, too.

Pillsbury's Best is a good, all-around flour. It makes tender, flakey pie crust, and light, fluffy, full-flavored cakes, as well as perfect bread. Be careful not to use too much flour—that's all. Pillsbury's Best is a "thirsty" flour and a little of it goes a long way. In mixing it use plenty of liquid.

You don't need one flour for bread, one for cake and pastry, and one for something else. With Pillsbury's Best in the kitchen, you are equipped for baking anything. Think of the convenience of not having to bother with "special" flours!

Pillsbury's Best flour is built for all-around home use. Don't think of it as a bread flour merely. Think of it as "the flour for every purpose."

The Flour Question Settled  
**Because  
Pillsbury's Best**

Pillsbury Flour Mills Company, Minneapolis, Minn.



**This ALUMINUM SET**

**OR CHOICE OF OTHER USEFUL PREMIUMS WITH YOUR 1918 IMPERIAL RANGE**

A special offer with every Imperial Range—an elegant Pure Aluminum Cooking and Roasting Combination. Seamless and Sanitary—4 pieces. Makes 12 useful kitchen utensils, as illustrated.

**30 DAYS' FREE HOME TEST**  
PAY US NO MONEY IN ADVANCE

We take all the risk. Choose any range you want from over a hundred styles. Try it, test it for 30 days before you decide to keep it. Send it back if not satisfied.

**FACTORY PRICES—WE PAY FREIGHT TO YOUR HOME TOWN**

Choose Your Own Terms. If you decide to keep your Imperial—Cash or Credit. By dealing direct with our factory you pay Manufacturer's Price Only and No Freight.

**SAVE MONEY** By our new 20th Century method. 100,000 Imperials now in use. Housewives delighted. IMPERIAL RANGES are made of highest grade materials. 365 DAYS' GUARANTEE. Will no warp or crack. Have the marvelous even baking of The Colonial Oven modernized—a STONE OVEN BOTTOM—which holds heat like a Fireless Cooker. Great fuel savers and new kind of PERFECT ODOR HOOD. Test all these without risk in your home before buying any range. Write at once for

**BIG FREE CATALOG**  
Get "No Money Risk" Trial offer. Big Free Premium of grand complete description of Imperial Ranges and their new 1918 improvements. You need this book to intelligently select a range. Write today. A letter or postal will do.

The IMPERIAL STEEL RANGE COMPANY  
430 Detroit St.  
CLEVELAND, O.



Genuine comfort if you ask for and get—

**Mayer's**

**Martha Washington Comfort Shoes**

Beware of Imitations—name and trade-mark stamped on the sole.

F. Mayer Boot & Shoe Company  
Milwaukee, Wis.

**HONOR BILT**

**37 DIFFERENT STYLES**



**THE ORIGINAL CHEMICAL Indoor Closet**

30,000 SOLD—FIFTH YEAR

**More Comfortable, Healthful, Convenient**

Eliminates the out-house, open vault and cess-pool, which are breeding places for germs. Have a warm, sanitary, odorless toilet right in your house. No going out in cold weather. A boon to invalids. Endorsed by State Boards of Health.

**ABSOLUTELY ODORLESS**

Put It Anywhere In The House

The germs are killed by a chemical process in water in the container. Empty once a month. No more trouble to empty than ashes. Closet absolutely guaranteed. Guarantee on file in the office of this publication. Ask for catalog and price.

**ROWE SANITARY MFG. CO.** 7412 6th St., DETROIT, MICH.  
Ask about the Ro-San Washstand—Hot and Cold Running Water Without Plumbing



**HOOSIER STOVES & RANGES FREE**

To try in your home 30 days free no matter where you live. Show your friends, send it back at our expense if you do not want to keep it. Million members of families enjoying the comforts and pleasures of "Hoosier" Stoves & Ranges, perfect bakers and heaters, beautifully finished, smooth latest design, guaranteed for years.

Write for our big free book showing photographs, describing large assortment of sizes and designs of Steel and Cast Ranges, Cooks, Soft and Hard Coal Heaters, to select from, explaining our free trial. Send postal today.

**HOOSIER STOVE CO.**  
131 State St., Marion, Ind.



Buy Your **COFFEE** WHOLESALE

Get the BEST and SAVE 10 cts per pound. WE PAY POST, EXPRESS or FREIGHT

If you love good coffee send for price list

**JEVNE COFFEE CO.** (Est. 1881) Coffee Specialists  
Dept. 7 1255-57 W. Madison St., CHICAGO.

## For the Needleworker

### A Suggestion for Farmers' Wives

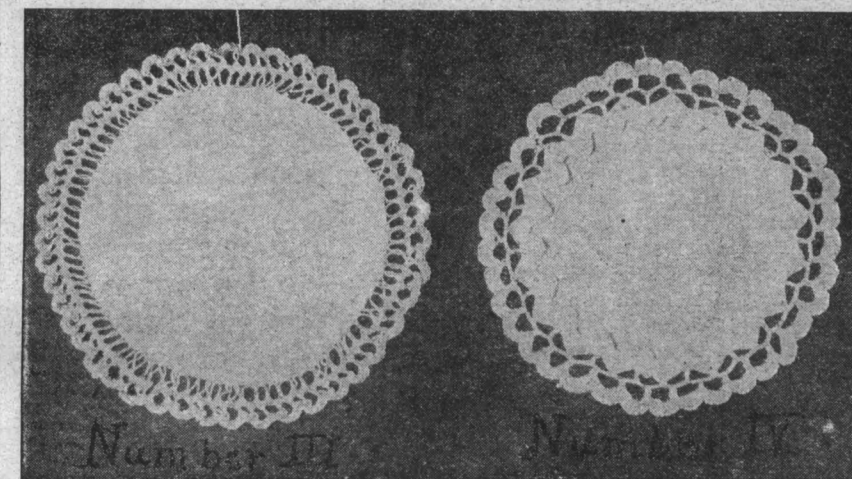
By GRACE N. WHITTAKER

THE average country woman is a little conservative about adopting so-called fads, but blessed be fads when they take the form of time and hard work savers.

Just now the city and village housekeepers are using the pretty luncheon sets for nearly everything except the formal dinner. One excellent housewife recently said, "I have not ironed a tablecloth this year." When asked if she had not entertained, she replied, "Certainly I have, and many times, too. I think my table, with its pretty luncheon cloth or its crochet doily set has looked just as well as in the days when I dreaded the coming of a guest because it added at least one more tablecloth to a washing already large enough."

There are some housekeepers, and they do not all live on farms either, who think they can not use these small piece sets when alone, and who would be horrified if it were suggested that they be used for guests. And yet, why not? They certainly are pretty, easy to wash and iron, may be as inexpensive as desired, and last but not least, they look well. If an accident happens it means washing two or three small pieces and not a two or three-yard tablecloth.

When this labor-saving plan was mentioned to one woman she said, "I'd like to try it but I have a stock of tablecloths on hand and do not feel that I can go to the extra expense."



Another woman solved her problem for her as follows: First she cut the borders from both sides of a cloth that was two yards square, leaving a piece of all-over center design that measured forty-six inches by two yards. From this was cut a forty-six-inch square, which when hemmed made a forty-five-inch cloth. The remainder, twenty-six by forty-six inches was trimmed across the ends with linen lace and made a neat cover for a serving table. Sixty inches was next cut from each piece of border. These pieces were put together with linen insertion and the piece thus made trimmed with lace to match the insertion. The two remaining pieces, twelve by thirteen inches, were edged with the same kind of lace and these with the runner made another change for the table. Either looks just as well as the tablecloth and is so much easier to iron.

Some of the doily sets with crochet edge are very easy to make. Nearly every copy of any woman's journal gives directions for making something of the kind. If these are too much work, the doilies may be trimmed with lace and this work may all be done on the sewing machine. If one prefers a dainty color to the white, they may be made from any of the pretty, light cre-

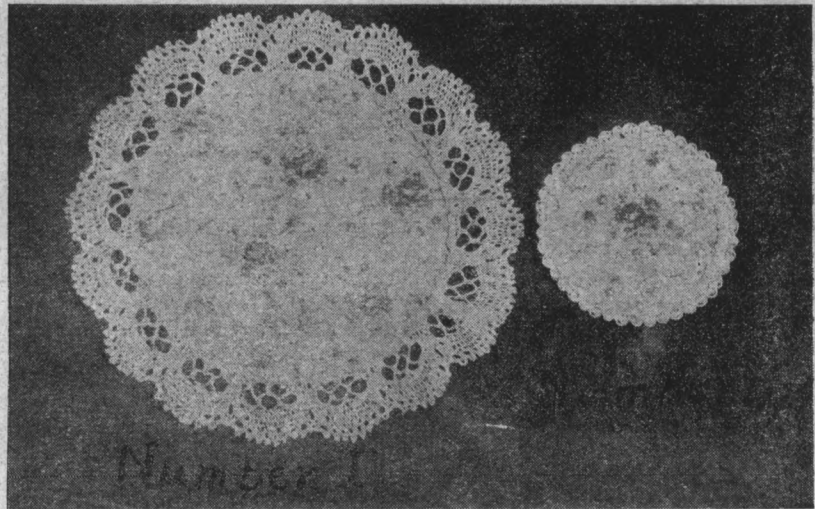
tonnes and trimmed with narrow braid or lace.

An objection that one sometimes sometimes hears is, "My table is old and discolored. If I had a new table I would try it." This difficulty is very easily overcome for a good rubbing

used when guests are not present, but the doilies will be found useful for the cup and saucer.

Unless the trimming used is very narrow (a half-inch or less), the linen or cretonne centers will be somewhat smaller than the measurements given. Three-fourths of a yard, of yard-wide material will be enough for the set unless a very narrow border is used.

Fig. 1.—Doily made of cretonne, edged with linen lace. To make, cut a circle of the desired size from the cretonne. Turn over a quarter-inch on the right side, baste on the lace to cover the raw edge and stitch. To prepare the lace, roll it tightly, wet the edge



down with sandpaper (and this may be done by one of the men on the first rainy day), followed by a coat of wax or of one of the varnishes that are warranted to withstand both heat and water, and behold, a table as good as new. Do you know how much easier it is to wash and iron than the time-honored tablecloth.

A luncheon set usually consists of

to be sewed to the cloth, and allow it to dry. When unrolled, it will be found full enough to fit the circle.

Fig. 2.—This doily is made of the same material, but with a very narrow border.

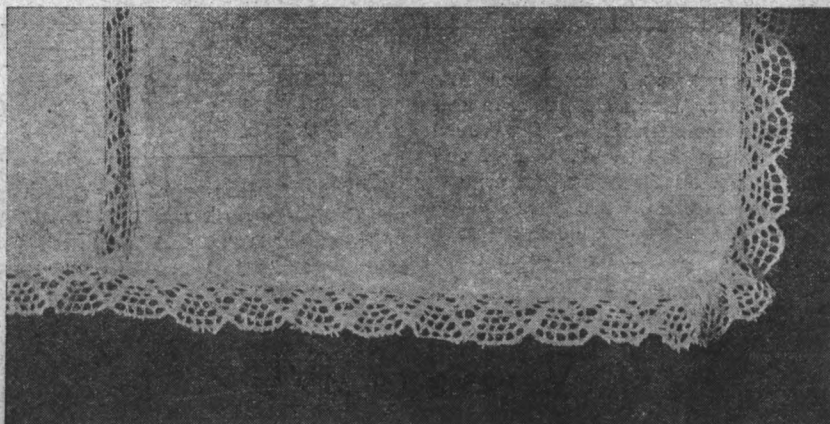
Fig. 3.—For this doily cut a circle of linen the required size, roll the edge and over-hand the lace. Directions for making lace: Material, No. 20 thread, a stiff wire hairpin. Make a loop in the end of the thread, insert the hook, wind the thread one and one-half times around the hairpin, winding toward the right. With the hook draw the thread through under the threads on the pin. This makes two loops on the hook. Pull the thread over the threads on the pin and through the loops on the hook. Turn the work and thread half way around. Make a double crochet in the preceding stitch. Repeat until you have the desired amount. After sewing this on the doily take some other color (blue was used for this), and make six doubles in the first loop, catch the next two together with a double, six doubles in the last loop. Repeat from \*

Fig. 4.—This doily has the edge turned on the right side, covered with half-inch rick-rack braid and stitched.

First Row.—One double in point, \* five chain, one treble at bottom of curve, five chain, one double in next point \*. Repeat from \* to \*.

Second Row.—Eight chain, fasten under five chain of preceding row. Repeat.

Third Row.—One d, 6t, 1 d, in each



A good size when finished is eighteen loop of preceding row.

Colored braid or cotton may be used for place doilies, seven inches for the bread and butter, and four inches for tumbler. In very many farm homes made from pieces of tablecloth which the bread and butter plates are not is described above.

Fig. 5 shows the end of the runner made from pieces of tablecloth which



## INSIDE THE LINES.

(Continued from page 573).

"I am authorized to judge how much your information is worth," his companion declared, leveling a cold glance into Capper's eyes. "You can tell me what you know, and depend on me to pay well, or—we part at once."

"But, Louisa"—again the whine—"how do I know you're what you say? You've flown high since you and I worked together in the Brussels shop. The Wilhelmstrasse—most perfect spy machine in the world! How I'd like to be in your shoes, Louisa!"

She detached the heavy gold locket from the chain on her bosom, with a quick twist of slim fingers had one side of the case open, then laid the locket before him, pointing to a place on the bevel of the case. Capper swept up the trinket, looked searchingly for an instant at the spot the woman had designated, and returned the locket to her hand.

"Your number in the Wilhelmstrasse," he whispered in awe. "Genuine, no doubt. Saw the same sort of mark once before in Rome. All right. Now, listen, Louisa. What I'm going to tell you about where Brussels stands in this—this business that's brewing will make the German general staff sit up." The woman inclined her head toward Capper's. He, looking not at her but out over the rich gleam of brocades, broadcloths and gleaming shoulders, began in a monotone:

"When the war comes—the day the war starts, French artillerymen will be behind the guns at Namur. The English—"

The Hungarian orchestra of forty strings swept into a wild gipsy chant. Dissonances, fierce and barbaric, swept like angry tides over the brilliant floor of the cafe. Still Capper talked on, and the woman called Louisa bent her jewel-starred head to listen. Her face, the face of a fine animal, was set in rapt attention.

"You mark my words," he finished, "when the German army enters Brussels proof of what I'm telling you will be there. Yes, in a pigeonhole of the foreign-office safe those joint plans between England and France for resisting invasion from the eastern frontier. If the Germans strike as swiftly as I think they will the foreign-office Johnnies will be so flustered in moving out they'll forget these papers I'm telling you about. Then your Wilhelmstrasse will know they've paid for the truth when they paid Billy Capper."

Capper eagerly reached for his glass, and, finding it empty, signaled the waiter.

"I'll buy this one, Louisa," he said grandiloquently. "Can't have a lady buying me wine all night." He gave the order. "You're going to slip me some bank-notes tonight—right now, aren't you, Louisa, old pal?" Capper anxiously honed his cheeks with a hand that trembled. The woman's eyes were narrowed in thought.

"If I give you anything tonight, Billy Capper, you'll get drunker than you are now, and how do I know you won't run to the first English secret-service man you meet and blab?"

"Louisa! Louisa! Don't say that!" Great fear and great yearning sat in Capper's filmed eyes. "You know I'm honest, Louisa! You wouldn't milk me this way—take all the info I've got and then throw me over like a dog!" Cold scorn was in her glance.

"Maybe I might manage to get you a position—with the Wilhelmstrasse." She named the great secret-service office under her breath. "You can't go back to England, to be sure; but you might be useful in the Balkans, where you're not known, or even in Egypt. You have your good points, Capper; you're a sly little weasel—when you're sober. Perhaps—"

"Yes, yes; get me a job with the Wilhelmstrasse, Louisa!" Capper was babbling in an agony of eagerness.

"You know my work. You can vouch for me, and you needn't mention that business of the Lord Fisher letters; you were tarred pretty much with the same brush there, Louisa. But, come, be a good sport; pay me at least half of what you think my info's worth, and I'll take the rest out in salary checks, if you get me that job. I'm broke, Louisa!" His voice cracked in a sob. "Absolutely stony broke!"

She sat toying with the stem of her wineglass while Capper's clasped hands on the table opened and shut themselves without his volition. Finally she made a swift move of one hand to her bodice, withdrew it with a bundle of notes crinkling between the fingers.

"Three hundred marks now, Billy Capper," she said. The man echoed the words lovingly. "Three hundred now, and my promise to try to get a number for you with my people. That's fair?"

"Fair as can be, Louisa?" He stretched out clawlike fingers to receive the thin sheaf of notes she counted from her roll. "Here comes the wine—the wine I'm buying. We'll drink to my success at landing a job with—your people."

"For me no more tonight," the woman answered. "My cape, please." She rose.

"But, I say!" Capper protested. "Just one more bottle—the bottle I'm buying. See, here it is all proper and cooled. Marks the end of my bad luck, so it does. You won't refuse to drink with me to my good luck that's coming?"

"Your good luck is likely to stop short with that bottle, Billy Capper," she said, her lips parting in a smile half scornful. "You know how wine has played you before. Better stop now while luck's with you."

"Hanged if I do!" he answered stubbornly. "After these months of hand to mouth and begging for a nasty pint of ale in a common pub—leave good wine when it's right under my nose? Not me!" Still protesting against her refusal to drink with him the wine he would pay for himself—the man made that a point of injured honor—Capper grudgingly helped place the cape of web lace over his companion's white shoulders, and accompanied her to her taxi.

"If you're here this time tomorrow night—and sober," were here farewell words, "I may bring you your number in the—you understand; that and your commission to duty."

"God bless you, Louisa, girl!" Capper stammered. "I'll not fail you."

He watched the taxi trundle down the brilliant mirror of Unter den Linden, a sardonic smile twisting his lips. Then he turned back to the world of light and perfume and wine—the world from which he had been barred these many months and for which the starved body of him had cried out in agony. His glass stood brimming; money crinkled in his pocket; there were eyes for him and fair white shoulders. Billy Capper, discredited spy, had come to his own once more.

The orchestra was booming a rag-time, and the chorus on the stage of the Winter Garden came plunging to the footlights, all in line, their black legs kicking out from the skirts like thrusting spindles in some marvelous engine of stagecraft. They screeched the final line of a Germanized coon song, the cymbals clanged "Zam-m-m!" and folk about the clustered tables pattered applause. Captain Woodhouse, at a table by himself, pulled a wafer of a watch from his waistcoat pocket, glanced at its face and looked back at the rococo entrance arches, through which the late-comers were streaming.

"Henry Sherman, do you think Kitty ought to see this sort of thing? It's positively indecent!"

The high-pitched nasal complaint came from a table a little to the right of the one where Woodhouse was sitting. (Continued next week).

# Columbia

## Grafonola

### and Columbia Records



### "That is the instrument I want"

You want to have just that secure, decided feeling when you buy a phonograph at Christmas or at any other time.

You are not likely to have a complete conviction that you are buying the right instrument for your home until you have seen and heard the Columbia Grafonola.

Whatever the price that you feel ready to pay, you will find in the Columbia Grafonola a model of such substantial value that you will have to give it a place in your consideration.

From the lowest-priced Grafonola at \$18 to the handsome cabinet instrument at \$250, Columbia instruments invite and welcome comparison. The customer who calls only at a Columbia Grafonola store is sure to be pleased when he hears the Columbia. The customer who hears many instruments is convinced on hearing the Columbia that "That is the instrument I want."

Columbia Graphophone Company  
New York



### Something for the Boys and Girls

It's fun to boost for the Michigan Farmer, besides we will pay you well to do it. Earn some Christmas Money taking Michigan Farmer subscriptions. It's something any boy or girl can do and enjoy.

Write us and we will tell you about our Christmas Money subscription plan.

THE MICHIGAN FARMER,

Detroit, Mich.



**This ALUMINUM SET**

**FREE**

**OR CHOICE OF OTHER USEFUL PREMIUMS WITH YOUR 1918 IMPERIAL RANGE**

A special offer with every Imperial Range—an elegant Pure Aluminum Cooking and Roasting Combination. Seamless and Sanitary—4 pieces. Makes 12 useful kitchen utensils, as illustrated.

**30 DAYS' FREE HOME TEST**

**PAY US NO MONEY IN ADVANCE**

We take all the risk. Choose any range you want from our hundred styles. Try it, test it for 30 days before you decide to keep it. Send it back if not satisfied.

**FACTORY PRICES—WE PAY FREIGHT TO YOUR HOME TOWN**

**Choose Your Own Terms.** If you decide to keep your Imperial—Cash or Credit. By dealing direct with our factory you pay **Manufacturer's Price Only** and No Freight.

**SAVE MONEY** By our new 20th Century methods, 100,000 Imperials now in use. Housewives delighted. **IMPERIAL RANGES** are made of highest grade materials. **365 DAYS' GUARANTEE.** Will no warp or crack. Have the marvelous even baking of The Colonial Oven modernized—a **STONE OVEN BOTTOM**—which holds heat like a fireless cooker. Great food savers and new kind of **PERFECT ODOR HOOD.** Test all these without risk in your home before buying any range.

Write at once for **BIG FREE CATALOG**

Get "No Money Risk" Trial offer. Big Free Premium offer and complete description of Imperial Ranges and their new 1918 improvements. You need this book to intelligently select a range. Write today. A letter or postal will do.

The **IMPERIAL STEEL RANGE COMPANY**  
430 Detroit St., CLEVELAND, O.



Genuine comfort if you ask for and get—

**Mayer**

**Martha Washington Comfort Shoes**

Beware of Imitations—name and trade-mark stamped on the sole.

**F. Mayer Boot & Shoe Company**  
Milwaukee, Wis.

**HONOR BILT**

**37 DIFFERENT STYLES**



**THE ORIGINAL CHEMICAL**

**Ro-San Indoor Closet**

**30,000 SOLD—FIFTH YEAR**

**More Comfortable, Healthful, Convenient**

Eliminates the out-house, open vault and cess-pool, which are breeding places for germs. Have a warm, sanitary, odorless toilet right in your house. No going out in cold weather. A boon to invalids. Endorsed by State Boards of Health.

**ABSOLUTELY ODORLESS**

Put It Anywhere In The House

The germs are killed by a chemical process in water in the container. Empty once a month. No more trouble to empty than ashes. Closet absolutely guaranteed. Guarantee on file in the office of this publication. Ask for catalog and price.

**ROWE SANITARY MFG. CO.** 712 6th St., DETROIT, MICH.  
Ask about the Ro-San Washstand—Hot and Cold Running Water Without Plumbing



**HOOSIER STOVES & RANGES FREE**

To try in your home 30 days free no matter where you live. Show your friends, send it back at our expense if you do not want to keep it. Million members of families enjoying the comforts and pleasures of "Hoosier" Stoves & Ranges, perfect bakers and heaters, beautifully finished, smooth latest design, guaranteed for years.

Write for our big free book showing photographs, describing large assortment of sizes and designs of Steel and Cast Ranges, Cooks, Sift and Hard Coal Heaters, to select from, explaining our free trial. Send postal today.

**HOOSIER STOVE CO.**  
131 State St., Marion, Ind.



Buy Your **COFFEE** WHOLESALE

Get the BEST and SAVE 10 cts per pound. WE PAY POST, EXPRESS or FREIGHT

IF YOU LOVE GOOD COFFEE SEND FOR PRICE LIST

**JEVNE COFFEE CO.** (Est. 1881) Coffee Specialists  
Dept. 7 : 2855-57 W. Madison St., CHICAGO.

## For the Needleworker

### A Suggestion for Farmers' Wives

By GRACE N. WHITTAKER

THE average country woman is a little conservative about adopting so-called fads, but blessed be fads when they take the form of time and hard work savers.

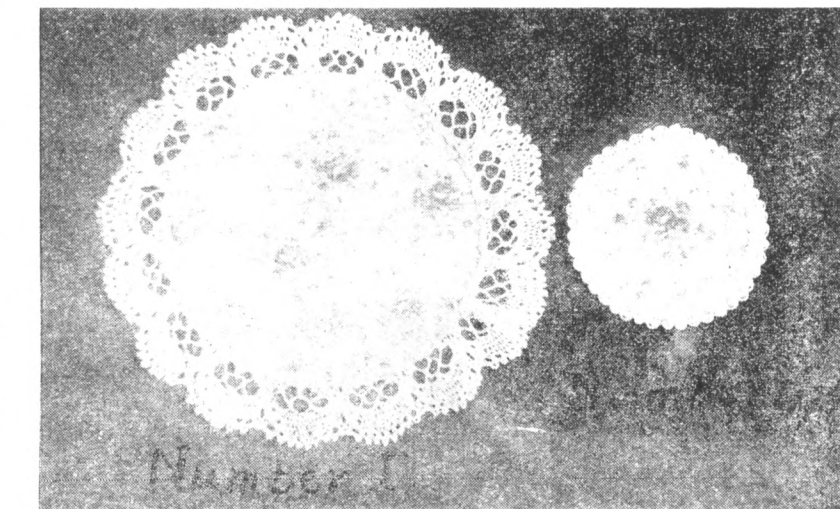
Just now the city and village housekeepers are using the pretty luncheon sets for nearly everything except the formal dinner. One excellent housewife recently said, "I have not ironed a tablecloth this year." When asked if she had not entertained, she replied, "Certainly I have, and many times, too. I think my table, with its pretty luncheon cloth or its crochet doily set has looked just as well as in the days when I dreaded the coming of a guest because it added at least one more tablecloth to a washing already large enough."

There are some housekeepers, and they do not all live on farms either, who think they can not use these small piece sets when alone, and who would be horrified if it were suggested that they be used for guests. And yet, why not? They certainly are pretty, easy to wash and iron, may be as inexpensive as desired, and last but not least, they look well. If an accident happens it means washing two or three small pieces and not a two or three-yard tablecloth.

When this labor-saving plan was mentioned to one woman she said, "I'd like to try it but I have a stock of tablecloths on hand and do not feel that I can go to the extra expense."

tonnes and trimmed with narrow braid or lace.

An objection that one sometimes sometimes hears is, "My table is old and discolored. If I had a new table I would try it." This difficulty is very easily overcome for a good rubbing



down with sandpaper (and this may be done by one of the men on the first rainy day), followed by a coat of wax or of one of the varnishes that are warranted to withstand both heat and water, and behold, a table as good as new. Do you know how much easier it is to wash and iron than the time-honored tablecloth.

A luncheon set usually consists of

to be sewed to the cloth, and allow it to dry. When unrolled, it will be found full enough to fit the circle.

Fig. 2.—This doily is made of the same material, but with a very narrow border.

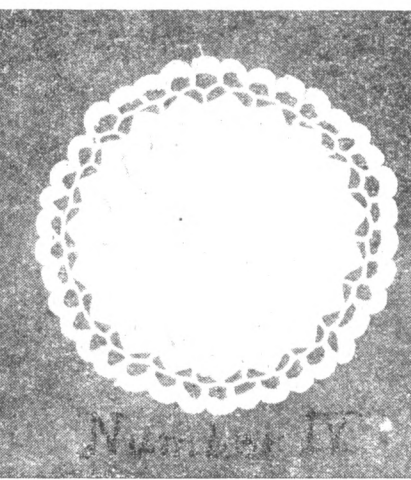
Fig. 3.—For this doily cut a circle of linen the required size, roll the edge and over-hand the lace. Directions for making lace: Material, No. 20 thread, a stiff wire hairpin. Make a loop in the end of the thread, insert the hook, wind the thread one and one-half times around the hairpin, winding toward the right. With the hook draw the thread through under the threads on the pin. This makes two loops on the hook. Pull the thread over the threads on the pin and through the loops on the hook. Turn the work and thread half way around. Make a double crochet in the preceding stitch. Repeat until you have the desired amount. After sewing this on the doily take some other color (blue was used for this), and make six doubles in the first loop, catch the next two together with a double, six doubles in the last loop. Repeat from \*.

Fig. 4.—This doily has the edge turned on the right side, covered with half-inch rick-rack braid and stitched.

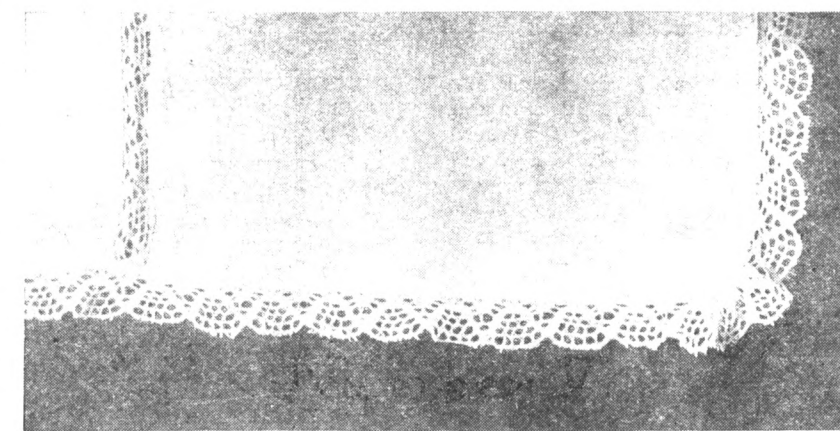
First Row.—One double in point, \* five chain, one treble at bottom of curve, five chain, one double in next point \*. Repeat from \* to \*.

Second Row.—Eight chain, fasten under five chain of preceding row. Repeat.

Third Row.—One d, 6t, 1 d, in each



Another woman solved her problem for her as follows: First she cut the borders from both sides of a cloth that was two yards square, leaving a piece of all-over center design that measured forty-six inches by two yards. From this was cut a forty-six-inch square, which when hemmed made a forty-five-inch cloth. The remainder, twenty-six by forty-six inches was trimmed across the ends with linen lace and made a neat cover for a serving table. Sixty inches was next cut from each piece of border. These pieces were put together with linen insertion and the piece thus made trimmed with lace to match the insertion. The two remaining pieces, twelve by thirteen inches, were edged with the same kind of lace and these with the runner made another change for the table. Either looks just as well as the tablecloth and is so much easier to iron.



A good size when finished is eighteen inches for the centerpiece, ten inches for place doilies, seven inches for the bread and butter, and four inches for tumbler. In very many farm homes the bread and butter plates are not

loop of preceding row. Colored braid or cotton may be used for this set, or both.

Fig. 5 shows the end of the runner made from pieces of tablecloth which is described above.



## INSIDE THE LINES.

(Continued from page 573).

"I am authorized to judge how much your information is worth," his companion declared, leveling a cold glance into Capper's eyes. "You can tell me what you know, and depend on me to pay well, or—we part at once."

"But, Louisa"—again the whine—"how do I know you're what you say? You've flown high since you and I worked together in the Brussels shop. The Wilhelmstrasse—most perfect spy machine in the world! How I'd like to be in your shoes, Louisa!"

She detached the heavy gold locket from the chain on her bosom, with a quick twist of slim fingers had one side of the case open, then laid the locket before him, pointing to a place on the bevel of the case. Capper swept up the trinket, looked searchingly for an instant at the spot the woman had designated, and returned the locket to her hand.

"Your number in the Wilhelmstrasse," he whispered in awe. "Genuine, no doubt. Saw the same sort of mark once before in Rome. All right. Now, listen, Louisa. What I'm going to tell you about where Brussels stands in this—this business that's brewing will make the German general staff sit up." The woman inclined her head toward Capper's. He, looking not at her but out over the rich gleam of brocades, broadcloths and gleaming shoulders, began in a monotone:

"When the war comes—the day the war starts, French artillerymen will be behind the guns at Namur. The English—"

The Hungarian orchestra of forty strings swept into a wild gipsy chant. Dissonances, fierce and barbaric, swept like angry tides over the brilliant floor of the cafe. Still Capper talked on, and the woman called Louisa bent her jewel-starred head to listen. Her face, the face of a fine animal, was set in rapt attention.

"You mark my words," he finished, "when the German army enters Brussels proof of what I'm telling you will be there. Yes, in a pigeonhole of the foreign-office safe those joint plans between England and France for resisting invasion from the eastern frontier. If the Germans strike as swiftly as I think they will the foreign-office Johnnies will be so flustered in moving out they'll forget these papers I'm telling you about. Then your Wilhelmstrasse will know they've paid for the truth when they paid Billy Capper."

Capper eagerly reached for his glass, and, finding it empty, signaled the waiter.

"I'll buy this one, Louisa," he said grandiloquently. "Can't have a lady buying me wine all night." He gave the order. "You're going to slip me some bank-notes tonight—right now, aren't you, Louisa, old pal?" Capper anxiously honed his cheeks with a hand that trembled. The woman's eyes were narrowed in thought.

"If I give you anything tonight, Billy Capper, you'll get drunker than you are now, and how do I know you won't run to the first English secret-service man you meet and blab?"

"Louisa! Louisa! Don't say that!" Great fear and great yearning sat in Capper's filmed eyes. "You know I'm honest, Louisa! You wouldn't milk me this way—take all the info I've got and then throw me over like a dog!" Cold scorn was in her glance.

"Maybe I might manage to get you a position—with the Wilhelmstrasse." She named the great secret-service office under her breath. "You can't go back to England, to be sure; but you might be useful in the Balkans, where you're not known, or even in Egypt. You have your good points, Capper; you're a sly little weasel—when you're sober. Perhaps—"

"Yes, yes; get me a job with the Wilhelmstrasse, Louisa!" Capper was babbling in an agony of eagerness.

"You know my work. You can vouch for me, and you needn't mention that business of the Lord Fisher letters; you were tarred pretty much with the same brush there, Louisa. But, come, be a good sport; pay me at least half of what you think my info's worth, and I'll take the rest out in salary checks, if you get me that job. I'm broke, Louisa!" His voice cracked in a sob. "Absolutely stony broke!"

She sat toying with the stem of her wineglass while Capper's clasped hands on the table opened and shut themselves without his volition. Finally she made a swift move of one hand to her bodice, withdrew it with a bundle of notes crinkling between the fingers.

"Three hundred marks now, Billy Capper," she said. The man echoed the words lovingly. "Three hundred now, and my promise to try to get a number for you with my people. That's fair?"

"Fair as can be, Louisa?" He stretched out clawlike fingers to receive the thin sheaf of notes she counted from her roll. "Here comes the wine—the wine I'm buying. We'll drink to my success at landing a job with—your people."

"For me no more tonight," the woman answered. "My cape, please." She rose.

"But, I say!" Capper protested. "Just one more bottle—the bottle I'm buying. See, here it is all proper and cooled. Marks the end of my bad luck, so it does. You won't refuse to drink with me to my good luck that's coming?"

"Your good luck is likely to stop short with that bottle, Billy Capper," she said, her lips parting in a smile half scornful. "You know how wine has played you before. Better stop now while luck's with you."

"Hanged if I do!" he answered stubbornly. "After these months of hand to mouth and begging for a nasty pint of ale in a common pub—leave good wine when it's right under my nose? Not me!" Still protesting against her refusal to drink with him the wine he would pay for himself—the man made that a point of injured honor—Capper grudgingly helped place the cape of web lace over his companion's white shoulders, and accompanied her to her taxi.

"If you're here this time tomorrow night—and sober," were here farewell words, "I may bring you your number in the—you understand; that and your commission to duty."

"God bless you, Louisa, girl!" Capper stammered. "I'll not fail you."

He watched the taxi trundle down the brilliant mirror of Unter den Linden, a sardonic smile twisting his lips. Then he turned back to the world of light and perfume and wine—the world from which he had been barred these many months and for which the starved body of him had cried out in agony. His glass stood brimming; money crinkled in his pocket; there were eyes for him and fair white shoulders. Billy Capper, discredited spy, had come to his own once more.

The orchestra was booming a rag-time, and the chorus on the stage of the Winter Garden came plunging to the footlights, all in line, their black legs kicking out from the skirts like thrusting spindles in some marvelous engine of stagecraft. They screeched the final line of a Germanized coon song, the cymbals clanged "Zam-m-m!" and folk about the clustered tables pattered applause. Captain Woodhouse, at a table by himself, pulled a wafer of a watch from his waistcoat pocket, glanced at its face and looked back at the rococo entrance arches, through which the late-comers were streaming.

"Henry Sherman, do you think Kitty ought to see this sort of thing? It's positively indecent!"

The high-pitched nasal complaint came from a table a little to the right of the one where Woodhouse was sitting. (Continued next week).

# Columbia

## Grafonola

and Columbia Records



### "That is the instrument I want"

You want to have just that secure, decided feeling when you buy a phonograph at Christmas or at any other time.

You are not likely to have a complete conviction that you are buying the right instrument for your home until you have seen and heard the Columbia Grafonola.

Whatever the price that you feel ready to pay, you will find in the Columbia Grafonola a model of such substantial value that you will have to give it a place in your consideration.

From the lowest-priced Grafonola at \$18 to the handsome cabinet instrument at \$250, Columbia instruments invite and welcome comparison. The customer who calls only at a Columbia Grafonola store is sure to be pleased when he hears the Columbia. The customer who hears many instruments is convinced on hearing the Columbia that "That is the instrument I want."

Columbia Graphophone Company  
New York



Columbia  
Grafonola  
Price \$45

Columbia  
Grafonola  
Price \$30

### Something for the Boys and Girls

It's fun to boost for the Michigan Farmer, besides we will pay you well to do it. Earn some Christmas Money taking Michigan Farmer subscriptions. It's something any boy or girl can do and enjoy.

Write us and we will tell you about our Christmas Money subscription plan.

THE MICHIGAN FARMER,

Detroit, Mich.





# Our Boys and Girls

## At Work and play



### Junior Farmers Make Splendid Showing

By R. N. KEBLER

District Club Leader of Upper Peninsula

EVERYTHING considered, the boys and girls Upper Peninsula Potato Show at Crystal Falls, Iron county, November 15-16, was the best of its kind ever held in Michigan.

Last spring an army of 304 youths volunteered their services to potato culture and upon organization were formed into thirty-seven potato clubs in that many agricultural districts. The organizations not only enabled them to uphold the flag of the nation by aiding in food production, but also afforded these future farmers an opportunity of being educated in the scientific methods of potato culture.

No army is competent without leadership, and in this case it was given

given score cards and practiced judging under the supervision of a potato expert. These cards were later criticized by the man in charge.

The culmination of the year's work was the Boys' and Girls' Upper Peninsula Potato Show at Crystal Falls. All members of clubs who had received seventy per cent on quality at the county round-up were allowed to exhibit at this show, also all who had received prizes on any of the four-point basis were encouraged to attend. This resulted in a total attendance of about

Raymond Brusseau, of Iron county and Peter Raffin, of Dickinson county, had score cards which tallied almost identically with those of Mr. Waid. This shows the results of the training received at the local and county shows. Several others ran very close to this record, most of them being Iron county boys. This was probably due to the fact that R. G. Hoopingarner, Iron County Agent, was the first agent established in the upper peninsula and has devoted a great deal of his time to potato culture.

The following prizes were awarded by the Upper Peninsula Development Bureau:

For the Best Story: Vernon Lindroth, Schoolcraft county, Maple Grove, potato fob; Harold Helseus, Ontonagon county, Trout Creek, Gilbert's book on "The Potato;" Arnold Wickman, Iron county, Polatka, \$1.00 bank account.

The reading of these stories proved conclusively that the authors had their subject well in hand.

For the Best Yield: Wallace Krieger, 572 bushels, Marquette county-Scandia, potato fob; Clifford Felt, 504 bushels, Marquette county, National Mine, Gilbert's book on "The Potato;" Garland Wolff, 500 bushels, Schoolcraft county, Cooks, \$1.00 bank account.

When Wallace Krieger was announced as the Champion Potato Grower of Michigan, men took the lad by the arms and lifted him to the stage midst shouts and roars of applause. One taking second note of his yield would surely conclude that he deserves all the credit given him. Clifford Felt came in with a very close second and is well worthy of mention, as is also Garland Wolff who ran almost neck and neck with him.

For the Largest Profit: Clifford Felt, \$148.40, Marquette county, National Mine, Potato fob; Wallace Krieger, \$127.27, Marquette county, Scandia, Gilbert's book on "The Potato;" Garland Wolff, \$98.60, Schoolcraft county, Cooks, \$1.00 bank account.

Note that Clifford Felt grew his po-

tatoes at less expense than did Wallace Krieger, and consequently won over the latter on profit. Clifford hill-selected a large number of bushels which assisted in increasing his net profits.

For the Highest Quality: Willard Millar, Manistique, Potato fob; Clifford Barton, Marquette county, Republic, Gilbert's book on "The Potato;" Edmund Ehli, Marquette county, Arnold, \$1.00 bank account.

C. W. Waid considered the quality of these potatoes, as well as several of the other exhibits, so excellent that he packed them up and sent them to East Lansing where they will be exhibited at the College during Farmers' Week.

County—Four-point Basis: Marquette, \$10, to be used as county agent and club members see fit; Schoolcraft, \$7.00, to be used as county agent and club members see fit; Dickinson, \$5.00, to be used as county agent and club members see fit.

Boys—Four-point Basis: Clifford Felt, \$94.25, free trip to Lansing and Michigan Agricultural College; Wallace Krieger, \$88.15, grade calf; Garland Wolff, \$87.50, pen of four hens and one cockerel.

Judges: Raymond Brusseau, Iron county, Amasa, potato fob; Peter Raffin, Iron county, Iron Mountain, potato fob.

Of the army of 304 members, 165 really "went over the top," that is, they fully completed the project, this being fifty-four per cent. The six counties represented grew 36.89 acres with a yield of 6,344.5 bushels, a value of \$6,323.16 and a profit of \$3,901.90. This makes an average per acre of 168.5 bushels, value \$171.40, profit \$105.77 at a cost of \$65.63. This we admit was "doing their bit."

The above data was compiled by charging fifty cents per bushel for the culls, \$1.00 per bushel for market potatoes, and \$1.50 per bushel for hill selected. The remaining forty-six per cent who did not fully complete their projects, grew potatoes, but data on the same could not be collected.

One of the things that made this show stand out as an educational feature was the cooperation of the Iron



The Boys After a Profitable Days' Work.

by a staff of local leaders, school commissioners and extension workers. The duties of these leaders were to arrange and be present at club meetings at various times of the year to give instruction in spraying, hill selection, show selection, marketing, and in general potato culture. A social atmosphere was evidenced at these meetings by the parliamentary rules which were acknowledged, as well as by the games, songs and yells.

After harvest time, according to the club rules, it was necessary for these soldiers of the potato industry to exhibit and advertise the fruits of their labor. Consequently, the leadership staff arranged for the thirty-seven local shows, to be followed later on by the county round-ups. At the local shows which were held in the rural schools, each member brought an exhibit of ten potatoes of his own selection. These exhibits were judged by the county agents, who also taught the members the art of judging. Stories on how they grew their potatoes, together with a report showing the yield, cost of production and profit, were also brought to this meeting. Each one in attendance was scored on the four-point basis, that is on yield, profit, story and quality of exhibit, and first, second and third places were awarded. This was the preliminary step to the county round-up.

From the experience derived from the local show, the members were able to make a better exhibit at the round-up. Here the general routine of instruction was about the same as at the previous show, with the added features of a banquet, outside speakers, yells, songs and games. The members were

300, which includes teachers from Iron county and about thirty guests from without Iron county, 235 exhibits being made. The guests from without the county were entertained during their stay by city people interested in the work.

In the evening a banquet was served by the domestic science teacher with girl club members as assistants. This was under the auspices of the Business Men's Association of Crystal Falls. Much enthusiasm was expressed by the yells given, a young spud grower from Dickerson county proving himself very apt as a yell master, while a young lady from Iron county knew just how to get the crowd to operate their vocal cords in unison and harmony. The spirit those youngsters put into the banquet program would have put any college function to shame. The speakers of the evening were Professor J. H. Kaye of the Northern State Normal, Marquette; E. C. Lindemann, State Club Leader, East Lansing, and G. E. Bishop, of Alpha. These men greatly encouraged the boys and girls in their enterprise.

During one of the sessions when several of the boys were called upon for five-minute talks on how they grew their potatoes, men who had made a business of growing potatoes listened with a great deal of interest. One of them said, "I thought I knew the potato game, but those boys have awakened me to possibilities I had never thought of."

At this meeting also the boys scored exhibits, this time without assistance, and in tallying up the scores, a comparison was made with those of C. W. Waid, Potato Expert, East Lansing.



Members of Dafter Potato Club Studying Potato Diseases in the Field.



county teachers and their fine spirited school commissioner. And it was intimated that hereafter the Iron County Teachers' Institute and the Boys' and Girls' Potato Show would be one, thus showing the close relationship between club work and the rural school.

Think what it would mean to the nation if every one of our American lads would do what these 165 have done.

This is indeed a fit and proper time to rally for our country, and even though one cannot be in the trenches, by aiding in the productiveness of the things of the soil, one plays a most important and necessary part. Thus it is hoped that when the "Spring Drive" is on there will be a wonderful response by our young soldiers who, with the hoe, will fight the foe.



## Boys' and Girls' Club Notes

Conducted by E. C. Lindemann



### Save Seed Corn.

All corn club members should do their very best to save and cure as much seed corn as they can possibly reach. There will be a great scarcity of seed corn next year and many boys have excellent corn on this acre. If it is matured or partially matured, it should be saved for seed. Boys who wish to know the moisture content of their corn may have samples analyzed by writing to C. A. Spaulding, East Lansing, Michigan.

### Red Cross Work for Girls.

Over one thousand girls in Michigan who are members of the garment making clubs are now engaged in producing articles for the Red Cross. Three hundred comfort bags have already been completed and five hundred hospital bags. The members of the girls' clubs of Michigan are going to furnish the equipment for the Shirley Hospital Unit in France. They are doing their work under the direction of the Women's Patriotic League for Service of Detroit. The girls are making: Trench candles, joke books, Christmas stockings, comfort bags and hospital bags. Great interest has been aroused over this work and there will undoubtedly be a much larger number of girls engaged in it before the winter is over.

A girls' garment making club in Kent county, under the supervision of Mrs. Toots, has already completed one hundred hospital bags, thirty-five Christmas stockings and one hundred trench candles.

Some of the girls are now beginning their work for the Belgium and French Baby Relief. The children in these countries need: Bonnets, jackets, booties, and other articles made of flannel.

Iona Lee, aged thirteen, has just won the championship for canning club work in Lake county. There are twelve members in the club which she represents and their club keeps up regular meetings throughout the year. They are planning to do gardening and canning work next season. At the club exhibit the members of the club gave a dinner to their parents.

Evelynn Pepper, of Osceola county, who was last year's state champion for canning clubs, has a record of this year of five hundred and twenty-seven quarts. The champion has not been decided for the state.

Six Normal girls of Shiawassee county, under the supervision of Ellen Rich, Principal, have completed one hundred and fifty trench candles and eight Christmas stockings as a part of their Red Cross work. The class is organized as a regular girls' club.

The high school girls at Zeeland and Coopersville are undertaking the hot school lunch plan on an organized and business-like basis.

In order to indicate the progress of boys' and girls' club work in Michigan, the following list of state leaders is given: E. C. Lindemann, state club leader; Anna B. Cowles, state club leader for girls; Barbara Van Heulen, assistant state club leader for girls; R. N. Kebler, district club leader for the upper peninsula; A. G. Kettunen, emergency state club leader; George D. Gilbert, emergency club leader for northeastern Michigan.

Kent county has employed G. O. Stewart, a recent graduate of the Michigan Agricultural College, to act as county club leader on a permanent twelve months' basis. Mr. Stewart has been in care of the garden club work at Grosse Pointe during the past season.

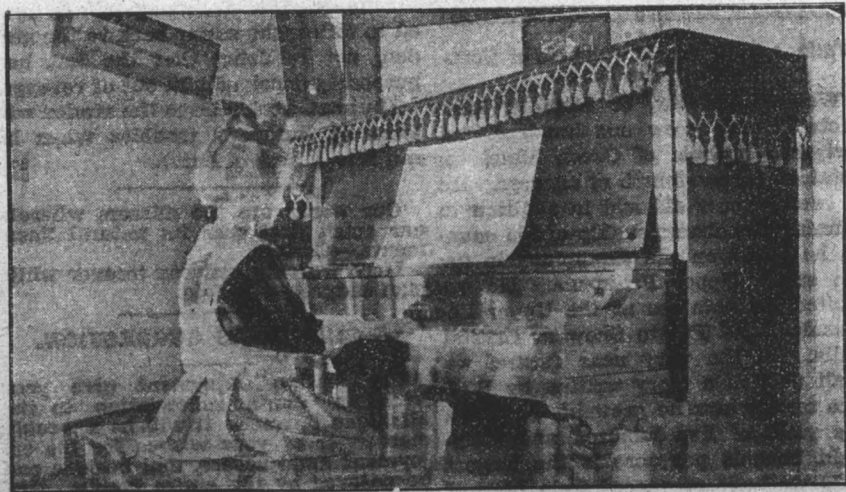
Saginaw county has appropriated one thousand dollars from the board of supervisors for the purpose of employing a county club leader on a twelve months' basis. C. P. Pressley, who has been in charge of the work in Saginaw county the past season has been selected for the position.

The Calhoun county round-up for boys' and girls' club members will be held at Marshall on December 28. The Hillsdale county round-up for boys' and girls' club members will be held at Hillsdale on December 14. The Kent county round-up for boys' and girls' club members will be held at Grand Rapids on December 15. Barry county round-up will be held on December 8, Mecosta county on December 7.

There were more than 25,000 members of boys' and girls' clubs in Michigan this year.

Boys' and girls' clubs are now organized in fifty-five counties of the state of Michigan.

Every boy and girl should turn to page 570 and read "How the World's Business is Transacted," the first of Mr. Tyler's series of articles.



The Morning Practice Hour.

## Give Her A Merry Christmas



Freedom forever from the hard work of pumping and carrying water—can you imagine a finer present for your wife?

## Leader

Pressure Water Systems

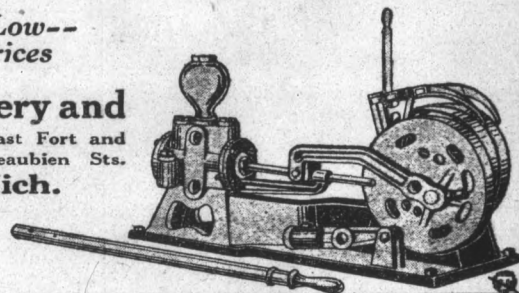
give you a constant, never-failing water supply at the turn of a faucet.

The pump may be operated by an electric motor, gasoline engine or by hand. A few minutes pumping every morning puts a pressure on the Leader Tank that lasts all day.

And for watering stock—just think of the work and time you will save.

The Cost Is Low--  
Get Our Prices

Kerr Machinery and  
Supply Co., East Fort and  
Beaubien Sts.  
Detroit, Mich.



## Fertilizers Pay Better Than Ever

TODAY a bushel of corn or wheat buys more fertilizer (potash excepted, of course) than at any time during the past three years. Note how much cheaper you can buy a 2-10 fertilizer now than before the war.



In 1914  
would buy



Today

will buy



In terms of farm products, fertilizers cost less today than in 1914.

Fertilizers paid you then—they will pay you better now.

Fertilizers are today more profitable and more necessary to efficient production than before the war. Boost crop production, grow more per acre and increase your profits by using fertilizer.

Help both the railroads and yourself by ordering Spring Fertilizers NOW.

Send for literature to Department 9

Soil Improvement Committee  
of the National Fertilizer Association

Postal Telegraph Bldg., Chicago The Munsey Bldg., Baltimore

## A Match-Lighting Gasoline Lantern!

No torch needed. Lights with a match like the old time oil lantern but makes and burns its own gas from common gasoline, giving a brilliant, steady, white light of 300 candle power.



Most Brilliant Light Made  
Brighter than the brightest electric bulb. More light than 20 oil lanterns. Cheapest and best light made. Costs less than one-third of a cent per hour. Safer than the safest oil lantern. The

**Coleman Quick-Lite**

No wicks to trim—No globes to wash. No dirt or grease, no glare or flicker. Absolutely safe. Fuel can't spill—no danger if tipped over in straw. Guaranteed Five Years—will last a lifetime. If your dealer can't supply, address our nearest office for Catalog No. 23 COLEMAN LAMP CO. St. Paul, Wis., Toledo, Dallas, Chicago.

## Nelson Tank Heater Two weeks Free Trial

Heats water in half the time with half the fuel. Burns trash, cobs, wood or coal. All heat under water. 50,000 in use. If you don't think it worth double the price, return it at our expense.



Choice Xmas Gifts. "Indian Legendary Poems." Beautifully bound. Finely illustrated. \$1.00. Beautiful booklets, poems, "Valley Ontonagon," illustrated with colored photos 25c. "Birth of Arbutus," Indian Legend, bound with purple silk cord 25c. New War Song "Freedom and Liberty" 10c. Postpaid. Rev. EDGAR BROWN, Dexter, Mich.

SONG—New Patriotic, 12c postpaid. "While we are on our way to Europe." Wm. Ermine Walter, 197 Palmer Ave. East, Detroit, Mich.



A useful gift from  
a thoughtful giver

*President*  
**Suspenders**  
for comfort

and for Christmas

The universal favorite—3,000,000 pairs sold last year—so free and easy and great for wear—the best suspender quality at any price. A safe purchase because we **Guarantee Satisfaction**

Buy of any dealer anywhere. Look for the name on the buckle. If the ones you buy are not satisfactory, in every way, mail them to us. We will repair, replace, or (if requested) refund your money.

*President Suspender Company*

Shirley, Mass.



## Now is the Time

to have your FUR GARMENTS REPAIRED in a first class manner before winter sets in.

We REPAIR and RELINE FUR COATS, FUR ROBES, furnish NEW CLOTH SHELLS for FUR LINED COATS, REPAIR the FUR, and make over LADIES' FUR SETS into newest styles.

We pay express charges on all FUR GARMENTS sent to us for an estimate as to cost.

Our price list and samples are free.

May we be of service to you?

**THE BLISSFIELD ROBE and TANNING COMPANY**

BLISSFIELD, MICHIGAN



## \$12.00 FOR THIS FINE FUR COAT

Made from your own cow or horse hide to your own measure. We tan and manufacture the raw hide into a warm serviceable coat for this small charge.

**Send Us Your Hides**

We make up any kind of skin to suit your individual desire—

**Also Ladies Coats and Furs, Auto Robes, etc.**

We have been leaders in the tanning business since 1878 and guarantee satisfaction.

**FREE** Book of styles of Men's and Women's Furs. Write for it today.

Reading Robe & Tanning Co.  
112 East Street Reading, Mich.

## RAW FURS

More Cash for You!

Put your own assortment on your Raw Furs. We guarantee to pay you your price (sometimes more) or return your furs. Write now for our Pricelist F. Good News for you!

**H. HAIMOWICZ. (est 1894)**  
265-267 Main St., Paterson, N. J.

## HIGHEST PRICES

Paid for all kinds of Raw Furs

I need large quantities of all kinds of furs, and it will pay you to get my price list. I especially solicit furs from all northern and central sections. Write for price list and shipping tags today to  
**O. L. SLENER**  
P.O. Box H.2 East Liberty, O.

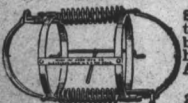
Est. 1853 Capital \$600,000.00 Inc. 1889

Highest Prices Paid For

## RAW FURS

Write for Fur List and Book on Successful Trapping

**TRAUGOTT SCHMIDT & SONS**  
136-164 Monroe Ave. Detroit, Mich.



Safe Sure Catch Trap. Designed to be placed in the animal's burrow. Your hardware dealer has them. Write for booklet. Agents Wanted.

**SABO TRAP MFG. CO.**  
8126 W. 25 St., Cleveland, Ohio

## SKUNK

We pay top prices for Skunk, Mink, Muskrat, and all raw furs. Price list free. **M. J. JEWETT & SONS**, REDWOOD, N. Y. DEPT. 11

# Bumper the White Rabbit

By **GEORGE ETHELBERT WALSH**

Copyright, 1917, by Geo. E. Walsh

## Bumper Meets the Sewer Rat

**B**UMPER was so young and inexperienced that he didn't know a tree trunk that was hollow inside from a rabbit's burrow. Bumper was a city-bred rabbit, born in the backyard of a tenement house, and how could you expect him to know much of the things that ordinary wild rabbits learn by heart before their whiskers begin to sprout?

When he opened his eyes the next morning, he stretched himself, and blinked hard at the circular roof over his head, wondering what sort of a house he was in now. It took some time for his brain to recall the events of the previous night. Then he sat up and smiled.

"Ho! Ho!" he laughed. "Carlo must have had a long, cold wait outside for me. I think I'll take a peek at him."

He was really anxious to see if the little girl was up yet, and if she had missed him. He had perfect confidence in her, and knew that she would call off the dog the instant she saw him.

Bumper could see that it was morning, for the bright light shining through the big end of the drain-pipe proved that. He crawled along cautiously, making as little noise as possible. If Carlo was waiting at the entrance to pounce upon him, he wasn't going to be caught napping.

Another thing which drew him toward the mouth of the pipe was the fragrant odor of good things from the garden. In spite of the big feast of the night before Bumper was hungry again and he longed to get back in the garden and devour a few more carrots and crisp lettuce leaves.

He was within a few feet of the mouth of the drain-pipe, quite confident that Carlo had grown tired of watching and left, when a shadow came between him and the light. Bumper caught sight of a head and forelegs thrust into the opening, and then, without stopping for further investigation, he turned tail and ran back. There was a wild scamping and scraping behind him, and he knew that Carlo was pursuing him in the hole.

But Carlo couldn't follow him very far. The pipe narrowed so that there was just room for Bumper to squeeze through, and no dog, certainly not a big dog like Carlo, could catch him in there. When he reached the place where he had spent the night, he stopped to look around him.

Horror of Horrors! Carlo or some other animal was close behind him, blocking the entire entrance to the hole. Bumper could hear him scraping along, and could almost feel his breath. A shiver of terror went clear through him. In some strange manner the hole had been enlarged over night, or Carlo had shrunk in size, or what seemed more probable, another dog much smaller had taken up the pursuit.

With a little yip of fear, Bumper scrambled onward again, making his way through the drain-pipe as fast as his feet would permit, which, after all, was not so very fast, for he slipped and lost his footing a dozen times, and once fell all in a heap where an elbow in the pipe brought him to an abrupt stop. There were two holes opening before him, one leading to the right and the other to the left.

Bumper chose the one to the right, and so did the animal pursuing him. The race continued until the rabbit came to another branch where there seemed to be three holes leading off into different directions. Bumper chose

the middle one blindly, and ran through it for dear life.

It was very dark, and it was impossible for him to tell where he was going. His one great desire was to escape the pursuing dog or other animal close behind him. Consequently, he was unprepared for the sudden climax of his adventure.

The narrow tunnel came to an abrupt ending, and when Bumper shot out of it he landed in a big, circular space that gave him plenty of opportunity to turn around and look at his enemy. He had no more idea what kind of a place he was in now than before. It was all so strange to him.

"Hello!" a voice called to him out of the small hole.

Bumper looked up, and saw a big Sewer Rat grinning at him from the mouth of the drain-pipe.

"I never saw a rabbit run faster in all my days," laughed Mr. Sewer Rat. "I couldn't keep up with you. What did you think was after you?"

Bumper was very angry and indignant now that he realized his flight was all unnecessary. He disliked Mr. Sewer Rat and all his tribe, for they had often made their way into the old woman's backyard to annoy the young bunnies. Besides his bad manners and uncouth ways, the Sewer Rat was disgustingly dirty in his habits. How could

## Here He Is



Wallace Krieger, 568 Bushels of Potatoes to the Acre.

Wallace Krieger, of Skandia, Marquette county, grew one hundred and forty-two bushels of Green Mountain potatoes on one-fourth of an acre. He is twelve years old and in addition to winning the championship of his county, he also won the championship for the entire Upper Peninsula. He exhibited his potatoes at the Upper Peninsula Boys' Potato Show at Crystal Falls. In the very near future, we shall publish a story written by Wallace telling how he grew his potatoes. His yield of five hundred and sixty-eight bushels per acre is the largest yield we have on record from boys of Michigan.

he be otherwise when he chose to live in sewers rather than in clean quarters above ground?

"Why were you running so fast?" asked Bumper, not willing to admit the rat had frightened him.

"Just to frighten you," was the retort. "I wanted to give you the scare of your life, and I guess I did."

"Oh, no," replied Bumper, assuming an air of dignity. "I wasn't really frightened so long as I knew you were behind me. Carlo couldn't catch me until he nabbed you."

"Carlo! Who's Carlo?" demanded the Sewer Rat, pretending ignorance.

"Oh! Ho!" laughed Bumper. "Don't pretend that Carlo, the dog, wasn't after you. Didn't I see him chase you in the hole? And how frightened you looked! Why, it nearly made me die with laughter."

Mr. Sewer Rat puffed up his cheeks and gnashed his long, white teeth angrily. Bumper's fling had hit the mark.

"If Carlo ever touches me," he said, "I'll bite his nose so he'll remember it. Who's afraid of an old dog like Carlo?"

"You are, I should say," smiled the white rabbit.

The Sewer Rat started to deny this, and then thought better of it. "Well, I wasn't more frightened than you, Mr. White Rabbit. You're as pale as a ghost this very minute."

"That's a good one," laughed Bumper. "Pale as a ghost! Why, I'm whiter than snow all the time. How could I get paler?"

Mr. Sewer Rat gnashed his teeth again, and swished his long tail. He was plainly angry and discomfited. So he retorted maliciously:

"You're not white at all. You're so dirty your own mother wouldn't know you. White! Oh! Ho! Ho! I wish you could see yourself."

Bumper did see himself, or, at least, a part of himself. Both front paws were muddy; his long ears were covered with iron rust; his fat cheeks were dusty and cobwebby, and to the ends of his whiskers clung specks of dirt. In his progress through the drain-pipe he had accumulated sufficient dirt to entirely change his color from pure white to a rusty gray.

"I can soon clean myself," he remarked, "and the little girl with the red hair will help me. Is that the hole that leads back to the garden?"

The Sewer Rat suddenly blinked his wicked little eyes. "Yes," he replied, "if you know the right turns to take. If you don't you'll get lost, and never find your way out."

"I think I know my way back," said Bumper, hesitatingly. He hated to ask favors of the Sewer Rat, but when the latter volunteered information he was grateful for it.

"You'll find a better way back to the garden by following the abandoned sewer you're standing in. Keep straight on to the end. It's much better than crawling back through this small drain-pipe."

"Thank you!" replied Bumper. "I believe I'll go back that way!"

"All right, then. I must be going to my family. I haven't had my breakfast yet. Good morning!"

Bumper thanked him again, and turned to follow the sewer back to the garden, not realizing that the Rat had purposely deceived him out of revenge.

(In next week's issue the reader will learn of Bumper's troubles when he ran into a nest of bats).

Our works are the mirrors wherein our spirit first sees its natural lineaments.—Carlyle.

Hero worship endures forever while man endures.—Carlyle.

## A CHRISTMAS SUGGESTION.

For lasting enjoyment give your friend a year's subscription to the Michigan Farmer. It will be a weekly messenger of your wishes for his enjoyment and success, and besides can be enjoyed by the entire family. Gift subscriptions will receive the Christmas number free.



# The Grizzly King

By JAMES OLIVER CURWOOD

Copyright by Paget Newspaper Service

## A Serial for Every Member of the Family

### CHAPTER I.

WITH the silence and immobility of a great reddish-tinted rock, Thor stood for many minutes looking out over his domain. He could not see far, for, like all grizzlies, his eyes were small and far apart, and his vision bad. At a distance of a third or a half a mile he could make out a goat or a mountain sheep, but beyond that his world was a vast sun-filled or night-darkened mystery through which he ranged mostly by the guidance of sound and smell.

It was the sense of smell that held him still and motionless. Up out of the valley a scent had come to his nostrils that he had never smelled before. It was something that did not belong there, and it stirred him strangely. Vainly his slow-working brute mind struggled to comprehend it. It was not caribou, for he had killed many caribou; it was not goat; it was not sheep; and it was not the smell of the fat and lazy whistlers sunning themselves on the rocks, for he had eaten hundreds of whistlers. It was a scent that did not enrage him, and neither did it frighten him. He was curious, and yet he did not go down and seek it out. Caution held him back.

If Thor could have seen distinctly for a mile, or two miles, his eyes would have discovered even less than the wind brought to him from down the valley. He stood at the edge of a little plain, with the valley an eighth of a mile below him, and the break over which he had come that afternoon an eighth of a mile above him. The plain was very much like a cup, perhaps an acre in extent, in the green slope of the mountain. It was covered with rich soft grass and June flowers, mountain violets and patches of forget-me-nots, and wild asters and hyacinths, and in the center of it was a fifty-foot spatter of soft mud which Thor visited frequently when his feet became rock-sore.

To the east and the west and the north of him spread out the wonderful panorama of the Canadian Rockies, softened in the golden sunshine of a June afternoon.

From up and down the valley, from the breaks between the peaks, and from the little gullies cleft in shale and rock that crept up to the snow-lines came a soft and droning murmur. It was the music of running water. That music was always in the air, for the rivers, the creeks, and the tiny streams gushing down from the snow that lay eternally up near the clouds were never still.

There were sweet perfumes as well as music in the air. June and July—the last of spring and the first of summer in the northern mountains—were commingling. The earth was bursting with green; the early flowers were turning the sunny slopes into colored splashes of red and white and purple, and everything that had life was singing—the fat whistlers on their rocks, the pompous little gophers on their mounds, the big bumblebees that buzzed from flower to flower, the hawks in the valley, and the eagles over the peaks. Even Thor was singing in his way, for as he paddled through the soft mud a few minutes before he had rumbled curiously deep down in his great chest. It was not a growl or a roar or a snarl; it was the noise he made when he was contented. It was his song.

And now, for some mysterious reason, there had suddenly come a change in this wonderful day for him. Motion-

less he still sniffed the wind. It puzzled him. It disquieted him without alarming him. To the new and strange smell that was in the air he was as keenly sensitive as a child's tongue to the first sharp touch of a drop of brandy. And then, at last, a low and sullen growl came like a distant roll of thunder from out of his chest. He was overlord of these domains, and slowly his brain told him that there should be no smell which he could not comprehend, and of which he was not the master.

Thor reared up slowly, until the whole nine feet of him rested on his haunches, and he sat like a trained dog, with his great forefeet, heavy with mud, drooping in front of his chest. For ten years he had lived in these mountains and never had he smelled that smell. He defied it. He waited for it, while it came stronger and nearer. He did not hide himself. Clean-cut and unafraid, he stood up.

He was a monster in size, and his new June coat shone a golden brown in the sun. His forearms were almost as large as a man's body; the three largest of his five knifelike claws were five and a half inches long; in the mud his feet had left tracks that were fifteen inches from tip to tip. He was fat, and sleek, and powerful. His eyes, no larger than hickory nuts, were eight inches apart. His two upper fangs, sharp as stiletto points, were as long as a man's thumb, and between his great jaws he could crush the neck of a caribou.

Thor's life had been free of the presence of man, and he was not ugly. Like most grizzlies, he did not kill or the pleasure of killing. Out of a herd he would take only one caribou, and he would eat that caribou to the marrow in the last bone. He was a peaceful king. He had one law: "Let me alone!" he said, and the voice of that law was in his attitude as he sat on his haunches sniffing in the strange smell.

In his massive strength, in his loneliness and his supremacy, the great bear was like the mountains, unrivalled in the valleys as they were in the skies. With the mountains, he had come down out of the ages. He was part of them. The history of his race had begun and was dying among them, and they were alike in many ways. Until this day he could not remember when anything had come to question his might and his right—except those of his own kind. With such rivals he had fought fairly and more than once to the death. He was ready to fight again, if it came to a question of sovereignty over the ranges which he claimed as his own. Until he was beaten he was dominant, ariber, and despot, if he chose to be. He was dynast of the rich valleys and the green slopes, and liege lord of all living things about him. He had won and kept these things openly, without strategy or treachery. He was hated and he was feared, but he was without hatred or fear of his own—and he was honest. Therefore he waited openly for the strange thing that was coming to him from down the valley.

As he sat on his haunches, questioning the air with his keen brown nose, something within him was reaching back into dim and bygone generations. Never before had he caught the taint that was in his nostrils, yet now that it came to him it did not seem altogether new. He could not place it. He could not picture it. Yet he knew that it was a menace and a threat.

For ten minutes he sat like a carved thing on his haunches. Then the wind

## Go the economical way to California

and have all the pleasures of comfortable travel by using a tourist sleeper.

Visit the places you've always wanted to see on

### The Salt Lake Route

Through parts of the West, richest in agricultural wealth and scenic beauty. Salt Lake City. Rainbow Canyon.

Let the DEPARTMENT OF TOURS make you and California acquainted—plan your trip and see you comfortably located. A remarkable service by men who know every inch of the country.

"MAKING CALIFORNIA EASY"

A fascinating free book. Send for it, do.

### DEPARTMENT OF TOURS

Howard H. Hays, Manager

CHICAGO, UNION PACIFIC & NORTH WESTERN LINE

Room 1682, 226 West Jackson Street, Chicago



## LET US TAN YOUR HIDE.

Horse or Cow hide, Calf or other skins with hair or fur on, and make them into coats (for men and women), robes, rugs or gloves when so ordered. Your fur goods will cost you less than to buy them and be worth more.

Our illustrated catalog gives a lot of information. It tells how to take off and care for hides; how and when we pay the freight both ways; about our safe dyeing process on cow and horse hide, calf and other skins; about the fur goods and game trophies we sell, taxidermy, etc.

You can have either book by sending your correct address naming which, or both books if you need both. Address

The Crosby Frisian Fur Company, 571 Lyell Ave., Rochester, N. Y.



## Raw Furs

We pay highest prices for raw furs, remit promptly and pay all express and postage. We give you an absolutely fair sort. Write today for price list.

Miller & Fineberg

Dept. D, 25 Jefferson Ave., Detroit, Mich.

### SHIP YOUR

## RAW FURS

To BEN CORN, 267 Seventh Ave., New York City. SEND POSTAL FOR PRICE LIST. Will pay 5 percent additional for shipments of \$25 and over.

## Get Your Hide Tanned Let Us Tan Your Hide

and make them into Coats, Robes, Furs, Gloves, Mitts and Caps.

Sylvania Tanning Co. Sylvania, O.

## TRAPPERS AND HUNTERS

IF YOU WANT A SQUARE DEAL SHIP YOUR RAW FURS TO US. Write for price list.

H. MARTIN & CO., Greenwich, Ohio.

### DOGS

Fox Hounds of all ages, Skunk and Rabbit dogs. W. E. LECKY, Send 3c stamp, Holmesville, Ohio.

## Save Money Through Michigan Farmer Christmas Clubs

The times demand the giving of useful presents. As a practical, enjoyable and lasting present nothing is better than the Michigan Farmer. It is a 52 time reminder of your wishes for enjoyment and success.

Michigan Farmer Club Rates Make Xmas Money Go Farther  
2 subscriptions for \$1.50--3 for \$2.00--5 for \$3.00

Solve your Christmas problems—give your friends real conservation presents—send them the Michigan Farmer

If the recipient is a new subscriber he will get the Xmas number free—if he is a subscriber now his subscription will be extended. We will send a gift notice, mentioning your name, to all.

Special—send in your club orders of two or more subscriptions before Dec. 20th. and we will send you free our Christmas Gift Package—full of greeting cards and other Christmas Cheer. Address

Christmas Club, The Michigan Farmer, Detroit, Mich.



shifted, and the scent grew less and less, until it was gone altogether.

Thor's flat ears lifted a little. He turned his huge head slowly so that his eyes took in the green slope and the tiny plain. He easily forgot the smell now that the air was clear and sweet again. He dropped on his four feet, and resumed his gopher-hunting.

There was something of humor in his hunt. Thor weighed a thousand pounds; a mountain gopher is six inches long and weighs six ounces. Yet Thor would dig energetically for an hour, and rejoice at the end by swallowing the fat little gopher like a pill; it was his *bonne bouche*, the luscious titbit in the quest of which he spent a third of his spring and summer digging.

He found a hole located to his satisfaction and began throwing out the earth like a huge dog after a rat. He was on the crest of the slope. Once or twice during the next half-hour he lifted his head, but he was no longer disturbed by the strange smell that had come to him with the wind.

#### CHAPTER II.

A MILE down the valley Jim Langdon stopped his horse where the spruce and balsam timber thinned out at the mouth of a coulee, looked ahead of him for a breathless moment or two, and then with an audible gasp of pleasure swung his right leg over so that his knee crooked restfully about the horn of his saddle, and waited.

Two or three hundred yards behind him, still buried in the timber, Otto was having trouble with Dishpan, a contumacious pack-mare. Langdon grinned happily as he listened to the other's vociferations, which threatened Dishpan with every known form of torture and punishment, from instant disembowelment to the more merciful end of losing her brain through the medium of a club. He grinned because Otto's vocabulary descriptive of terrible things alway impending over the heads of his sleek and utterly heedless pack-horses was one of his chief joys. He knew that if Dishpan should elect to turn somersaults while diamond-hitched under her pack, big, good-natured Bruce Otto would do nothing more than make the welkin ring with his terrible, blood-curdling protest.

One after another the six horses of their outfit appeared out of the timber, and last of all rode the mountain man. He was gathered like a partly released spring in his saddle, an attitude born of years in the mountains, and because of a certain difficulty he had in distributing gracefully his six-foot-two-inch length of flesh and bone astride a mountain cayuse.

Upon his appearance Langdon dismounted, and turned his eyes again up the valley. The stubby blond beard on his face did not conceal the deep tan painted there by weeks of exposure in the mountains; he had opened his shirt at the throat, exposing a neck darkened by sun and wind; his eyes were of a keen, searching blue-gray, and they quested the country ahead of him now with the joyous intentness of the hunter and the adventurer.

Langdon was thirty-five. A part of his life he spent in the wild places; the other part he spent in writing about the things he found there. His companion was five years his junior in age, but had the better of him by six inches in length of anatomy, if those additional inches could be called an advantage. Bruce thought they were not. "The devil of it is I ain't done growin' yet!" he often explained.

He rode up now and unlimbered himself. Langdon pointed ahead.

"Did you ever see anything to beat that?" he asked.

"Fine country," agreed Bruce. "This is a mighty good place to camp, too, Jim. There ought to be caribou in this range, an' bear. We need some fresh meat. Gimme a match, will you?"

It had come to be a habit with them

to light both their pipes with one match when possible. They performed this ceremony now while viewing the situation. As he puffed the first luxurious cloud of smoke from his bulldog, Langdon nodded toward the timber from which they had just come.

"Fine place for our tepee," he said. "Dry wood, running water, and the first good balsam we've struck in a week for our beds. We can hobble the horses in that little open plain we crossed a quarter of a mile back. I saw plenty of buffalo grass and a lot of wild timothy."

He looked at his watch.

"It's only three o'clock. We might go on. But—what do you say? Shall we stick for a day or two, and see what this country looks like?"

"Looks good to me," said Bruce.

He sat down as he spoke, with his back to a rock, and over his knee he levelled a long brass telescope. From his saddle Langdon unslung a binocular glass imported from Paris. The telescope was a relic of the Civil War. Together, their shoulders touching as they steadied themselves against the rock, they studied the rolling slopes and the green slides of the mountains ahead of them.

They were in the Big Game country, and what Langdon called the Unknown. So far as he and Bruce Otto could discover, no other white man had ever preceded them. It was a country shut in by tremendous ranges, through which it had taken them twenty days of sweating toil to make a hundred miles.

That afternoon they had crossed the summit of the Great Divide that split the skies north and south, and through their glasses they were looking now upon the first green slopes and wonderful peaks of the Firepan Mountains. To the northward—and they had been traveling north—was the Skeena River; on the west and south were the Babine range and waterways; eastward, over the Divide, was the Driftwood, and still farther eastward the Ominica range and the tributaries of the Finley. They had started from civilization on the tenth day of May and this was the thirtieth of June.

As Langdon looked through his glasses he believed that at last they had reached the bourne of their desires. For nearly two months they had worked to get beyond the trails of men, and they had succeeded. There were no hunters here. There were no prospectors. The valley ahead of them was filled with golden promise, and as he sought out the first of its mystery and its wonder his heart was filled with the deep and satisfying joy which only men like Langdon can fully understand. To his friend and comrade, Bruce Otto, with whom he had gone five times into the North country, all mountains and all valleys were very much alike; he was born among them, he had lived among them all his life,

and he would probably die among them.

It was Bruce who gave him a sudden sharp nudge with his elbow.

"I see the heads of three caribou crossing a dip about a mile and a half up the valley," he said, without taking his eyes from the telescope.

"And I see a Nanny and her kid on the black shale of that first mountain to the right," replied Langdon. "And, by George, there's a Sky Pilot looking down on her from a crag a thousand feet about the shale! He's got a beard a foot long. Bruce, I'll bet we've struck a regular Garden of Eden!"

"Looks it," vouchsafed Bruce, coiling up his long legs to get a better rest for his telescope. "If this ain't a sheep an' bear country, I've made the worst guess I ever made in my life."

For five minutes they looked, without a word passing between them. Behind them their horses were nibbling hungrily in the thick, rich grass. The sound of the many waters in the mountains droned in their ears, and the valley seemed sleeping in a sea of sunshine. Langdon could think of nothing more comparable than that—slumber. The valley was like a great, comfortable cat, and the sounds they heard, all commingling in that pleasing drone was its drowsy purring. He was focussing his glass a little more closely on the goat standing watchfully on its crag, when Otto spoke again.

"I see a grizzly as big as a house," he announced quietly.

Bruce seldom allowed his equanimity to be disturbed, except by the pack-horses. Thrilling news like this he always introduced as unconcernedly as though speaking of a bunch of violets. Langdon sat up with a jerk.

"Where?" he demanded.

He leaned over to get the range of the other's telescope, every nerve in his body suddenly a quiver.

"See that slope on the second shoulder, just beyond the ravine over there?" said Bruce, with one eye closed and the other still glued to the telescope. "He's halfway up, digging out a gopher."

Langdon focussed his glass on the slope, and a moment later an excited gasp came from him.

"See 'im?" asked Bruce.

"The glass has pulled him within four feet of my nose," replied Langdon. "Bruce, that's the biggest grizzly in the Rocky Mountains."

"If he ain't, he's his twin brother," chuckled the packer, without moving a muscle. "He beats your eight-footer by a dozen inches, Jimmy! An"—he paused at this psychological moment to pull a plug of black MacDonald from his pocket and bite off a mouthful, without taking the telescope from his eye—"an' the wind is in our favor an' he's as busy as a flea," he finished.

Otto unwound himself and rose to his feet, and Langdon jumped up briskly. In such situations as this there was a mutual understanding between

them which made words unnecessary. They led the eight horses back into the edge of the timber and tied them there, took their rifles from the leather holsters, and each was careful to put a sixth cartridge in the chamber of his weapon. Then for a matter of two minutes they both studied the slope and its approaches with their naked eyes.

"We can slip up the ravine," suggested Langdon.

Bruce nodded.

"I reckon it's a three-hundred-yard shot from there," he said. "It's the best we can do. He'd get our wind if we went below 'im. If it was a couple o' hours earlier—"

"We'd climb over the mountain and come down on him from above!" exclaimed Langdon, laughing. "Bruce, you're the most senseless idiot on the face of the globe when it comes to climbing mountains! You'd climb over Hardesty or Geikie to shoot a goat from above, even though you could get him from the valley without any work at all. I'm glad it isn't morning. We can get that bear from the ravine!"

"Mebbe," said Bruce, and the started.

They walked openly over the green flower-carpeted meadows ahead of them. Until they came within at least half a mile of the grizzly there was no danger of him seeing them. The wind had shifted, and was almost in their faces. Their swift walk changed to a dog-trot, and they swung in nearer to the slope, so that for fifteen minutes a huge knoll concealed the grizzly. In another ten minutes they came to the ravine, a narrow, rock-littered and precipitous gully worn in the mountain-side by centuries of spring floods gushing down from the snow-peaks above. Here they made cautious observation.

The big grizzly was perhaps six hundred yards up the slope, and pretty close to three hundred yards from the nearest point reached by the gully.

Bruce spoke in a whisper now.

"You go up an' do the stalkin', Jimmy," he said. "That bear's goin' to do one of two things if you miss or only wound 'im—one o' three, mebbe: he's goin' to investigate you, or he's going up over the break, or he's coming down in the valley—this way. We can't keep 'im from goin' over the break, an' if he tackles you—just summerset it down the gully. You can beat 'im out. He's most apt to come this way if you don't get 'im, so I'll wait here. Good luck to you, Jimmy!"

With this he went out and crouched behind a rock, where he could keep an eye on the grizzly, and Langdon began to climb quietly up the boulder-strewn gully.

(Continued next week.)

#### WINTER MUSIC.

BY J. A. KAISER.

Far off, the mellow music  
Of silver-sounding bells;  
The lowing of the cattle;  
The tale the swung axe tells;

The hoarse "Helloo" of hunters;  
The baying of the hound;—  
Fall through the realm of snowflakes  
With soft and soothing sound.

Near by, the chirp of sparrows;  
The saucy "chick-a-dee";  
And faint foot-falls of feathery flakes  
Make up the minstrelsy.

#### TO OUR SOLDIERS.

BY LOULA E. LEISENRING.

Here's just a friendly message,  
To our soldier boys in France,  
Just a word of hearty greeting,  
It may cheer some heart perchance.

We at home are thinking ever,  
Of the boys across the sea;  
And we cheer, and praise their courage,  
In this fight for liberty.

Hearty greetings to our soldiers  
Sammie boys so strong and true,  
Facing danger, fighting bravely,  
For our own Red, White and Blue.

Keep your courage, do not falter,  
For the fight will not be long.  
We will welcome your returning,  
With a shout, and joyful song.

### Kent City Boy Wins State Championships



Boys' Live Stock Judging Contest at the West Michigan State Fair at Grand Rapids, in which Henry Bjork, of Kent City, won the State Championship. He later won the same honors at the Michigan State Fair at Detroit.



## Farmers' Clubs

### THE ANNUAL MEETING.

The quarter-century anniversary of the Michigan State Association of Farmers' Clubs was held in the Senate Chamber at Lansing on December 4-5, 1917. The delegates assembled with a large representation present. The forenoon was given over to routine work, the first general session being opened at one o'clock p. m.

Following the opening exercises, including invocation by Rev. W. L. Fox, of Lansing, and a solo by Melvin Hart, of Howell, the report of the Associational Secretary, Mrs. J. S. Brown, of Howell, was given. Her official report contained the following statistics based on reports from forty-six report blanks returned to December 1, 1917:

One hundred and five active clubs with a membership of 5,366 a year ago and with nine new added would make approximately 5,916, a net gain of 350 members.

Number of meetings held during the year of the forty-six Clubs reported 483, the lowest number being seven and the highest twenty-six, this banner numbers of meetings being held by the River Bend Club of Ottawa and Kent counties, while the Allendale, of Ottawa county held twenty meetings with a membership of 130 and the average attendance being seventy-five, the largest average attendance reported.

Eleven Clubs hold fairs, and many other Clubs make entries at their county fairs. Five have boys' and girls' clubs.

Seventeen hold temperance meetings, while twenty-three Clubs use prepared programs, twenty-nine have picnics.

Thirty-six Club secretaries take the Michigan Farmer.

Thirty-eight Clubs of the forty-six reported sent delegates last year.

Twenty-three deaths have occurred the past year, five clubs have reported from Jackson county, and five from Clinton county.

### Organization for Financial Advancement.

This topic was ably discussed by Hon. A. B. Cook, of Owosso. After making a strong plea for the organization of farmers along business lines, he took up one phase of the subject for detailed discussion, namely: "The Cooperative Elevator." The type of organization to which he referred as a cooperative elevator company, as he carefully explained, was not one in which a large number of farmers were stockholders and in which dividends in excess of the interest and earning power of the money are paid on stock, but rather to a type of organization in which a large number of farmers are small stockholders, but in which the earnings of the capital stock are limited to six per cent on its par value, and the balance of the profits of the concern are divided up among the stockholders in proportion to the amount of business they have contributed to the organization during the year. The particular advantages of this type of organization were made clear and specific illustrations were drawn in support of the argument. Mr. Cook thought that only one other type of organization was of equal importance with the cooperative elevator—the average rural community, namely the cooperative live stock shipping association.

Following Mr. Cook, Dr. Wilbur, personal assistant to Mr. Hoover in food administration work, addressed the convention on the need of food conservation. In his address and in a later talk to the delegates, Dr. Wilbur made it very plain that if the war is to be won on the present European battle field, the people of this country must make it possible by increased produc-

tion of food stuffs and rigid conservation of foods, particularly of flour, fats and sugar. Dr. Wilbur showed that he was not unmindful of the handicap confronting food producers at the present time, but compared their condition to farmers of Belgium, Northern France, Poland, Roumania, Northern Italy and other battle grounds of the great war. Dr. Wilbur brought home to his hearers the prospect that if we do not present a patriotic front in the matter of food production and conservation, enabling the allies to win the war on the European fields, that the same conditions which prevail among the farmers in the countries named may in the not distant future obtain over large sections of our own country.

Following Dr. Wilbur's talk, Miss Theresa J. Shier, director of the Department of Library Publicity, Michigan Branch of the United States Food Administration, gave a talk describing the nature of the library publicity work and called attention to a fine exhibit of children's posters which she had arranged in one corner of the room. Attention was also called to the publications of the department, and the ladies present were invited to take copies of those which were available and ask any questions they might desire concerning the work, which opportunity was improved during recess. A reading by Mrs. Claude A. Burkhart, of Howell, finished the afternoon program.

The evening session was a banquet at a local church, at which the president's address and other important numbers were given. This session will be described in a future issue. At a later session the following resolutions were adopted:

### State Affairs.

Whereas, that inasmuch as the partial right of suffrage has been granted unto women; therefore be it resolved that we favor an amendment to the State Constitution granting unto them universal suffrage.

We unhesitatingly ask and demand the legislature to give the people a good workable law for the Torrens system of land transfers, making it optional with the electorate of the county.

We favor a change in our jury system, to the effect that nine men shall render a decision in all civil cases and all criminal cases constituting a misdemeanor.

We favor a bill making uniformity of text books up to and including the eighth grades in the rural schools.

Whereas, the real burden of taxation is now borne by real property; therefore, we recommend a law for levying of an income tax for state purposes to meet the exigencies of an increased taxation, also the necessity arising from the continually increasing number of individuals and corporations who pay but little of the taxes or seek to evade it entirely.

We denounce as unjustifiable and vicious the methods of taxation of mortgages and land contracts and demand a law to place every dollar's worth of property on the assessment rolls at its equitable value.

We believe in our state and national bank laws, and ask for the elimination of all private banks.

We denounce the multiplication of so many state officers and boards that are unnecessary and deplore the raising of salaries that are now adequate.

Resolved, that we disapprove of the duplication of work and unnecessary expense caused by carrying of minor cases from the justice to the circuit court and recommend that a higher limit be made in which the justice court shall be final if arbitration can not be secured.

Realizing fully the great and immediate burden of national responsibility that the United States has willingly assumed in this struggle for democracy and right, and the predominant need of conserving our food supplies for war purposes, as well as to aid humanity and the pressing need for the fullest possible protection of food, food stuff and food animals in the years to come:

We, the State Association of Farmers' Clubs of Michigan, do hereby resolve that:

We will gladly support our government to the utmost of our powers.

We will practice conservation of food and the saving of wheat, meat, pork products, sugar and dairy products needed by our army and our allies.

We commend the activities of Hon. George A. Prescott, W. K. Prudden and the War Preparedness Board, and pledge them our hearty cooperation in the conservation of food and food products in this great crisis.

We will encourage production from every available acre in our great state.

We are opposed to the so-called Non-partisan League, as a means to a good and effective government.

As it is a proven fact that our fire losses in Michigan for the present year exceed those of a number of years

past, we would recommend that our Commissioner of Insurance be requested to compile a bulletin on causes of fires, with recommendations for prevention, the same to treat upon both city and country conditions, and distribute the same extensively throughout the state.

While we realize that in some cases men have been appointed as county agents, who were not fitted, either by education or experience to act in such capacity, we favor the movement as a whole, and where proper appointments are made we believe they will prove of great value to the farmers of the state.

Realizing that the labor situation on the farms will be serious from now on, we favor the work of the United States Boys' Working Reserve.

### National Affairs.

Whereas, our country is now in the terrible struggle for the freedom of the world, and our Allies are looking to us for help to make the world safe for democracy, and

Whereas, the best of our young men are being called to take arms in this great struggle,

Resolved, that we, the Farmers' Clubs of Michigan, offer ourselves to our country, that we pledge ourselves to put forth every effort to feed our troops and our Allies.

Resolved, that we help to sustain the Red Cross and the Y. M. C. A. of the army to the extent of our ability. That in whatever our country needs, we will do our part, not grudgingly, but with a free hand.

Resolved, that we will cooperate with our administration and leaders in food conservation in order that all the different agencies be fed and the war may be won before it comes to our own shores.

Resolved, in the matter of agricultural cost prices fixed and to be fixed by the Food Administration, we desire to call attention that the farmer as a buyer and consumer is paying for the labor therein on an average of an eight hour day, on a total wage basis, including superintendence of approximately fifty cents per hour, therefore, we ask that proper wage allowance be made for agricultural labor and payment of wages of superintendence.

We desire to call attention to the shortage of farm labor for next year, and ask that the federal and state governments make due provision for such emergency at the earliest possible moment.

Resolved, that we indorse the recommendations of the American Defense Society in forbidding the publication of newspapers and magazines in the German language during the war, and the publication of any disloyal utterances in English; and that Congress be asked to expel all disloyal members; and that it be recommended to the various authorities to forbid the compulsory study of German in the public schools.

Resolved, that we, the members of the Michigan State Association of Farmers' Clubs, do heartily indorse the principle of equal suffrage, and believing that, in view of the splendid services, the women are entitled to an equal voice in the affairs of the government; that we sincerely advocate the passage of a federal amendment to the constitution giving the women of the country the ballot.

We therefore urge our senators and representatives in Congress to support any legislation of this nature, and be it resolved, that our representatives in Congress be asked to lend their support and influence in behalf of the suffrage amendment to be introduced during the present session.

Resolved, that we, the Michigan State Association of Farmers' Clubs, request Congress to abolish the obsolete and wasteful practice of "Free Seed Distribution."

Resolved, that we condemn the use of any grain for the manufacture of beer.

Resolved, that we recommend the abolishing of express companies with their extra expense, and that the work now done by them be done directly by the railroad companies.

### Temperance.

Whereas, reliable statistics assure that the most potent cause for the poverty, crime and suffering which exists, is caused, directly or indirectly, by the use of intoxicating liquors, as a beverage, and

Whereas, the people of Michigan have, most wisely, determined, in a constitutional manner that such condition shall no longer be permitted to exist, therefore be it

Resolved, by the Michigan State Association of Farmers' Clubs, in convention assembled, that we will make use of every proper means, whereby to blot out the sin of the once legalized liquor traffic, and to bring the life-line of rescue to those unfortunate ones who have heretofore been dominated by the destructive liquor habit.

**"BALL Red Ball BAND"**

## For the Christmas Tree

Give the "Ball-Band" Rubber Footwear to the men and the women, also the boys and the girls.

It's warm and comfortable, vulcanized by vacuum process to give it extra long wear.

Worn by nine and one-half million people, and sold by 55,000 merchants—nearly every footwear store in the country.

Write for booklet illustrating the different kinds of footwear.

Mishawaka Woolen Mfg. Co.

319 Water St., Mishawaka, Ind.

"The House That Pays Millions for Quality"



## SAVE 1/2 YOUR TIME

with a KRAMER ROTARY HARROW

attached to your plow you can disc and harrow your land at the same time and with the same work and power that you use for plowing. You really do three operations in one. Time saved in planting season is money in the bank. Write today for full description.

Kramer Rotary Harrow Co. Morton, Dept. 62 Illinois

## APPLETON WOOD SAWS

Give perfect service for years. Tremendously strong rigid frame of angle steel, or hardwood, bolted, braced and mortised—can't get out of line from any strain. Lathe-turned steel shaft, in non-rigid boxes; dustproof, non-heating, self-adjusting—keep saw true and steady even after years of wear. Ten styles. Send for booklet. APPLETON MFG. CO. 620 Fargo St., Batavia, Ill.

**WERTHAN PAYS HIGHEST PRICES FOR EMPTY BAGS**

**CASH FOR EMPTY BAGS**

We pay highest prices and also freight charges. Be sure to get our prices before disposing of your bags. They're worth money to you and we'll pay you best cash price for them as soon as received and assorted. Write us at once stating how many you have.

**WERTHAN BAG COMPANY**  
61 Deck Street St. Louis, Mo.

**CLOVER** \$14.40 PER BU. SAMPLES FREE

Buy now and save money. Wonderful value for the price. Higher later. Our stock pure Iowa Grown re-cleaned and tested. Also Timothy, Sweet Clover, Alfalfa and other farm seeds at wholesale prices which mean big savings. Write today. Don't buy until you get our reduced prices on all grades, and catalog.

**A. A. BERRY SEED CO., Box 131, CLARINDA, IOWA**



## Make This Your Money Year

POULTRY and eggs are going to be the big money-makers this year. Hoover is beseeching little and big poultry raisers to double—triple—quadruple their products. We should raise twice as much poultry and eggs as we did last year. And prices will remain high—and go higher. The demand will take care of that. Why, New York City alone consumed annually One-Half Billion More Eggs than the greatest egg-producing state in America yielded last year! Get wise. Get hatches started quick! Plan for bigger hatches of better chicks. Get a hatch-increasing wonder—a

### 1918 X-Ray Incubator

Combines 20 Exclusive X-Ray Features. Completely hatches on only one filling oil during entire hatch. Duplex Central Heating Plant—directly underneath, gives natural, moist mother hen heat. X-Ray Automatic Trip regulates flame—no chilled eggs—no overheated sides. Read all about its 20 remarkable hatch-increasing, labor, time and money-saving features—and remember, it is shipped

Express Prepaid to practically all points.

X-RAY INCUBATOR CO.  
Dept. 23 Des Moines, Iowa



Write for  
1918 Book  
FREE

## Sell Day Old Chicks Hatch 800 to 10,000 a Month

Hatching and Selling Day Old Chicks

No experience required. We teach you how. Big demand in every locality. Write for free book of facts. Blue Hen Mammoth Easy work—takes only a few minutes a day. Small space needed. Use your present cellar. Equipment quickly pays for itself. Now is the time to investigate. Tells all about Day Old Chick business and facts about Blue Hen Mammoth Incubator and Colony Brooders. Write today. Watson Mfg. Co., 2020 Ann St., Lancaster, Pa. Dept. 2020, 1534 Masonic Temple, Chicago, Ill.

Book FREE

## "Raise More Poultry"

Is Our Country's Call. Now is the time to start—the demand is big—every man, woman, boy and girl can help. Besides supplying the Nation with food, you can make big profits with little effort—and this small investment, \$8.95 Champion 140-Egg Belle City Incubator

Hot Water—Copper Tank—Double Walls of Fibre Board—Self Regulated. With \$5.25 Hot Water 140-Chick Brooder—both only \$12.95. Frt. Paid E. of Rocks. Satisfaction Guaranteed. Share in my \$1000 in Prizes. Conditions easy. Order now or write today for my free book "Raising Facts". It tells all. Jim Rohan, Free. 1-2-8 Months' Home Test

Belle City Incubator Co., Box 14 Racine, Wis.

**NEW KIND OF INCUBATOR**  
Requires 3 minutes a day. Saves work, time, money. Built round, like hen's nest. No cold corners. One gallon of oil, one filling of lamp to a hatch. Wonderful built-in moisture attachment and complete circuit radiators mean even heat, moist and mild always. Many other features that save work, time and money fully described in new FREE book—write postal for your copy NOW. Radio-Round Incubator Co., 6712 Roger St., Wayne, Neb.

### POULTRY

#### BREEDING COCKERELS

Trapnested, bred-to-lay stock. S. C. White Leghorns, \$2 each. Barred Rocks and R. C. Reds, \$3 each. SUNNYBROOK POULTRY FARM, Hillsdale, Mich.

John's big beautiful hen-hatched Barred Rocks, good layers, Pens (5 birds) \$12 to \$20. \$3 to \$10 each, sold on approval. Circulars, photos. John Northon, Clare, Mich.

**Barred Rocks** Cockerels for sale from strain with records to 290 eggs a year. \$2 to \$5 each. Circular free. FRED ASTLING, Constantine, Mich.

**Barred Rock Cockerels** bred from Great Layers W. O. COFFMAN, R. 3 Benton Harbor, Mich.

**Barred** Plymouth Rock cockerels \$3.00 each. Full blood from prize-winning heavy laying strain. J. A. Barnum, Union City, Mich.

**Barred Rocks** Cockerels from good laying strain \$3.00 each two for \$5.00. A. A. WOOD & SON, Saline, Mich.

**Ferris White Leghorns**  
A real heavy laying strain, trapnested 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 934 Union, Grand Rapids, Mich.

**Pine Crest S. C. White Orpingtons**, special sale cocks and hens also young cockerels. MRS. WILLIS HOUGH, PINE CREST FARM, Royal Oak, Mich.

**Laybill S. C. W. Leghorns** Large, great layers. Pure white. Bargains in choice breeding hens now. Everfresh Egg Farm, Ionia, Mich.

**BUFF** Leghorns, breeding cockerels also a few fine pens of four hens and cockerels for \$10. More hens \$2 extra. Dr. William A. Smith, Petersburg, Mich.

**Fowlers Buff Rocks** Cockerels, pullets and hens for sale from two dollars up according to quality. R. B. FOWLER, Hartford, Mich.

Additional Poultry Ads on Next Page

(Continued from page 561).

found by the college to be highly successful for this purpose are given below:

Ration A.—Corn meal 12 lbs; flour (low grade, 8 lbs; middlings, 4 lbs. Cost, November 1, 4.4c per pound.

Ration B.—Corn meal, 12 lbs; oat meal, 8 lbs; middlings, 4 lbs. Cost, November 1, 4.2c per pound.

Ration C.—Corn meal, 12 lbs; flour (low grade), 8 lbs; middlings, 4 lbs; meat scrap, 6 lbs. Cost, November 1, 4.4c per pound.

Ration D.—Corn meal, 12 lbs; oat meal, 8 lbs; middlings, 4 lbs; meat scrap, 6 lbs. Cost, November 1, 4.2c per pound.

Ration E.—Corn meal, 12 lbs; flour (low grade), 8 lbs; middlings, 4 lbs; tallow (beef or mutton), 20 ounces. Cost, November 1, 4.7c per pound.

Ration F.—Corn meal, 12 lbs; oat meal, 8 lbs; middlings, 4 lbs; tallow, 20 ounces. Cost, November 1, 4.5c per pound.

These rations should be mixed with sour milk or buttermilk and fed in troughs.

The rate of feeding is also important and for the guidance of individuals who may never have tried crate fattening heretofore, this schedule is suggested:

First day, only water, twice during the day.

Second and third days, one-half ounce of feed mixed with buttermilk, per bird, fed twice during the day.

Fourth, fifth, sixth and seventh days, three-quarters of an ounce of feed, mixed with buttermilk, per bird, twice a day.

Eighth and ninth days, one ounce of feed mixed with buttermilk, per bird, fed twice a day.

Tenth, eleventh, twelfth and thirteenth days, all they will eat in twenty minutes, fed twice a day.

Fourteenth day, feed nothing. Give birds water to drink.

Fifteenth day, kill.

### MICHIGAN BEE-KEEPERS IN SESSION.

The fifty-second annual meeting of the Michigan Bee-Keepers' Association was held November 27-28 at Saginaw. Colin P. Campbell, of Grand Rapids, was reelected as president, and B. K. Kindig, of East Lansing, as secretary-treasurer. Battle Creek was chosen as the meeting place for next year. A committee was appointed on ways and means of marketing honey on a competitive basis, with David Running, of Filion, as chairman. Another committee headed by W. L. Cheney, of Mason, was named to confer with the state food administration and M. A. C. officials in an effort to secure the appointment of several extension workers in bee culture. Every county of importance in bee-keeping will have a local association and a drive will be made to increase honey production. The government will furnish an expert and the state will supply three men to cooperate with the state inspector in increasing the production. Floyd Markham, of Ypsilanti, won the gold medal offered by manufacturers of bee supplies for the best exhibits for the third time, so that it now becomes his property.

A special committee was appointed to look into the matter of having exhibits at the fairs. The report on bee inspection showed that thousands of colonies had been examined during the past year at low cost.

E. R. Root, of Medina, Ohio, gave an interesting talk on the honey market, saying in part: "There is grave shortage of sugar, and honey will fill the bill. While it is twenty per cent water a teaspoonful of extracted honey in your coffee will sweeten it just as much as so much sugar, or even more so, for honey dissolves instantly and completely. It can be used in baking and requires no shortening and it is so used by most of the large baking companies to some extent. Honey is taking the place of syrup."

## A Farmers' Festival

By JENNIE BUELL

THE organized farmers of Washtenaw county have just put through a project which is quite worth telling about. This was a Farmers' Thanksgiving Festival to which every farm neighborhood of the county contributed of the season's produce and which turned over to the Red Cross the tidy sum of \$2,500 as a gift from the rural folks.

### A Cooperative Festival.

I said "the organized farmers" accomplished this result; and this is true for, although the idea, requisite faith, enthusiasm and energy were supplied by Mr. Earle W. Martin, still this individual alone could not have realized his plan had he not started the movement and worked through the Horticultural Society and Ann Arbor Grange, of both of which he is a member. As a result of his incentive, there were exhibits at this festival made by all the Granges of the county (fourteen), three Farmers' Clubs, one School Improvement Association, two Gleaner arborers. Besides these, five individual farm exhibits were shown and scores of families not affiliated with any par-

wiches and coffee, also donating the eatables and turning the proceeds into the gift fund.

For the most part little effort was made at elaborate effects, but there was one notable exception; the loyal members of the Stone School Improvement Association worked out a likeness of their rural school house, using potatoes and other vegetables or cobblestones, which was continually admired and which spoke eloquently of the strong community sentiment centered in one little rural school.

### The Spirit of the Occasion.

But the biggest factor by far about this Farmers' Festival was its spirit. To the initiated, it is apparent at once that such an event was not attained by wishing. And it was not; it was instigated and dominated by a willing spirit of service. Three weeks of dauntless zeal and efficient organizing went before its realization. Committees were first secured in one or two local societies and then these committees visited every arm organization in the county and secured committees there to



Donations for the Red Cross Festival were Abundant.

ticular organization sent their contributions with organizations from their localities. There were hundreds of bushels of grain, vegetables and fruits donated for the exhibit and sale. These were massed at centers in the different sections of the county and sent in by auto trucks; for instance, Chelsea sent five truck loads, Milan sent a fine lot, Manchester sent three tons, and Salem Farmers' Club sent the prize-winning exhibit.

### Attractive Exhibits.

The city Y. M. C. A. at Ann Arbor offered its entire building for the use of the festival and for one week it presented a decidedly arm like scene in preparation and during the two days of the festival proper. Its gymnasium was banked to the galleries with produce and heaped high in the middle with only a narrow aisle between. In the reading room was a rest room alcove, a collection of old war relics, Red Cross exhibits and a miniature "hut" such as the Y. M. C. A. maintains on the battle fronts and in training camps. In the basement was an overflow of field and garden products, besides a considerable exhibit of live poultry. Farmers purchased excellent breeding stock and city folks, who liked to carry home their Thanksgiving dinner with its feathers on, were alike accommodated. On the second floor the women of the farm organization did a brisk business in canned vegetables, fruits and jellies, dressed poultry and baked goods. The table containing the baked products was cleaned out several times only to be replenished by fresh relays prepared by the committee over night or over meal time. The "war breads," sold with recipes, were the objects of constant discussion and inspection. Another fertile topic for conversation was "coldpack canning" at canned goods table. In an adjoining space, the Red Cross women of the towns served sand-

cannass their respective districts. Every family was urged to "give a little more than you think you can; this is your fair, make it a winner." This required days of travel, speaking and personal interviews; but everywhere the patriotic cause for which they worked made their pleas fruitful and aroused in the rural county such a feeling of oneness and zeal as probably has never been felt here before.

### Grocers' Help.

The produce contributed was appraised by a leading grocer who furnished clerks and cash registers to help with its disposal. Liberal prizes were offered by the city merchants for a few exhibits, such as the best exhibit by any organization, best individual exhibit, heaviest chicken, best bushel of potatoes, best ten ears of seed corn, best loaf of white bread and best loaf of war bread. The prize-winning exhibits were sold Saturday evening by a popular auctioneer, most of them bringing fancy prices.

### Its Widespread Influence.

"This is the easiest way of raising money for the Red Cross, army 'Y' work, or other patriotic cause," says Mr. Martin. But when this is said concerning financial returns, the story is only fairly begun; for there have been greater and more far-reaching results come from the festival. First, it led farm organizations to work together across their society lines; second, it brought town and country people into one way together and into more understanding acquaintance; and, third, there is crystallizing a county federation of all rural forces that shall stand ready for service while the war lasts. It is too early to tell much of the dreams and plans along this latest line of development but the thought of it is big with expectant promise. If these hopes materialize, Michigan Farmer readers will hear more of it.



**ABC**  
of Poultry  
Raising—FREE

Send Johnson your name and get the best facts on making profits with chickens. Learn how Johnson started 750,000 people the simplest and easiest way with

**OLD TRUSTY**

Big production makes low price. And Johnson pays freight or express. Quick shipment—safe arrival guaranteed. Our book tells all about it. Write today for copy. Address

**M. M. JOHNSON CO.**  
Clay Center, Neb.

Tell Me Your Poultry Troubles

Makes Big Hatches in Cold Weather

**Keep Your Hens a Laying**

Trust your hatching to time tried and tested

**"SUCCESSFUL"**

Incubators and Brooders Used by the big money makers who stay in business year after year. Poultry Lessons Free. Booklet, "How to Raise 48 out of 50 chicks," 10 cents. Catalog Free. Write today.

Des Moines Incubator Co., 368 Second Street, Des Moines, Iowa

## POULTRY

## HOMESTEAD FARMS

**POULTRY SALE**

We have the following birds for immediate delivery. Pullets—full grown and about ready to lay: 24 White Plymouth Rocks; 20 Barred Plymouth Rocks; 10 S. C. Rhode Island Reds; 10 White Leghorns; also 20 Leghorns two-thirds grown; 12 Black Orpingtons. Yearling Hens—moulting finished 60 S. C. White Leghorns; 30 S. C. Rhode Island Reds; 12 Black Orpingtons. Cockerels—Rose and Single Comb White Leghorns; Barred Plymouth Rocks; Rhode Island Reds; Black Minorcas. These are season closing sales.

**HOMESTEAD FARMS**  
Bloomington, Mich.

**Chicks.** We ship thousands, booking orders now for spring delivery. Free booklet.

**FREEPORT HATCHERY,** Box 12, Freeport, Mich.

**RHODE ISLAND REDS.**

Both Combs. Cocks, Hens, Cockerels and Pullets at reasonable prices. Interlakes Farm, Box 39, Lawrence, Mich.

**R. C. Br. Leghorn** Cockerels. Leading strains in America. bred from winners. \$2 each after Dec. 1. A square deal, orders promptly filled. E. Himebaugh, Coldwater, Mich.

**Breeding Stock** Hens and Cockerels pure bred S. C. W. Leghorns \$1.25 up. Hillsdale, Mich.

**Bred-to-Lay** Rose Comb Rhode Island Red Cockerels. Write for prices. A. E. SHIER, Wolverine, Cheboygan Co., Mich.

**R. C. Br. Leghorn** cockerels \$1.50 and \$2. A few nice Mrs. Wm. Nickert, Carson City, Mich.

**S. O. W. Leghorn** hens two years old, and late hatch- ed pullets \$1 each. Cockerels, utility and trap- ped \$1.50 to \$5. Hillcrest Poultry Farm, Ypsilanti, Mich.

**SILVER Golden and White Wyandottes.** Choice breeding stock of sale after Oct. 1st, a few bargains in yearling hens. O. W. Browning, R. 2, Portland, Mich.

**WHITE Wyandottes.** I have a fine lot of April and May hatching cockerels for \$3.00 and \$5.00 each. DAVID RAY, 709 Norris St., Ypsilanti, Michigan.

**White Wyandottes** 50 extra choice cockerels \$3 to \$5. I ship on approval and guarantee satisfaction. Milton E. Stewart, R. 3, Augusta, Mich.

**White Chinese Ganders** Pekin Ducks and a few R. C. Br. Leghorn hens. Cockerels all sold. MRS. CLAUDIA BETTS, Hillsdale, Michigan

**GIANT** Bronze Turkey Toms big boned young thoroughbreds 16 to 22 lbs. Cheaper now than later. N. EVALYN RAMSDALL, Ionia, Mich.

**Fine** Mammoth white Holland Toms for sale \$6.00 each if sold by Dec. 21st. Pure bred. Mrs. H. C. MCINTYRE, Jeddo, Mich.

## BREEDERS' DIRECTORY.

Change of Copy or Cancellations must reach us Ten Days before date of publication.

**We Offer a Few Special Bargains** In S. C. White Leghorn cockerels, Ram- bouillet rams, Hampshire pigs (either sex) and Holstein bulls. A good chance for a small investment to reap the benefit of a large expenditure of capital and years of expert breeding.

**Flanders Farm, Orchard Lake, Mich.**

# The First Michigan Holiday Guernsey Sale

Fair Grounds, Jackson, Michigan  
December 27th, 1917  
One O'clock Sharp

A consignment of about seventy-five Cows, Heifers and Bulls of popular breeding. Advanced registry cows with records to 12908 lbs. of milk, 675 lbs. fat. Heifers open and bred, also many good foundation cows.

Among the bulls will be Imported Westmoreland 17918 a May Rose, Golden Secret and Hayes bull, winner of First, Champion and Grand Champion Michigan State Fair 1912, also first prize Wisconsin and Minnesota 1912. L'Aiglon of Bon ayre 33664 winner at 1917 shows also May Rose breeding. Young bulls by the above sires and also such bulls as Walbridge Glenwood Boy First, Champion and Grand Champion Michigan State Fair 1916; First, Champion and Grand Champion Illinois State Fair 1916; First, Champion and Grand Champion Missouri State Fair 1916; First Dairy Cattle Congress, Waterloo, Iowa 1916. Prides Hambro 35933 a May Rose winner at Illinois, Ohio, Missouri, New York state fairs 1916; First and Junior Champion, Michigan State Fair 1916.

In the females there are several daughters of Glenwoods Champion also females rich in the blood of Stranforths Glenwood of Pinehurst, Glenwood Boy of Haddon, the Sequels and Governor of the Chene. Many of these females are from show herds of 1916 and 1917.

Catalogue Mailed on Request to

**G. W. Allen, Sales Mgr., Grass Lake, Mich.**  
**Col. D. L. Perry, Auctioneer, Columbus, Ohio**

## Jerseys and Duroc Jerseys

The most important thing in buying a Jersey bull is to get one backed up by generations of high producers. Brookwater offers to sell a few choice bull calves of this kind. Our herd of Durocs has won more prizes at the State Fairs this year than any other.

Boar Pigs and Yearlings For Sale.

H. W. MUMFORD,  
OWNEK

**BROOKWATER FARM**

O. F. FOSTER,  
MANAGER

Ann Arbor, Mich., R. 7.

## "BULLY" BARGAINS at Long Beach Farm, Augusta, Mich.

Choice Holstein bulls, \$80 up. 4 to 14 mos. old from A. R. O. dams from noted families. Our Junior Herd Sire is stated to be a world beater. His sire is Spring Farm King Pontiac 6th. His dam a 28.53 lb. 6 yr. old daughter of DeKol 2nd Butter Boy 3rd. You should have our illustrated booklet. Our herd is under state and Government supervision.

## CATTLE.

### Aberdeen-Angus

Herd established in 1900. Trojan—Ericas and Black birds only. Bulls in service; Black Brandon 28932 Enos of Woodcote 191382. Also breeders of Percheron and Saddle Horses.

**WOODCOTE STOCK FARM,** Ionia, Mich.

## M. S. D. AYRSHIRES

We have for sale a choice lot of young stock from A. R. dams. Also a few mature cows. Write for particulars.

**W. L. HOFFMAN, Steward,**  
School for the Deaf, Flint, Michigan

### Registered Guernseys

Stock always for sale. May Rose Strain—Herd Tuberculin tested annually. Never had a reactor—no abortion. J. M. WILLIAMS, North Adams, Mich.

**Guernseys** For Sale, four young registered cows. Tuberculin tested. Geo. N. Crawford, Holton, Mich.

**GUERNSEYS** must reduce herd, so offer Glenwood breeding also bulls, all stock of A. R. breed- ing, herd tuberculin tested.

**T. V. HICKS,** Battle Creek, Mich.

**GUERNSEYS—REGISTERED** BULL CALVES Containing blood of world champions.

**HICKS' GUERNSEY FARM,** Saginaw, W. S. Mich.

**I am in the Market** for 15 head of fresh cows or coming in soon. Must be good grade of Guernsey, Holstein or Durham at a fair price. Address

**THOMAS F. COWHEY,** Washington, Mich.

**Avondale Stock Farm,** Wayne, Michigan have entered 10 head of Registered Guernsey Cattle in the Michigan Holiday Guernsey Sale at Jackson, Michigan. Dec. 27, 1917.

**I have entered 10 head Reg. Guernsey Cattle in the** Mich. Guernsey sale at Jackson Dec. 27, 1917.

**JOHN EBELS,** R. 2, Holland, Mich.

## CLUNY STOCK FARM

**100--REGISTERED HOLSTEINS--100**

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.

## Don't Sell Common Dairy Cows For Beef

Due to the high price of feed they may pay little profit. But there is a scarcity of dairy animals. Their daughters will yield 25% to 100% more milk than their dams if you

### Use a Guernsey Bull

In Ohio a Guernsey Bull used in a grade herd sired daughters who produced 50% more milk and 70% more butter fat as two year olds than their dams did when mature.

Write for our beautiful illustrated book "The Grade Guernsey."



**REG. HOLSTEINS:** Herd headed by Albina Bonte R. Butter Boy No. 93124. Da m's record at 6 yrs. butter 28.53 lbs. milk 619.4. Yearly record at 3 1/2 yrs. butter 802 lbs. milk 18622 lbs. W. B. READER, 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.

**GEO. D. CLARKE,** Vassar, 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.

**\$50 Gets** son of 30 lb. bull dam is grand- daughter of De Kol 2nd Butter Boy 3rd. Her dam 18.96 lb. 2 yr. old.

**M. L. McLAULIN,** Redford, Michigan.

## I Always Have Holsteins To Sell

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

**L. E. CONNELL, Fayette, Ohio**

## "TOP-NOTCH" HOLSTEINS

"Milk production is an inherited ability. Good cows must be bred to good pure-bred bulls if progress in dairying is to be made"

Extract U. S. Dept. of Agric. Bulletin.

Here is a young bull with inherited ability, and rare individual merit. He was born Dec. 24, 1915.

Butter 7 Days	33.62
Butter 30 Days	130.73
Milk 30 Days	2615.70
Butter 1 Year	538.41
Milk 1 Year	18675.80

His Sire's Sire's three nearest Dams average Butter four yr. old. (Including a junior three and senior four yr. old.)

His Dam's Record { Butter 7 Days	21.24
3 Yrs. 14 Days { Milk 7 Days	452.8
Dams' Dam { Butter 7 Days	29.40
Almost 30 lbs. {	
About 1/4 white. Price low for this quality.	

**McPherson Farms Co., Howell, Mich.**

## A Few Fine Bulls For Sale

**Bigelows Holstein Farms, Breedsville, Mich.**

### OAK LEAF FARM

**Herd Sire**  
**Ypsilanti Sir Pictetije De Kol**

Registered Holstein cows & bull calves fine individual- als cows safe in calf satisfaction guaranteed.

**E. H. Gearhart & Son, Marcellus, Mich., R. No. 4.**

## WINWOOD HERD REGISTERED HOLSTEINS

**Holton, Mich.**

**Reference: Old State Bank, Fremont, Mich.**

**Flint Maplecrest Boy sire in service**

His sire is Maplecrest Korndyke Bengerveld, his 3 Nearest Dams each over 30 lbs. of butter in 7 days. His dam and grand dam both made over 1232 lbs. of butter in 1 year. It is the yearly cow we are looking for to deliver the goods. Flint Maplecrest Boy's Dam is Gluck Vassar Bull, 30.57 lbs. of butter in 7 days and 120 lbs. in 30 days. Her butter fat test is 5.27. This looks about right to the man who goes to the creamery. We have Bull Calves from 2 weeks to 8 months old for sale at dairy farmers' prices all out of A. R. O. Heifers. Write & tell us the kind of a bull you want.

**John H. Winn. (Inc.) Holton, Mich.**

**REG. Holstein Bull Calf.** The last one until winter. A good one with A. R. O. backing. Write for pedigree and price.

**Elmer E. Smith, Redford, Mich.**

Additional Stock Ads. on Page 570

Isn't it Strange? — — But Dairy Dan's Wife had the Right Idea!

The Sharples Separator Co., West Chester, Pa.

Dairy Dan was a regular feller—had a ten-cow dairy and a fixed-feed separator.

But he couldn't turn that fixed-feed separator up to regulation speed. He lost a dime's worth of cream any- how—twice a day.

He hated to admit that this constant loss would have more than paid for a modern separator which skims clean at any speed.

But one day he discovered a hole in the pocket of his 6-days-a-week suit—commonly called overalls.

And he sure did give Maria an awful call-down for her carelessness.

She got peeved and showed him how he could mend his carelessness—by buying a SHARPLES SUCTION-FEED SEPARATOR. Adv't



# Markets.

## GRAINS AND SEEDS

December 11, 1917.

**WHEAT.**—The demand for wheat is well sustained and offerings find millers ready buyers. The trade in flour is active and very satisfactory. One year ago No. 2 red wheat was quoted locally at \$1.76 per bushel. Present Detroit quotations are: Cash No. 2 red \$2.17; No. 2 mixed \$2.15; No. 2 white \$2.15.

**CORN.**—While an embargo on the shipment of corn to eastern points has resulted in a general decline in values over most of the corn belt, the situation is not so bad as it might have been had not the recent cold wave appeared. The zero weather not only improved conditions for keeping immature corn, but also stimulated buying. On Monday the Detroit prices were 1c lower for mixed corn and unchanged for yellow, while the Chicago market showed a fractional decline for futures and a break of 10¢@20¢ in cash sales. A year ago No. 3 corn sold in Detroit at 97½¢ per bushel. Last week's local quotations were:

	No. 3 Mixed.	No. 3 Yellow.
Wednesday .....	2.03	2.08
Thursday .....	2.03	2.05
Friday .....	2.04	2.07
Saturday .....	2.04	2.07
Monday .....	2.03	2.07

**OATS.**—Although dealers have been expecting lower prices in this department, the small receipts from the producing sections and the demand from local millers and from eastern dealers have prevented any decline. At Chicago on Monday there were substantial advances made. One year ago standard oats were quoted at 59¢ per bushel. Last week's Detroit quotations were:

	No. 3 Standard.	No. 3 White.
Wednesday .....	78½	77½
Thursday .....	78½	78
Friday .....	77½	77
Saturday .....	77	76½
Monday .....	77	76½

**RYE.**—Market easy and dull, with price advanced during the week. Cash No. 2 \$1.81½ per bushel.

**BEANS.**—Cash beans declined 25¢ on Monday. There was a decrease in the demand which, however, is expected to be only temporary. Offerings of good stock are small. Cash beans are now quoted at \$12.50 per bushel. At Chicago the trade is steady, with the Michigan pea beans, hand-picked, quoted at \$14@14.50 per cwt., and fancy red kidneys at \$17.

**SEEDS.**—Prime red clover \$16.20; March \$16.10; alsike \$14.20; timothy \$3.65 per bushel.

## FLOUR AND FEEDS

**FLOUR.**—Jobbing lots in one-eighth paper sacks are selling on the Detroit market per 196 lbs., as follows: Best patent \$11.30@11.50; seconds \$10.85@11; straight \$10.50@10.75; spring patent \$11.35@11.60; rye flour \$11.10@11.20 per bbl.

**FEED.**—In 100-lb. sacks jobbing lots are: Bran \$42; standard middlings \$44; fine middlings \$46; cracked corn \$89; coarse corn meal \$77; corn and oat chop \$55@60 per ton.

**HAY.**—In carlots at Detroit: No. 1 timothy \$24.50@25; standard timothy \$23.50@24; No. 2 timothy \$22.50@23; light mixed \$23.50@24; No. 1 clover \$19@20 per ton.

Pittsburgh.—No. 1 timothy \$27.50@28; No. 2 timothy \$25.50@26; No. 1 light mixed \$26.50@27; No. 1 clover mixed \$28.50@29.50; No. 1 clover \$28.50@29.50 per ton.

## DAIRY PRODUCTS

**BUTTER.**—Market is firm with a slight advance. Fresh creamery firsts 43¢@44¢; fresh creamery extras 45¢@45½¢ per pound.

Chicago.—A firm feeling generally pervades the market. Creamery extras 47½¢; extra firsts 45¢@46½¢ per lb.; packing stock 31¢.

**CHEESE.**—Michigan flats 23½¢ per lb.; New York flats 25¢; brick 24½¢; long horns 26½¢; Michigan daisies 24½¢; Wisconsin daisies 25½¢; Wisconsin double daisies 25¢; domestic Swiss 35¢@40¢ for prime to fancy; Limburger 28¢@29¢.

## POULTRY PRODUCTS

**POULTRY.**—(Live).—Poultry, especially chickens, firm. Best spring chickens 22¢@23¢; hens 21¢@22¢; ducks 25¢@26¢; geese 20¢@21¢; turkeys 20¢@23¢.

Chicago.—(Live).—Demand fair and market steady. The Chicago Poultry Board has ruled that poultry must not be fed at least twelve hours before placing on the market for sale. Fowls 18¢@19¢; spring chickens 19¢; ducks 21¢; geese 15¢@19¢; turkeys, good 22¢. (Dressed).—Fowls 19¢@21¢; ducks, fancy 23¢@24¢; geese 20¢; turkeys 30¢.

**EGGS.**—Fresh eggs are firm. Fresh firsts 43¢@48¢.

Chicago.—Fresh eggs are holding firmly with prices 1¢@2¢ higher. Fresh Michigan firsts sell for 47¢@50¢; ordinary firsts 43¢@46½¢; miscellaneous lots, cases included 43¢@49¢.

## FRUITS—VEGETABLES

**POTATOES.**—(Markets).—Twelve cars of potatoes were on the Detroit market Monday morning. No sales were reported for this week, but on Saturday round whites sacked brought \$2 per cwt. At Pittsburgh, Michigan round whites sacked are bringing \$2.10; at Indianapolis \$2@2.25; at Chicago \$1.90@2; at Columbus, Ohio, \$2.15@2.25.

Extremely cold weather over the important potato producing sections has practically prevented any movement of the product. At Grand Rapids round whites sacked were quoted at \$1.80@1.85 f. o. b. carloads. In New York state the same grade were \$2.30@2.35; in Minnesota farmers are securing \$1.50 for bulk ungraded at side tracks.

**APPLES.**—There were twelve cars of apples on the Detroit market Monday morning. Few early sales were made on account of the weather. Some York Imperials brought \$5@5.25 per bbl. Spies are held around \$7; Greenings \$6@6.25; Snobs \$6.50@7. The New York market is strong for good stock, while the demand for inferior offerings is moderate. In Chicago the demand and movement is moderate, with market steady. Quotations to jobbers in barrels are: Jonathans \$5@6.25; Ben Davis \$3.50@4.25; Greenings \$5.50@6.50; Spies \$5.25@6; Grimes at \$5@5.75.

**ONIONS.**—The movement of this product is comparatively small at present; jobbers are receiving \$3.75@4 per 100-lb. sack for yellows in Detroit. In New York the prices to jobbers are \$2.25@2.75, in Chicago 100-lb. sacks bring \$1.50@2, and 70-lb. sacks \$1@1.50.

**CABBAGE.**—The stores are paying \$1.25 per bushel for good cabbage in Detroit. In New York state producers are receiving \$33@35, while in Wisconsin the price ranges from \$21@28 per ton.

**CELERY.**—No sales were reported from New York state early this week, while at Kalamazoo, Mich., a few wagonloads were sold at the side track at 10¢@12¢ per dozen. Cold weather has greatly restricted business.

## WOOL

While trading has been quiet this past week the same strength in prices prevails with dealers counting on advances rather than declines. Fleeces have changed hands in comparatively small quantities while pulled wools go practically as fast as they are produced. The range of prices for fleeces at Boston has been from 56¢@85¢ and for pulled wools \$1.15@1.85.

## GRAND RAPIDS

The movement of potatoes continues very light, with practically no demand. Some field frosted stock is reported. Carloads f. o. b. Grand Rapids, for the round whites, bulk per 100 lbs., quoted at \$1.80. Quotations to growers for tubers at loading stations in the state, practically unchanged from last week.

## LIVE STOCK

### BUFFALO.

December 10, 1917.

Cattle.—Receipts 125 cars; market steady; best shipping steers \$12.50@13; fair to good \$11@12; plain and coarse \$9.50@10; yearlings \$11.50@12; handy steers \$10.50@11.50; fair to good kinds \$9@10; handy steers and heifers mixed \$8.50@9; western heifers \$8@9.50; light butcher steers \$7.75@8.25; best fat cows \$8.50@9; butcher cows \$6@7; cutters \$5.25@5.50; canners \$4@5; fancy bulls \$8.50@9; butcher bulls \$7@8; common bulls \$6@6.50; best feeders 900 to 1000 lbs. \$8.75@9; medium feeders \$7.75@8; light, common \$6@7; stockers \$6.75@7.25; best milkers and springers \$6@12.50.

Hogs.—Receipts 40 cars; market 15¢@25¢ higher; heavy \$18@18.25; yorkers \$18; pigs \$16.50.

Sheep and Lambs.—Receipts 15 cars with market 50¢ higher; top lambs at \$18.25@18.50; yearlings \$13@15; weth-

ers \$11.50@12; ewes \$11.25@11.50.

Calves.—Receipts 500, with market strong; tops \$16.50; grassers \$6@7.

### CHICAGO.

December 10, 1917.

Cattle, Hogs, Sheep. Receipts today.. 28,000 37,000 18,000 Same day 1916.. 20,777 58,157 21,408 Last week..... 81,509 186,442 75,688 Same wk 1916... 68,420 297,275 104,836

Cars on railroads leading east were scarce today, and the prospect was prices for cattle would close lower, especially for the choicer class, for which there were no early bids. Otherwise, the morning market was called steady, with fat butcher stock 10¢ or more higher. Hogs advanced as much as 25¢, with the top price \$17.65. Hogs marketed last week averaged 211 lbs. The small supply of lambs was well taken, with the best killers selling at \$16.85, an advance of 10¢ on the highest sale late last week. Some fat clipped lambs brought \$14.

Cattle receipts were moderate last week, and sales were largely 50¢ higher, with some transactions as much as 75¢ higher. The best time was the middle of the week, the greater part of the steers offered on Wednesday going at \$975@1460 and the week's best sales of prime beefs being at \$15@16.50. There was a lively and high market for fat butcher stock, with \$6.50@7.50 cows of the previous week looking 75¢@1 higher. Cows sold at \$6.70@10.10 and heifers at \$6@12.50, while cutters went at \$6.10@6.65, canners at \$5.50@6 and bulls at \$6@11. Calves soared much higher under inadequate offerings, with the more select class of light weaners purchased for \$14@15 per cwt., and sales down to \$6.50@7.50 for the commoner heavy lots. The stocker and feeder branch of the market was fairly active most of the time, prices averaging 25¢@40¢ higher, with decreased offerings and buyers paying \$6.25@11, although not much trading was done higher than \$10. The future looks promising enough to encourage feeding cattle, although there promises to be enough beef to go around. During the latter part of the week a fair part of the advance in cattle prices disappeared under much larger receipts, many lots selling off as much as 25¢.

Hogs continued in good general demand for still another week, and high prices were paid. Nothing has occurred to discourage hog feeders, and extremely high prices indefinitely are practically certain. Provisions are extremely active and unusually high in price. The week closed with hogs selling at \$16.40@17.35, comparing with \$16.15@17.35 a week earlier, while pigs sold at \$12.50@15.40, with feeding pigs taken at \$15.25@16. Prime heavy hogs sold highest, with prime light weights at \$17.20.

By recent action of the directors of the Chicago Board of Trade, no daily fluctuations in prices for any delivery of provisions beyond 50¢ per 100 lbs. of lard or ribs, or \$1 per barrel for mess pork from closing prices of the last previous close will be permitted. Also no purchases or sales of provisions shall be made for future delivery beyond six months ahead of the month current at time of such transaction. Trading in provisions either for current month or for future delivery for the purpose of unduly influencing values is forbidden. President Griffin states that this action was taken on the suggestion of the food administration.

Lambs, yearlings, wethers and ewes continued to sell at extremely high prices during the past week, with a top for lambs at \$17, while prime feeding lambs sold as high as \$17.50. The best wethers brought \$13, comparing with \$9.50 a year ago, \$6.75 two years ago and \$5 five years ago. A year ago prime lambs at \$13 looked extremely high, and the top price was \$9.25 two years ago and \$8.25 five years ago. The closing prices were: Lambs \$12.50@16.75; feeding lambs \$16.50@17.25; yearlings \$12@14.50; wethers \$11.40@12.90; ewes \$9@11.60; breeding ewes \$11@13.50; feeding ewes \$7@10; bucks \$7@9.25; goats \$5@8.75.

Many stockmen marketing cattle, hogs and sheep in the Chicago stock yards are greatly pleased with the minimum price fixed by the food administration bureau for packing hogs, and they agree that the farmers of the country as a class are determined to back the government by growing as much live stock as possible in order to feed our own people, our soldiers and sailors and our allies. Increased pork production in the state of Illinois was pledged the government of the United States in a resolution adopted at a meeting of 200 live stock feeders held in the University of Illinois a short time ago. There can be not the shadow of a doubt that the enormous worldwide requirements call imperatively for far more hogs than are now being bred and raised in this country.



Warranted to give satisfaction.

## GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

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

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

### HOGS.

DUROCS Orion Chief Perfection No. 69945, and Jennings Pilot Wonder No. 8373. 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.

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

Duroc Sows and gilts bred to Eureka Cherry King and Orinson Critic son of Critic Model 1916 champion Iowa Fair. W. C. Taylor, Milan, Mich.

Pinehurst offers: Registered Spring Boars, tried brood sows, One Great Herd Boar. Write your wants. Orlo L. Dobson, Quincy, Mich.

## DUROC SOWS

Bred to Orion's Fancy King 83857, the biggest pig of his age ever shown at the International. NEWTON BARNHART, St. Johns, Mich.

Durocs. Sons of Panama Special \$15 at weaning. Good spring gilts. R. C. R. I. Red Cockerels \$3. E. E. Calkins, R. 6, Ann Arbor, Mich.

Duroc Jersey Spring gilts and fall pigs either sex. E. D. HEYDENBERG, Wayland, Mich.

DUROCS for sale, 1 fall boar, 7 Spring boars, good breeding. Write for description and prices. J. D. CRANE & SON, Plainwell, Mich.

Duroc Jersey: Extra good spring pigs for sale. CAREY U. EDMONDS, Hastings, Mich.

Duroc Jerseys—boars of the large heavy boned type. Prize winning stock, prices reasonable, type and breeding considered, also gilts bred to Junior Champion boar for spring farrow. F. J. Drott, R. 1, Monroe, Mich.

For Sale Duroc Jerseys Boars and gilts; also, dandy fall pigs. Prices right. JOHN MCNICOLL, Station A, Route 4, Bay City, Mich.

DUROC JERSEY SOWS Bred to one of the best young boars in Mich. for Mar. farrow. RUSH BROS., Romeo, Mich.

## BOARS

Big growthy fellows. The kind that pleases. I ship C. O. D. and pay express. J. CARL JEWETT, Mason, Mich.

Chester Gilts bred for March farrow early fall pigs both sexes from best blood lines. F. W. ALEXANDER, Vassar, 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

## Big Type O. I. C's.

Stock of all ages for sale. We showed at four state fairs and won more champions and Grand Champions than all the other breeders together double, we were Premier Breeder and Exhibitor at every fair we showed. We Bred the best. We sell the best. We Guarantee them to be the best. Write your wants. Get our Catalogue. We ship on approval. CRANDELL and SON, Cass City, Mich.

O. I. C's. Service boars all sold, have some fine last spring gilts, and a nice lot of this fall pigs, not akin, good growthy stock. ½ mi. west of Depot, Ottiz, phone 124. Otto B. Schulze, Nashville, Mich.

O. I. C. & CHESTER WHITE SWINE. Strictly big type with quality. Have a choice lot of boars fit for early fall service. These boars will be so worth the money. Also have some fine gilts. I will ship C. O. D. NEWMA'S STOCK FARM, R. 1, Marlette, Mich.

O. I. C. Choice Spring boars and gilts out of prize winning stock. All stock guaranteed. The long bodied and Big Boned type. Write for photo and low prices. A. V. HATT, Grass Lake, Mich.

Additional Stock Ads. on Page 587



## THIS IS THE FIRST EDITION.

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

## DETROIT LIVE STOCK MARKET.

Thursday's Market.  
December 5, 1917.  
Cattle.

Receipts 3161. Canners and bulls are steady; other grades 15¢ to 25¢ lower than last week.

Best heavy steers \$10@11; best handy weight butcher steers \$8.50@9.50; mixed steers and heifers \$7@8.50; handy light butchers \$6.50@7; light butchers \$6@6.50; best cows \$7@8; butcher cows \$6.25@6.75; common cows \$5.75@6; canners \$5@5.75; best heavy bulls \$7.50@8; bologna bulls \$6.50@7; stock bulls \$5.50@6.50; feeders \$7.50@8.50; stockers \$6@7.50; milkers and springers \$5@100.

Erwin, S. & J. sold Wolmer 5 stockers av 680 at \$7; to Bray 3 cows av 1023 at \$7, 5 do av 726 at \$6; to Sullivan P. Co. 2 do av 935 at \$7.50, 3 do av 857 at \$6.50; to Wolmer 4 stockers av 600 at \$7, 6 do av 583 at \$6; to Thompson 1 heifer wgh 780 at \$7, 5 steers av 810 at \$8, 10 do av 918 at \$9.50; to Mich. B. Co. 16 do av 875 at \$8.25, 1 bull wgh 1210 at \$7.75, 1 do wgh 1300 at \$7.50, 3 butchers av 727 at \$6.50; to Cogles 28 stockers av 508 at \$5.65; to Nagle P. Co. 10 steers av 1150 at \$10.15; to Bresnahan & K. 1 cow wgh 1180 at \$6, 4 canners av 980 at \$5.50, 2 cows av 975 at \$6, 5 do av 866 at \$5.50, 7 do av 900 at \$6.25, 4 do av 960 at \$5.50; to Bray 7 do av 1060 at \$6; to Mich. B. Co. 10 butchers av 1065 at \$6.50, 3 do av 857 at \$7.50, 24 do av 710 at \$7, 9 do av 722 at \$7; to Bray 8 canners av 915 at \$5.50, 19 do av 970 at \$5.60, 2 do av 1030 at \$5, 4 cows av 1180 at \$7; to Garber 6 butchers av 616 at \$6.35; to Bresnahan & K. 12 steers av 926 at \$7.15, 3 do av 697 at \$5.75; to Newton P. Co. 2 do av 1185 at \$8.50, 7 cows av 1043 at \$6, 7 do av 945 at \$5.75; to Mich. B. Co. 5 butchers av 780 at \$8; to Sullivan P. Co. 1 bull wgh 1600 at \$7.75, 1 do wgh 960 at \$7.

McMullen, K. & J. sold Fineman 16 butchers av 682 at \$6; to Bray 25 canners av 850 at \$5.75, 2 cows av 1075 at \$6; to Newton P. Co. 9 steers av 1064 at \$10, 3 cows av 1043 at \$5.50; to Parker, W. & Co. 4 canners av 917 at \$5.50, 19 do av 931 at \$5.50, 25 do av 900 at \$5.50, 7 do av 956 at \$5.50; to Hyman 6 butchers av 663 at \$6.35; to Kamman B. Co. 4 do av 907 at \$8, 1 cow wgh 1200 at \$6.75; to Bresnahan & K. 1 do wgh 1000 at \$5.50, 1 do wgh 1090 at \$6.50; to Mich. B. Co. 1 do wgh 950 at \$6.50, 4 do av 807 at \$7, 9 do av 806 at \$6.50, 1 do wgh 1150 at \$6.25, 2 do av 730 at \$6.50, 1 bull wgh 1080 at \$6.75; to Kamman B. Co. 5 butchers av 640 at \$7.10, 5 do av 770 at \$7.25, 9 do av 980 at \$8.50, 3 cows av 1063 at \$7.40; to Applebaum 22 butchers av 582 at \$6; to Sullivan P. Co. 1 cow wgh 1120 at \$6, 2 do av 1025 at \$6.25, 5 heifers av 750 at \$7; to Bresnahan & K. 10 canners av 783 at \$5.50, 2 do av 1110 at \$6.75; to Grant 24 butchers av 604 at \$5.75; to Newton P. Co. 12 cows av 850 at \$5.75; to Mich. B. Co. 3 do av 1133 at \$7; to Bresnahan & K. 9 canners av 997 at \$5.50; to Bernfeldt 14 butchers av 430 at \$5.40; to Thompson 26 steers av 972 at \$10.60; to Bray 4 cows av 1000 at \$6; to Gilbert 1 do wgh 1270 at \$7.

## Veal Calves.

Receipts 658. Market strong on good and common dull. Best \$14; common \$10@11; heavy \$6@8.

Sandel, S., B. & G. sold Goodgold 6 av 250 at \$7.50; to Nagle P. Co. 7 av 180 at \$13.50, 3 av 145 at \$13, 2 av 245 at \$10; to Sullivan P. Co. 11 av 165 at \$14, 4 av 145 at \$11, 2 av 130 at \$9; to Hammond, S. & Co. 4 av 125 at \$13, 18 av 145 at \$13.75, 2 av 165 at \$10.50, 3 av 130 at \$11, 8 av 140 at \$14; to Nagle P. Co. 3 av 190 at \$14.25; to Goodgold 3 av 150 at \$9, 5 av 155 at \$11.

## Sheep and Lambs.

Receipts 4872. Market strong to 25¢ higher. Best lambs \$16.90@17; fair lambs \$15.75@16; light to common do \$14@15; fair to good sheep \$9@10; culls and common \$6@7.50.

Bishop, B. & H. sold Nagle P. Co. 42 sheep av 98 at \$8, 7 do av 125 at \$9, 4 do av 125 at \$10, 173 lambs av 82 at \$16.65, 79 do av 70 at \$16.50, 12 do av 98 at \$16.50, 120 do av 90 at \$16.75, 77 do av 75 at \$16.50, 6 do av 75 at \$16; to Hammond, S. & Co. 68 do av 73 at \$16.60; to Sullivan P. Co. 15 do av 55 at \$15.25, 49 do av 60 at \$16, 35 yearlings av 95 at \$14.50, 8 sheep av 80 at \$6; to Nagle P. Co. 55 lambs av 80 at \$16.75, 186 do av 80 at \$16.50, 28 do av 75 at \$16.75; to Hammond, S. & Co. 62 do av 75 at \$16.75; to Nagle P. Co. 137 do av 70 at \$16.75.

## Hogs.

Receipts 7231. Market steady. Mixed grades \$16.50@17; few heavy at \$17.25; pigs all sold at \$15.25.

## THE MICHIGAN FARMER

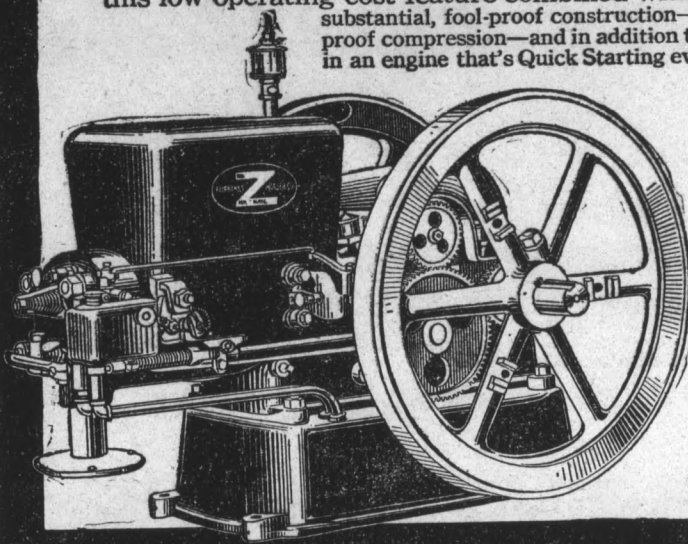
## Save 50% By Using KEROSENE

The Fairbanks-Morse "Z" Engine is built for your work.

And it will do the work efficiently and economically. Powerful—lower in original cost and lower in up-keep—you'll find the type "Z" a money-making helper for you.

## The 3 and 6 H. P. are REAL Kerosene Engines

—not just "adapted" for kerosene. The same power from a gallon of kerosene as from a gallon of gasoline—50% saving in fuel cost. They will use gasoline too. Think of finding this low operating cost feature combined with simplicity—light weight—substantial, fool-proof construction—gun barrel cylinder bore—leak-proof compression—and in addition to all this, Built-in Magneto—in an engine that's Quick Starting even in cold weather. The 1½ H. P. uses gasoline only.



## Buy From Your Dealer

He carries it in stock and will gladly demonstrate its adaptability to your use and he's interested in keeping you satisfied.

FAIRBANKS,  
MORSE &  
CO.  
Chicago  
Manufacturers

3 H.P.  
\$89.00  
6 H.P. \$156.00  
Both With Throttling Governor  
1½ H.P. (Gasoline) \$48.50 on skids  
All F.O.B. Factory. With BUILT-IN MAGNETO

## For Sale, Used and Rebuilt Machinery

22 H. Peerless, steam tractor engine.  
22 H. Stevens, 20 H. Huber, two 20 H. Rumleys.  
18 H. and 22 H. Wood Bros.  
19 H. Port Huron, 18 H. Pitts, 18 H. Huber.  
18 H. Nichols and Shepard.  
18 and 20 H. Baker, 15 H. Port Huron.  
15 H. Case, 12 H. Case, 8 H. Gaar-Scott portable; 20 H. Russell portable.  
22 in. and 36 in. Wood Bros. steel threshers.  
28 in., 32 in. and 36 in. Case, 30 in. and 32 in. Advance, 31 in. Gaar-Scott, 30 in. and 34 in. Pitts, 28 in. and 32 in. Nichols and Shepard.  
Big Six and No. 1 Birdsell clover hullers; Pitts and Huber bean threshers.  
Write us for complete used machinery list. Save money by buying used machinery.  
The BANTING MFG. COMPANY  
114 Superior St., TOLEDO, OHIO

## HAY Ship To The Old Reliable House

Daniel McCaffrey's Sons,  
623-625 Wabash Bldg., Pittsburgh Pa.

## POTATOES--APPLES--ONIONS WANTED

CHAS. W. RUDD & SON, Detroit, Mich.

## EGGS: We are paying good premiums for new-laid Eggs, either Whites or Browns. Write us for particulars. AMERICAN BUTTER &amp; CHEESE COMPANY, Detroit, Mich.

## ICE PLOWS

CUTTERS Mr. Farmer: Here is your chance to get a high-grade cutter at a bargain. We are offering 50 Brand New Cutters at the manufacturing cost. Immediate delivery. Write for booklet and prices. WOLVERINE SALES CO.  
711 Delaware St., Grand Rapids, Mich.

## HOGS

O.I.C.'s Registered serviceable boars. Bred gilts. Aug. Sept. Oct. pigs. Registered Shropshire ewe lambs. G. P. Andrews, Danville, Mich.

O. I. C.'s: A few prize winning gilts at Michigan State Fair, also Aug. Sept. pigs of the best blood lines. Clover Leaf Stock Farm, Monroe, Mich.

O. I. C. Am offering some good boars of May far row and fall pigs either sex. C. J. THOMPSON, Rockford, Mich.

Big Type Poland China Apr. boars, sire and dams Big Type from 1000-lb. stock; can be returned if not satisfactory. R. W. MILLS, Saline, Mich.

## BOARS--SOWS

Big type big bone. For the next 30 days we will sell Big type Poland China at bargain prices. April boar weighing 300 lb. Open gilts. Summer and fall pigs everything goes. Get busy. J. C. BUTLER, Portland, Michigan, Bell Phone.

LARGE Type P. C. Largest in Mich. Spring Boars ready to ship. The kind that make good. Come and see the real big type kind. Expenses paid if not as represented. Free livery from Parma. W. E. LIVINGSTON, Parma, Mich.

Big Type Poland Chinas: April and May pigs, healthy and growing. Prices right. L. W. BARNES & SON, Byron, Mich.

LARGE Type P. C. Some growthy spring Boars and L. Gills ready to ship, come and see them. Free livery from Augusta. W. J. Hagelshaw, Augusta, Mich.

Big Type Poland China boar now ready to ship, buy G. W. HOLTON, KALAMAZOO, MICHIGAN.

LARGE Type P. C. Some good spring boars up to 270 lbs. Will also price gilts, open or bred. Fall pigs ready to ship. Wm. J. Clarke, R. 7, Mason, Mich.

Big Boned Poland China boars shipped C.O.D. call or write for photo, weights, pedigree and price. E. R. Leonard, R. 8, St. Louis, Mich.

Walnut Alley big type P. C. boars that represent the best breeding of Iowa at ½ their value for the next 10 days. (Two that are extra.) A. D. GREGORY, Ionia, Mich.

LARGE STRAIN P. C. nothing for sale until after H. O. SWARTZ, Schoolcraft, Mich.

Big type P. C. Boars and Gilts of Peter Mouw breeding. He sold 104 head Sept. 21 for \$32.35 average \$308 per head. C. E. Garnant, Eaton Rapids, Mich.

Registered Hampshires, spring boars and gilts JOHN W. SNYDER, R. 4, St. Johns, Mich.

## SHEEP

IT PAYS TO BUY PURE BRED SHEEP OF PARSONS "The Sheepman of the East." I sell and ship everywhere and pay express charges. Write for club offer and price list. Oxford, Shropshires and Fokled-Delaines. PARSONS, Grand Ledge, Mich. R. 9

Shropshire Ram Lambs and one three year ARMSTRONG BROS., R. 3, Fowlerville, Mich.

Shropshires a few choice Ram lambs; one three yrs. old. 10 ewes. DAN BOOHER, R. 4, Ewart, Mich.

## Reg. Shropshire Rams For Sale

Prices reasonable. Harry Potter & Son, Davison, Mich.

## SHROPSHIRE AND HAMPSHIRE RAM LAMBS

Husky ones with quality, price \$35. Shipped C. O. D. Kope Kon Farms, Sheep at Lupton address Coldwater, Mich.

## CHOICE BRED EWES

250 left. 1 to 4 years old, bred to good Shropshire rams. \$13 to \$16 each for 10 or more, if taken soon. ALMOND B. CHAPMAN, So. Rockwood, Mich.

Registered Oxford Down Ram lambs for sale. OLMSTED and J. SPAANS, Muir, Mich.

Registered Oxford Ram and Ram lambs. Also Berkshire hogs. CHASE STOCK FARM, R. 1, Maillette, Mich.

## FOR SALE 100 Good Breeding Ewes

bred to good Shropshire bucks, weighing over 200 lbs. Will sell in small flocks if desired. Hillcrest Farm, Kalamazoo, Mich.

EWES: Rambouillet and Hampshire for sale. A. A. WOOD & SON, Saline, Mich.

Western ewes bred to registered rams. 100 light western lambs, O. K. for feeders. BARNARD SHEEP RANCH, R. 5, Clare, Mich.

## HORSES

## Eleven (11) Head of Registered Percherons For Sale.

Stallions, brood mares, colts and fillies. A fine lot, big boned, clean limbed, strait gaited, drafty show-horse type.

I will sell cheap for cash or will give time to reliable parties Dr. C. L. Barber, Lansing, Mich.

## REGISTERED PERCHERON

Mares and Stallions priced to sell. Inspection invited. L. C. HUNT, EATON RAPIDS, MICH.

## LOESER BROS.

Belgian and Percheron Stallions for sale that will pass the Michigan Stallion Inspection. Have a few mares of both breeds. Shorthorn Cattle, we offer a choice lot of bulls and females. Write us.

## LIGONIER INDIANA.

## PERCHERON DISPERSAL

The entire herd of the late A. A. Palmer will be closed out; 25 pure bred percheron mares \$200 to \$400 except two; also young stallions

PALMER BROS., Belding Mich.

Have Rented my farm will close out my Percheron horses cheap. Stallions and mares. E. J. ALDRICH, Tekonsha, Mich.

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

Percheron Stallion. 3 year old beautiful style and high bred, registered. For sale. E. P. KINNEY, Lansing, Mich.

## SHETLAND PONIES

200 head to select from. Special prices on colts for August and September. Write Dept. E. The SHADYSIDE Farms, North Benton, Ohio.

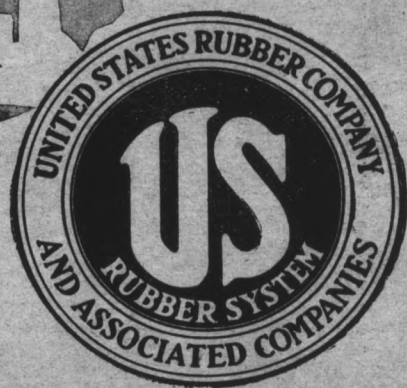
Shetland Pony 3-year-old, broke, \$100, 2-year-old \$75. Thoroughbred Holstein bull calf \$50 if taken at once. H. G. KEESLER, Cassopolis, Mich.

For Sale, Span Black Percheron Mares Six and eight years old, weight 2800 lbs., one registered. Roan Durham bull, 20 months old, registered. Clark O'ankshaw, Lawrence, Mich. Home Phone.

Will take a Draft Stallion on share, 2000 lbs. Black or Gray. C. D. MURRAY, New London, O.

When writing to advertisers please mention the Michigan Farmer.





## Be "U. S. Protected" For Winter Barnyard Tasks

**W**HEN the ground is shrouded in deep snow and the thaws bring ankle-deep, oozy mixtures of mud and slush, keep your feet warm, dry and comfortable in U. S. Rubber Footwear.

Built for heavy service, double duty, this rubber footwear is impregnable to assaults of wet and cold—made to defy storm, sloughs and snags. Not only does greater comfort make this footwear most desirable, but sturdiness and long wear mean money saved.

Every pair bears the U. S. Seal—the trade mark of the largest rubber manufacturer in the world. *Look for this seal—it is your protection.* "U. S." is for sale everywhere. Your dealer has the style you want or can get it for you.

United States Rubber Company  
New York

# U. S. Rubber Footwear