

MICHIGAN FARMER

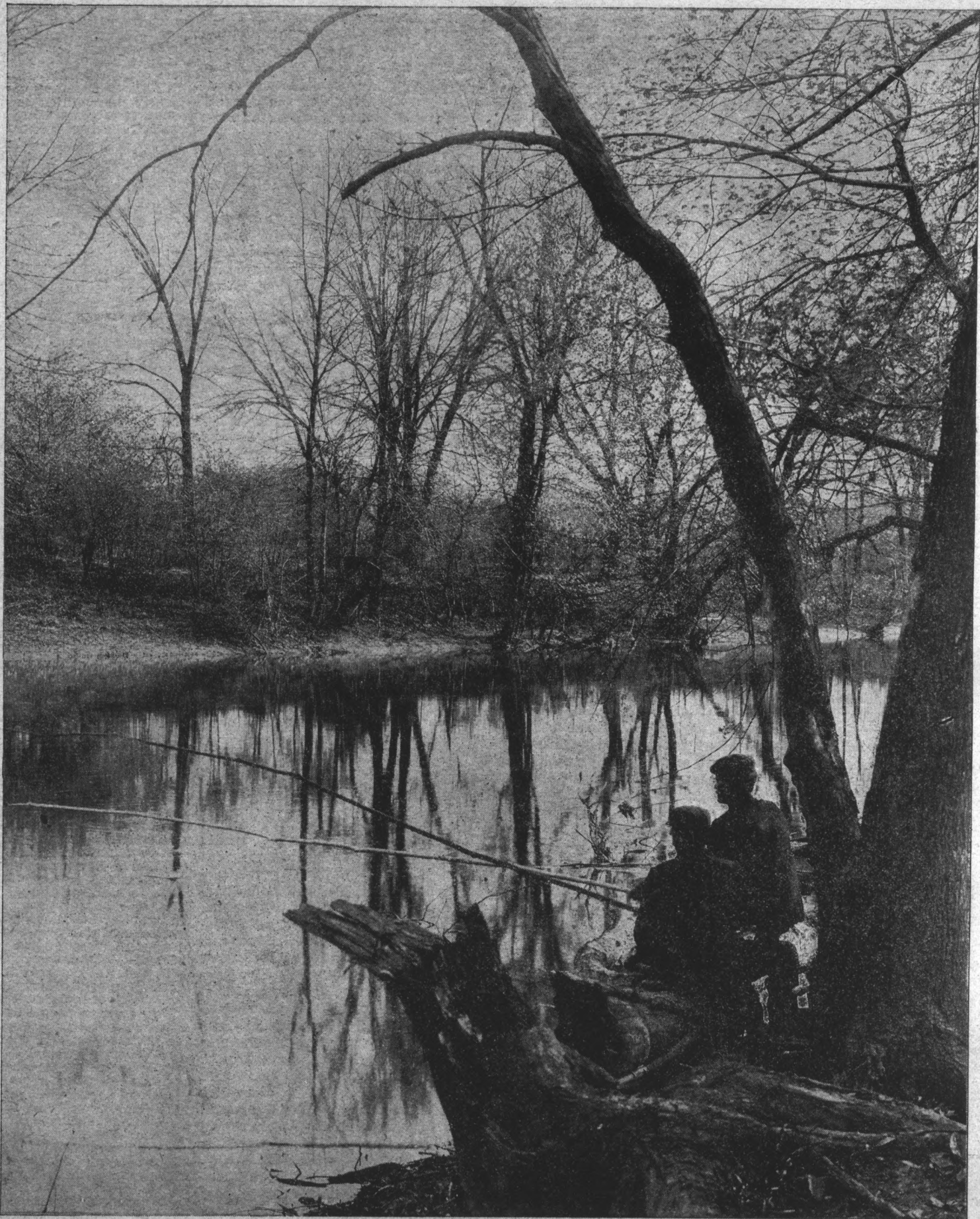
AND LIVE STOCK JOURNAL.
PUBLISHED WEEKLY. ESTABLISHED 1843.

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

VOL. CL. No. 24
Whole Number 3997

DETROIT, MICH., SATURDAY, JUNE 15, 1918

\$1.00 A YEAR
\$3.00 FOR 5 YEARS



The Michigan Farmer

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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.

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TERMS OF SUBSCRIPTION: One Year, 52 issues, \$1.50; Two Years, 104 issues, \$2.50; Three Years, 156 issues, \$3.50; Five Years, 260 issues, \$5.00. 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 objectionable advertisements inserted at any price.

Member Standard Farm Papers Association and Audit Bureau of Circulation. Entered as second class matter at the Detroit, Michigan, post office.

DETROIT, JUNE 15, 1918



CURRENT COMMENT.

The step taken by the Community Michigan Shorthorn Breeders' Association in holding a summer show and sale in a locality where it seemed desirable to create increased interest in the breed was a constructive action which might well be emulated by other breed organizations. Usually, as in this case, some progressive member of the organization must take the initiative, do much of the work and help pay the cost, but the results are certain to be an adequate recompense.

Community interest in breeding is a great asset to the individual breeders as well as to the community. Many examples could be cited to prove this fact, the most notable of which is the community interest in Holstein cattle which has been developed in several sections of our state. And this principle applies to the grading up of our common stock on a community basis as well as to the breeding of pure-bred animals as evidenced by the establishing of bull associations in many communities, where pure-bred sires of one breed have been used on a community basis for a number of years.

Community interest is an important but greatly neglected factor in the building of a permanently prosperous agriculture. It is even more important in live stock than in other lines, and the man or men who successfully promote it are public benefactors.

The effort toward comprehensive rural organization which is being put forth by the States Relations Service through the medium of the county agents, in counties where farm bureaus are maintained, is worthy of the support of every Michigan farmer. Every farmer who has given serious thought to this proposition will at once concede that better organization is essential to substantial progress and prosperity of American farmers. This fact is most noticeable at the present time when, under the stress of war conditions, the government has found it necessary to regulate every kind of business to some degree to safeguard the interest of the nation as a whole. Nearly all other business

interests are sufficiently well organized so that their welfare can be properly protected by the presentation of dependable data when government regulation is under discussion.

The lack of a general organization which can speak with authority for the agricultural interests of the country is a patent fact which is greatly to be regretted under present conditions. In this connection the article by State Market Director McBride, "Is a National Board of Agriculture Possible?" published in our June 1 issue, is worthy of a careful re-reading by every Michigan Farmer reader.

While there is no question but that great benefit would be derived by a thorough community organization in every rural community in Michigan, the possible benefits of such an organization are necessarily limited, though well worth while, but such an organization once established all over the country could easily be made the basis of a national agricultural organization through which the farmers could express themselves most forcibly. Such an organization built on the foundation afforded by the work of the States Relations Service, could be kept free from politics or personal interests of every kind and would have at hand the best of facilities for the study of production costs on the farms of the country, which is most essential as an educational factor and absolutely necessary should the policy of price fixing be established all along the line as a war necessity, or as an outcome of war experience.

In these days when history is in the making at such a rapid rate, it is not only difficult but quite impossible to predict with any degree of accuracy what may occur in the way of re-adjustment during the next few years. An efficient agricultural organization of national scope would be prepared to not only protect its own interests but as well to do constructive work in the period of reconstruction which will follow the war. No better basis for an effective organization is possible than is afforded by the type of organization which the county agents are seeking to establish in the various agricultural communities of this state and in the country at large. These efforts should not only receive the approval but the active support of the farm leaders in every agricultural community.

It is none too early to recall that in July will occur the annual School Matters. meeting in the thousands of rural school districts of the state. The importance of the attendance of every parent and taxpayer at their respective school meetings is patent. This, however, does not discharge their full obligation toward the institutions that are and will continue to be the greatest factor in the molding of the young life of rural Michigan.

These men and women should carefully weigh beforehand every matter that will have an influence on school life. This is none too early to review the various items that ought at least to come before the school meeting. The condition of the school grounds is a matter that should be given careful consideration. Are these grounds well drained, properly graded, arranged and planted to give the boys and girls who pass the major portion of their wakeful hours there the best chance to develop into big, bright, broad-minded men and women? Is the school building itself in good repair, and so arranged that the teacher can render the most efficient service to the scholars and the community? Is the school supplied with suitable equipment such as a variety of seats and desks adapted to the various ages of pupils, a ventilating system as good at least as the best dairymen of our state provide for their cattle, an adequate heating system, shades, curtains, pictures, maps, charts, reference books, a library, etc.,

etc.? Has the school board provided for a sufficient supply of pure water? What qualifications are being demanded in the teachers selected? Do the school officers give the attention they should to their duties, and if they have done so, have you made known to them your appreciation?

We believe it would be a wise procedure for the various farm organizations of the community or possibly the local church society to hold a session previous to the annual school meeting, at which school subjects can be publicly discussed, and one of the features should be the presentation of matter secured from the state superintendent of public instruction's office relating to the ideal rural school and the best equipment for these institutions. Future generations will be called upon to meet more complex problems than the present generation has been confronting, and it will be only through the training of an adequate educational system that they will be enabled to meet their full responsibility.

The government report on the condition of the wheat crop is

most encouraging at this time, when wheat is such a vital factor in the winning of the war in which we are engaged and which must be won at any sacrifice. The June 1 crop report indicates that the country's wheat crop is likely to be the second largest in our history. As compared with last year, the present condition of winter wheat is 132.7 per cent, while the condition of spring wheat is 121.5 per cent, making the present condition of all wheat 28.2 per cent better than last year.

With an indicated yield of close to a billion bushels of wheat, with oats and barley considerably above normal, and with weather conditions favorable for other spring planted crops, there is every encouragement that the world shortage of food stuffs will be kept from becoming more serious through the patriotic efforts of American farmers. Unfortunately Michigan's wheat crop is considerably below normal, due to severe winter-killing, but a large acreage of oats and barley promise a big yield which, if realized, will go far to make up this deficiency.

This is a time when the ever present fear of over-production should not be a disturbing factor since the unprecedented world demand for food stuffs and the increased capacity for ocean shipment will make for compensatory prices. The important factor of increased food production in winning the war is everywhere appreciated, and the farmers of the nation and state are to be congratulated in the success of their efforts in this direction under the handicaps with which they have been confronted.

The Agricultural Fairs.

Michigan farmers should not permit the handicaps with which they are confronted this year to divert their attention from agricultural fairs of the state, and their importance from an educational point of view. The educational value of a high-class agricultural fair is far greater than is generally appreciated. The time and money expended by any farmer in studying the agricultural and industrial exhibits at any good fair is a good investment. The man who is in a position to add to the educational value of these fairs, both state and local, should well consider his opportunity and duty in this regard and, if he finds it at all possible, should add to the interest of these events by entering his best products for exhibit.

First to be considered in this connection should be the State Fair, because of its greater importance as an educational factor. It is not too early to begin preparations for making an exhibit at the State Fair, particularly of live stock, of which there should be a good representation of our Michigan

product. Through the efforts of Secretary-Manager Dickinson, of the Michigan State Fair, the federal railroad authorities have granted a concession for the free return shipment of live stock exhibits, thus lightening the cost of fair exhibitors in this department.

The poultry exhibit at this year's State Fair should be the greatest ever shown in the state. The new \$25,000 poultry building now in process of construction will afford ample facilities for putting on a poultry show, which will be representative of the importance of this great industry in Michigan. But it is up to the poultrymen of the state to make the show, as it is to the farmers of the state to make a well balanced show in every department. To this end adequate preparations should not be neglected.

HAPPENINGS OF THE WEEK.

Wednesday, June 5.

American and French troops stop the German advance along the Marne. Allies make gains near Bethune and Ypres.—German attack near Kemmel is also repulsed.—Total death list of victims of the U-boat raid off the Atlantic coast numbers sixteen persons, with forty-two others unaccounted for.—Nearly one million men who have become twenty-one years of age since June 5, 1917, register in this country.—Charles W. Fairbanks, former vice-president of the United States, died during the night at his home in Indianapolis, Ind.

Thursday, June 6.

It is unofficially announced that one of the German U-boats operating near the American coast has been sunk.—The Allied line between Soissons and Rheims is becoming stronger each day, and notwithstanding the great mass of German troops that is endeavoring to crush the defenders, no progress is being made by the enemy.—The War Industries Board of the United States is considering the fixing of lumber prices for both the government and the commercial user.—Creek Indians in Oklahoma are opposing the draft and in places riots have occurred.

Friday, June 7.

United States Marines operating on the newly-made German salient in the Aisne province near the Marne force back the enemy a distance of two miles on a two-and-a-half-mile front.—Germans mass troops before Toul for a new attack on American held lines.—It is reported that two German submarines were sunk in an attack made upon the United States transport Leviathan, formerly the German liner Vaterland.—U-boats sink fourteen Norwegian ships during May, the tonnage of which is, however, exceeded by the amount of shipping constructed in the shipyards of Norway during the same period.—Secretary McAdoo announces tax plan to raise \$3,000,000,000 during the coming year.

Saturday, June 8.

American troops extend their successful operations in Aisne province and capture three additional villages. Over 300 Germans are taken prisoners.—New U-boat raids off the American coast are announced by the United States naval officers.—The advance of Bolshevik troops accompanied by Germans and Austrians into Siberia may precipitate the long-talked off military invasion of Siberia by Allied forces, particularly those of Japan and China.—Five Americans and two Germans are held in New York City on a charge of conspiracy in plotting to aid Germans to land an armed expedition in Ireland.—General Crowder issues order to local boards to reclassify draft registrants, placing more men in the advanced classification list.—Jewels belonging to the former Czar Nicholas of Russia, are reported as having been recently smuggled into New York City.

Sunday, June 9.

New German troops have been moved to stop the American drive along the Marne.—Germans open a new drive on a twenty-mile front between Noyon and Montdidier. At the center they advance over two miles.—The United States is now establishing naval convoys for all coastwise shipping. British technical authorities report Liberty engines are giving excellent results and will be placed in the first line of high-power air engines.—General Pershing reports total American casualty toll to have reached 7,315 to date. Thus far disease and accident have killed more of our men than have the enemy's guns.—Strike of Detroit milk drivers had little effect on the distribution of milk in the city today.

Monday, June 10.

In the new drive between Montdidier (Continued on page 738).

The "Minute-Man" Crop for Michigan

By J. F. COX

DURING the Civil War and immediately after, buckwheat production gained an importance which has never since been attained. The crop of 1866 was the largest ever grown. The increased production of buckwheat under conditions which prevailed during that strenuous war period indicates the particular fitness of this crop to help meet the inordinate demand for the utmost food production which now faces the country.

The term "emergency crop" commonly applied to buckwheat, is at present particularly applicable. It is the only grain crop adapted to human consumption which can be seeded during mid-summer and mature a harvest before killing frosts occur in northern states. Where corn or other cultivated crops have failed, or on land prepared too late for spring or early summer seeded crops, buckwheat may be planted with assurance of a successful grain yield.

Buckwheat is remarkably varied in use and adaptability. Griddle cakes made from buckwheat flour are distinctly an American culinary product. The unfortunate American who has not experienced them has a rare joy awaiting him. Buckwheat middlings and bolted meal are valuable stock feeds. As a chicken feed buckwheat is highly esteemed. The crop furnishes a valuable bee pasture and buckwheat honey meets with particular favor on certain markets. The fact that its seeds will sprout under comparatively dry conditions, and that the crop will reach maturity in sixty or seventy days makes buckwheat an excellent summer catch crop. As a green manure crop it is of

value, since it will produce considerable growth on soils deficient in organic matter. Turning under a crop of buckwheat on light soils increases their content of organic matter and ability to hold moisture. Buckwheat has a mellowing effect when grown on heavy soils. In southeastern Pennsylvania it is an established custom for farmers to grow buckwheat preceding potatoes, it being noted that the potatoes produced are smoother and more uniform.

Buckwheat is adapted to a wide variety of soil conditions. It will give the best results on well-drained, fertile loams, but will do better than ordinary grain crops under adverse soil conditions. In Michigan it is widely grown in regions where sandy lands prevail. The fact that buckwheat is a member

of the Dock family and closely related to Sorrel and Sour Dock, accounts for the extraordinary ability of this crop to produce profitably on sour and poorly drained soils. Though buckwheat will withstand such conditions, the crop will nevertheless give quick response to early plowing, thorough preparation and fertilization, but is then brought into competition with more valuable crops, such as corn, oats, wheat and barley.

The period of planting buckwheat ranges from the middle of June to the middle of July. From three to five pecks per acre are drilled, or seeded broadcast and harrowed in. Applications of about two hundred and fifty pounds per acre of acid phosphate or ammoniated phosphates will increase yields and hasten maturity. The Jap-

anese variety is the highest yielding and the most widely grown, although the Gray and Silverhull are quite common in buckwheat sections. In some regions, it is the custom to mix the Japanese and Gray, the claim being made that the larger growing Japanese variety will shield the smaller plants of the Gray and thus prevent blasting, should hot dry weather occur during blossom time.

The crop is harvested as a rule just before heavy frosts occur or when the largest proportion of the seed is mature. Blossoms are usually produced until cut short by frost. Harvesting is accomplished with a self-drop reaper or with the cradle. Since the grain shatters easily, it should be harvested and handled early in the morning or during damp weather. The straw cures slowly and should not be bound into sheaves. The usual custom is to set up in bunches, bound loosely at the top with twisted buckwheat straw, and allowed to cure for several days. Average yields range from fifteen to eighteen bushels per acre, though yields of twenty-five to thirty bushels are not infrequent.

Owing to the comparatively small amount of labor needed in handling this crop and its adaptability to late planting, the area of land given over to buckwheat should be considerably extended in order to help meet the urgent demand for the greatest possible grain production during the coming season. The time of seeding corn, oats, barley and spring wheat is now past, and buckwheat remains the only grain crop which can be settled with hope of a harvest this season.

The Sheep Shearers



Factors in the Classification of Wool

By I. D. KNOUGH

FARMERS are giving more consideration to the wool crop this year than they have in the past. The chief reason for this is, no doubt, the entrance of the government as a factor in the distribution of wool. As a result of federal control wool will sell entirely upon its merits.

The majority of farmers understand the grading of wool only in a very general way. They can separate fine wools from coarse wools. Many, however, are not fully informed regarding the basis upon which the intrinsic value of a fleece to the manufacturer of woolen products, is determined. Let us talk over for a few minutes some items regarding wool that every farmer may or should have, a working knowledge of, especially if he owns sheep.

Density of the Fleece.

Density of the fleece has reference to the closeness of the fibres upon the skin of the animal. This varies according to the breed, and also according to the individuality of the particular animal. Some of our pure-bred Merino sheep have as high as 48,000 fibres to the square inch.

This, of course, is important to the breeder. A dense fleece protects the sheep better than an open fleece. It also keeps out the dirt and makes a more valuable article to the merchant on this account. Where the fibres are close together a larger quantity of what is known as the yolk is retained, which keeps the wool fibres lively and in a healthy condition. Loose wool is apt to have weak spots in the fibre, due to colds contracted by the animals by not having a proper covering. When a sheep has become chilled or is ill, the pores of the skin contract, resulting in a shrinkage in the wool fibre at

that particular point. This greatly impairs the value of the fleece. No matter how fine the wool might be, if it has these weak spots, it will not be available for making high-grade materials, and consequently must be sold at a greatly reduced price.

Length of Staple.

Wools are classed as long or short. The short staples are used for carding, while the long staples are used as combing wools. Short staple wool has

superior felting qualities because of the large number of serations or spirals in the fibre. In carding this short staple it is broken up into many small pieces, which when spun run transversely across the yarn, allowing many little ends to project therefrom. When such thread or yarn is woven into cloth, it gives a felty appearance which resembles fur to some degree.

The long wools are combed, that is the fibres are laid parallel to each other

and then spun into yarn, which makes a firm, strong cord. Such yarn when woven produced what we call worsted cloth. The length of fibre, therefore, gives us the names of clothing and combing wools, and should be taken into consideration when the farmer is endeavoring to classify the fleeces he may have for sale.

The Fineness of the Fibre.

This quality of wool is generally dependent upon the density of the fleece. There is, however, considerable variation in fleeces of equal density. The health of the animal has much to do with this. Where a sheep has been sick the wool will have less crimp than in the healthy animals, and this crimp is generally looked upon as marking the fineness of the fibre. In testing the strength of these fibres, it will be observed that those from any portion of a fleece will break in relatively the same place; this is due to a weakening of the fibre by some adverse change in the health of the animal.

Condition of the Fleece.

Besides the soundness of the fibre to which we have already referred, the condition of the fleece also takes into account its purity and the quantity of oil or yolk that it may contain. Some wool has what is called "hemp" scattered through it. This hemp is hairs which are most readily detected about the face and forearm of the animal, but if seen they are certain to be discovered over the entire body. These hairs will not take the dye the same as wool fibres, and therefore injure the fleece for the manufacture of dress goods and fine cloth.

The lack of yolk in wool often results in what is called "felty" wool.



The Value of the Fleece is Greatly Impaired by Improper Tying.

The fibres mat on the sheep's back. The lack of yolk or oil is pretty likely to be due to the condition of the animal which in turn may be caused by improper feeding. Where the yolk is present in larger amounts than would cause a "felty fleece," but still less than the normal quantity, what is termed a "cloudy wool" may be the result. Here the fibres stick together from the skin to the points but not to such an extent as to be termed "felty."

Shrinkage in Fleeces.

When wool is scoured, the oil and dirt that it contains is removed. Naturally the more oil in the fleece, the more weight will be taken from it in the scouring process. This explains why the shrinkage is usually greater in the fine wool fleeces. Data gathered by the Michigan Experiment Station shows that in some instances the per-

centage of shrinkage is seventy per cent or more of the original weight of the fleece. In some of the coarse wool sheep the shrinkage, on the other hand is less than thirty per cent. In purchasing wool therefore, on a scoured basis, it is impossible to determine beforehand how much scoured wool there will be. It is like testing milk for butter-fat. The only way to learn accurately the quantity of fibre is to wait until after the scouring has been done. This accounts for the ruling by the federal government that growers who ship wool to distributors on their own account shall be entitled to receive an advance not exceeding seventy-five per cent of the fair estimated market value of this wool. Then as soon as possible after the wool can be scoured, final returns will be made.

Market Grades.

The usual grades in which wools

from Michigan and other fleece states have been divided by the trade and which are now recognized by the government, are as follows:

Fine delaine.
Fine clothing.
Half-blood staple.
Half-blood clothing.
Three-eighths staple.
Three-eighths clothing.
Quarter-blood staple.
Quarter-blood clothing.
Low quarter-blood.
Common and braid.

The wool trade had established one grade above fine, which was generally known as "XX." This grade would be called a "full-blood." Fine wool came next as a "three-quarter blood," then came the half-blood, three-eighths blood and quarter-blood. These grades should not be interpreted to mean that XX, for instance, is taken from pure-bred sheep. It has absolutely no rela-

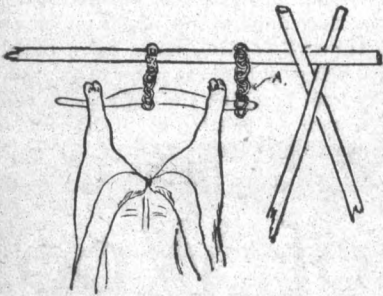
tion to the breeding of the animal, the grades being based upon the quality and condition of the staple. Delaine wools are those that have in addition to a fine fibre, sufficient length to make them available for the manufacture of fancy fabrics.

The grading of wool is a business by itself. Men become expert at it only after long years of handling the product. The farmer, however, should know something of the general principles upon which the fleeces are classified. He should also be acquainted with those conditions which render wool more or less valuable to the manufacturer, for in avoiding some of the adverse conditions he may add considerable to the value of a product, which for years to come will be a very profitable one to produce. If one is starting a flock he should have in mind the things that effect the value of wool.

Suggestions for Our Busy Farmers

TO HANDLE THE KILLED HOGS EASILY.

Here is an idea that makes easy the handling of hogs at butchering time, especially if the hogs are heavy; it is useful in handling light hogs also. It consists of short lengths of chain with a hook on the end of each piece. When the hog is ready to be hung the gambrel is placed in the tendons of the feet, lifted up with a pole and one of the lengths of chain put in the center of the gambrel and fastened over the



pole on which the hogs are to be hung; this is much easier than trying to lift the hog and place the gambrel over the pole.

When the hog is to be cut up one-half of the hog may be cut down at a time by taking another length of chain and putting it around the end of the gambrel as shown at A in the drawing. One man can easily cut down a big hog by himself by this simple arrangement and there is no danger of dropping it in the mud or dirt. The chains can be made from old pieces of log chain or from discarded trace chains.—J. L. J.

BALING HAY.

Except for local consumption in a limited way, hay for market must be baled. There is also an increasing number of farmers who bale it for their own use. The saving of time and labor in feeding baled hay on the farm will more than pay the cost of baling.

The baling of hay has much to be said in its favor. It saves a great deal of the waste that occurs where the hay stands in the stack for any length of time. It saves two-thirds of the storage space necessary for the same amount of loose hay. Baled hay retains from twenty to forty per cent more of its food value than when loose. It sells at a higher price per ton than loose hay.

The most economical time to bale hay is just as soon as it is cured well enough so it won't spoil. If timothy hay is cut and cured at the proper time, it can be baled in the field. If intending to bale in the field, the timothy should not be cut until nearly all the bloom has fallen and a small per cent of the heads are beginning to turn yellow. If cut at this stage, and it is free or nearly so from green weeds, it

can be cut one morning and baled the following day, provided the weather is good. If baled directly from the swath, care must be taken that it is entirely free from rain or dew. This should be attempted only under the most favorable weather conditions, and it should be tedded at least an hour before being taken up.—Harry L. Spooner

MEASURING SPRAY SOLUTIONS.

A stick marked with notches makes a good guide for drawing off a measured amount of lime-sulphur for spraying. Instead of using a quart fruit jar, or a gallon measure, every time the tank is to be filled, get a wooden lard tub. Fill the tub with the required amount of lime-sulphur, using your liquid measures, and then place a stick vertically into the tub, the tub being set level. Make a notch in the stick to show how high the liquid rises when the end of the stick rests on the bottom of the tub. If different strengths of solution are used on some trees than on others, several such notches can be made, and the number of gallons marked on with a pencil.—E. H.

HOW TO PICK STRAWBERRIES.

Pickers should be taught the proper method of picking strawberries. Large quantities of desirable berries may be ruined by carelessness, indifference, or inexperience in picking. Picking is done best by the use of the thumb and forefinger, as shown at the left in illustration, each berry being pinched off with a stem about three-eighths to one-half-inch long, and placed in the box



Proper Method of Picking Shown at Left. Other Two Injure Fruit.

carefully, not thrown, tossed, or dropped into the box. To gain speed, there always is a tendency for the picker to pull or snatch off the berries and toss them into the boxes. Some pickers crush, bruise, or squeeze much fruit while picking, by holding too many berries in the hand at one time; others pile up berries on full trays which must later be taken off and placed in other boxes. Such practices result in bruised berries as well as many without the hull or cap. Damaged berries and berries without hulls do not carry well to the market, and in proper picking are not allowed in the boxes. Unless each row is picked clean of all berries that are ready at each picking,

the next picking will contain overripe fruit.—F. Bulletin.

TWO-ROW CULTIVATORS HELP TO SOLVE LABOR PROBLEM.

Hundreds of farmers in Indiana are adopting the two-row cultivator this year along with other improved farm machinery as the best solution of the farm-labor problem. This is shown by the large number of sales reported from every section of that state, indicating that the farmers are endeavoring to solve their own problems in every possible instance.

Last year in nine typical Indiana counties, one implement concern sold thirty two-row cultivators to dealers in this territory. This year the same company sold one hundred and six two-row cultivators to the same dealers in the same period. Here is one striking example. Last year the firm's dealer at one point bought and sold only five two-row cultivators to his patrons. This year this same man sold twenty-six. These men had seen the value of the two-row cultivator demonstrated by their neighbors.

Another example of how farmers are taking up labor-saving machinery may be seen in these same nine counties. In 1917 only thirty-eight tractor plows were sold to dealers in this section of the state, while this year the number sold was one hundred and forty-six.

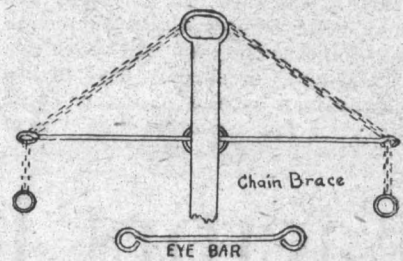
Advantage of the two-row cultivator over the old single-row plow which has been in use for years, is shown by the report of one farmer. To cultivate eighty acres of corn with a single-row plow, it took one man ten days. Figuring his wages, board and lodging at \$2

a day this would make a total of \$20, and the use of two horses at \$3 a day would mean \$30, a total of \$50. Using the double-row cultivator, it took one man just five days to do the same work. With his pay and keep figured then at \$10 and the use of three horses for five days at \$22.50 the total cost of cultivating the eight acres of corn was only \$32.50, against \$50 by the old method. Three or four cultivations of an eighty-acre tract is going to go a long way toward paying for the cultivator, farm mechanic experts point out. Practical farmers throughout Indiana who have used both plows say the two-row cultivator will do work absolute as well as the single-row

cultivator and that it is just as easy to operate as the one-row outfit.

WAGON-CHAIN BRACE.

Here is one of the best devices I ever saw for the use of chains on a wagon instead of a neckyoke. I saw it on the farm of a neighbor recently. The pieces between the tongue and chains are eye-bars which any blacksmith can make for you. The inner ends of the pieces are fastened to iron specially made for this purpose and the outer ends are fastened to links of



the chains. When you start down a hill or go back up, the pull of the horse is straight back and not at an angle sideways as it would be otherwise.—John K. Graham.

HANDLE FOR BARREL SPRAY PUMP.

Some of the growers in our section find the old-fashioned barrel outfit indispensable in spraying, especially on small trees. To increase the efficiency of the pump, these men are using an extension on the handle. A short length of well casing or two-inch pipe is simply slipped over the pump handle thus giving a longer leverage, and a better hand hold. If this plan is tried, it will be found that the arms can be worked long hours without the fatigue resulting from the short handle, because all the muscles of the upper body are used, while with a short high handle, the arms are cramped more or less.—E. H. Brown.

SHARPEN GUARDS.

The guards on the mower and binder would do better work if the "dubbed over" points were filed off sharp. New plates may be required also, and some guards may be loose. Make the machinery one hundred per cent efficient, ready for the field.

GET THESE TOO.

A farm work-shop with a place for everything and everything in its place will pay big interest on the investment. It is time for the cow which does not pay, to go to the block, but it is poor economy to butcher profitable producers. Every farming community this year should be formed into groups of farmers to change work and facilitate farm operations.

What Glezen Did for His County

By I. J. McMURTRY

At a meeting of the northern Michigan bankers held in Alpena some two years ago, Agriculturist W. C. Byers, of the Michigan Central Railroad, explained to the bankers the possibilities of the Calf Club work as it had been carried on in Illinois for some little time and urged them to father the movement in their home communities. At the same time, Mr. Byers promised that for every carload of pure-bred heifers shipped into a community, the Michigan Central Railroad would loan that community a registered sire of the same breed.

So far as the writer knows, Banker H. T. Glezen, of Cheboygan, was the only banker who had the vision together with persuasive and persistent faculties sufficient to carry the project successfully through. Mr. Glezen saw the vast possibilities of the natural re-



This is Glezen.

sources of Northern Michigan as soon as they could be properly articulated with pure-bred cattle. He began agitating and early in December, 1916, unloaded and placed among the boys and

girls the first carload of Holstein heifers ranging in ages from three to four months to two years and in price from \$30 to \$150. These heifers gave such satisfaction that enough applications were received within another month to warrant the buying of a second carload of heifers. These were placed very satisfactorily.

The impetus given to the dairy industry in the county was such that it was little trouble for the county agent to organize pure-bred sire associations. Today something like over two years after these two carloads of heifers were brought in, there is a strong demand, not simply for high-class grade Holstein, but registered animals are wanted.

Mr. Glezen is now planning to take applications for the third car of heifers to be brought in this spring. These will probably be exclusively first-class registered stock.

Early in February of this year, Mr. Glezen and the county agent planned and worked out what was accounted to be a very successful all-day cattle breeders' meeting. The leading speakers of the meeting were Prof. A. C. Anderson, head of the Dept. of Dairy Husbandry, M. A. C., and Hon. D. D. Aitkin, of Flint, president of the Holstein-Friesian Association of America.

The farmers of Cheboygan county today are taking a forward look in the live stock industry that would have been entirely unthought of had not Mr. Glezen and his board of directors a year and a half ago received the vision that they did, taken the forward look, and placed the resources of their institution at the command of every farmer for the betterment of the live stock interests. They believed, as the farmers are now coming to believe, that Cheboygan county has the land, the climate, the men, the money to make it one of the greatest cattle counties, not only in Michigan, but in America.

European Live Stock Losses

THE comparative losses of live stock by the warring and neutral nations of Europe and the general effect on their meat supply may be judged from figures announced by the United States Food Administration.

As regards meat, the Central Powers were much better prepared for the war than the Allies. Although the Allies possessed a greater total number of meat animals, the Central Powers had forty-two per cent more per capita. This advantage amounted to thirty-three animals of all classes per one hundred population.

Due apparently to acquisition of animals by conquest, Germany has not slaughtered her home supply of live stock as rapidly as otherwise would have been necessary. There is now a practical exhaustion of animals in Belgium, Serbia and Rumania as a result of invasion, according to information from very reliable sources. In total animals the Allies have decreased their herds and flocks 45,787,000 head while Germany has reduced hers about 18,000,000—only slightly more than a third as many. The figures include cattle, sheep and hogs. Neutral nations show a total net reduction amounting to 1,412,000 of these animals. The European loss thus exceeds 65,000,000 head without taking into consideration Austria, Turkey and Russia which would, undoubtedly, bring the total to over 100,000,000.

A somewhat clearer view of the European meat situation at present is secured by reducing the number of animals to the actual amount of dressed meat they will yield. Rating cattle as

equivalent to 500 pounds of dressed meat apiece; sheep forty pounds, and hogs 150 pounds, it appears that the various countries have suffered losses in their total meat assets to the following extent:

Per Cent of Loss on Meat Basis.

Allies as a group.....	28.7
England	12.5
Belgium	32.0
France	21.4
Italy	17.8
Germany	36.3
European neutrals	0.9

Considering the poor condition of the animals still alive and the reported reduction in live weight, the possible meat resources of Europe are obviously still further reduced.

The total number of cattle, sheep and hogs now in the United States is about 187,000,000, according to best estimates, which makes a striking comparison with the European depletion of 100,000,000 animals. Briefly, it appears that Europe has already lost considerably over half as many meat animals as there are in the United States today.

LADY MAKES GOOD AT FEEDING.

An unusual shipment of hogs was that made a short time ago by Mrs. A. A. Wiswell, of Warren county, Illinois, who had forty-eight prime one-year-old swine which averaged 401 pounds on the Chicago market. They were well finished, and such weight and finish are seldom seen these times. They brought \$68 per head. Mrs. Wiswell also had a carload of 938-lb. yearling cattle on the market, and they sold for \$15.25 per 100 pounds.

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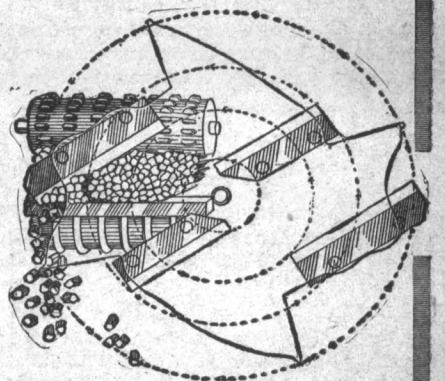
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Home Grown Fertilizers for Orchards

THE use of cover crops cannot by any stretch of the imagination be classified as a new practice in fruit growing. Orchardists, almost from time immemorial, have used them to advantage, as successful growers are still doing—and as others, who wish to successfully tide over the uncertainties of war times, must do. With fertilizers becoming harder to find than a pro-German (not to mention the matter of prices after they are found), the man who would keep up the fertility of his orchard soil is going to find his problem becoming an increasingly baffling one, unless he awakens quickly to the value of cover crops.

This matter is dwelt upon at some length in a press bulletin just issued by the Department of Horticulture of the college.

"Of all the resources available to the fruit grower at this time, none can be used more effectively in overcoming the fertilizer famine than cover crops," Prof. C. P. Halligan declares. "Cover crops, themselves, add neither potash nor phosphoric acid to the soil, but they have the power to make such of these elements as are present in the soil much more readily available to the fruits. What is of equal importance, they do this at a season of the year when these elements are most needed.

"Recent experiments in fertilizing commercial orchards have shown that it is possible to derive great benefits from fertilizers which add nitrogen to the soil. Some of the chief advantages of leguminous cover crops lie in the fact that they serve just this purpose, and furnish an element which, if the purchaser had to buy in the form of commercial fertilizer, would be very expensive. Clovers, vetches, beans and peas, when used as cover crops, supply nitrogen to the orchard soils. But cover crops have their greatest value in that they add humus to the soil. This humus tends to maintain the physical condition and increase the water-holding capacity of the orchard land. One of the strongest arguments in favor of cultivation in Michigan orchards is the fact that this practice conserves the moisture. Soils without humus are not capable of holding large quantities of

water. The addition of humus makes their capacity in this respect greater.

"The selection of a plant for cover crop purposes depends largely upon the character of the soil and the time at which it can be seeded. On sandy soils, winter vetch is one of the most desirable leguminous cover crops. It must be seeded rather early, that is, some time in July or early August, and it usually is combined with oats or rye, as vetch makes but a slow growth in the fall and early winter. It is able to withstand very dry weather during late summer and fall, as well as the tramping of pickers and packers at harvesting time. If used with oats and seeded with a drill, fifteen pounds to the acre, is sufficient with a bushel of oats; but if spread broadcast, twenty to twenty-five pounds should be used per acre. On the heavier clay loam soils, Mammoth Clover and June Clover are both desirable leguminous cover crops. These crops require a very well prepared seed bed and if the weather conditions are favorable in late summer and fall, a good growth will be secured. Crimson clover is also used sometimes

as a cover crop, but its lack of hardiness, especially during severe open winters, makes it less desirable than those first mentioned.

"On orchard lands that have not been previously used for cover crops, where the soil is not in an ideal condition, rye is a desirable crop to use. It brings the soil to a mellow state, so that other cover crops are grown. Rye is also an excellent cover crop to sow if the seeding has been delayed until the fall. It makes a fair growth during the fall, and springs up very early in the spring, so that by the time the orchard is plowed, there is a fairly heavy crop of rye to turn under.

"Of the other crops that may be used oats are probably the most popular. The seed is not expensive, and it is much better than weeds in an orchard. Oats can be sown late, and produce a good cover in the fall. They are also very popular in orchards that are to be disked in the spring, rather than plowed, as there is less difficulty in working them into the soil. Oats also make an excellent crop to sow with winter vetch or peas, but being non-legumin-

ous, they do not themselves add nitrogen to the soil.

"The comparatively high price of seed at the present time makes it important that the soil should be very well prepared, and to obtain the maximum benefit from the amount of seed used, it will often be desirable to drill the seed, rather than to broadcast it. Under the present abnormal conditions fruit growers in Michigan cannot afford to neglect this practice of obtaining the many benefits to be derived from cover crops.

TROUBLE DEPARTMENT.

Cutworms.

What can I do for cutworms? They are cutting off my pepper and tomato plants. I wind them with paper but they crawl up the paper and cut them just the same.

Macomb Co.

W. H.

Cutworms, which are often prevalent at this time of the year, can be fairly well controlled by making a poison mash of twenty-five pounds of bran to two pounds of Paris green. The bran and Paris green should be thoroughly mixed while dry and then slightly moistened so that the Paris green will adhere to the bran. This should be sprinkled around the plants toward evening so that it will still be moist when the cutworms come out to do their damage.

The winding of the plants with paper is of little use, as the paper gives the worms as good a foothold as the plants.

For trees a band of cotton wrapped in an umbrella shape is a barrier to the cutworms in getting to the tops of the trees.

The digging of the ground around the plants will often reveal the cutworms, as they spend their daytimes just under the ground near the plants that they have damaged. They can be destroyed by dipping in kerosene, or by crushing them.

Watch the weather, watch insect and fungous diseases and watch the fruit. If an additional spray is necessary, put it on. Don't allow past efforts to prove abortive on account of the need of one more application. Clean fruit will pay best.



Successful vegetable growers realize the need of a steady supply of moisture to insure a steady growth of their crops. Dry weather not only cuts the crop yield but also decreases the quality of the vegetables. The overhead irrigation system is one of the best means of supplying moisture at needed times.

State and Federal Crop Reports

Wheat.—The average condition of wheat is 56 in the state, 52 in the southern counties, 46 in the central counties, 65 in the northern counties and 96 in the upper peninsula. The condition on May 1 was 57 in the state, 53 in the southern counties, 51 in the central counties, 69 in the northern counties and 98 in the upper peninsula. The estimated total number of bushels of wheat marketed and consumed by growers in the ten months August-May is 11,500,000. Eighty-one mills, elevators and grain dealers report no wheat marketed in May.

Rye.—The condition of rye in the state is 72, southern counties 70, central counties 66, northern counties 77 and upper peninsula 92. One year ago the condition in the state was 83, in the southern and central counties 81, in the northern counties 87 and in the upper peninsula 94.

Corn.—The acreage of corn planted or to be planted as compared with last year is 97 in the state, 100 in the southern counties, 96 in the central counties, 91 in the northern counties and 100 in the upper peninsula. The condition of corn as compared with an average is 94 in the state and central counties, 95 in the southern counties, 88 in the northern counties and 99 in the upper peninsula.

Oats.—The condition of oats as compared with an average is 98 in the state, 100 in the southern counties, 99 in the central counties, 96 in the northern counties and 94 in the upper peninsula. The condition one year ago

was 86 in the state, 82 in the southern counties, 88 in the central counties, 91 in the northern counties and 97 in the upper peninsula.

Barley.—The acreage of barley sown or that will be sown as compared with last year is 106 in the state, 113 in the southern counties, 101 in the central counties, 93 in the northern counties and 103 in the upper peninsula.

Meadows.—The condition of meadows as compared with an average is 91 in the state, southern and northern counties, 89 in the central counties and 99 in the upper peninsula. The condition one year ago was 83 in the state, 82 in the southern counties, 81 in the central counties, 86 in the northern counties and 93 in the upper peninsula.

Potatoes.—The acreage of potatoes planted or to be planted as compared

with last year is 82 in the state, 85 in the southern counties and upper peninsula, 80 in the central counties and 76 in the northern counties. The condition as compared with an average is 95 in the state, 97 in the southern counties and upper peninsula, 94 in the central counties and 91 in the northern counties.

Cabbage and Celery.—The number of acres of cabbage planted or to be planted so far as reported is 8,505 in the state and the number of acres of celery 3,115.

Sugar Beets.—The acreage of sugar beets planted or to be planted as compared with last year is 103 in the state, 106 in the southern counties, 91 in the central counties, 121 in the northern counties and 116 in the upper peninsula.

Colts and Calves.—The number of colts as compared with last year is 81 in the state and southern counties, 76 in the central counties, 83 in the northern counties and 89 in the upper peninsula. The number of calves as compared with last year is 96 in the state, 94 in the southern and central counties, 97 in the northern counties and 109 in the upper peninsula.

Fruit.—The following table will show the prospect at the present time for a crop of the various kinds of fruit in the state and the different sections:

	State.	So. Co's.	Cen. Co's.	Nor. Co's.	Up. Pen.
Apples	80	77	81	85	98
Pears	64	63	68	62	87
Peaches	13	14	10	10	..
Plums	58	59	54	59	93
Cherries	66	59	79	70	93
Str'w'rs	87	83	97	89	95

Grain and seed threshed in Michigan up to and including June 1, 1918, as per returns of threshermen is as follows:

	Acres.	Bush.	Yield per acre.
Wheat	772,575	13,925,108	18.02
Rye	323,452	4,534,317	14.02
Oats	1,240,352	44,814,252	36.13
Barley	129,045	3,319,962	25.73
Bck'wht	32,829	351,212	10.69
Peas	14,932	155,020	10.38
Beans:			
White	426,303	3,105,822	7.29
Red Kid.	8,918	46,700	5.24
Brn Swed	2,322	12,964	5.58

Federal Estimate of U. S. Crops

Crop.	Total Production in Millions of Bushels.			Yield Per Acre.		
	1918.	1917, Dec. Est.	1912-1916, Av.	1918.	1917, Dec. Est.	1912-1916, Av.
Winter wheat	587	418	552	16.1	15.2	16.1
Sp'g wheat	344	233	257	15.3	12.6	13.8
All wheat	931	651	809	15.8	14.2	15.4
Oats	1,500	1,587	1,296	33.7	36.4	32.8
Barley	235	209	202	25.8	23.7	27.0
Rye	81.0	60.1	44.5	14.9	14.7	16.5
Hay, tons	107	94.9	95.4	1.54	1.36	1.40
Apples	203	175	214
Peaches	42.9	45.1	49.6

Uncle Sam Delivers Butter

BUTTER is highly perishable unless it is handled under proper conditions, yet the fact that many consumers obtain their supplies direct from producers by parcel post, proved by the quantity passing through many post offices, indicates that parcel post marketing of butter is feasible. It is usually an economical method, as the cost of market distribution through the regular wholesale and retail channels of trade is relatively high in comparison with the cost of shipments by parcel post from the first and second and sometimes more distant zones.

Experimental Parcel-Post Shipments of Butter.

Shipments of butter aggregating more than 10,000 pounds have been made by the Bureau of Markets, under various conditions and in packages carrying from one to ten pounds, over both long and short distances, in order to test various kinds of shipping containers, methods of packing, and the possibilities of parcel-post shipping of butter during the summer and other seasons. These experimental shipments consisted of (1) shipments of fresh butter from four creameries to this bureau, and (2) shipments of the butter received from the creameries by the bureau to experiment stations and return shipments of the same.

Although many of these shipments were made during the heat of summer, only fourteen of the 454 shipments, or 3.1 per cent, were received in an unsat-

isfactory condition. These very satisfactory results may be attributed to the care exercised in the proper packing of the butter in suitable shipping containers and the precooling or thorough hardening of the butter at the creameries before shipment.

The experimental shipments to the state experiment stations were satisfactory where the temperature and distance were not too great. Butter which had softened much in transit from the creamery to the bureau when later shipped to the experiment stations did not arrive in as good condition as that in which the grain had not been previously injured. In general, the shipments from Washington were successful when forwarded as far north as Maine and as far west as Michigan and Indiana. Shipments into the south were successful for shorter distances.

The results of these experimental shipments indicate that well-made butter, thoroughly chilled before shipping, when packed in a suitable container, may be marketed satisfactorily by parcel post when extreme high temperatures are not encountered. Under ordinary conditions, where the butter does not melt and a firm or semi-firm condition is maintained, the shipping of butter by parcel post generally may be successful. Even though proper safeguards were taken, the shipments made during extremely hot weather frequently arrived in an oily and unsatisfactory condition.



URGES USE OF DAIRY PRODUCTS.

In order to clear up a misunderstanding among dairy farmers and distributors of milk in certain parts of the country who fear injury to their business, the Food Administration announces that it has never advised the public to decrease whole milk consumption or attempt to substitute other foods for milk. On the other hand, the 1918 Home Card, issued recently, says: "Use Milk Wisely. Use all the milk. Waste no part of it. The children must have whole milk. Use sour and skim-milk in cooking and for cottage cheese."

A Task Not to Be Neglected

By H. W. SWOPE

One of the most important things in the operation of a dairy is the cleaning of the dairy utensils. They must be cleaned and rinsed thoroughly immediately after being used; this will prevent the water in the milk from evaporating and the solid matter sticking fast to the utensil. If it is found impossible to wash the utensils at once, it will be a good plan to rinse them in lukewarm water so that the greater part of the milk will be removed before it has had a chance to stick fast to the pail or cow. Hot water should never be used until the milky substances have been removed with the lukewarm water first, as the hot water will coagulate the casein in the milk so that it sticks to the pail and will therefore require a great amount of washing before it can all be removed from the vessel.

After thoroughly rinsing the utensils in the lukewarm water, they should be thoroughly washed in hot water, using some good brand of alkali washing powder. There are many good washing powders to be found on the market that will answer the purpose and make this part of the dairy work easier each day. Soaps or powders that contain grease as a part of their composition will not make a satisfactory brand of soap or powder to use in

this work and not nearly as good as a genuine alkali powder.

It is a good plan also to have on hand several good stiff brushes that are adaptable to cleaning the various utensils used daily. If steam is installed it can be used very effectively in sterilizing the utensils, but of course this is not always installed and it is necessary, therefore, to follow out the rinsing and washing process, as I have described. Never wipe the utensils after washing them in the hot water. The heat imparted by the steam or hot water will make the utensils dry very quickly. They should be placed upside down on the racks so no dust or dirt will get on the inside of them. This is just as important as the cleaning process. Never put covers or lids on the cans or pails, but give them free access to air and sunlight at all times. This keeps them bright, clean and sanitary.

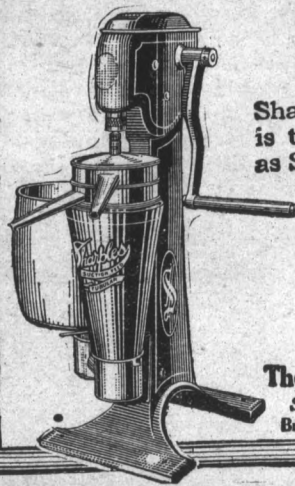
Kill weeds while they are small. Keep all gates closed and all gaps up. It will save steps. There will be little time on the farms this year to listen to agents. A corn crop kept thoroughly cultivated is, as a cleaning crop, almost equal to a summer-fallow. You may not be the best farmer in your neighborhood, but you can at least strive not to be the worst.

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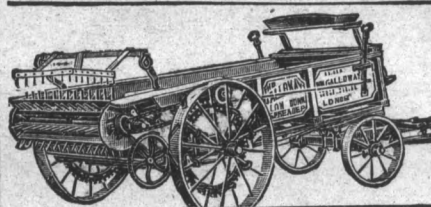
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Prosperity Through the Dairy Cow

By CHAS. E. RICHARDSON

ONE time, I remember, when I was a youngster at school, the teacher was telling the scholars about the different kinds of animals there were. It was a lesson in natural history, and she told about lions and tigers and other wonderful and strange creatures. After she had finished, she asked all of the pupils individually what animal seemed to them the most wonderful. She received all sorts of names; most of them were names of strange and curious animals. There was one little fellow who had done a lot of listening, but had kept very still and had not talked about what he had heard. She asked him:

"William, what animal do you think is the most wonderful?"

"The cow," he answered.

The way everyone laughed at this unexpected answer, made the poor boy hang his head in shame.

But, today that same little boy, now grown to be a man, has shown that he was not very wrong when he stated that he thought the cow was the most

valuable and prosperous nation. In proportion that the live stock is sold off from any country, then poverty and failure takes place. On the other hand, wherever the farmers are successful, which is principally through live stock farming, there is found happiness and progress for everyone.

When a farmer has a stable full of nice cows, there he has beings working for him at all times. A cow is one of the busiest of animals. Night and day she is taking crude material in the form of hay and grain and silage and converting these into valuable food products such as milk and butter. She knows no holidays. At times she presents to her owner young which go to make up the herd of the future cows, etc. All of these are valuable.

Even when the cow gets too old for dairy purposes, she is sold for beef, as a final source of profit.

But, there is another thing which the farmer gets which is worth much. That is manure. That is made night and day and that is the foundation of the fertility of the farm. That is a fertilizer which is truly valuable. Manure makes the light soil firmer, makes the heavy soil more mellow. Puts humus into the soil and holds moisture in dry seasons, and in the early planting days retains the heat of the sun which makes the soil keep warmer for the early crops. And, unlike commercial fertilizers, it stays in the soil for a number of years.

When one sells from the farm hay, corn, wheat, etc., there is taken from the farm in fertilizing ingredients \$7 to \$10 worth for each ton sold. With dairy products there is only about \$2 or less for each ton. Where one ton of milk is sold there are ten to twenty of the other products for the same amount of money received. If butter is sold there is only fifty cents worth of fertilizer taken from the farm for each ton. With this and milk a large percentage is taken from the air through the feed consumed. So, with dairying there is practically no loss when its

carried his cows through these hard times get his reward. Besides, his farm will be up in fertility, where those that have not the stock to make the manure, will have gone backwards. The cow is going to save the farm. And, the farm that is prosperous (through its dairying, etc.), will help to build up agriculture and the prosperity of the nation. With the help of the farmer, the cow will do her part to win the war and make everyone who has stood beside her, and carried the dairy through, successful.

Truly, when we realize the changes that have been in the cow, from the beginning, when she gave a few quarts of milk each day, until now, through the ages of time, she gives enormous quantities of milk and butter-fat; how she has been the foster-mother of the human race, and the foundation of our fertility, and incidentally prosperity; who will not agree with the little boy mentioned at the first of this article who said that the cow is the most wonderful of all animals.

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A Wonderful Animal.

wonderful of all animals. He has one of the finest herds of pure-bred cattle, and his farm is one of the most fertile and while he has not the wealth of Rockefeller or Morgan he has independence and happiness which great wealth cannot always buy. And, all of this has been acquired through the help of cows.

I have in mind two different persons who started farming about ten years ago. Each had about the same sort of a farm to start with. And each had the same amount of capital to begin with. In fact, they each started with the same. One of them stated that he was not going to be bothered with cows; they "tied one down too much." He made the principal method of his farming raising crops to sell. He planted large acreages to potatoes and used commercial fertilizers. At first he made more money than the other man. But, by gradually taking out of the soil its fertility in the form of crops, and selling them, he is now unable to raise much on his farm. He is at present teaming for a living and agriculture is only a side-line.

The other fellow began with a few cows. Made dairying the foundation of his farming. He gradually worked up his mowings and fields with the manure which his cows made. Little by little he added new stock to his herd and after getting a pure-bred bull he has raised a nice herd of grade cows. He has not sold off the fertility of his farm by selling grain or other crops or hay. These take away the fertility quickly. But by selling milk or butter, there has been very little taken away from the farm. And, today this man has one of the best farms around and he and his family have some of the good things of life. He let cows work for him and they have "made good."

Cows are the foundation of progressive agriculture. Successful agricul-

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Tires today are the common factor in the business of farming transportation. Let Goodrich Tires make money out of tires for you in your hauling problems.

They will, because Goodrich Tires are built to give the maximum of the kind of service which coins into money, as real as the money you get out of your farm implements.

This is not a boast, a mere promise, or a dream. It is fact, proved in a nation-wide, year-long testing of—

GOODRICH SERVICE VALUE TIRES

The Goodrich brand on a tire—and you men of the farm know the value of a trustworthy brand—is a guarantee of high service. Goodrich has stood for what is best in rubber for a half century. That half century of experience starts Goodrich Tires with tire bodies built right, and treads tough to stand the roughest going.

But Goodrich, to take the last risk out of its tires, sends them forth with its Test Car Fleets, and batters them over every kind of road in our country; perhaps over the roads that pass your farm. Their strength and dependability are sure because they are proved.

It makes no difference what kind of tires you need, pneumatic tires large or small, truck tires, motor cycle and bicycle tires, Goodrich has the tires which on the farm coin themselves into money.

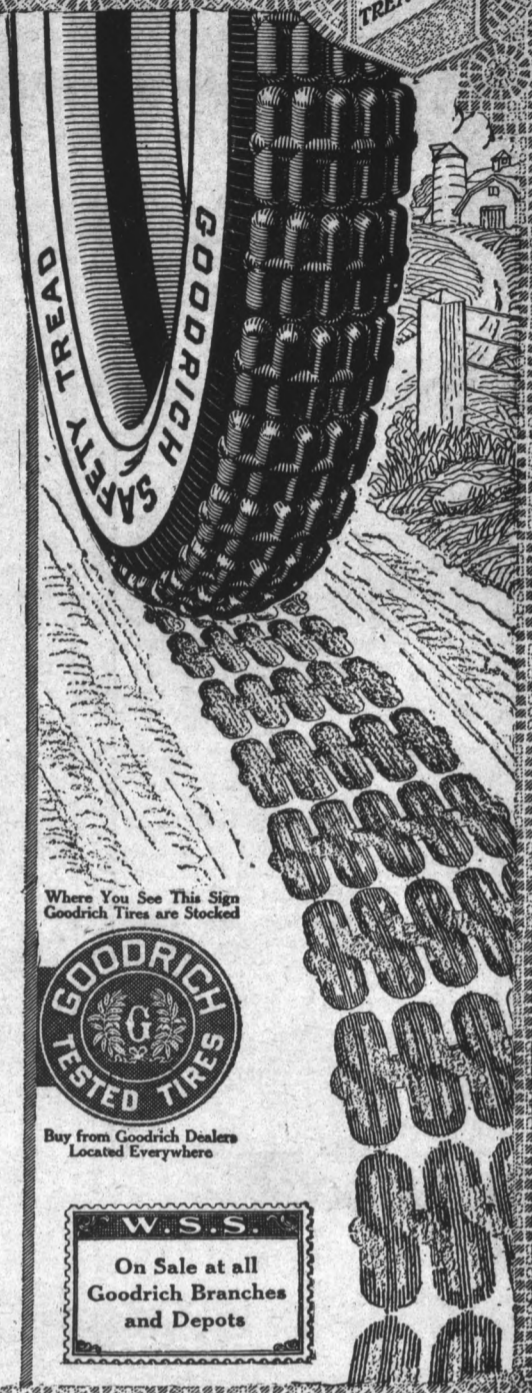
The big, generously sized pneumatic tires roll up phenomenal mileage. The truck tires outwear steel under the heaviest loads. Get money out of tires by making sure you get Goodrich Tires.

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there are more than a thousand opportunities to make a dollar buy more. That is what Montgomery Ward & Co.'s Special Mid-Summer Sale by Mail offers you. This is a price-smashing sale—a remarkable collection of bargains.

You probably have the 100-page Book of Bargains of this sale. If not, send us your name and address for your free copy at once.

Study this book and you will realize the money-saving opportunities that this Mid-Summer Sale brings right to your door. Look through it again—today. Every offer on every page saves you real money. Every offer is a bargain—a picked special. What you need to wear, to eat or to use in the home—all dependable, guaranteed merchandise.

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You probably have the 100-page Book of Bar-gains of this sale. If not, send us your name and address for your free copy at once.

Study this book and you will realize the money-saving opportunities that this Mid-Summer Sale brings right to your door. Look through it again—today. Every offer on every page saves you real money. Every offer is a bargain—a picked special. What you need to wear, to eat or to use in the home—all dependable, guaranteed merchandise.

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

Mention The Michigan Farmer When Writing Advertisers

Why Purchase Fertilizer Now?

Will you need fertilizer this summer or fall? If you do, orders should be placed at your earliest convenience since delay will increase the probability of not getting your needs supplied. Here is a statement from the United States Railroad Administration bearing directly on the proposition:

The Car Service Section of the United States Railroad Administration desires to call attention to the necessity for still heavier loading of fertilizer cars to be used for summer and fall business.

Excellent results have followed the efforts in this direction already made by fertilizer manufacturers and shippers, and we are able to report that the average carload of fertilizer this spring was from twenty to thirty per cent heavier than in previous seasons. This economy of space has saved the equivalent of many thousands of freight cars. In other words, large numbers of cars have been released for other urgent war-time needs—certainly a saving of great importance in these days of service car shortage.

We feel, however, that even greater saving must be effected. Practically every car should go out loaded to capacity plus ten per cent. The demand for cars to move war supplies to the seaboard is increasing daily. Every shipper must contribute his share toward making up the extra car supply required for government uses. There is only one way in which to do this; and that is to load cars heavier and thus ship the same amount of goods in fewer cars.

We appreciate the fact that in order to load every car to capacity, manufacturers must have their orders in hand at a date sufficiently early to allow the assembling and grouping of all less-than-carload quantities. This, of course, necessitates full and free cooperation on the part of the farmer and dealer.

We want to urge upon you to use every means at your disposal to secure such active cooperation from both the dealer and consumer, that orders may be on hand early enough this summer to enable manufacturers to send out every car loaded to capacity plus ten per cent. We feel certain that when the necessity for this action is brought forcibly to the attention of the farmer—upon whose response success depends—the cooperation secured will approach one hundred per cent.

We must get results, but results secured through free cooperation are much to be preferred to results secured by official regulation.

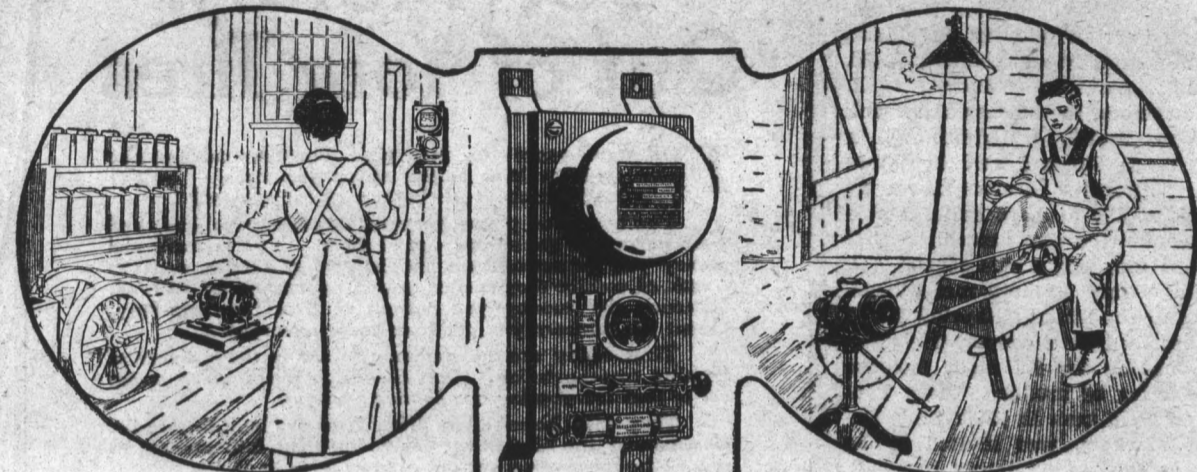
WILL PAY FARE OF HANDS WHO LEAVE TO WORK ON FARMS.

Money to pay the transportation of workers to the farms of the state where this is necessary, has been appropriated by the war preparedness board to the labor agencies conducted by Michigan in many cities, according to A. B. Cook, federal farm labor director.

The appropriation, which was small but sufficient, will be used as a revolving fund—that is, men whose tickets are bought for them will be required to reimburse the board. The system is one that has been adopted in several states with practically no loss to any of them, and from the agricultural standpoint has added greatly to the efficiency of the employment agencies maintained by the states.

"Conditions at present indicate that farm labor is fairly plentiful, and is going to be available in sufficient quantity, at prices not unreasonable, all things considered," Director Cook declares. "The farmer must stand ready," he adds, "to pay a reasonable wage, though he need not permit anyone to hold him up."

Western Electric POWER and LIGHT



Automatic Regulator Makes Engine Self-Starting

Automatic Regulator saves the Battery

Portable Utility Motor Ready for Any Kind of Work

THE automatic regulator device on Western Electric Power and Light is found on no other electrical plant. This exclusive feature places this outfit in a class by itself.

This wonderful little device simplifies the making of electricity and represents an entirely new method of charging a storage battery.

Uses Any Engine

And, best of all, this Western Electric plant will operate successfully with

It removes the human element and the chance of overcharging the battery; thus insuring longer life to this—the most delicate part of every lighting system.

It does away with the complicated switchboard and makes this plant unequalled in simplicity of starting and operating.

any kind of an engine. If you already have one you can use it with this outfit.

Let us tell you about this plant, and how easy you can get electricity on your farm. Mail the coupon for Booklet.

WESTERN ELECTRIC COMPANY INCORPORATED

Kirby Ave. and Dequindre St., Detroit, Mich.
500 South Clinton St., Chicago, Ill.

WESTERN ELECTRIC COMPANY, Inc.

Please send me your Power and Light Booklet No. M.F.6.

Name _____

P. O. Address _____

County _____

State _____



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.

Seed Buckwheat \$5

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

Farms and Farm Lands For Sale

100 Acres Stock & Tools \$2600

Splendid New York dairy, general farm bargain, on good road, near 2 fine lakes, depot, milk station, high school, churches, etc. 90 acres fine tillage; spring-watered wire-fenced pasture for 20 cows, home-use wood; large quantity fruit. Good 6-room home, 2 barns, other buildings. Aged owner, alone, for quick sale includes pr. horses, heifer, hens, mower, rake, plows, cultivator, harrow, wagons, tools, hay, etc., all for \$2000, part cash. Never before advertised, will sell quick. Details page 17 Strout's Catalogue. Copy free, with other bargains including crops, stock, tools. E. A. STROUT FARM AGENCY, Dept. 101, 150 Nassau St., New York, N. Y.

FARM FOR SALE

Long Beach Farm 250 A. on shore of Gull Lake Kalamazoo Co. 2 houses, large dairy and other buildings very complete, 30 A. alfalfa, 70 A. grain a grand location for a dairy farm. Small payment, long time. F. S. KENFIELD, Augusta, Mich.

Farm of 160 acres 1 1/2 miles from Onaway, Mich. on main pike, level, no waste, 100 under cultivation, rest pasture and wood. Dark clay soil, woven wire fence, good grain and stock farm, new 9 rm. house, furnace, toilet, bath. Large barn, new granary, machine shed, etc. 100 ton silo, young orchard, near school. Telephone. R. F. D. A. J. BRENNER, Onaway, Mich.

Don't wait, closing out large estate near Pensacola, Florida, Clay subsoil. Railroad through land, prices \$17.50 to \$25.00 per acre, 80 acres or larger tracts. Terms easy. Apply Thomas M. Campan, 502 Whitney Office Bldg., 172 Griswold St., Detroit, Mich.

To Exchange for farm or city property—barn, garage, fruit, small railroad town, fine farming country, former occupant did \$500. weekly business. COOPER & GOVER, Mt. Pleasant, Mich.

Wanted To hear from owner of farm or unimproved land for sale. O. K. HAWLEY, Baldwin, Wisconsin

DOGS

Belgian Hares, Flemish Giants, white rabbits, guinea pigs, pigeons, ferrets, swine; dogs and puppies of all breeds; young stock specialty. Stamp for circulars. Chas. Ridgely, Canton, Ohio.

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

Bone Spavin

No matter how old the case, how lame the horse, or what other treatment has failed, try Fleming's Spavin and Ringbone Paste, \$2 a Bottle. One application usually enough; sometimes two required. Intended only for the established cases of Bone Spavin, Ringbone and Sidebone, causing chronic lameness. Fleming's Spavin Liquid, \$2 a Bottle. For the recent cases of Bone Spavin, Ringbone and Sidebone and for Bone Spavin, Splint, Curb, Soft Enlargements, etc. Your money back if these remedies fail. Write for Fleming's Vest-Pocket Veterinary Adviser. 192 pages, 67 illustrations. FLEMING BROS., 282 Union Stock Yards, Chemists, Chicago, Ill.

FOR SALE Kiln Dried Salvage Grain Barley, Oats & Wheat

Send for Samples C. E. Dingwall Co., Milwaukee, Wis.

Attention Farmers!

The Wing invention of a horse shoe to build up and prevent broken down horses by taking the bearing off the Ospeidis bone and placing it on the shell of the hoof where it belongs. A great boon to such horses. Don't fail to show this ad. to your blacksmith or write to Warren Wing, Winn, Michigan

CORN

\$1.25 to \$1.65 per bushel. If you buy in carloads or less send for samples. OARPENTER GRAIN COMPANY, Battle Creek, Michigan.

Cash for Old False Teeth. Don't matter if broken. We pay up to \$20 per set, also cash for old gold, silver, platinum, dental gold and old gold jewelry. Will send cash by return mail and will hold goods 10 days for sender's approval of our price. Mail to Mazer's Tooth Specialty, 2007 S. 5th St., Phila., Pa.

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

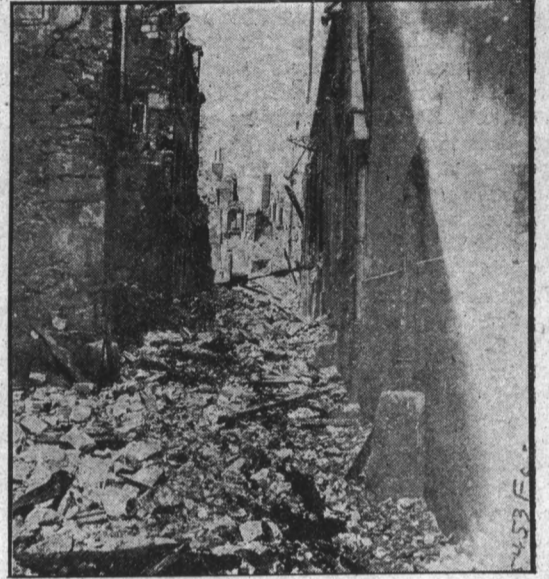
WORLD EVENTS IN PICTURES



Edison and Schwab at Launching of Vessel.



Latest Photograph of President Wilson.



Scene in Shell-battered Rheims.



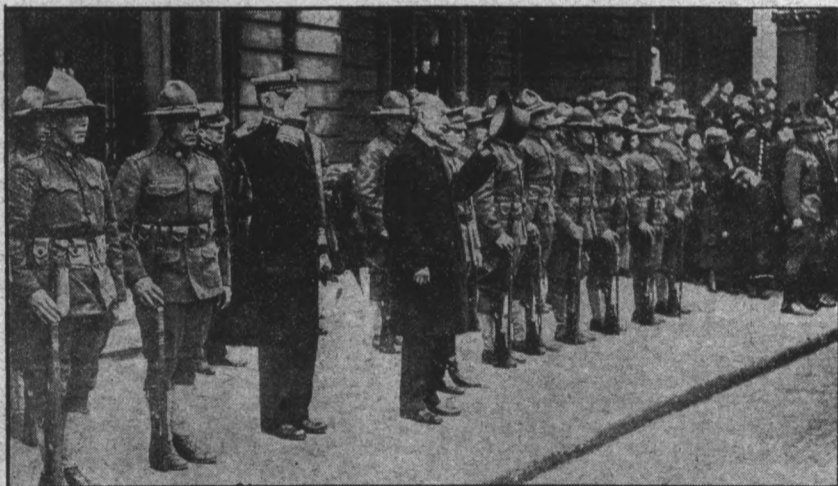
Refugees Driven from Homes.—(British Official Photo).



•The Universal Appeal.



Battery of British Guns.—(British Official Photo).



Admiral Sims and Ambassador Page Review U. S. Troops in London.



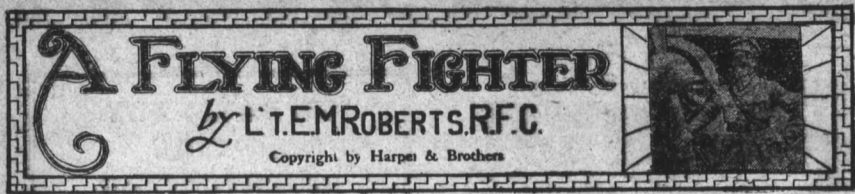
Vacuum Cleaner Collects Coins in Red Cross Drive in New York.



Big American Guns Arrive Close to Front Lines.—(French Official Photo).



Machine Gun Squad Fighting in the Open.—(British Official Photo).



(Continued from last week).

"Get down! Get down!"

We all laid down right where we were and waited. The working party is protected by the patrol, and that patrol had warned us. We waited until we got another call that everything was clear and went to work again. After that every time a maul hit a post it sounded to me like a 12-inch gun. Presently the Huns started to send up star shells for the purpose of finding out where the noise came from. By that time we were down again, of course. But the enemy took a chance with their machine guns in the direction from which the noise had come. The bullets went to one side of us, however. The firing did not last long, and then we resumed our labor; but I heaved a sigh of relief when we were through with the job, and we were back in the second-line dugout with a kettle full of tea and some chuck.

Two days later I was called in by the commanding officer and ordered to return to my unit. His report of me, he said, he would send in by telephone. I surrendered my equipment, said good-bye to the boys I had met, and started for Squadron Headquarters. I had gone about two miles on my way back when I passed something that resembled a house. Part of the chimney was shot off, and the windows were all broken. The ruin was similar to many others one could find around that part of the country.

Of a sudden the front of the structure slid to one side and a roar like a clap of thunder came out of it. Then followed a burst of smoke and a glimpse of the long, great barrel of a heavy gun settling on the recoil, and then the front of the house slid back—camouflage. For some minutes there was an awful ringing in my ears, and I had to hunt for my cap, which had been blown off my head. I found it under the leafless branches of a tree across the road, and near it were the bodies of four small birds which had been killed by the concussion.

CHAPTER VIII. My First Flight.

UPON my arrival at the squadron headquarters I reported to the commanding officer, who called in one of the flight commanders. The two of them discussed for a while as to what pilot was to take me up on a trial trip, and when this serious business had been disposed of, I was sent to the quartermaster of the aerodrome to be fitted out with the requisites of the flyer. These consist of a helmet, leather coat, fur gloves, and goggles.

The pilot with whom I was to fly told me to take the front seat of the machine and strap myself in. While I was attending to that my nerves seemed a little bit unruly. The moment for which I had hoped so much was come at last, but my sensations were not exactly what I had imagined they would be when the time came.

As I fastened each strap around me the risks of aviation became more real. Though I had often dwelt on the fact that there are no landing places in the air, the straps brought to me full realization that whatever happened to the airplane would happen to me. There was no getting away from the machine in case something went wrong.

But there was no time for philosophizing. The pilot took his seat behind me, strapped himself in, tested various levers and contrivances; in the meantime somebody started the motor of the plane running.

I noticed that several men were holding the machine back until the propel-

ler should have gained the speed necessary to give us a good start across the field.

I do not remember whether the pilot gave the signal that he was ready by word or by a gesture. Anyway, of a sudden the machine started to move, began to "taxi" across the field, and gained momentum with each instant.

It is hard to describe the sensation I had when the kite was finally in motion. I remember that the pilot opened the engine out and that the earth seemed to roll from under us, though the bumping of the wheels on the ground reminded me that we were still "taxying."

Of a sudden the bumping ceased and we seemed suspended in mid-air. But the wheels hit some other high places, showing that as yet we were not off the ground. Once more the machine was being supported on its wings. I hoped that the wheels would touch the ground again, but hoped in vain.

The motor was speeding up now and the peculiar swaying motion of the machine left no doubt in my mind that we had left the ground for good.

I noticed that the airplane was flying steadily enough, but for all that I

satisfactory to him, for presently he began to point out the objects on the ground, which was now far below us. We were then some eight thousand feet above the ground.

The pilot drew my attention to lines on the ground—mere pencil marks—and he told me that these were the trenches and communication ditches, and I thought how much safer the boys in the trenches were, even with the mud and rats. The lines stretched out as far as the eye could reach, and were parallel in the main, though here and there they diverged a little to come closer to one another at some other place. Over and near the lines wide puffs of smoke appeared. They were caused by exploding shells. I began to listen for the detonations, but the noise of the motor made it impossible for me to hear anything else.

So long as the puffs of smoke stayed near the ground and the trenches, all was well, I concluded. But I remembered the Hun aviator's fate at Ypres, and wondered how long it would be before those beautiful little smoke puffs would come nearer to us.

While I was still wondering a flash ahead of us rent the air. It was yellow and intense. The next moment a round powder puff took its place, and from this began to curl in all directions smoke ribbons which the fragments of the exploding shell were drawing after them.

I looked around at the pilot. He said nothing, but held up two warning fingers, while over his face went an



Making Ready for the Flight.

felt the uneasiness which is experienced by the person who is at sea for the first time. The slightest departure of the machine from its horizontal course threatened to entirely upset my stomach.

But before long interest in the things underneath me overcame that sensation. The earth was receding in the most peculiar manner. I told myself that we were going up, but still the idea that remained uppermost in my mind was that the earth was dropping away from us.

We began to climb up and up. I was beginning to enjoy this when of a sudden the engine stopped. My heart went into my mouth. And I said to myself, "Willie, you're a dead one." I expected to fall. But the machine continued on an even keel, and from back of me came two sharp raps. Then I was sure I was gone.

I looked around and saw the pilot smiling. He was saying something which I had great difficulty in understanding. But from his lips I read the question:

"How do you like it?"

I replied that I liked it well enough, and judged from the searching look in the eyes behind the goggles that the pilot was very much interested in ascertaining the state of my nerves. The result of his scrutiny must have been

expression of disdain.

Four other shrapnel shells exploded near us, and there was now no doubt in my mind that "Archie" was very busy with his anti-aircraft battery.

The Hun aircraft batteries, however, did not seem to be as greatly interested in us as they might have been, and after awhile their efforts to bring us down ceased.

I was once more able to watch things beneath us. The earth looked flat now. Hill and dale had disappeared. We sailed over a forest and I found that it looked like a lawn. Only its darker green separated it from the remainder of the landscape. The farm houses were the size of a match box and the fields around them seemed a part of a checkerboard. Men could not be seen at all. Two little towns over which we flew looked about a foot square.

I was enjoying this very much when of a sudden the engine stopped once more. Somehow I had learned to look upon that motor as something human, and I found myself unconsciously appealing to it to start again. I knew, of course, that the machine could volplane—glide—to earth, but I was not so sure that this particular pilot, despite his great reputation, was really the man to bring me safely back to earth.

The list of the machine forward made another severe attack upon my nerves. I surmised that the pilot intended to glide. What I feared most, however, was that he might attempt to do some fancy tricks aviators are fond of, especially when they have novices aboard. There might be somersaults, just plain or corkscrew fashion, and I was quite sure that anything of the sort would be too much for me.

But this did not seem to be the intention of the pilot. I had hardly found comfort in that thought when I noticed that the speed of the machine was now so terrific that the wire stays began to scream and whistle. The sensation of great speed overwhelmed me. Everything began to revolve about me, and I had to keep my eyes off the earth in order not to grow sick. It was not the motion of the machine alone that caused this sensation, but the great speed at which the earth seemed to be coming up to meet us.

Minutes seemed hours long, and with each second my prayers that this would soon be over grew more fervent. I was suffering all the tortures man ever imagined.

Of a sudden the machine lurched. The increased pressure against the plane could be felt by a tautness that went over every part of it, my own body and mind included. The next moment I noticed that the wire stays were no longer singing, and then, to my great surprise, I noticed that we were directly above the aerodrome.

The realization that this trip would soon be over was a great relief. But another fear seized me. We were not far from the ground now, but were still going at such a speed that the machine coming in contact with the ground would certainly be smashed; so, at least, I thought.

That was not the case, however, though the bounce we got when the wheels first touched showed me that it was indeed well to be strapped into the seat. The strain of my body against the leather was such that the straps creaked, and I would have been catapulted out of the machine had it not been for the safeguarding strap.

After the first bounce the machine traveled another short distance on its planes, hit the ground once more, rose again, and then taxied up to the shed.

I unstrapped myself and then climbed out of the machine. I was glad to be once more on solid ground even though it did heave a bit.

(Continued on page 731).

VACATION DAYS.

BY L. M. THORNTON.

Oh, I'm glad as a kid, as a very small kid,

When school lets out in June,
I could dance a jig if I ever did
I could almost sing a tune.

For its good to be sure of my boys again

And my girls for the whole day through;

There's such a lot we can plan for then

And so much that it's good to do.

Oh, I'm glad as a kid, as a very small kid,

When the school house door is barred;

I'm glad to think that the key is hid
And I find it isn't hard.

My boys, what a jolly bunch they are
And my girls, how worthy praise;

The hours that I like the best by far
Are in these vacation days.

Oh, I'm glad as a kid, as a very small kid,

And you ought to feel that way,
For now is your chance to make your bid

For their love and their trust today,
And there's nothing under the heavens high

That can make the angels glad,
As a boy and a girl, while the years go by,

Who are loving "chums" with Dad.

One thing seems certain: So long as one great nation stands armed to the teeth, all other nations are safer with a thorough system of preparedness.



“It isn’t because the idea is new—but because your ideas are old, John”

“Your father felt the same way about the harvesting machine—and the same way about the silo, the tractor and the automobile. My place is as modern by night as it is by day. We have electricity for light and power. Electricity lessens all of our work. It is like another hand—it saves work doing the chores—and the current is always available for light or power day or night. Investigate, John, as I did. I found out all about farm lighting plants and bought the Alamo Unit.

“Here are some of the reasons I chose the Alamo. First, for its simplicity. It requires little or no attention. It is practically automatic in operation. You simply touch a button to start or stop it. If lubricating oil or cooling water runs low, it automatically stops so the machine cannot injure itself.”

A Complete, Compact Unit

The Alamo is built in one complete, compact unit. The engine, the generator, the radiator and the switchboard are mounted together on one base—this does away with belting, shafting and the like. Its running balance is perfect. It can be set anywhere—no special foundation is required. It is free from vibration and noise.

Super-Silent Motor

The engine or motor has ample power—yet it is simple and abuse-proof. Alamo engineers solved the problem by the use of the Ide Super-Silent Motor, designed expressly for this plant.

Durable, Dependable and Safe

The generator runs practically without vibration, adding greatly to the life of the unit. It is well ventilated and entirely protected against oil. Its capacity

is 1,000 watts. This is ample power for furnishing all lights required, charging the battery and plenty of current for other purposes.

Easy To Install

Because of its simplicity the Alamo Unit is easy to install and easy to care for. And when the Alamo is installed, a woman or child can take care of it and run it. All there is to do is to keep fuel and oil supplied and water in the radiator.

Booklet Free

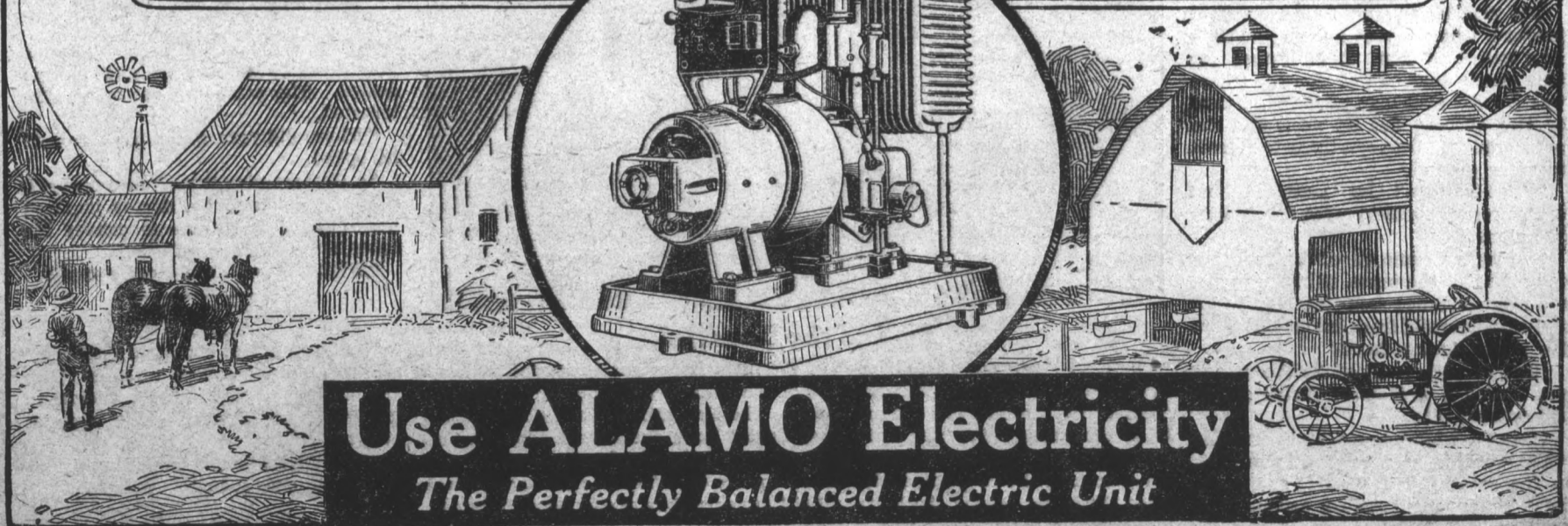
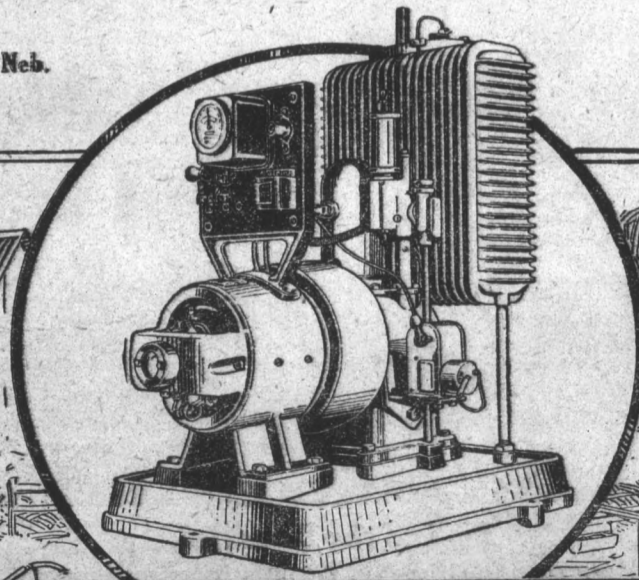
The Alamo booklet describes and illustrates the Alamo Unit in plain, simple, non-technical language. It tells the “whys and wherefores”—it describes everything in an understandable way. Write for this booklet, it is free. When we send it, we will tell you the name and address of the nearest Alamo dealer, and where you can see the Alamo Unit in operation. Write today.

ALAMO FARM LIGHT COMPANY

Address Main Office:
1215 Farnam St., Omaha, Neb.

Factory: Hillsdale, Mich.

(10)



Use ALAMO Electricity
The Perfectly Balanced Electric Unit

Parson Rawlins' Page

By ELMER HICKS

UP above the twinkling stars the Recording Angel was beginning his work for the day, and, as was the usual custom, with the great book before him, started recording the doings of the righteous first; even before their day's work was done, for the only entry to be made was a ditto of the days that had gone before.

As the Heavenly Recorder paused with the pen held over page marked "Parson Rawlins," he hesitated, and did not make the regular entry as had been done for five years now.

Parson Rawlins' day was about done but where was the nightly "All is Well" sent by his guardian angel from that dim and distant earth below.

The Recording Angel turned his gaze downward, searching San Francisco's dim outlines until he located the wicked blotch of sin known as Barbary Coast.

He saw Parson Rawlins leave the little church, located right in the heart of that vile nest of crime, and go forth down a crooked, dirty street past rows of brightly lighted houses with their windows and doors wide open, showing their attractions to all who might gaze within.

But neither to the right nor left looked the Parson; he did not seem to see painted, half-dressed women offering, forcing, themselves on any who might venture within reach of their luring wiles.

Nor hear the mechanical pianos or the maudlin, drunken songs, for he was thinking of the souls that must be saved among that mighty throng.

The Recording Angel saw, as Parson Rawlins turned into a dark, ill-lighted street, two husky, bullet-headed ruffians step forward and block his path. The parson was startled for a moment at the interruption and the Recording Angel almost held his breath.

"Are ye' that slinkin', cowardly preacher?" demanded the larger of the brutes, "that's trying to upset the business of better men than you?"

"I am the servant of the Lord," replied the parson in the meekest kind of voice, but his eyes held a most steady gleam.

"Soak 'im first, Slim," ordered the big one, "the worse he's beat the more we get."

Parson Rawlins backed off before them. He was in a sea of doubt, for he did not want to be pounded to a pulp and truly this was no time to turn the other cheek. As the two men crowded him he prayed:

"Oh, Lord, you are my Shepherd. You led me here and this must be thy will." And he squared his broad shoulders, placed his back to the wall and waited their rush with a knowing smile. The Lord's work, this time, thought the parson, should be well done or he missed his guess by a mile.

The ruffians advanced with one foot forward, using a well known shuffling ring gait that kept them braced for any shock that might come. There was a swift exchange of blows, a thud or two of bare fist on flesh and the parson ducked between them to retreat to safer ground.

"Prize-fighters," he muttered and maneuvered so as to meet the smaller one alone.

The ruffian came on with a rush, but cautious just the same, till he was just the right distance from his man to hit and save himself from harm. But there the victim took a hand.

"God be with you," spoke the parson and landed a well-aimed kick right in the fellow's ribs.

It was a trick learned by experience while working as a rough lumber-jack in the great North Woods, and down went his opponent with a groan. The fight was all knocked out of him for several weeks to come.

Parson Rawlins and the big one ad-

vanced on each other with a cautious tread. Each knew the other was no mean opponent and skill would win the fight, instead of main strength.

Suddenly they mixed at a fast and furious pace. Arms and fists were flying as each man ducked and fought and the thud of fist on flesh told of many licks finding their mark. As suddenly as they had gone together each man backed off to catch his breath.

The parson was wearing a glorious smile, though one eye was entirely closed and his lips split and swollen and the blood trickled from many cuts on his face. It brought back the memory of former ring days before he had accepted grace, and he remembered that the clean liver always stood the fastest pace.

"Devil take the hindermost," prayed the parson and waded in at a furious gait. Striking with right, with left, dodging and ducking, sometimes getting a kick himself but all the time putting such a beating on the other fellow as had never been administered in the rogue's life before.

Finally the enthusiastic parson desisted for the fellow seemed to have enough. With both eyes closed, his left jaw broken, and every front tooth loose, the man hung to the fence to keep from falling down.

The Recording Angel breathed a sigh of satisfaction and unclenched his right hand, releasing the broken pen staff that he had crushed without knowing when.

"That Parson deserves a military medal," he said, "but, alas, I am not the judge."

Instead he wrote with the broken pen, in the great book of daily records of deeds both great and small,



Bailleul the Beautiful

Bailleul was considered one of the most important strategic points on the Western Front and was the first of the main German objectives in their April drive towards the channel ports. The British had used it up to April 16, as the strong point from which they hurled back the waves of enemy attackers on the Flanders front. This view shows the principal street and the church in the city, which the enemy now holds. When the photograph was made it was far behind the lines and still unmarred by enemy bombardments. Bailleul is a typical Flanders village, its quaint old buildings and winding streets lined with picturesque homes, once the pride of a happy, peaceful people, now a mass of shell-torn, crumbling ruins.

"Parson Rawlins: A Christian duty well performed!"

HOW "CHAMOIS" LEATHER IS MADE.

Probably many people who handle wash leather in course of business would find it difficult to explain how it is made. Wash leather, as it is often called "chamois" leather, is now always made from the flesh-split or "lining" of sheep skins, the thin grain of which constitutes the "skiver." The splitting is done on pelts fresh from the limes by a machine with a vibrating knife against which the skin is drawn, and, to get sufficient plumpness the liming must be through. The skins, either at once, or after a slight drenching, are thrown into a fulling mill, or "faller stocks" together with some sawdust, and are kneaded until they reach a semi-dry and somewhat porous condition, when they are sprinkled with fish oil. The stocking is continued, with occasional pauses to allow the goods to cool, and sprinkling with oil at intervals till the original limy smell disappears, and is replaced by a somewhat pungent odor, and the skins are thoroughly saturated with oil. They are then packed in a box and covered up, when they rapidly heat by the oxidation of the oil (and might even take fire, if not taken out in time and hung up or spread on a floor to cool), while at the same time a good deal of irritating acrolein vapour is evolved. This packing is repeated two or three times till the oxidation is complete, heating no longer takes place, and the skin is yellow throughout, and full leathery. The remaining operations consist in pressing out the surplus oil (degras, or sod oil, which is valuable for currying), washing with warm alkaline solutions to remove the residual oil, and finally drying, and "fluffing" on an emery wheel to produce a smooth surface.

"By the Way"

PIE AND —!

Colonel W. C. Gorcas, Surgeon-General of the army, tells this story about a National Guard Encampment last summer:

"Jim Wheeler, a new volunteer who



had not quite learned his business was on sentry duty one night when a friend knowing his fondness for pie, brought him one from the canteen.

"While he sat quietly on the grass devouring the pie, the major sauntered up in undress uniform. Not recognizing him, the sentry did not salute, so the major stopped and asked, 'What's that you have there?'"

"Pie," answered Jim, good-naturedly. "Squash pie. Have a bite?"

"The major frowned. 'Do you know who I am?' he asked haughtily.

"No," the sentry answered, "unless you're the major's groom."

"The major shook his head.

"The barber from the village?"

"No!" thundered the other.

"Maybe—and the sentry laughed—"maybe you're the major himself."

"I am the major!" came the stern reply.

"Good Heavens!" exclaimed the sentry. "Hold the pie, will you, until I present arms?"

FAULTLESS LOGIC.

"Ma," remonstrated Bobby, "when I was at grandma's she let me have fruit-tart twice."

"Well, she ought not to have done so, Bobby," said his mother. "I think once is quite enough for little boys. The older you grow, Bobby, the more wisdom you will gain."

Bobby was silent, but only for a moment.

"Well, ma," he said, "grandma is a good deal older than you are."—Tit-Bits.

OBSERVANT CHILD.

Teacher.—"What is water?"

Willie.—"A colorless fluid that turns black when you wash your hands."

HIS GENEROSITY.

A "Tommy," lying in hospital, beside him a watch of curious and foreign design. The attending doctor was interested.

"Where did your watch come from?" he asked.

"A German give it me," he answered.

A little piqued, the doctor inquired how the foe had come to convey his token of esteem and affection.

"E 'ad to," was the laconic reply.

AUNTY'S JOY.

"I told you last Sabbath, children," said the Sunday-school teacher, "that you should all try to make someone happy during the week. How many of you have?"

"I did," answered a boy promptly.

"That's nice, Johnny. What did you do?"

"I went to see my aunt, and she's always happy when I go home again."—Boston Transcript.

A FLYING FIGHTER.

(Continued from page 728).

Next morning I learned that the Hun shrapnel had not been as innocuous as I had imagined. There were several holes in the planes of the machine which must have been made by the contents of the shell which exploded behind us, and which I could not see from my seat in front. But old "Archie" had been a little off-color in his shooting, as he generally is.

The impression that my first flight made upon me, as shown by a dream I had that night. I dreamed that I was up in the air higher than anybody had ever been before, and that the machine suddenly broke up into small parts. I was plunging down trying to catch these parts and was just about to hit the ground when I discovered that I was on the floor near my bunk.

I was discussing our trip with the pilot who had taken me up, Lieut. R.—, when an orderly came out and told me that I was to report at headquarters. There I was told that I was to be sent to a battery of sixty-pounders to learn what I could about artillery.

The next stage in my training as an aviator was accomplished in that battery.

Much of my life, while attached to the battery, I spent in a dugout, which was comfortable enough; besides, the bugs had been trained to leave strangers alone—so, at least, the Sergeant-Major said. But in that, as in other things, he was mistaken. The insects took a violent liking to me and inside of three days I had the finest collection of them the battery could boast of.

I made the acquaintance of a new sport while with the battery. A saucer serves for an arena. Into this one puts a kootie and a flea. A vicious fight results and on the outcome of that the boys bet. The combat generally ends in favor of the flea.

During the third night of my stay with the battery, about eleven o'clock, I was awakened by a heavy explosion. I started to my feet, but before I could find myself another explosion came. I made for the surface and just as I reached there another bang close by shook me off my feet. In my hurry to get back into the dugout I missed the first step and landed unceremoniously at the bottom. I flew through the sacking which serves as a door and lit on one of the gunners who slept in the corner of the dugout.

The man was so used to night bombardments that he did not mind the noise of the shells. But he thought differently of the disturbance I was causing. His flow of language was very sulphurous and included a peremptory command to shut the door. He opined that it was a shame to send a "mutt" like me down to a battery to create trouble and attract gun fire to a gang of peaceful gunners.

The battery was shelled for three nights running and I was blamed for it. Before my arrival the battery had been living peacefully enough, they said, and while they granted that I had made no deal with the Germans, they still insisted that I was a Jonah. Whereupon I returned to my little two by twice corner and went to sleep.

I was put to work, however. I assisted in loading one of the big guns and as a special favor I was permitted to yank the lanyard a couple of times. Then they tried to explain sighting to me. I heard lengthy expositions of errors in elevation and the like, and somebody said a great deal in explanation of loading, relaying, fire and what not before I left.

I also learned that the fire was being directed from the ground from what the battery commander called the O. P., or observation post. He sent me up to that post with one of the spotters. We reached it on our hands and knees and found that its site was an old tree stump to which a telephone

line had been laid. From that spot the observation man directed the fire by means of a telephone. His work consisted of telephoning to the battery commander whether the fire was short or high, or fell to the side of the object aimed at.

The language of the observation post was Chinese to me at first. I could not make out what they meant by "No. 1 gun, two minutes, five degrees right."

After that No. 2 gun would take a whirl at it as the next correction indicated. That correction might be: "No. 2 gun, one minute, eight degrees far."

It was all Dutch to me, but it was interesting to watch it. I afterwards found out that the fire spotter sometimes worked in connection with air-planes when shrapnel was being used, the duties of the ground observer in that case being to determine the height at which the shrapnel was exploding. The aerial observer also had to report on the effect of the fire. Nobody had explained to me so far why I had been attached to the battery and nobody ever did, but I surmised they wanted me to get up some acquaintance with artillery practice. Some day no doubt, if I lived long enough, I would have to spot shrapnel while on the wing, and my apprenticeship with artillery would then have some value.

To observe artillery fire from above was the very thing I wanted to do, and I made up my mind that the corrections I sent down should be as accurate as possible. With that in mind I absorbed as much of artillery technique as I could. I was anxious to get back to the Flying Squadron in the hope that I would get another flight right away. On arriving at headquarters I had the satisfaction of being told by the commanding officer that I was doing fine; but to this remark he added that I was to keep it up and then sometime or other I might be a real birdman.

The next week I spent in learning a great deal about the Lewis gun. I was taken to a range and taught how to use it, how to remedy its jams, change broken cartridge guide springs, and apply the immediate action on an empty drum.

The gun I was handling had all the defects which I might have to overcome in the air, and I will say that my course on the range was very thorough. Later, I learned how to fix the "double feed jam," change extractors, regulate the action of the bolt and do the many other things one has to know in order to keep a machine gun running.

I put in a very busy week, especially since in addition to my study of the Lewis gun I had to continue artillery observation practice. I discovered that spotting artillery fire while moving about on an airplane was not so simple as I had imagined. The things I was supposed to learn were piling up rapidly, moreover. By the end of the week I had also been introduced to wireless telegraphy. I worked fourteen hours each day.

(Continued next week).

SERVING THE COLORS.

Secretary McAdoo has a deep appreciation for the way in which women are responding to the country's needs. In a recent speech he said: "The wives of our soldiers, the mothers of those sons who die, the children who are left fatherless—they are all serving the colors, just as much as the men who wear the uniform, and their suffering is, in many respects, greater. The time is coming when, if we are going to have complete democracy, all must have equal rights. I am surprised after all the women have done since the war, that there are still men who think they don't deserve equal rights."



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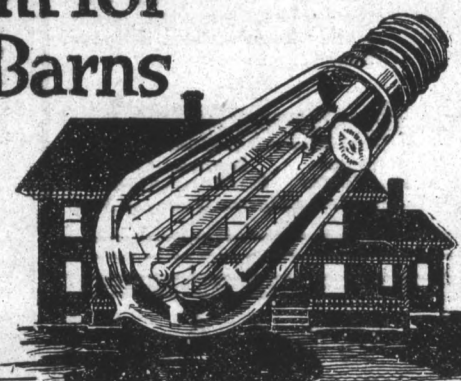
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Boys and Woodchucks

By G. W. TUTTLE

ON the old New England farms the boys waged constant war upon the woodchucks. How cunning the old fellows are—all eyes and nose. They will spring a boy's carefully set trap with their nose, leaving a few hairs as souvenirs of the occasion. Woodchucks have an insatiable appetite for the good things of the garden. They believe in meals at all hours—that is, at all hours when the garden is not watched. As a boy grows older and begins to use a gun he soon discovers that it takes a lot of careful stalking to give a woodchuck a surprise party. I remember two very peculiar incidents that happened while I was trying to get rid of some of the troublesome woodchucks on the old farm.

In one field an old mother woodchuck and her partly grown family fed. Straight and stiff upon a great stone at the mouth of her burrow the mother chuk would sit, standing guard for her young while they ate.

One day I borrowed an old muzzle-loading rifle from a neighbor. Creeping along back of a stone wall I managed to get within range of her as she sat on the stone. I took careful aim and pulled the trigger. Apparently only the cap snapped.

The woodchuck disappeared, while a very much disappointed boy walked over to the hole. What was my astonishment to find the woodchuck lying across the mouth of her hole, as dead as a coffin nail. A few grains of powder

must have exploded for the heavy bullet had penetrated her heart, although it did not have sufficient force to pass entirely through her body. The charge had undoubtedly become damp and only a few grains of the powder had ignited.

Another very peculiar incident occurred one day when I was using this same borrowed rifle. I saw a woodchuck sitting at the mouth of her hole. It was a downhill shot and I probably shot a trifle high on that account. At the report the woodchuck dropped, apparently stone dead. I walked leisurely down to pick up my victim. When about fifteen feet from her my stone-dead woodchuck suddenly rolled over, took one good look at me, and then dove down into her hole. Presumably she had been stunned by the bullet, which must have grazed her head.

I am not certain that our good-hearted neighbor really enjoyed lending me his muzzle-loading rifle. I accidentally loaded it with two charges of powder one day, and not getting another shot at the time I returned it loaded. When my neighbor afterward took a shot at a woodchuck both parties escaped with their lives. After this strenuous experience I cannot say that my neighbor really ached to loan me that rifle—that is, unless I returned it unloaded. Strange, how little it takes to awaken prejudice against a boy on a farm, is it not? Had he lost some valuable portion of his person—an arm or a leg, for instance—his hesitancy would have been justifiable.

COLDWATER YOUTH IS BEST OF MICHIGAN'S JUVENILE GARDENERS.

Frederic Kibbee, of Coldwater, sixteen years of age, has been singled out by the Club Department of the Michigan Agricultural College from among 30,000 other boys and girls as the best boy gardener in the state. The award is for work done by him in the season of 1917, for owing to the difficulty of securing reports from the many thou-



Frederic Kibbe, Best Boy Gardener in the State.

sands of youngsters in every part of the state, choice of the winner was delayed until all could be heard from. The Coldwater boy will hold his crown until 1919.

Taking up gardening to aid in the food campaign, Frederic tilled a garden three-quarters of an acre in extent, and from this he harvested produce which sold for \$190. Of this amount according to his account, \$113 was net profit.

"Peas and radishes were my big crop," he declares in his report. "I am going to specialize more this year, and for one thing, I am going to raise more peas."

MY STORY.

Our club was organized last year. Mr. Markley came to our school to see if we boys would like to have a handicraft club to learn to build things. He asked our teacher if she would like to have us learn and if she would let us

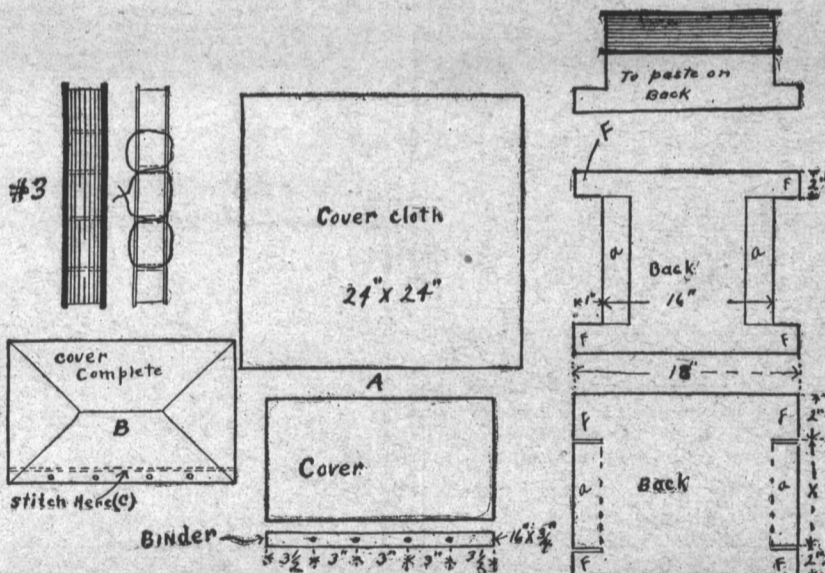


Carl Boyea, State Handicraft Club Champion.

have part of one afternoon off in each week to do manual training. After he had asked the teacher he came to us boys and asked us if we would like to join. We all agreed that we would like to join. So he said he would come and help us boys every week.

The mothers' club bought our tools free. We were glad to have them furnished free, but we were still more

Boys and Girls Try This



Here is a binder for "The Michigan Farmer" that any boy or girl can make. Cut out two pieces of heavy cardboard sixteen inches by ten and a half inches for the sides or covers, and four pieces sixteen inches by three-quarters of an inch for the binders. Glue the binders together in pairs. Next cut out your cloth in two pieces twenty-four inches by twenty-four inches. On these lay the cover and binder in position, as shown in illustration (A), and fold the cloth and sew or glue tightly as in (B). Then stitch tightly between the cover and binder as at (C). Next with a punch and hammer punch four holes through the center of the binder three inches apart and three and a half inches from each end; measuring from the

bottom, punch similar holes half an inch from the back on all your magazines. Now using a stout cord or picture wire, thread through these holes and through the binder strips, as in illustration No. 3, tie the ends tightly at the center. Next cut a piece of canvas eighteen inches by the thickness of your book, plus five and a half inches. Cut slits one inch deep on each side two inches from the ends, fold and glue center laps (A). Then glue over the back of the volume and binder sticks, turn flaps (F) inside the cover and glue. and you have a bound volume. A six months' index of the Michigan Farmer appears in the last issues in June and December.

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glad when they furnished our material free.

After we had our material the first thing I made was a Ford jack. A Ford jack should be made of hickory wood. Why I chose the Ford jack is because we have a truck at home that I can jack up and pump the tires full of air easier.

The second thing I made was a trap nest. A trap nest is to catch chickens in to test which ones lay the most eggs.

The third thing I made was a broom holder. A broom holder is to hang the broom in so that it isn't always falling down when I open the door to get out.

The fourth thing I made is a milk stool so that when I go to milk our cow I can sit on a good strong stool without breaking down, or so I don't always have to hunt for a box.

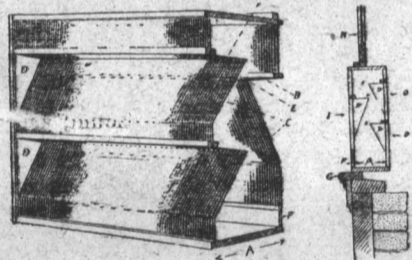
The fifth thing I made is a fly trap so that the flies are not always around me and lighting on my face when I am sleeping.

The things I would like to make next year are a cultivator, self-feeder, and fireless cooker. but I don't know whether I will or not.

We have a good place to work in, it is in the basement of our school. The floor is nicely cemented. There are four windows in it and also a furnace. My age is twelve years.—Andrew Ferlinga, Grand Rapids, Mich.

HOW TO MAKE A FLY TRAP.

The trap is essentially a screen box closely fitted to the frame of a window, as shown in the accompanying drawing. The thickness of the box at A should be about twelve inches. Instead of the screen running straight down over the box on either side it is folded inward nearly to the center of the frame in V-shaped folds running across the window. One, two, or even more folds may be made in the screen on either side. The upper side of the fold B should extend toward the center almost at right angles with the



sides of the trap, or parallel with the top and bottom; lower side C should slant downward as shown in the drawing. The sides of the frame may be cut out at the proper angle and the pieces D returned after the screen has been tacked along the edges. Along the apex (inner edge) of each fold is punched a series of holes E about one-half inch in diameter and one inch apart. The pieces of the folds on either side of the window should not be directly opposite. A narrow door F opening downward on hinges should be made on one side of the trap at the bottom for removal of the dead flies. The entire trap is fastened to the window by hooks so that it may be readily taken off. An additional trapping feature may be added by providing a tent trap fitted in the bottom of the box. A narrow slit is left along the base to allow the flies to enter beneath the tent. Bait may be placed under the tent to attract flies.

E. W. GAGE.

BOYS' AND GIRLS' FARMING.

Farming is fully as much a boys' and girls' problem as it is a problem of production. If the boys and girls have not been interested in the farm they will likely leave. That means the end of that farm home in ten or twenty years and a tenant will likely follow on the farm, and the ones who should be on it will likely be in town working

for wages. That farm home has in a measure been a failure. Give the boys and girls on the farm recreation; a social center is one solution. Give them a good consolidated school with its many advantages, and give the boy or girl a chance to learn that the farm produces things of value to them by letting them have a pig or a calf or



Kenneth Ousterhout, State Champion Poultry Club Member in 1916.

acre to care for as their own and to market as their own and then have the proceeds to spend as they choose. This develops the ownership idea and the spirit of independence. When the boy or girl is given nothing to raise and market as their own, the hired man or dependent attitude is too often developed.—W. C. Palmer, N. Dak. Ag. College.

THE GAME OF FORTS.

Where cards are not played the game of forts is one coming into favor because of its timeliness. If the game is played in a hall have small tables (card tables) placed in two rows down the room. If played at home, stands and larger tables can be utilized or a broad window ledge will hold a "fort." An easy way of making a fort is to take a thin piece of cardboard, red, white or blue is preferable, four by six inches in size, and folding across the middle crosswise; then thrust a toothpick through the middle of the bottom edges and your fort, log cabin shaped, will stand up quite as well as though more time had been given to its construction. In the top of each "fort" put a tiny American flag and to the top of it attach a tiny strip of white cardboard with the name of the fort printed upon it. There must be a "fort" for each player and names can be selected from the following list; Washington, Ticonderoga, Sumter, Stanwix, St. Louis, Pitt, Myer, Orange, Necessity, Nassau, Moultrie, St. Marie, Monroe, McHenry, Loyal, Lee, McAllister, Edward, Cumberland, Dubuque, Slocum, Scott, Bird, Smith, Dodge, Wayne, Tottem, William Henry, Ethan Allen, Crown Point, Ellsworth, Oglethorpe, Sill, McPherson, Nicholas, Tompkins, Hamilton, Niagara, Riley, Pulaski, Reno, Sam Houston, Wright, Ontario, George, Worth, Porter, Green, Charles.

Each player is given a sheet of paper and a pencil and is allowed to select his own fort. He is then given five minutes in which to write as many words as possible, using only the letters used in the name of the fort. For example, Fort Henry—hen, her, rye, are the only words that can be formed, but Fort Tompkins will give Tom, Tim, on, in, mop, skip, sin, simp, skin, sink, stink, stomp, stop, skim, nip, and probably many others. After a half hour or longer if interest does not lag a tiny bell announces the game over and each player keeps the "fort" at which he is then stationed, as a souvenir. A flag may be given as a prize for the one having made the most words from the names of the forts visited.

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Earn Thrift Stamps to Help Your Nation, State and Self

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Michigan is proud of her reputation in many respects, but she is way below her quota in the amount of Thrift Stamps sold. Earn Thrift Stamps to help save her reputation.

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We will give you a Thrift Stamp for each Special Offer Michigan Farmer Subscription you send us. These Special Offer Subscriptions are easy to get. We furnish special cards and full instructions.

Boys and girls—here's an opportunity for profitable, patriotic endeavor. Send for details now.

The Michigan Farmer, Detroit, Michigan.

As a war measure you should give close attention to 'values'. This applies particularly to tea. Low-priced tea is generally most extravagant in use since it takes so many more spoonfuls to make a satisfactory infusion than does a fresh, clean tea like

"SALADA"
TEA

Your grocer sells it—always insist upon it in sealed metal packages.

Black, Mixed, Green

B 368

Woman and Her Needs
At Home and Elsewhere

Why We Must Send Wheat Overseas

THE Allies ask America for wheat, rye, corn, barley, and oats, and we are sending them in large amounts. They ask us especially, however, for wheat. They ask it as the necessary basis for their necessary loaf. They must have bread, and they must have bread which will keep sweet and palatable for several days.

Wheat is the basis for the durable raised bread loaf.

Troops must have bread carried to the front from bakeries behind the lines; it must be a durable raised loaf.

Workers in the war factories must have bread from commercial bakeries. The women in the factories can not be bakers also. Their bread must be the durable raised loaf.

All France depends on the bakeries for its bread. The people do not know how to bake in the home. They have no ovens for baking, nor could they afford fuel for them if they had.

Al the bread of France and England and Italy today is war bread. It is made of gray wheat flour, milled at a high extraction rate; that is, a larger proportion of the wheat grain is now put into the flour than formerly was the case. Their flour now contains more of the outer parts of the wheat grain, parts which formerly were separated from the flour and used as feed for animals.

This flour is then mixed with as large a percentage—usually twenty-five per cent—of flour made from other cereals as can be used and still permit the making of the raised loaf.

In England this war bread can not be sold until it is twelve hours old, so that the people won't be tempted to eat too much fresh bread. In France and Italy the bread is rationed according to the age and occupation of each person. A child has less than an adult; a light worker less than one who does heavy labor.

France has always lived on bread. Of the average Frenchman's normal diet fifty-two per cent is composed of bread and but forty-eight per cent of other foods. France has just put her whole people on a rigorous bread ration which limits them to only two-thirds of the amount they have been accustomed to. In all the Allied countries they are using as little wheat as will give them bread at all and as little of this bread as is possible to keep them in health and strength.

The people of Belgium are living on a relief ration. Over 1,000,000 of them get their daily bread and soup by standing in line long hours before the relief

kitchens. They have stood in these long soup lines every day for three and one-half years. But they do not complain. They only ask that the soup and bread be there every day. They depend upon America.

We are sending corn and cereals other than wheat, to England, France, Italy and Belgium. These cereals are shipped as fast as they can be used. But the people can not live on them alone. They do not know how. They are unable to cook them properly. They must have wheat to mix with them and with potatoes to make their bread. We are now sending wheat to the limit of our cargo space, and yet we are only meeting the minimum requirements of these people. In order to continue doing this, our people must share their present wheat supply.

We are dividing our wheat evenly today between ourselves and the Allies. We must not use before the next harvest more than one-half of the wheat we have. Even with one-half of our wheat the loaf of the Allies is small. It can not be made smaller without undermining their strength and morale. Is there any doubt what we shall do in this emergency? We have just one thing to do, and that is to save wheat and send wheat.

90 Bushels Per Acre

Mr. A. J. Woolen writes: "I arrived in Canada with practically nothing. Nevertheless I made good, and my first crop of oats went on an average 90 bushels to the acre."

Mr. Woolen is only one of thousands of farmers who have made good in Western Canada. Government statistics show the average yield of oats per acre is 53 1/2 bushels; of wheat 30 bushels.

Wheat	30 bu.
Oats	53 1/2 bu.
Potatoes	148 bu.
Barley	37 bu.
Rye	27 3/4 bu.
Flax	13 1/2 bu.

This is the 1915 average per acre from Government statistics.

128,000 FREE FARMS!

Whether you have capital to buy land or not, there is a farm for you in Canada. You can get one of the recently surveyed 160-acre fertile homesteads along the Canadian Northern Railway. Here you have the same opportunity to succeed as did Mr. Woolen. First comers get choicest locations.

Best Farm Lands \$15 to \$25 Per Acre

Thousands of acres of specially selected centrally located land, close to the railway, can be purchased on easy cash payments, or part cash and part crop payments. Here are modern free schools, good transportation, telephones and automobile roads. Crops produced can only be equaled on farms costing \$150 to \$200 per acre in more densely settled communities.

Special Low Fares—The Canadian Northern Railway, which takes you to all parts of this territory, provides special low fares to home-seekers and settlers.

Send for FREE Book

Write today for your free copies of the "Home-Seekers' and Settlers' Guide" and government literature. The Guide is full of interesting and valuable information based on government returns and it tells you exactly how to make a home in Western Canada. Here is a home and wealth for you.



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527 Majestic Bldg.,
Detroit, Mich.

Get Cash

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

WERTHAN PAYS HIGHEST PRICES FOR EMPTY BAGS

Include Vegetables In the Child's Diet

CHILDREN must have plenty to eat. Adults can get along for some time, if necessary, on noticeably restricted diets without serious impairment of health, but children can not draw on their reserves in this way without detriment to their growth and vigor. Children from two to six years should have three good meals a day, the heaviest one being in the middle of the day. Their day's food should include plenty of milk, not less than one and a half pints—skim-milk may be used if butter is given also—plenty of cereals and green vegetables, particularly leaf vegetables, such as spinach. It is desirable also to have a more varied diet and to include sugar, fruits, eggs, and meats with fish and fowl, in the daily meals. Information regarding these matters will be furnished to mothers if they will write to the Children's Bureau, United States Department of Labor, Washington, D. C.

Authorities on the subject state that there is practically no substitute, either for milk or green vegetables in the

food of the growing child. Milk should be given in many forms. Spinach is one of the best of green vegetables. It can be prepared in a number of ways and should be used freely in the daily diet. Fish and chicken are better for children in many cases than beef or other meats, and where these foods can be obtained one or the other may be given to children.

In the face of the great need for conserving wheat the use of new cereals has become a matter of necessity. There seems to be no reason why such food may not be as wholesome as wheat, if properly cooked. Mothers may need to be warned that all cereals, and particularly the coarser ones, like oatmeal and corn, need very long cooking to be suitable for children. Therefore it stands to reason that the "quick" breads and griddle cakes, which have been exposed to cooking heat perhaps only a few minutes, will not be well digested and that all preparations of cereals should be subjected to long slow cooking if they are to enter into the diet of young children.

At this moment, also, people are being urged to eat all the potatoes possible as another substitute for wheat. The request is made that families shall eat potatoes three times a day but this is not intended to apply literally to the youngest children, who would not get a sufficient variety of food in the day's meals if given potatoes at each one. The manner of cooking potatoes must be constantly varied or the family will tire of them. The methods will include frying and scalloping, delicious to the adult palate, if well done, but not suitable to young children. It is wise, therefore, for mothers to remember that children under five will hardly be able to eat potatoes more than once a day, and that for them this vegetable is better when baked, mashed, or freshly boiled and served simply with the addition of a little salt and milk or cream. Thus prepared they are so completely cooked and so finely divided that children do not swallow them in chunks. Frying, on the other hand, makes foods generally less suitable to the digestion of children.

EVERYWOMAN'S CANNING BOOK.

A valuable book for every home canner is "Everywoman's Canning Book," (Whitcomb & Barrows, Boston), by Mary B. Hughes. Miss Hughes had charge of a canning kitchen last year, conducted by Mrs. Augustus Hemenway in Boston, to take care of the surplus from war gardens. She gives careful and comprehensive directions for canning everything from the first stalk of rhubarb in spring to the last fall fruit, and includes, besides, methods of canning meat and fish. Miscellaneous relishes and old family recipes contributed by Boston women who worked in the kitchen last summer are given a chapter, and there is also a chapter on the drying of vegetables and fruit.

MICHIGAN FARMER PATTERNS.

Any of the patterns illustrated may be secured by sending order to Pattern Department, Michigan Farmer, Detroit, enclosing the amount set opposite the patterns wanted.



No. 2483-2381—Ladies' Costume. The blouse is cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 4 1/4 yards of 44-inch material. Skirt 2381 is cut in six sizes, 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 2 3/4 yards of 44-inch material for a 24-inch size. The skirt measures about 2 1/2 yards at the foot. Two separate patterns, 10 cents for each pattern.

No. 2461—Splendid Style for Sports or Outing. Cut in three sizes, 16, 18 and 20 years. Size 16 requires 6 1/4 yards of 44-inch material. The skirt measures a little over 1 1/2 yards at the foot. Price 10c.

Fasten under the lower shelf of the pantry the frame on which the extra boards of the extension dining table come and slide the boards in. Thus they take up no extra space and are always at hand.—Mrs. J. J. O'C.

This Year's Chicken Crop

By J. A. KAISER

WITH the advance of the season, a marked decrease in the number of young chicks being raised, compared with former years, has become evident in the writer's section. Indeed, this situation exists over large areas, and it seems very probable, over most of Michigan. Conditions in the section under immediate observation are very similar to conditions in the state at large, and hence we have a right to conclude that with slight variations, results are the same.

In an attempt to account for the big falling off in the number of chickens, one factor looms large and may be considered as foremost in producing the situation. This has to do with the scarcity of grain. To get at the root of the matter, the partial failure of the corn crop last year has had a direct bearing on the decrease in the number of this year's chickens. Thousands of farmers found themselves at the end of winter without a bushel of corn. With many the tendency was to cut down the number of hens and to curtail materially the number of young chicks. The writer knows from personal observation, that this has actually been done by a large number of farmers. A few of the wiser ones still possess their flocks in undiminished numbers, and are raising this season, the usual number of chickens. These few are looking into the future. They know that the decrease in the number of chickens must inevitably result in even higher prices than at present. They know, too, that growing crops will in a few short weeks alleviate the grain situation.

But if the falling off in the number of young chicks is noticeable on the farms, it is even more noticeable in the towns, where there have been, of late years, many poultry raisers. For a number of years prior to the entrance of this country into the war, there was a tendency for village and city dwellers to embark in the poultry industry. Some of them went into the business on a large scale, and with fair success.

Thousands of village and city residents were owners of small flocks which produced eggs and chickens for home consumption, and often in addition eggs and chickens for the market. But this year the tendency among these poultry raisers is very decidedly to cut down the flock. In some instances the poultry yard has been emptied entirely of its feathered occupants.

In the case of these town residents, too, the explanation is found largely in the scarcity and high price of grain. Eggs and poultry are high-priced, it is true, but the advance has not been so great as in the price of grains. Taken as a whole, the output from these town poultry yards is very considerable, both in eggs and chickens. They help solve the food problem, even in cases where the flocks are so small that they can provide products only for home consumption.

In the light of the foregoing facts it at once becomes evident that this year's chicken crop will be very short. When farmers and other poultry raisers do not even put their incubators in operation; when steps are taken to reduce the flock of hens already in possession, and when, nearly everywhere, there is an avowed purpose to raise less chickens than formerly, there can be but one result. This situation must mean fewer chickens in the autumn, and fewer eggs next year. That such a program is not in harmony with the regulations for food preparedness, is, of course, evident. The falling off in the chicken industry is a natural consequence of prevailing conditions. In the case of the farmers, at least, the policy of curtailing the flock may be, and probably is, short-sighted. In these days of food shortage the situation is serious enough to be worthy of attention. After four years of war, conditions are such that any time, with a failure of certain crops, we must face a world famine. Certainly it is not wise, in the light of such a possibility, to permit a decrease of production along any line.

Change Hens' Diet for Summer

The poultryman who aims to keep his hens laying their best during the months of June, July and August, should give careful consideration to what he feeds his flock, avers Prof. C. H. Burgess, of the Department of Poultry Husbandry of M. A. C.

"After a hen has laid heavily during the winter and spring," he says, "she should be fed a food richer in protein, for if she does not receive food containing the elements from which eggs are made, she must draw upon the tissues of her own body to furnish egg-making material.

"To make the summer ration five per cent of protein should be added to the spring ration. A moist mash should be fed once a day, the moisture being rubbed into the mash with the hands. Do not stir the moisture in with a stick or spoon.

"Plenty of succulent feeds should also be fed, such as lettuce and sprouted oats. It is often worth while to plant a good patch of Swiss chard for summer feeding, for there is no green food during July, August and September that can compare with this green for coloring the yolk and keeping hens healthy. Besides, if the tops of the chard are cut, it will produce second and third crops of leaves.

A grain ration for June and July can be made up of two parts of shrunken wheat (unmillable) and one part of cracked corn (by weight), and one part of soaked oats (by weight).

"A mash ration can be made up of one part by weight of wheat bran, one part by weight of corn meal, one part

by weight of gluten meal, one and one-fifths part by weight of meat scrap and one part by weight of ground oats. "Feed the mash dry, and once per day feed it moist. Remove the hens and market them as soon as they begin to molt."

CARE OF THE LATE HATCHES.

BY ELA E. ROCKWOOD.

A late hatch in the poultry yard is not usually to be encouraged. However, as such things will occur occasionally it is better to take extra pains to push the little things along as fast as possible to a point where they can take care of themselves for the winter, rather than by neglect cause an unnecessary loss, especially in years like the present. Too often the late-hatched chicks are left to shift for themselves at a season when they can hardly be expected to do so. Plenty of good nourishing food, milk, either sweet or sour, and a good warm coop at night, will cause them to develop very rapidly and hatches even as late as September will pay for raising this year. Since a turkey usually hatches two and even three broods in a season if allowed to do so, it will be found that later on the mortality in the flock will not be so great as during the more unfavorable weather of spring months. Attention must be vigorous as regards lice in the later hatches, as the hotter the weather the more these pests seem to thrive. There is nothing better than the well-known insect powder for this, as it is harmless except to insects.

1898—1908—1918

Three Signal Years in American History

1898—War with Spain! Humanity and liberty brought by America to oppressed Cuba and Philippines, the United States taking its firm place as a world power.

1908—Peace and prosperity! America's battleship fleet, "Ready for a fight or a frolic," as Admiral "Bob" Evans remarked, gone on its 45,000-mile, around-the-world cruise, pointing out to all nations the fact that we had become a power to be reckoned with, and a cruise which European experts said could not be completed. But it was!

1918—America in the Great War, throwing its every energy into the combat to make the world a decent place to live in.

In 1898, TRUMAN H. NEWBERRY, one of the organizers of the Michigan Naval Reserves, served through the Spanish war as a lieutenant on the "Yosemite," which was manned by Michigan's Reserves.

In 1908, TRUMAN H. NEWBERRY prepared the battleship fleet for its famous cruise and from assistant



Truman H. Newberry

secretary became Secretary of the Navy in the Roosevelt cabinet.

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We furnish container for eggs to be sent us and boxes for your chicks. Both sent parcel post.

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

We also sell purebred Barred Rock, White Rock, White Leghorn, Brown Leghorn, Buff Leghorn, White Wyandotte, Rhode Island Red, Black Minorca and Ancona chicks. Lowest Prices. Safe delivery and satisfaction guaranteed. Send for catalog.

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There is still time to raise strong, hearty chickens, if you will send your order now. Orders can be filled in from a week to ten days. Order pure bred free range stock: Barred Rocks; R.C. and S.C. Rhode Island Reds; White Wyandottes; S.C. Black Minorcas; S.C. White and Brown Leghorns; S.C. Anconas. Also eggs for hatching from these breeds.

Will you please send for circular and price list. Pullets and Hens

We have a few S.C. White Leghorn and S.C. Black Minorcas one year old pullets, now laying, that will give eggs thru this summer and next winter and that will make fine breeding stock for next spring. Send for prices in six, twelve, or twenty-five. Black Minorcas Cockerels to mate with the hens.

Eight-weeks old S.C. White Leghorn Pullets and Cockerels in limited numbers. These will be winter layers.

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BARRON ENGLISH 240 EGG

strain White Leghorns. Heavy winter layers. No better Leghorns in laying ability, type, size and very vigorous and hardy. Bred to lay and pay. No SHOW stock. Winners at all laying CONTESTS. 1000 yearling hens for sale at \$1.25 each. Special summer prices. Also 3,000 pullets at \$1.50 each and up, as to age. 1,000 choice breeding cockerels March hatch large vigorous males from 25 egg-bred hens for next year's breeding pens, buy NOW and save money. \$1.25 each special prize if ordered now for Sept. delivery or later. Write us your wants and send for circular. Devries Leghorn Farm & Hatchery, Box 22A, Zeeland, Michigan.

Barred Plymouth Rock eggs for hatching from full blood stock prize-winning strain \$1.50 per 13. J. A. BARNUM, Union City, Mich.

Chicks Chicks Chicks 250000 for 1918

Strong chicks from pure bred farm stock, that are hatched right. Have chicks of utility and exhibition quality. S.C. White and Brown Leghorns, \$10.50 and \$13.00 per 100; Barred Rocks, \$13.00 and \$15.00 per 100; R.C. and S.C. Reds, \$13.75 and \$15.00 per 100; White Wyandottes, \$14.00 and \$16.00 per 100; S.C. Anconas, \$13.00 and \$15.00 per 100; S.C. Black Minorcas, S.C. Buff Orps, and White Rocks, \$18.00 per 100; Odds and Ends, \$10.00 per 100. Guarantee safe arrival. Ship by parcel post prepaid. Free catalog or order direct from this ad. Quick service and quality for the money.

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BABY CHICKS

\$5.50 per 50; \$10 per 100. S. O. White and Brown Leghorns. Bred for egg production. Safe arrival guaranteed. Express or parcel post. Catalogue free. Wolverine Hatchery, Box 222, Zeeland, Mich.

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BUFF Leghorns—All stock and eggs at reduced prices for the remainder of the year. Buy now for next year. Dr. William A. Smith, Petersburg, Mich.

BRED-To-Lay S.O.W. Leghorns and Barred Rocks. Eggs, \$1.25 for 15, \$2 for 25, \$3.50 for 50. ALPINE POULTRY FARM, R. 2, Grand Rapids, Mich.

Chicks from our Bred-to-Lay White Leghorns. Ferris and Young strains \$12 per 100; from our Barred Rocks, Thompson strain, \$15 per 100. RUSSELL POULTRY RANCH, Petersburg, Mich.

Choice Chicks; June and July Brown or heavies at 16c. Also Minorcas, Anconas and Buff Leghorns at 16c. Crescent Egg Company, Allegan, Mich.

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

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

Ferris White Leghorns

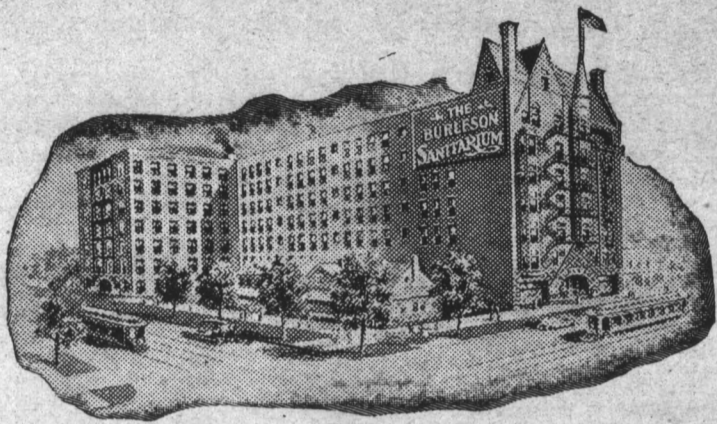
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Additional Poultry Ads on Page 739

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Registered Guernsey heifer born Oct. 1917. Her half sister has record of 479 lbs. fat and nearly 1000 lbs. milk with first calf. Also bull calf eligible to register. Cheap.
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A Few Fine Bulls For Sale

Bigelows Holstein Farms, Breedsville, Mich.

\$50 Liberty Bond gets 1 mo. old grandson of Pontiac Maid 30 1-5 lb. Other granddam sister to grandsire of 42 lb. 4 yr. Herd free tuber. Apr. adv. for females. Terms, M. L. McLaulin, Redford, 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. OLARKE, Vassar, Mich.

Letters from Our Readers

KIND READER:—

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

Sincerely yours,

THE EDITORS.

KEEP TAXES DOWN NOW.

As the editor has kindly offered space to subscribers for discussing questions of interest to those engaged in agriculture, and as excessive taxation is one of the paramount causes for dissatisfaction to the rural dweller, would it not be well to get the attitude and opinion of this class as regards the proposed expenditure at this time of a large appropriation that was made by our last legislature for the purpose of building additional office facilities at Lansing to accommodate the state's business requirements. Eight hundred thousand dollars was roughly estimated at that time to furnish the fund, \$200,000 to be raised annually, but it is now estimated that owing to increased value of material and labor it will cost perhaps \$2,000,000 to complete and furnish the proposed structure. Two annual levies have already been collected and turned into the treasury and at a recent meeting of those appointed to look after the matter the consensus of opinion seemed to be in favor of using the money on hand for the purpose of starting the work in the near future, and depending on the next legislature to make additional appropriations to complete the work regardless of cost. It appears that the \$400,000 that has been collected could be turned in to the general fund and used for other purposes. Now, the question is, do the taxpayers propose to look on with indifference and allow themselves to be mulcted in this way. At a time when farmers are compelled to let all improvements go for the purpose of getting the mere necessities of life and meeting expenses that cannot wait, it would seem that this would be a good time for our farm papers to get busy and start something that would be greatly appreciated by the already overburdened taxpayers of the state of Michigan.—J. B.

FARMERS NEED RECREATION.

I was glad to notice that our Michigan Farmer had given a page of its paper to complaints and to the betterment of its farm friends. I read all the articles with a great deal of interest but was especially interested in the article written by F. D., of Galien, for the reason that this has been my own experience in farming. In A. G.'s article he says that many people think the farmer is getting rich because he has bought an automobile. Let me say that here is one of the main drawbacks in farming, and that is recreation. The farmer labors faithfully combating the elements, insects and drawbacks of every description and has but very little or no recreation, and so turns to the automobile and pays a profit of from two hundred to three hundred per cent to get it. I have read that big manufacturers do not think it worth while to risk their money unless they can clear at least twenty-five per cent, and many at the present time are making enormous profits on huge war contracts. I have often wondered what kind of a noise we would hear from our city consumer if the farmer was guaranteed a profit of twenty-five per cent on his investment. Of course, the farm products are high at present, and the farmer is handling a lot of money, but what good does it do him when most of the farm supplies he has to

buy have doubled and some trebled in price.

I notice by the Michigan Farmer that the farmers at Greenville are receiving from fifty to sixty cents per hundred for their potatoes, while at Detroit the same potatoes are selling at from \$1.10 to \$1.16 per hundred. The Food Administration seems to think this is only a just profit for the middleman and the railroads, but what puzzles me is if this is just, where does the man that raises them get off at? We pay our groceryman eight cents per pound for rolled oats, or \$2.56 per bushel, and besides, the manufacturer turns the oat hulls into feed at a still greater profit, and the highest price paid farmers for oats at this point at any time this year is ninety cents. We keep a farm book every year and try to keep in touch with where we're at, but, like F. D., we find it's enough to drive a Jew peddler to insanity to try and make both ends come out even and keep our credit with our banker and dealer good, and we have not ventured to buy an automobile yet, taking our turn at milking the cows night and morning and then finishing up a few odd jobs that have been left over during the day, after a hard day's work, for our recreation.

Now, I hear someone say, "he is trying to burn the candle at both ends; but with help scarce and your credit constantly in mind, what are you going to do about it, especially when you have no other help on the farm. However, the solution A. S. offers sounds good to me and I hope to read the opinion of many others through the Michigan Farmer.—E. J. Stewart, Owosso, Mich.

EARLY PRAISE FOR THE FARMER.

In browsing around recently at the state library in the Capitol at Lansing, we came across a book entitled "Transactions of the Michigan State Agricultural Society in 1849." This society was organized at Lansing on March 17 of that year, and its first president was Governor Epaphroditus Ransom, of Kalamazoo.

Joseph R. Williams gave an address before the agricultural society of Kalamazoo county on October 11, 1849, in which we find the following paragraph: "The prejudice against book farming is still strong. If you study the book in order to find how many experiments you can try, how many novelties you can run after, the book is for you a bad guide. If you seek its counsel to save you from error, and aid your inquiries, it is invaluable. I venture to say that few men have taken an agricultural paper for a single year and read it, without saving by its suggestions from six to ten times its cost. A mere recipe from the Michigan Farmer will often save your wife five times the value of the paper in a year. A virulent disease attacks your sheep or cattle or fruit trees and you turn over the index of your Farmer and find all the known remedies described."

ALMOND GRIFFIN.

Carry a few tools to the field each day and save trips to the barn.

Missed the Paper.

"I greatly appreciated your magazine while taking it and did miss it very much after my subscription expired, but just neglected to renew. Enclosed you will find one dollar for subscription."—J. P. P., Sherwood, Mich.

FLANDERS FARMS DISPERSION SALE

65 Head Holsteins, Orchard Lake, Mich., June 26, 1918

Never before in the history of Holsteins has a herd of the quality of Flanders Farms Herd been offered for sale in the state of Michigan. The breeding is AAA1 and there is not a poor individual in the sale. The only cripple in the herd has been sold for beef. Don't come to this sale looking for a lot of culls. You won't find them at Flanders Farms. Mr. W. E. Flanders, the owner, has long been known in the automobile world as the builder of the best. He would have nothing to do with anything that was cheap or of inferior quality. The same is true with regard to his herd of Holsteins. "Nothing but the Best" has been his motto in building up his herd and "Nothing but the Best" is what you will have an opportunity to buy at this sale.

The entire herd of sixty-five will be sold including: Three thirty pound cows in calf to King of the Pontiacs Segis. Six daughters of thirty pounds cows. A twenty-nine pound three-year-old together with her twin bulls and yearling daughter sired by King of the Pontiacs Segis. All but two that have freshened have A. R. O. records. Forty are from A. R. O. dams. Twenty daughters and a dozen sons of King of the Pontiacs Segis. Every one of breeding age in calf to King of the Pontiacs Segis. The entire herd has been under Federal Inspection and every animal over six months of age will be **GUARANTEED FREE FROM TUBERCULOSIS FOR SIXTY DAYS.**

If You Want Good Holsteins Attend This Sale

For Catalog Write to

Flanders Farms
Orchard Lake, Mich.

or

Liverpool Sale & Pedigree Co.
Liverpool, N. Y.

CATTLE

Stonyhurst Stock Farm

Has a few fine bulls for sale. Are offering one this week from a 21.75 lb. Jr. 4 and sired by Pet Johanna Sir Hartog whose daughters are just coming fresh, one at 2 1/2 years has a 25 lbs. record. This youngster is 3 mos. old finely marked, straight and weighs 350 lbs. his full sister has just made at 1 year 11 mos. 17.64 of butter, 456.5 milk 7 day. Priced Cheap.

The Pontiac Herd

"Where the Champions come from"
Offer Bull Calves sired by sons of Pontiac Koradyke, Hengerveld DeKoi, Pontiac Dutchland, or Admiral Walker Fistorfje.
Do you want a Pontiac in your herd?
Pontiac State Hospital, Pontiac, Mich.

HOMESTEAD FARMS

A Federation of Interests
Holsteins--A herd of high class Holsteins; Young Bulls, Calves, Bred Heifers and cows.
Will you write to us for full description and photographs?
HOMESTEAD FARMS, Bloomingdale, Mich.


The Traverse Herd

Great Values In Bulls
from A. R. O. Cows with records up to 30 lbs. Let us know your wants. We will send extended pedigrees and prices.
TRAVERSE CITY STATE HOSPITAL, Traverse City, Michigan.

Want Yearly Records?

Our new sire has four sisters whose semi-official records are 577, 742, 913 and 946 pounds of butter in one year respectively at 2 to 3 years of age. His dam is a daughter of Friend Hengerveld De Koi Butter Boy, four of whose daughters have records over 1000 pounds and she is also a granddaughter of Pontiac Aaggie Koradyke, with six daughters above 1000 pounds of butter in one year.
Peaceland Stock Farm, Three Rivers, Mich.
C. L. Brody, Owner Charles Peters, Herdsman

Purebred HOLSTEINS
are the most profitable cows on earth. They yield most milk, most butter-fat, most profits. Booklets free
The Holstein-Friesian Association of America, Box 104, Gratiot, Mich.



Holstein bull, nearly ready for service, large straight H deepbodied, handsomely marked 3/4 white. His six nearest dams have A. R. O. records that average butter 7 days 24.13 milk 634 lbs. W. B. Reader, Howell, Mich.

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

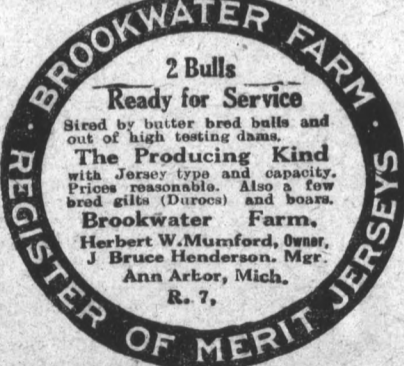
Holstein calves, 25 heifers, & 2 bulls 15-16ths pure, 5 weeks old, beautifully marked, \$25 each, crated for shipment anywhere. Buy only the best. EDGEWOOD FARMS, Whitewater, Wis.

HEREFORDS

6 bull calves for sale, Perfection Fairfax and Prince Donald breeding.
ALLEN BROS., PAW PAW, MICH.

Herefords Bob Fairfax 494027 at head all ages either polled or horned. EARL C. McCARTY, Sec'y Mich. H. B. Ass'n, Bad Axe, Mich.

BROOKWATER FARM
2 Bulls Ready for Service
Sired by butter bred bulls and out of high testing dams.
The Producing Kind with Jersey type and capacity. Prices reasonable. Also a few bred gilts (Durocs) and boars.
Brookwater Farm, Herbert W. Mumford, Owner, J. Bruce Henderson, Mgr. Ann Arbor, Mich. R. 7.



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

Maple Lane R. of M. Jersey Herd. For sale one four-year-old cow, also bull calves and heifer calves sired by a grandson of the Poggis 99th of Hood Farm.
IRVIN FOX, R. 3, Allegan, Mich.

For Sale Jersey bull Goldie's Foxhall No. 161935. Dropped March 22, 1917. Solid color, black tongue & switch. A fine individual large of his age, will sell cheap. Also a young cow & several bred heifers, all of solid color.
NEWMAN'S STOCK FARM, R. 1, Marlette, Mich.

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

JERSEY bull and bull calves for sale from R. of M. Cows, also heifers and cows of all ages.
O. S. WEHNER, R. 6, Allegan, Mich.
Little Farmstead Jersey Cattle. Several heifers bred Lto freshen next fall. Also a few heifer and bull calves of choice breeding. Colon O. Little, Coopersville, Mich.

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

Year Old Jersey Bull. Ready for service. High livered \$40. Send for photograph. JAYNE HILL FARMS, Fenton, Mich.

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

Shorthorns--Scotch and Scotch Topped animals of both sex for sale. Prices reasonable. GEO. D. DOSTER, Doster, Mich.

BIDWELL SHORTHORNS

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

Richland Farms Shorthorns

IMP. Lorne in service. Grand Champion Shorthorn Bull of Mich. We offer for sale a choice collection of young bulls by some of the leading sires of the breed. You cannot afford not to own one of these bulls at the prices we are asking for them. We invite correspondence and inspection.
G. H. PRESCOTT & SONS, Farms at Prescott, Mich. Office at Tawas, City, Mich.

Francisco Farm Shorthorns We maintain one of Michigan's good herds of Scotch and Scotch Topped cattle. They are well bred, properly handled and price reasonable. Come and see; we like to show them.
P. P. POPE, Mt. Pleasant, Mich.

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

Shorthorns Maxwellton Monarch 2nd, 387322 half brother to 5 Grand Champions in service.
JOHN SCHMIDT, R. 5, Reed City, Mich.

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

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

Shorthorns--Sired by a grandson of Cyrus OOLAR BROS., R. 2, Conklin, Mich.

Dairybred Shorthorns of best Bates Strains, young stock of both sexes for sale.
J. B. HUMMEL, Mason, Mich.
Maple Wood Shorthorns--Two promising bull calves, roans and of best milking strain.
Harter & Easton, Jenison, Mich.

SHORTHORNS
Cows, heifers & young bulls for sale at farmers prices; herd catalog mailed free. Horrieton Farms, Hart, Mich.
Shorthorn Cattle of both Sex for Sale
W. W. KNAPP, Howell, Michigan.

For Sale Shorthorns of Quality Scotch and Scotch Topped descendants of Archer's Hope, Avondale, Maxwellton Sulton and White Hall Sulton by the Oscola Co. Shorthorn Breeders Ass. JOHN SCHMIDT, Sec. Reed City, Mich.

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

Cattle For Sale 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 Shanstun, Fairfield, Iowa, R-4

Roan Bull Calf For Sale, 8 months old.
J. E. Tanswell, Mason, Mich.

2 Bulls Ready for Service At Farmers' prices.
Long Beach Farm, Augusta, Michigan

HOGS

FAIRMAN FARMS PLYMOUTH, MICH.

BERKSHIRES SPRING PIGS

Gladstone--Majestic--Dukes
Successor breeding

Only a Few Left For Sale

Big Growly Berkshire Pigs. Both sexes, large prolific strain.
W. H. Every, Manchester, Mich.

DUROCS Orion Chief Perfection No. 68945, and Jennings Plot Wonder No. 73373. Two outstanding boars of big type and excellent quality. All selected large type smooth sows. Thrifty, smooth, large boned spring gilts from these herd boars and choice sows at very reasonable prices. The Jennings Farms, Bailey, Mich.

50 Duroc Sows and Gilts for fall farrowing, bred to Orion's Fancy King 8387 the biggest pig of his age ever sho at a International. 1 mile N. E. of town. Visitors welcome 7 days in week. Newton Barnhart, St. Johns, Mich.

Duroc Jerseys For Sale Herd boar and spring pigs. Write Wells Parish and Sons, R. 3, West Olive, Mich.

DUROC JERSEYS
E. D. HEYDENBERK, Wayland, Mich.
Duroc fall boars sired by Grimson Critic T. Satisfaction and Brookwater Principal, priced right. Bred sows all sold.
M. C. TAYLOR, Milan, Mich.

Choice Duroc Jersey Gilts For Sale.
CAREY U. EDMONDS, Hastings, Mich.
Additional Stock Ads. on Page 739



SECOND EDITION.

The markets in this edition were revised and corrected on Thursday afternoon, June 13.

WHEAT.

The very small stocks of wheat are being still further depleted by exportations and domestic consumption. Relief is now in sight, however, in that harvesting the 1918 crop has already begun in the southwest. Over a considerable portion of the winter wheat states the crop is good. The present condition of the crop is three per cent above the ten-year average condition for June 1, according to the federal crop estimates which places the prospective winter wheat crop at 587,000,000 bushels. In the northern states the damage from winter-killing was much greater than in the central and southwestern districts. A year ago wheat was worth \$2.95 for No. 2 red on the Detroit market. Present quotations here are:

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

CORN.

Prospects for an early resumption of exporting grain to Europe has given strength to the corn deal, and prices showed improvement early this week. The new crop is in excellent condition, although growth has been somewhat retarded by the recent cool weather. The acreage, however, is large and the stand is declared to be the best in many years. All corn meal and corn flour held in the east by jobbers has been taken over by the government. Farmers are too busy to deliver the grain to country elevators, and stocks are being reduced as a result. A year ago No. 3 corn brought \$1.74 on the Detroit market. Latest quotations are:

- No. 3 corn\$1.45
- No. 3 yellow 1.55
- No. 4 yellow 1.45
- No. 5 yellow 1.30
- No. 6 yellow 1.20

OATS.

The holding back of oats by dealers resulted in an up turn in values early this week, notwithstanding the ideal condition of the new crop. Eastern dealers are also making inquiry for the grain, while local buying for domestic consumption is gaining in activity. Export demand is also having its effect upon this deal. The visible supply of oats diminished 2,280,000 bu. during the past week. One year ago standard oats were quoted on the local market at 70c per bushel. The latest quotations here are:

- Standard79½
- No. 3 white79
- No. 4 white78

RYE.

A slightly firmer tone has resulted from inquiries for this grain; cash No. 2 now being quoted at \$1.95 per bu.

BEANS.

Stocks of beans have been added to this past week through the liberal selling by growers. The outlet remains inadequate to clear the trade and give offerings a free movement. Prices are unchanged. On the local market cash beans are quoted steady at \$10 per cwt. At Chicago prices are ruling easy at recent declines. Quotations there are:

- Mich. pea beans, h. p....\$10.00@11.00
- Red kidneys 9.50@11.50
- Brown Swedish 8.50 9.00

HAY.

Offerings are increasing and market is dull and weak owing to an indifferent demand. Present Detroit quotations are:

- No. 1 timothy ...\$19.00@19.50
- Standard 18.00@18.50
- Light mixed 18.00@18.50
- No. 2 timothy.... 17.00@17.50
- No. 1 clover 12.00@13.00

POTATOES.

Michigan potatoes have made advances in nearly all the leading markets. This state continues to be the largest shipper of old potatoes. The supplies do not appear to have been as large as were figured a month or more ago. The condition and prices per cwt. for U. S. Grade No. 1 prevailing at various important market centers as reported by the local office of the United States Bureau of Markets are as follows for sacked stock:

- Detroit (stronger)\$1.50@1.67
- Cleveland (stronger) .. 1.60@1.65
- Buffalo (stronger) 1.75
- Philadelphia (steady) .. 1.50@1.65
- New York (fair) 1.75@1.90
- Pittsburgh (variable) .. 1.80@1.90
- Cincinnati (stronger) .. 1.75
- Columbus (strong) 1.50@1.60
- Indianapolis (stronger) 2.00@2.10
- Chicago (stronger) 1.90@2.00

BUTTER.

Not a great deal of change is noted in the butter market since a week ago. Last week's receipts, however, were larger at a majority of the terminals than for the previous week, and slightly in excess of the receipts for the corresponding period a year ago. Buying for domestic consumption and for military requirements is very liberal, and the high values resulting from this outlet is keeping storage men from putting away much of the product. The Detroit market is firm with the fresh creamery extras quoted at 41½c and do firsts at 40½c. Higher market prevails in Chicago, with the creamery range at 35@42c. In New York the trade is higher with creameries bringing 42@45c. At Philadelphia western creamery stocks are up to 49c.

CHEESE.

Cheese prices show some gain during the past week. The liberal consumption of this product is one big factor in maintaining a strong market at a season when the production is normally large. Prices at primary cheese markets range from 21@22½c for flats and daisies, while Young Americas bring 22¼@25c. At Detroit flats are selling to jobbers at 21@24c for new offerings; Daisies bring 22½c, and limburger 21@22c. New York reports a firm trade, with whole milk flats at 23½@23¾c for fresh special, and do average run at 23@23¼c. The Philadelphia trade continues firm with full creams at 22@25c for old and 22@24c for new.

EGGS.

While values are steady with those of last week, the situation of this trade is such that dealers are expecting the prices to go higher. At Detroit current receipts from the state are jobbing at 33½c and firsts in new cases 34c. In New York with a firm market reported fresh gathered extras bring 38@39c; do storage packed 36½@37½c, and firsts 34@36c. Philadelphia trade holds firm, with western extra firsts bringing \$11.40 per case. The Chicago market rules steady with firsts at 30@32c; ordinary firsts at 28@30c; at mark, cases included 29@31c.

DETROIT CITY MARKET

The offerings on the city markets these days is made up almost entirely of truck crops. The markets, however, are being liberally patronized. Radishes bring \$1 per bu; potatoes 85c; ordinary lettuce 25@35c; head lettuce \$1.20@1.25; strawberries \$6.75@9 per case; eggs 45c; hay \$23@25 per ton.

GRAND RAPIDS

This week and next will be strawberry time for the home-grown and a fair crop is promised, the yield depending on weather conditions. Berry prices on Monday's market ranged from \$2.75@3.50 per crate, but will very likely go lower with increased offerings. First home-grown peas started at \$4@4.50 per bushel. Pieplant has held up remarkably well, due to cold-pack canning in the homes. The few old potatoes offered sell at 60@70c. Hay is worth \$20@21.

LIVE STOCK
DETROIT

Thursday, June 13, 1918.

- Market steady.
- Cattle.**
- Best heavy steers.....\$15.50@17.00
 - Best hdy wt bu str (grs) 13.25@13.75
 - Mixed str and hfrs (grs) 10.50@11.75
 - Handy lt butchers (grass) 9.50@10.00
 - Light butchers (grass).... 8.50@ 9.00
 - Best cows (dry-fed)..... 11.00@11.50
 - Butcher cows (grass).... 8.50@ 9.00
 - Cutters 7.50@ 8.00
 - Canners 7.00@ 7.25
 - Best heavy bulls 11.00@11.75
 - Bologna bulls 9.00@ 9.75
 - Stock bulls 8.00@ 8.75
 - Stockers 7.50@ 9.50
 - Milkers and springers.. \$65@ 100

Veal Calves.

- Market rules steady.
- Best grades\$16.00@16.50
 - Others 10.00@15.50
- Sheep and Lambs**
- Market steady; quality common.
- Best lambs\$ 17.00
 - Fair lambs 15.00@16.00
 - Light to common 10.00@13.00
 - Fair to good sheep..... 10.00@13.00
 - Culls and common 7.00@ 8.25

- Hogs.**
- Prices are lower than last week.
- Pigs\$ 17.00
 - Mixed 16.25@16.40

CHICAGO.

Thursday, June 13, 1918.

Cattle.

Estimated receipts 13,000. Fed cattle steady to strong, butcher stock and bulls steady to lower. Good choice prime steers \$16.50@17.90; common medium butchers \$12.75@16.60; heifers \$8.50@15.50; cows \$8.50@15; bologna bulls \$9@14; canners and cutters \$7.27@8.25.

Hogs.

Estimated receipts 34,000. Market 5@10c lower. Tops \$16.65; bulk of sales at \$16.35@16.65; heavy \$16.30@16.40; mixed and lights \$16.40@16.50; packers' hogs \$15.80@16.15; medium and mixed \$16.15@16.25; light bacon \$16.45@16.55; pigs, good to choice at \$16.25@16.60; roughs \$15.40@15.75.

Sheep and Lambs.

Estimated receipts 9,000. Market opened strong and is becoming stronger. Good spring lambs selling at \$20.50; others \$17.60@18; common lambs at \$16@17.50.

Wednesday, June 12, 1918.

Cattle.

This week sees a higher cattle market than was ever witnessed before in the history of the trade, with steers selling today largely at \$15@17.50, the estimated day's receipts being only 7,000 head. The advance in prices for the first half of the week is fully 25@50c, with two cars of 1,450-lb. steers from Nebraska selling yesterday to a New York firm at \$17.95, or five cents higher than the previous high record established last September. The same firm bought some 1,002-lb. yearlings at \$17.60, the highest on record for the weight. A single steer sold the other day at \$18, and two head in different loads sold today at \$18.25. The commoner class of light steers sell at \$12.75@14.75, with a good class at \$16.75 and over and no steers with much weight going as low as \$17. Fat cows and heifers sell at \$8.40@15.75, canner and cutter cows at \$7.25@8.35, bulls at \$9@13.50, stockers and feeders at \$9@13.85 and calves at \$9@16.

Hogs.

Hogs are being marketed sparingly, only about 7,000 head arriving today, comparing with 34,000 yesterday. For all that, prices are a little lower today. Hogs bringing \$15.30@16.15 for heavy packing lots to \$16.50@16.75 for the best light butchers. Pigs are selling mostly at \$15.25@16.75, choice feeders going at the highest prices. Sharp declines in hog prices east and west have been largely responsible for the recent breaks here. Receipts of hogs in the eleven principal markets for this year have passed the 15,000,000 mark and are the largest on record for that period, being about 1,700,000 head larger than for the same time last year.

Spring and Clipped Lambs.

Only about 8,000 lambs and sheep arrived here today and prices were well maintained for desirable offerings, with prices for prime lots about nominal in the absence of offerings. Ewes are quotable at \$7.50@14.50; wethers at \$12.75@15; yearlings at \$13@16; lambs \$12.50@18; spring lambs \$13.50@20.50, a sale being made of six cars of California thin lambs at \$14.25 for feeding purposes.

BUFFALO.

Thursday, June 13, 1918.

Pigs sold here this morning from \$17.40@17.50; other grades of hogs at \$17.25@17.35; lambs brought \$18, and calves \$18. Cattle are steady.

Wednesday, June 12, 1918.

Cattle.

Receipts today two cars. Market steady.

Prime heavy steers.....\$17.50@18.15

- Best shipping steers 16.50@17.50
- Plain and coarse 14.00@15.00
- Native yearlings 16.00@16.50
- Best handy steers 15.00@16.00
- Fair to good kinds 13.50@14.50
- Western heifers 14.00@15.00
- Handy str and hfrs mixd 12.50@13.00
- Best fat cows 12.00@13.00
- Butcher cows 9.50@10.50

Calves.

Market rules strong at the following prices:

- Tops\$ 17.25
- Fed calves 7.00@ 8.50

Sheep and Lambs.

Receipts two cars. Market steady.

- Top lambs\$ 18.75
- Yearlings 15.00@16.00
- Wethers 14.50@15.00
- Ewes 12.50@14.00

Hogs.

Receipts 15 cars. Market has declined since last week.

- Yorkers\$17.25@17.35
- Pigs 17.25@17.35

WOOL

A conference held in New York last week between manufacturers of woolen goods and government officials resulted in an announcement indicating that about 34 per cent reduction in the consumption of woolen goods by civilians would be necessary this coming year. Fifty-four per cent of all the wools will go to spinners of yarns for military cloth. As stated in these columns in previous issues, the price to be paid growers is the seaboard price prevailing July 30, 1917.

HAPPENINGS OF THE WEEK.

(Continued from page 718).

and Noyon the French wings are holding firm, although the enemy has advanced two and one-half miles at the center.—Americans stop an assault on the Marne front, while the Allies repel an attack at Rheims.—President Wilson is being urged to cooperate with the other Allies in an effort to save Siberia to the entente cause.—Germany now has full control of the armies of Finland.—Aerial postal service has been established between London and Paris.—A new star, the brightest discovered in several centuries, is detected by Prof. Oliver, of the University of Virginia.

Tuesday, June ...

The German attack between Noyon and Montdidier appears to be breaking down before strongly fortified allied lines.—Casualties from British hospitals bombed by German aviators number 991.—The Soviet government of Russia is reported as preparing a draft measure to raise troops for opposing the Germans.—Sentences of 25 years in prison have been imposed by a court-martial upon forty-five conscientious objectors from Oklahoma who had refused to wear army uniforms.

MID-SUMMER SHORTHORN SALE.

(Continued from page 739).

Consigned by C. Carlson, Leroy, Mich.:

- Dale's Sultan, 654072, J. M. Heck, \$150.
- Fairview Sultan, 516338, Mr. Clark, \$205.
- Lass' Sultan, 654076, F. Perkins \$245.
- Pocohontas' Prince, 654078, B. Parks, \$115.

Consigned by M. P. Cook, of Flint, Mich.:

- Dan Lee, Genesee County Farm \$145.
- Butter Boy, 555218, Horace Scott, \$130.

Consigned by C. J. Deter, Webberville, Mich.:

- Garnet Sultan, 479016, Mr. Wolcott, \$180.

Consigned by R. C. Spaulding, Fenton, Mich.:

- Maple Grove Lad, 649130, G. J. Wright, \$75.
- Red Jacket, 609560, B. Parks, \$135.

A BOOK FOR LIVE STOCK MEN.

An album and history of last year's International Show at Chicago is now ready for distribution. This thoroughly illustrated and well-bound book will make an interesting and attractive volume for the library of any live stock man. Copies can be obtained at fifty cents each by writing the International Live Stock Exposition, Union Stock Yards, Chicago.


Mid-Summer Shorthorn Sale

The Mid-summer Shorthorn Sale held at Flint under the auspices of the Michigan Shorthorn Breeders' Association, as noted in the last issue, was well attended and the offerings were well distributed in the state, where they will continue to benefit the Michigan Shorthorn industry. The following is a list of the sales:

Females.

Consigned by M. P. Cook, of Flint, Mich.:
 Zenna, L. P. Otto, \$245.
 Primrose of Vienna, 40032, George Doster, \$140.
 Queen Mary, 40033, R. E. Potter, \$250.
 Consigned by John A. Anderson, of Clio, Mich.:
 Maude of Clio Fifth, 490243, E. C. Towne, \$240.
 Maude of Clio Ninth, 544386, O. M. York, \$180.
 Star of Clio, 544387, Arthur Cross, \$200.
 Consigned by W. F. Brickley & Son, Ionia, Mich.:
 Orange Beauty, 246058, A. L. Pant, \$250.
 Consigned by C. Carlson, of Leroy, Mich.:
 Princess Sharon 2nd, Mr. Hanson, \$180.
 Rose Sharon, J. E. Burroughs, \$240.
 White Girl, Mr. Hanson, \$130.
 Consigned by C. J. Deter, Webberville, Mich.:
 Baroness Hudson A 3rd, 618376, R. Johnson, \$175.
 Roan Beauty, 220851, B. Strong, \$245.
 Consigned by B. D. Kelley & Son, Ypsilanti, Mich.:
 Burr Oak Violet, 583465, M. J. Shear, \$160.
 Fancy Lady, 230049, F. J. Flower, \$180.
 Consigned by L. C. Kelley, Plymouth, Mich.:
 May Belle, 63977, L. C. Becker, \$300.
 Consigned by John Lessiter's Sons, Clarkston, Mich.:
 Albina, 618346, J. F. McClausen, \$295.
 Sally Sultana, 511913, W. J. Bell, \$505.
 Consigned by Michigan Agricultural College, East Lansing, Mich.:
 College Rosebud 3rd, 539642, A. L. Pant, \$230.
 College Melody, 539641, George Doster, \$155.
 Consigned by F. S. Postal Estate, Evart, Mich.:
 Buchan Fancy 24th, 498901, W. J. Bell, \$430.
 Mina May 3rd, 498927, W. J. Bell, \$300.
 Ury's Queen, 498941, W. J. Bell, \$600.
 Consigned by E. D. Rice, Flint, Mich.:
 Donna Victoria, 610712, E. S. Bristol, \$135.
 Lena 2nd, 215063, S. J. Flower, \$180.
 Madeline 2nd, 215065, E. S. Bristol, \$140.
 Rebecca 5th, 223899, W. J. Bell, \$220.
 Virginia Girl, 544946, J. E. Burroughs, \$175.
 Consigned by John Schmidt, Reed City, Mich.:
 Bell Robin 5th, 466544, Albert Johnson, \$260.
 Monarch's Bell, 588503, F. J. Flower, \$150.
 Consigned by T. M. Southworth & Sons, Allen, Mich.:
 Alexandrina 8th, 69705, L. P. Otto, \$300.
 Consigned by Michael Wagner, Fremont, Ohio:
 Eureka May, 542427, F. Edwards, \$250.
 Julia S, 236197, Mr. Strong, \$500.
 Bess B, 44601, A. L. Pant, \$410.
 Roan Nonpareil, 571261, F. Edwards, \$250.
 Queen, 208665, F. S. Postal, \$240.
Bulls.
 Consigned by O. A. Hoopingarner, Bronson, Mich.:
 Silver Thread, 619696, W. J. Leese, \$250.
 The Guard, 507461, Mr. Clark, \$210.
 Consigned by E. V. & W. J. Hosley, Howell, Mich.:
 Red King, Mr. Stimson, \$135.
 Roan King 8th, W. W. Knapp, \$90.
 Consigned by J. G. Hughes, Howell, Mich.:
 Diamond Archer, H. J. Mier & Son, \$100.
 Snowstorm, 435079, A. L. Pant, \$240.
 Consigned by John Lessiter's Sons, Clarksville, Mich.:
 Baron Victor, 618340, W. J. Bell, \$155.
 Harold, 618342, John Southworth, \$200.
 Consigned by Michigan Agricultural College, Lansing, Mich.:
 Choice Mysie, Wm. Claxton, \$190.
 Ingham Lad, E. F. Howe, \$105.
 Consigned by Theodore Nickles, of Metamora, Mich.:

Water Lily Monarch, 616990, Fred Carter, \$200.
 Consigned by L. D. Otto, Charlotte, Mich.:
 Kilwinning Star, 593275, Robert Parks, \$185.
 Missie Royal, 620933, Mr. Parkhurst, \$305.
 Consigned by F. S. Postal Estate, Evart, Mich.:
 Springhill Red, 622391, Wm. Kester, \$125.
 Consigned by E. D. Rice, Flint, Mich.:
 Osceola Gloster, 610710, W. J. Bell, \$100.
 Osceola King, 610711, G. A. Johnson, \$95.
 Consigned by E. B. Salisbury, Shepherd, Mich.:
 White Hope, 605168, Mr. Dexter, \$135.
 Consigned by John Schmidt, Reed City, Mich.:
 Lady Belle's Monarch, 588495, W. J. Bell, \$105.
 Northern Monarch 3rd, 612573, Chas. White, \$115.
 Consigned by Adams Bros., Litchfield, Mich.:
 Village Master 2nd, 603850, E. S. Bristol, \$130.
 Consigned by W. S. Adams, Litchfield, Mich.:
 Village Master 2nd, 669482, C. A. Bassett, \$95.
 Consigned by Albee & Hawley, Durand, Mich.:
 Famous Sultan, 670703, Mr. Stewart, \$90.
 Harry's Boy, 670704, Mr. Hanson, \$100.
 Consigned by John A. Anderson, Clio, Mich.:
 Genesee Chief 2nd, 655210, S. & C. Irwin, \$105.
 Prince of Clio 3rd, 655211, J. Ford, \$130.
 Red Robin, 665213, J. Berlin, \$105.
 Consigned by W. J. Baird, DeWitt, Mich.:
 Beaufort, 665525, Alfred Lohcock, \$45.
 Clinton's Best, 633909, E. B. Faust, \$105.
 Consigned by W. F. Brickley & Son, Ionia, Mich.:
 Snow Boy, 595059, Mr. Spaulding, \$125.
 (Continued on preceding page).



Put a silo on your farm — a milker in your barn.

Everywhere farmers are using silage to cut down high feeding costs. Thousands of milkers are being put into service to reduce labor on the farm. Join the McClure army of feed and labor savers. Erect a Saginaw or Liberty Silo. Install a McClure Milker. Write today for silo and milker information. Address Dept. 270.

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The wise man will keep his car locked or placed in a garage, also, take automobile insurance in the **CITIZENS' MUTUAL AUTOMOBILE INSURANCE COMPANY**, of Howell, Michigan.

The Company started before the war; became thoroughly organized with a large membership before the raise in the price of automobiles and repairs and labor.

The Company owns its own office building; has a large amount of equipment, and is a strong organization.

It has paid over 875 claims promptly and has created a reserve fund of about \$70,000 with a membership of over 32,000 of careful automobile owners selected outside of the large cities. The rates are very low in comparison with stock rates. That is the reason about five hundred new members are joining each week.

Cost only \$1.00 for policy and twenty-five cents per H. P.

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

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

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

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Day Old Chicks. Prepaid Delivery Parcel post or express. Will hatch every week. \$12 per 100. Guaranteed delivery. Prices prepaid.

Everfresh Egg Farm, Ionia, Michigan
 Mammoth Pekin Ducks from best stock in America. M Eggs \$1.50 per 11. Rose Comb Brown Leghorns from Madison Square and Mich. & Ohio Fair winners. Eggs \$1.50 per 15. Mrs. Claudia Betts, Hillsdale, Mich.

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

RHODE ISLAND REDS and Plymouth Rocks Males 11.5 to 12 lbs. according to age \$3 to \$8; P. B. hens weight 5 to 10 lbs., eggs 15 for \$1.50; 100; \$8; Mammoth Bronze Tom Turkeys 8 to 10 lbs. according to age \$6 to \$25, 10 eggs \$4. J. Morris & J. Barsan, Vassar, Mich.

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

SILVER Spangled Hamburg eggs \$7 per hundred; \$1.75 per setting balance of season. White Holland Turkey eggs \$1 per 12. RIVERVIEW FARM, Vassar, Mich.

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

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


Single Comb Black Minorca eggs \$1.50 per setting this month, two settings \$2.50. R. W. MILLS, Saline, Mich.

SPECIAL 30 eggs \$2.25 R. I. Reds, Rose or Single Comb. INTERLAKES FARM, Lawrence, Mich.

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

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DUROCS service boars, bred sows, fall pigs. Express paid. J. H. BANGHART, E. Lansing, Mich.
Duroc Jerseys for sale. Service boars & spring pigs also Shorthorn bulls, calves, milking Straits. CHAS. BRAY, Okemos, Mich.
Duroc Jersey's—Fall boars of the large heavy boned type. Gilts bred to Junior Champion boar for June farrow, also Spring pigs pairs not akin. F. J. DRODT, R. 1, Monroe, Mich.

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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

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O. I. C.'s 7 last fall gilts bred for next fall farrow. Also this spring's pigs from 3 sires, good stock. Otto B. Schulze, Nashville, Mich., 1/4 mile west of Depot, Citizen's phone 124.

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

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

O. I. C.'s Large type, spring pigs bred from State Clover Leaf Stock Farm, R. 1, Monroe, Mich.

O. I. C. Spring Pigs, big heavy boned fellows lbs. and bred gilts. F. C. Burgess, R. 3, Mason, Mich.

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

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

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

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

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

Large Type P. C.
 Bred gilts and boars all sold nothing to offer at present. W. E. LIVINGSTON, Parma, Mich.

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

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

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

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

L. S. P. C. all sold out, except the largest gilt raised last year, bred for June farrow. R. O. SWARTZ, Schoolcraft, Mich.

Hampshire Pigs only for sale now, a bargain in boar pigs. JOHN W. SNYDER, R. 4, St. Johns, Mich.

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

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

J. M. Hicks & Son, R. 2, Williamston, Mich.

FOR SALE Two Percheron stallions; two Percheron mares also reg. Shorthorn bull 9 months old. E. J. ALDRICH, Tekonsha, Mich.

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

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KOPE-KON FARMS. Coldwater, Mich.
Hampshires & Shropshires. It's a wise man who orders his ram for August delivery now.
About July 1 we will offer for sale choice Shropshire Rams. ARMSTRONG BROS., R. 3, Fowlerville, Mich.
Some Good Breeding Ewes and registered RAMS for sale. Barnard Sheep Ranch, R. 5, Clare, Mich.

National War Savings Day June 28th

That's the day we sign up.

That's the day we tell Uncle Sam just how hard we want to win this war. That's the day our government has officially set for us to purchase War Savings Stamps.

On June 28th every man, woman and child in the United States will be called upon to pledge his or her full quota of War Savings Stamp purchases for 1918.

You will be expected to pledge the **full** amount that you can afford—no more—but by the same token, no less.

In every state, county, city, town and village the War Savings Committees are preparing for this big patriotic rally of June 28th. Unless you have already bought War Savings Stamps to the \$1,000 limit, get busy with paper and pencil and figure out the **utmost** you can do.

Remember this. You take no chances when you go the limit on War Savings Stamps. They are the best and safest investment in the world.

They pay you 4% interest compounded quarterly. They **can't** go below par. You can get back every dollar you put into War Savings Stamps **any time** you need it. You can turn them in at the Post Office **any time** for their full value plus interest.

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What are you lending?

National War Savings Committee, Washington



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