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Is Your Hired Man Sitting on the Fence?

ONE of the outstanding developments in the agricultural world within the past few years has been the introduction of the specialist—the man trained to do a particular thing in the most effective and efficient way in which it is possible for that thing to be done.

Of course, there has been the usual number of tenacious adherents to the customs of yesterday who have turned their backs on these newcomers—forgetting that it has been the employment of just such highly trained men as these that has enabled big business to make the rapid strides as it has in America. But the expert is here to stay.

These newcomers have arrived upon the scene so recently, however, that in most of Michigan the general run of farmers are still unacquainted with the whereabouts of these men and the character of their work.

A concrete incident from Kent county will serve to illustrate: Harvey Johnson was lord and master over a farm in Kent county—a well-groomed place, with three hundred broad, rolling acres of thoroughly fitted land, every building and animal bespeaking able management.

But even so, Johnson was not wholly content. His wheat, he observed, was yielding only fifteen to twenty bushels to the acre, while one of his progressive neighbors with an almost identical type of soil was securing yields of twenty-five bushels or better. For some reason Johnson found he simply couldn't bring up his yields, even with liberal manuring and planting of superior strains of grain.

"Must be something else lacking in the soil," he finally concluded.

Johnson had fallen into the habit, when confronted with problems somewhat beyond the reach of his own extensive farm knowledge, of taking up matters with the college. So now he gathered up a number of typical examples of his soil, placed them in bottles and forwarded them to the soils' department of M. A. C. for examination.

"About all your land needs," the department wrote back in a few days, "is a good dose of lime."

Johnson acted on the suggestion—that was two years ago. Last year the college received this message from him:

"My yields have jumped five bushels to the acre."

Now it can not be said that Johnson is by any means an average farmer. If he was, he would never have thought

THE man you employ ought not to waste time chatting with a passerby when he should be working. That is not treating you right. If, on the other hand, your hired man sits on the fence because you have failed to give him work, then you are at fault. The state has provided a corps of men who are specially qualified to help farmers with difficult tasks. Now the man who can help you may be holding down the top rail because you have neglected to issue working orders. Remember, "He that asketh not receiveth not."

of submitting a soil sample to M. A. C., for in the course of much traveling about the state I have learned that most agriculturists, and this includes many a prosperous farmer, are but little familiar with the opportunities which exist for the securing of assistance from the college and the state.

In some quarters the idea still persists that about all the college does is produce graduates—whereas its work is threefold, for besides educating students it maintains as well an experiment station for the working out of agricultural problems and an extension service for aiding the farmer directly.

find yourself doubled up with a pain with which you are unfamiliar, you call in the family doctor. If you are a farmer and stroll into your potato patch some morning to find your tuber plants in a bad way, it is possible to make use of the extension service of the college by calling in the plant pathologist (plant doctor) or by submitting to him a few diseased plants. In such a case all that would be necessary would be to wrap up a few of the plants in a box and mail them to the Department of Botany, in East Lansing.

Upon receiving the specimens, the pathologists examine them, and in a

which will enable you to protect your potatoes in the future.

This is only one way in which the college and the extension service can be used. If you are a dairyman with a number of feeds on hand and you are undecided just what mixture of them would make the best balanced ration, an inquiry addressed to the Dairy Department of M. A. C. will probably secure you the information you desire to have.

In fact, expert advice can be obtained from the dairy and animal husbandry men of the college on almost any question bearing upon the breeding and feeding of live stock, whether the animals be dairy or beef cattle, or sheep and swine.

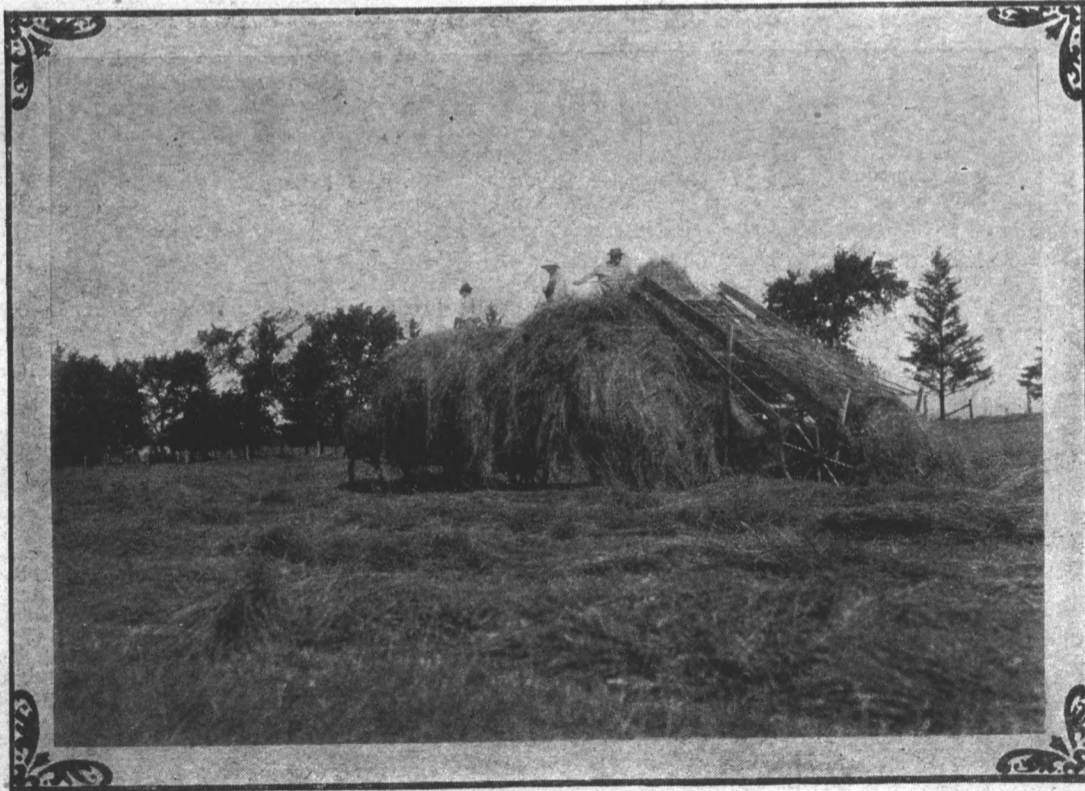
Or if you are considering purchasing some commercial feed and are doubtful about its exact feeding value, it is usually possible to obtain its "pedigree" from the chemistry experiment station by mailing to Prof. A. J. Patton the brand or trade name of the feed, with the name and address of manufacturers. The same can be done with fertilizers. This one department of the college through its work in this field, has probably saved the agriculturists of the state from more frauds than any other agency created for the protection of the farmer.

Occasionally it is not feed and fertilizer problems that concern the countryman so much as it is insect pests—maggots in the beans, grubs in corn, or flies in the wheat. For dealing with insect enemies of agriculture, the college maintains a corps of men who are members of the department of entomology. If the scale is becoming too populous in the orchard, or the web worm is taking too many liberties, a letter to the entomologists will bring a prescription which as a rule is sufficient to induce the unwelcome visitors to forage elsewhere.

In truth, the services which the college has developed and placed at the disposal of the farmer are almost without end. If a poultryman desires to secure a demonstration of the practice of culling his flocks, a demonstrator is obtainable; if a farmer wishes to learn a method of farm accounting that will enable him to put his

business upon a more up-to-date basis, a letter to the office of farm management will bring results; if the farm is a little wetter in spots than is desirable, pointers on drainage can be had from the department of farm mechanics, and if you will take the matter up

(Continued on page 745).



Haying Time

It is with this service that dwellers in the country will find it most convenient to become acquainted.

How can the extension service be used? A query of this kind might be answered in a typically Yankee fashion with another question: "How can a physician or lawyer be used?" If you

usually place you in possession of facts

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DETROIT, JUNE 22, 1918



CURRENT COMMENT.

Food Administration Results. Since the United States Food Administration was established as a war policy to aid in the conservation of food stuffs in this country, in order that we might more effectively sustain our European Allies and the starving people of Belgium and other lands, to provide for our own soldiers overseas and to keep prices steady and the flow of distribution even that the poor at home might be fed; in a word, to make everyone's effort count the most for winning the war for freedom, little information has been given out as to the actual results which were being accomplished.

A recent official statement from the Food Administration furnishes this information, which will enable the people of the country to judge more accurately with regard to the benefits derived from this branch of government activity. This statement shows that since July 1 of last year, at which time the shipment was 20,000,000 bushels, the estimated surplus of wheat for export actual shipments up to June, 1918, were 120,000,000. The ordinary exports of beef have varied between 1,000,000 and 2,000,000 pounds monthly, while the largest exports for a single month during the present year were 87,000,000 pounds. The ordinary rate of exportation of pork is about 50,000,000 pounds monthly, while the largest exports for a single month this year were 308,000,000 pounds.

One year ago the price of flour on the Minneapolis market was \$16.75 per barrel, wholesale, while the present price on the same market is \$9.80. Apparently a large part of this difference is due to a reduction of the margin between the price of the farmer's wheat and the flour made from it. One year ago this margin was \$5.68 per barrel, while at the present time the margin is sixty-four cents.

In general, according to the Food Administration's statement, prices to the farmer in the markets of the country have been twenty-seven per cent higher than last year, while the prices to the housewife buying in the market have been thirteen per cent less than last year. The greatest achievement

to the credit of the Food Administration, however, is in the maintenance of our European Allies at a time when they were absolutely dependent upon us for food, since this was an absolute requirement for the winning of the war. While the Food Administration has undoubtedly made some mistakes and while in some directions their activities have operated to reduce the income which would have been received by producers of food stuffs, yet that the results shown in the above statement have been accomplished is a matter for congratulation to the country as well as to Mr. Hoover and his aides in food administration work who are giving freely of their time and ability for its accomplishment.

The last declaration in the statement of the Food Administration would seem to settle the point that the necessary results have been accomplished with a minimum of hardship to producers and a maximum result in the curbing of profiteering.

One inevitable result of our participation in the world war has been a further draft upon farm labor, thus making critical what was already a serious problem. While the efforts to relieve the situation by the direction of city labor toward the farms have been helpful, particularly through the United States Boys' Working Reserve, yet they have been wholly inadequate to relieve the situation.

Greater efficiency in the use of man labor upon our farms is the only possible remedy for the situation in most communities. This involves the greater use of labor-saving machinery in every farm operation. Few farms are equipped with a full line of labor-saving machinery for the performance of every farm operation in which such equipment could be used to advantage. On the other hand, in practically every community is to be found a satisfactory line of labor-saving equipment upon different farms. One farmer will have a fairly complete line of labor-saving equipment for some special line of production in which he has engaged as a specialty. Other farmers in the same community will have other fairly complete lines, due to the fact that they have specialized in other directions. A few of the less fortunate or fore-handed farmers will be handicapped by not having special equipment of any kind which would add to their efficiency, but which they have been unable to afford, due to its high initial cost as compared with the number of days or hours which they could make of such equipment during the season.

While it is impractical under present conditions for every farmer to purchase all of the labor-saving equipment which he could use to advantage in the various operations on his farm, it is entirely possible and practical for the farmers of any given community to have a complete line of such equipment. Good war-time economy demands that such equipment be kept working as many hours as possible during the season in order that it may increase the man power efficiency, and thus not only aid in solving the farm labor problem for that community, but as well add to the production of food which will be an ever-increasing factor in the winning of the great war in which we are engaged.

Farmers having special lines of labor-saving equipment will be performing a public service by offering their neighbors the use of this equipment at a rental which will cover the wear and tear on same, and will pay a reasonable interest on the investment. Such charges should be made as low as is practical, but on the other hand, an established charge for the use of such equipment will encourage rather than discourage its community use, since many farmers will gladly rent equipment of this kind, where they would

hesitate about asking for the gratuitous use of same. This is a question which could be profitably discussed in local farmers' organizations, to the end that the solution of the difficult labor problem may be thus aided on a community basis.

Some types of farm equipment require expert handling for best results and for the conservation of the equipment. In such cases where owners of this equipment have the man power at their disposal, they will be performing a public service by operating same for their neighbors at a reasonable charge. A community cooperation of this kind will be most helpful to a large class of farmers in every community and to the nation and the world in increased food production in the present crisis.

Early Shopping this issue will be a Safe Rule.

In another column of this issue will be found an appeal to the farmers of the country to place their orders for fertilizer requirements at the earliest possible date, to the end that fertilizer distributors may be in a position to order their goods early and get them delivered before the freight congestion which will come with the movement of this season's crops. The government requirement for loading cars to their utmost capacity as a means of conserving shipping space is an added reason why orders should be placed early in order that the fertilizer requirements of our farmers may be satisfied.

What is true of fertilizer is true in large measure of other items of material and equipment. We are accustomed to the early shopping slogan along about Christmas time in the purchase of Christmas goods. This slogan was adopted largely for the convenience of distributors. Early shopping should be made the slogan now as a means of insuring the consumer the goods which he may need to carry on his business most economically and profitably. The farmer who anticipates his future needs and orders material or equipment to satisfy them months in advance of his actual requirements will be far ahead of his more dilatory neighbor in the ultimate results secured.

A Pessimist. A reader laments the awful social strata to which our people have declined

and cites the many unsolved social and economic problems which are being discussed generally, as proof of such decadence. His deduction, we think, is entirely wrong. Instead of these problems marking a deterioration of the moral fibre of our people we believe that they indicate the very opposite—a quickening of the moral conscience, a desire to correct unjust methods, an accumulation of a surplus moral energy. Turkey has no social problem because the consciousness of her people has not been aroused to realize the conditions under which those people live—conditions which would haunt the mind of the meanest American. We may well believe that this evidence marks an advancement, rather than a decline in the tendency of our society.

HAPPENINGS OF THE WEEK.

Tuesday, June 11.

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.

Wednesday, June 12.

Russian ambassador to the United States presents plea of Slav moderates for intervention in Russia by an inter-allied army.—In the drive between Noyon and Montdidier the French force

back the right wing of the German army seven and one-half miles.—American marines capture Belleau wood.—It is now generally believed by military critics that German's plan is to reach Paris.—Forty persons are missing when the British transport Ansonia is blown up off English coast by U-boat.—Contracts for United States war materials are now being given to concerns in the middle states to stabilize the labor supply of the country.—Coal outlook for Michigan is being generously discussed with opinions on the situation varying widely.

Thursday, June 13.

While the French troops yield ground to the enemy on the Oise river, they make additional gains about Montdidier.—American marines turn back five enemy divisions, and hold Belleau woods against repeated attacks.—The number of American fighting men now in France approaches the one million mark.—Italians torpedo an Austrian dreadnaught of 20,000 tons.—A crisis in the form of nation-wide strikes threatens to paralyze Austria's war activities.—The air post record between Philadelphia and New York is broken by Lieut. Culver who makes the distance in forty-two minutes.—Food Administration asks American people to place themselves on a limited beef allowance until September 15.—Henry Ford becomes a candidate for the United States Senate upon request of President Wilson.

Friday, June 14.

The force of the latest German drive is spent while the Allied troops are recovering territory near Montdidier.—President Wilson expresses the hope that the senate will pass the woman's suffrage amendment at the present session of congress.—War Department announces that a weekly review of events on the battle fields of Europe will be given the American public.—The possibilities of sending help to Russia through the port of Archangel is being considered by the Allies.—France celebrates the anniversary of the sailing of 150,000 American troops to take part in the great war.

Saturday, June 15.

Austrians start an offensive in northern Italy along one hundred mile front.—Major General Liggett has been selected as corps commander of the first American field army in France.—The French attack Germans near Ypres.—The Crown Prince's drive against the northeastern approaches to Paris is definitely halted.—German officially announces that a part of Roumania is to be ceded to Bulgaria.—Manufacturers will be obliged to cooperate with the government in securing sufficient workmen for war plants and the essential industries.—Canada will introduce a system of public saving following the war savings stamps program of the United States.

Sunday, June 16.

The Austrian offensive in northern Italy with an enormous number of troops involved fails to force back the Italians or to break the defenders' line at any point.—Opinion prevails that this Austrian drive was hastened to check internal disorders in Austria and to satisfy demands from Berlin.—America's military program contemplates the arming of 3,000,000 men by August 1.—Americans are now fighting on German soil near the border of Switzerland.—Twenty-eight U-boats have been sunk by our sailors.—Great Britain calls men from forty to fifty-one years old for medical examination.

Monday, June 17.

At many points Italians hurl back the Austrians in the big drive in northern Italy. The foe is using 720,000 troops.—Yankee troops defeat German shock forces in the Toul sector.—New attacks on unprotected ships off American coast are announced, and victims of these attacks now number twenty.—The Bulgarian ministry is reported to have quit.—Lenine, premier of the Bolshevik government of Russia, is planning a trip to Berlin and Vienna.—The fourth United States Liberty Loan campaign will be for \$6,000,000,000, and will probably be floated in October.

Tuesday, June 18.

Austrians failing to make headway in the Alps concentrate forces on Piave front where they made only small advances.—Americans on Marne are gassed by the enemy.—Turkey claims the capture of Tabriz a large Persian city.—A record-breaking sundry civil bill, carrying a total of \$2,915,019,447 is passed by the lower house of congress without a dissenting vote.—Early returns from state primaries in Minnesota show Governor Burnquist to be leading by a liberal margin over the candidate of the non-partisan league.—A nation-wide conspiracy between contracting agents and manufacturers of war materials is suspected by the department of justice.

The County Farm Bureau--What Is It?

By E. C. LINDEMAN

ALL workers and those who have given serious thought to rural affairs now agree that if proper progress is made our efforts must go forward on an organized basis. What form of organization is best fitted to carry on a complete program? This is the question which confronts all who are interested in rural progress. The County Farm Bureau is now operating in more than one thousand counties in the United States. It aims to connect and relate the efforts of the United States Department of Agriculture, the various state agricultural colleges, and all other organizations and agencies interested in the affairs of rural communities. The following brief analysis may help in throwing some light on the principles of this new organization.

1. The County Farm Bureau is a county organization. It recognizes the county as a community of communities. Interested farm people representing the communities of the county are called together to discuss the plans of the organization. They appoint temporary officers. A membership campaign is conducted. A county-wide meeting of all members and interested persons is called later. At this time the program of work is presented, permanent officers are elected and an executive committee placed in charge of the various lines of work.

2. The County Farm Bureau is a rural organization. Its membership is made up of men and women who live on farms and gain their livelihood through the business of agriculture. It is distinctly an organization of farmers, by farmers and for farmers.

3. The County Farm Bureau is a democratic organization. It is not an instrument of the federal or the state government. It is primarily a volunteer organization in which any farm resident of the county may become a member.

4. The County Farm Bureau includes the entire family and recognizes the family as the fundamental social unit. Its program of work includes activities for men, for women and for boys and girls. Women may become members on the same basis as do the men.

A Farm Bureau Training School was recently conducted at the Michigan Agricultural College. Three specialists from the United States Department of Agriculture gave quite an intensive course of instruction. All members of the Extension Staff receive training which will fit them to assist in organizing County Farm Bureaus. A number of Bureaus will be organized in Michigan during the coming season. How about your county?

5. The County Farm Bureau does not supplant other organizations. It is not the purpose of the Farm Bureau to take the place of such existing organizations as the Grange, Gleaners, Farmers' Clubs, etc., but rather to unite the work of all existing organizations and agencies. It acts as a clearing-house for all rural organizations, thus creating a unified program and doing away with duplication of effort.

6. The County Farm Bureau is based upon a definite program of work. The members of the bureau decide upon the vital problems of the county. The most important ones are included in the immediate program of work. Each specific line of work is called a "project." The work to be done under each project is definitely outlined and particular persons are delegated to carry out the projects. Each officer and each member of the executive committee has a specific task. In turn, each project has a delegated leader in each community. The following outline indicates a typical organization with a program of work:

1. Work with men: Agricultural projects.
2. Work with women: Home projects.

3. Community work: Boys' and Girls' Clubs, marketing, etc.

President of the County Farm Bureau in charge of organization.

Vice-president of the County Farm Bureau in charge of Boys' and Girls' Clubs.

Treasurer of County Farm Bureau in charge of finances.

Executive Committee Members.

One member in charge of the Project on Soils.

One member in charge of the Project on Live Stock.

One member in charge of the Project on Farm Crops.

One member in charge of the Project on Canning.

One member in charge of the Project on Clothing.

One member in charge of the Project on Boys' Corn Clubs.

One member in charge of the Project on Girls' Sewing Clubs.

(Note.—The above projects may be subdivided so that one member of the executive committee may have charge of a project on corn improvement, one on hogs, etc.)

After the county program is adopted by vote of the Farm Bureau members,

local community chairmen are appointed. These chairmen have charge of Farm Bureau activities in their particular communities of the county. Each community may select the projects which it desires. A community leader is selected for each project and he or she directs the work in the community.

7. The County Farm Bureau's program of work is carried out by means of demonstrations. For example, if corn-improvement is selected as a project, a leader for this project is appointed in each community. This leader secures a number of farmers who will carry on a prescribed line of work in corn improvement. The results of all of these demonstrations are collected and used as a basis for further work.

8. The County Farm Bureau employs trained specialists to assist in carrying out the program of work. As indicated above, there are three main lines of work to be carried out in each county: Work with men, work with women, and work with boys and girls. Most counties begin by employing a county agricultural agent whose business it is to carry out the agricultural portion of the program of work. Home demonstration agents are employed to carry on work with women, and county club leaders are employed to work with boys and girls. In some counties all three of these workers are now employed. The United States Department of Agriculture and the agricultural colleges assist in financing the work of these specialists. Most Farm Bureaus have a membership fee which is used to defray the cost of publication of a Farm Bureau paper or for office expenses.

When the above plan of organization is carried into effect there will be in every county of the United States a county-wide organization representing all of the vital interests of the people who live in the open country. It will be an adaptable organization equipped to meet all emergencies. The great war has taught us the bitter lesson of disorganization. This seems the opportune time for the farmers of America to mobilize their forces for the good of themselves and for the good of the nation.



In this southern Michigan Farm Bureau office are farmers' bulletins, agricultural books, charts, maps, samples of grain grasses, fertilizers, spraying solutions, disinfectants, soil tester, grain samples, etc., which are used by the county agent to make his work more valuable to the farmer.

Most Dollars from Summer-Fed Hogs

By Michigan's Grand Old Swine Feder, Mr. N. A. Clapp

IN the issue of the Michigan Farmer of June 1, C. C. L. expresses an opinion that it is, or will be, a difficult task to make hogs pay for the corn feed which has cost \$3.00 per hundred pounds. The title of the short article is, "Will Hogs Pay for their Feed?"

This query is of considerable importance for several reasons. In the first place, the farmer who has some hogs, and I think he is fortunate if he has, wishes to know if he is going to get his money back if he fits them for market on grain at present prices; and in the second place we are aware of the fact that the laboring men of our country and the soldiers in Europe will need all the pork that can be produced to sustain them until another

crop of corn can be raised for feed.

There are three ways in which hogs are generally fed on the farm in the summer time. One is to depend entirely on corn feeds, which is the most expensive and least profitable way, as thousands have proved by experience. Another way is to use a variety of feeds, utilizing some mill feeds with the corn feeds, which gives better returns and better profits; and the other is to allow the hogs a run at pasture and feed a variety of grain feeds in addition to the green feeds which can be gathered in the pasture fields.

I am ready to venture the assertion that any of the methods mentioned can be made profitable under some conditions. Much depends on the handling the hogs, and also much de-

pends on the character of the hogs one has to fit for market. Some men seem to have the ability to make hogs thrive and pay for the feed consumed under varying circumstances, while other men are never able to make hogs thrive under favorable conditions. Some pigs inherit the thrifty habit and carry it with them and make good returns for the feed consumed, if given a fairly reasonable chance, while others are what are called "hard keepers," and do not make liberal returns under good conditions.

Assuming that all farmers have a fairly good kind of hogs, we have reason to believe that they can make a good profit feeding corn meal which cost \$3.00 per hundred. If the hogs are confined to the pen and fed only

corn there would be but little margin for profit. According to the old rule which said it was supposed to take 112 pounds of corn meal to make a gain of twenty pounds, which amount would sell today for \$16.50 per hundred, which equals \$3.30, the profits would not be very satisfactory. But repeated experiments and experiences have shown that by the use of a variety of feeds while hogs are at pasture, the increase in weights from the same amounts of grain feeds used, are very much better than those attained where hogs confined to the pen are fed on corn alone.

In this day of enlightenment, intelligent, thinking farmers are thinking along the lines of feeding, and if they are living up to their best judgment,

are allowing their hogs some pasture feeds, feeding some grain feeds, and I think feeling assured that there is a prospect for liberal profits on the hogs which they are carrying through the summer on pasture and some grain feeds.

The stomach of the hog is not large enough to eat grass enough to enable him to any more than live and gain a little if depending on grass alone. In my experience a half grain ration given regularly while pigs are at grass, gives excellent results. The grass bulks up the feed and the gastric juices of the stomach penetrate the feed easily, and digestion is more fully accomplished than when grain is fed alone. And farther, considerable benefit is derived from the green feeds.

Looking Ahead.

In looking ahead there are many things that ought to make us feel encouraged. There is an unusual area sown to spring grains. If one has barley, peas and oats to grind and feed later in the season, the expense of making gains on the hogs one is carrying through the summer will not be heavy and the profits will be greater.

Another phase of the matter is encouraging: The market does not require that the hogs be loaded down with fat as was the case when the old-

fashioned lard type of hog was demanded. Medium weights in medium condition are required. A large amount of corn feeds will not be required to fit the hogs for the August and the September markets, which will call for bacon hogs.

Make the Hogs Comfortable.

One of the essentials for successful

hog feeding in the summer time, is making them comfortable. They should have access to water and if a wallow can be arranged for them to roll in during the heat of the day it will prove to be a benefit to them.

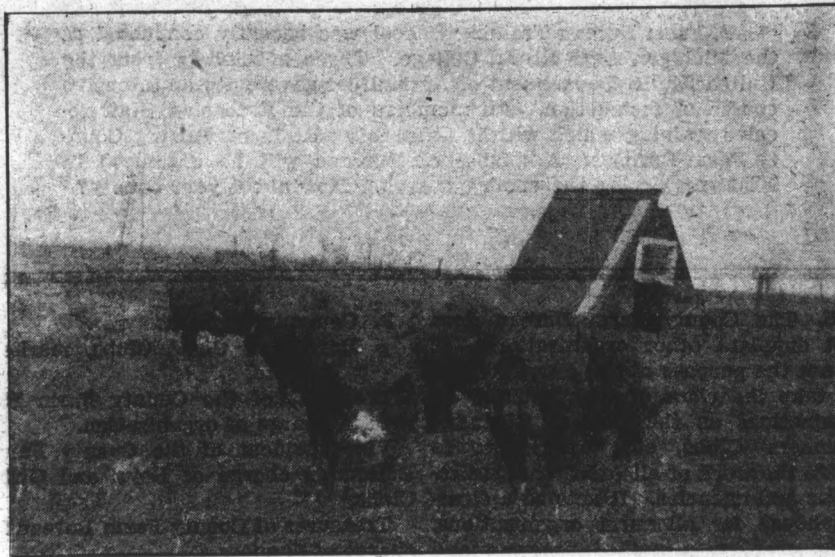
Do not compel them to endure the hot, burning sunshine during the middle of the day. They will eat of the

pasture feeds early in the morning and late at night after the sun has disappeared, but need some shelter from the hot sunshine and the storms. An A-shaped colony pen is a comfortable and convenient device in providing shelter. It can be built with a floor or runners so that it can be moved from place to place as occasion may require. It can be constructed at small expense and will last many years.

Regularity in Feeding.

One of the keys to successful hog feeding at any and all times of the year, is regularity in feeding. If the feeder is prompt to furnish the grain feed at the established feeding time, each and every day, much worry and squealing by the pigs can be avoided. It should be remembered that allowing the pigs to worry for their feed reduces the profits. If the feeder is regular in bringing the grain feeds, the hogs will form a habit of regularity in going in search for pasture feeds and returning to the feeding place for the expected grain feeds with great regularity.

It has been stated by the Food Administrator that the American hog must help to win the war. If that be the case let us make the most of the hogs in the summer time in order to do our part in the task of winning the war.

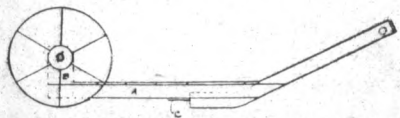


They Thrive Best when Shade from Hot Sun is Provided.

Suggestions for Our Busy Farmers

HANDY MILK CART.

We find this milk cart convenient to haul several cans of milk a short distance. The wheels are old corn

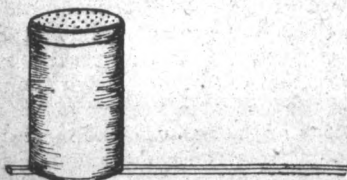


plow wheels. The pieces A are a half inch by four inch elm, because it is necessary that they be strong. The handle is a two-inch by eight-inch piece with the runner end full size, but the handle end is cut down to make it as light as possible, but care must be taken to not make it too weak. The upright hangers B are two-inch by four-inch pieces hung on an iron axle. The brace C is necessary to strengthen the pieces A.

This cart is of sufficient size to haul two ten-gallon cans or four five-gallon cans. It saves considerable lifting.—R. L. Sunderland.

THE PEPPER BOX SPRAYER.

For the control of insects, many of the garden plants need to be dusted with lime, land plaster, or similar materials. Unless one has a regular sprayer, this dusting has several disagreeable features. Some of the material is often blown in the face of the worker; the hands have to come in contact with the material; and, when the plants are small, it is a back-breaking job. If the material is scented with



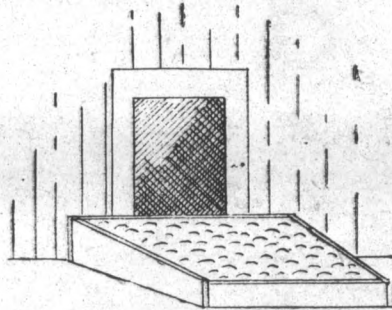
kerosene, turpentine, or carbolic acid, as is often the case, it is worse than ever.

For the grower whose acreage does not permit him to invest in an expensive sprayer, these troubles may be avoided to a large extent by placing

the material in a pepper box nailed to the end of a lath. The person applying walks down the rows and sifts some over each hill. Even if the grower does possess a good sprayer, when the plants are small, the pepper box, on account of its small size, will save a lot of waste of material, and at the same time is easier to carry.—H. L. S.

A HOG STEP.

Usually the muddiest place about a hog barn is the spot just outside the small doors or creep holes. As this place wears down it becomes a task for the young pigs to get into the door.



Since a pregnant brood sow is very likely to injure herself in climbing through a high door of this sort it is well to prepare against this possibility by building some sort of permanent step just outside the door. The one shown above will last a long time. It is made of two-inch stuff, forming a box that slopes away from the door. The box is filled with small stones or broken bricks which make a secure footing. The height of the step for the hogs ought not to be over six or seven inches.—J. L. J.

HOW HE OUSTED THE CUT-WORM.

I would judge from reading an article in the Michigan Farmer some time ago that some portions of Michigan soil is badly infested with wire-worms.

A farmer once called my attention to a large field of timothy grass just before haying time. He thought it would yield from three and a half to four tons of hay to the acre and I thought so myself. He said that a few years previous to this he bought his farm, considering it to be worn out land. He tried to get crops started in the spring and the wire-worms destroyed everything that he sowed or planted. The time came for sowing buck-

wheat. Then he put on the disk harrow and worked the ground up in good shape and sowed all that was under the plow to buckwheat, which proved to be a success. He followed two more years with the buckwheat. This, he said, finished the wire-worms. He gave all of his plow land three successive crops of buckwheat, which used up the wire-worms.

The lay of his farm was quite level and made up mostly of black loam.—J. M. Lyon.

HOT WATER TANK.

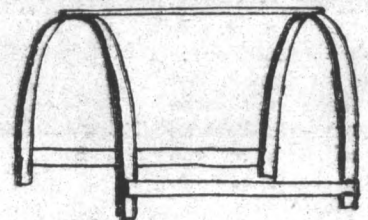
Living on a farm where there was no pressure system water supply, and needing a large quantity of hot water on hand at all times, I rigged up a very convenient arrangement. I procured a common large size ash can with a cover. I placed this on a stand behind the range. I took half-inch pipe and connected it with the can at two places, passing it through holes on the back side of the stove and making a loop on the inside of the fire box. These holes on the stove are always found on ranges for the purpose of connecting a hot water tank. The places where the pipe passed into the tank were made water-tight by having a lock-nut, leather washer and red lead paste on each side as shown at A in illustration. A faucet was placed at the bottom.

The water in the section of the pipe

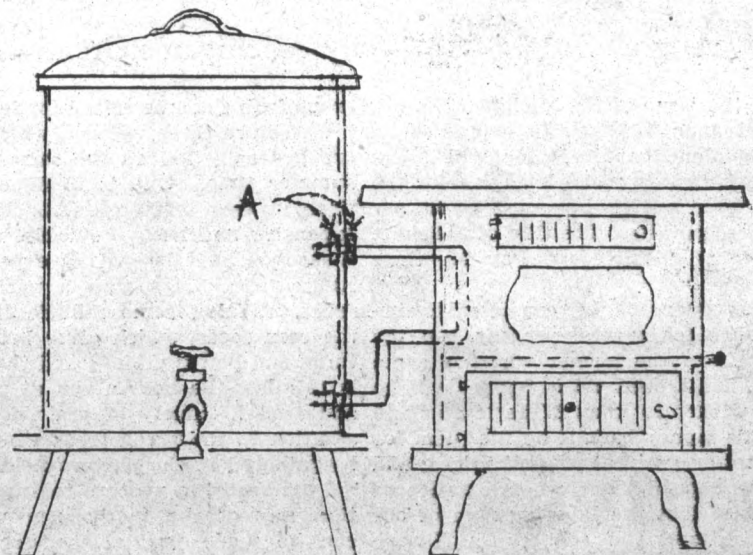
in the fire box becoming heated would rise into the top of the tank. The cooler water in the bottom of the can would thereby flow in, to be in turn heated. This caused a continuous circulation of water being heated on the thermostatic principle. The water level is never allowed to fall below the top pipe. The lower pipe should enter at the bottom of the tank as shown in drawing. Water taken from the top is boiling hot, and taken from faucet is naturally much cooler, but just hot enough for general uses.—C. E. Richardson.

PREVENTING COW FROM SUCKING HERSELF.

I saw an article in the Michigan Farmer asking how to prevent cows sucking themselves. I would like to say that a very convenient way is to place two bows over the neck then place two or three slats lengthwise



from bottom to nearly to the top of the neck. Fasten in under the neck with light straps to prevent it from working up.—C. L. S., Walkerville, Mich.



This Drawing Shows Range at Right and Tank at Left, with Pipe Connecting Tank and Fire Place of Range.

Dairymen Should Cull Herds Now

By W. F. TAYLOR

TO the writer the future of the dairy industry seems more hopeful than to some others with whom he has talked. I am satisfied that in the first place, we must cull out our poor cows and send them to the block, because if there are to be any profits in dairying they will be small for some time and the poor cow will spend our money every day instead of making money for us.

With an effort all along the line to get rid of the poor cows the demand for feed stuffs will lessen and prices will be held in check to some extent. With the poor cows slaughtered, the supply of milk and butter will fall off and prices will gradually improve.

But, says the man in the city, what is to become of the consumer. Milk is the cheapest food on the market today. It is strange that the people in the cities do not comprehend this truth. Oleomargarine may be used by grown-ups as a substitute for butter, but it is not a substitute for butter in the ration of

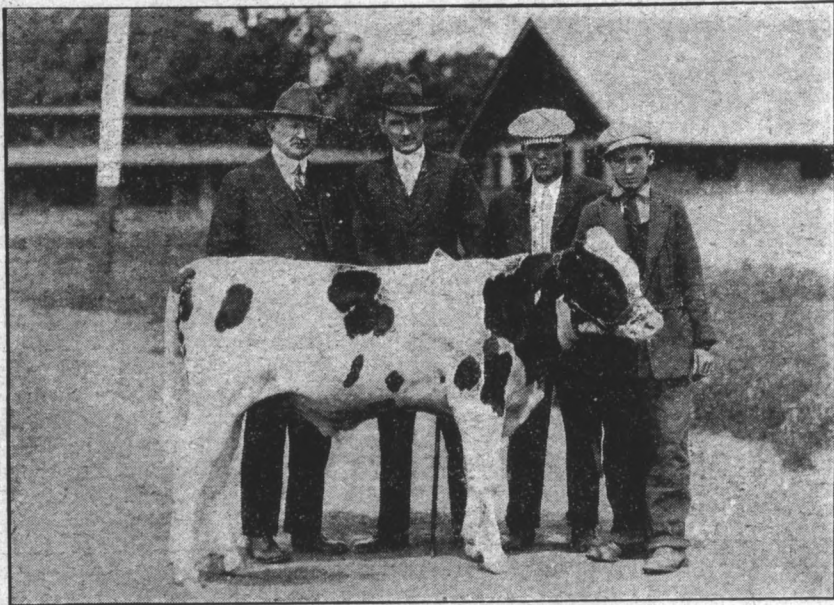
knew of another man anywhere whose success in feeding was better than my own I would see him at once and learn why. It is more important that we dairymen should succeed now than in the past, for we are a part of our great national army. We are not in uniform but we are soldiers of agriculture, and upon the way in which we "do our bit" will depend in some degree the outcome of this great world's struggle.

IS YOUR HIRED MAN SITTING ON THE FENCE?

(Continued from first page).

with your county agricultural agent it is sometimes possible to induce the drainage expert of the college to call and put on a drainage demonstration for the entire community.

As a whole, the college might be likened to a bureau of specialists—men engaged by the state to be used for the benefit of the people of the



Champion Sylvia Johanna Sells at Record Price of \$106,000.

the child and never can be. Prices of dairy products seem high to the consumer but they must go higher or these products cannot be furnished.

Gradually to a considerable extent, dairy products must take the place of meat. I am convinced that as a people we shall have to eat less and less meat until the close of the war. This will be necessary for two reasons. First, the production of meats must gradually fall off unless prices are considerably advanced, and second, large quantities of the grains essential in their production will have to be used directly as human food. The falling off in production and the consequent rise in prices will enable the farmer to produce both meat and dairy products at a small profit though in less quantity than before.

Keeping less live stock on the farm and devoting a larger acreage to the growing of grains, he will answer the nation's call for increased food production, in which capacity he is just as important a factor in winning the war as the manufacturer of munitions. By seeding liberally to clover, by making the best use of the manure resulting from even the smaller amount of live stock kept on the farm, by mowing the clover but one year and then plowing it under, he should reap a profit from the growing of grains sufficient to compensate him for the somewhat smaller returns from the live stock.

So in conclusion, I would get rid of every poor cow as soon as I could find her. I would breed the good ones to the best sire possible even though I had to drive for miles and pay a liberal service fee. I would feed thoughtfully, intelligently and carefully. If I

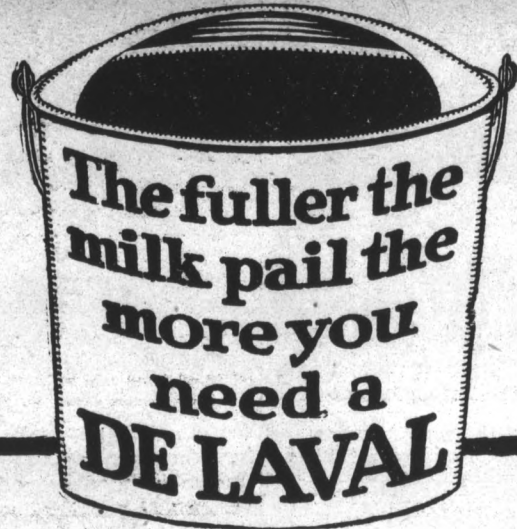
state. It is a rule, however, that enterprises of what might be termed a public nature are successful only in so far as the members of the public cooperate. The best trained plant pathologist in the world may be retained by a state, but if the people do not make use of him his knowledge is likely to bear little fruit. It is patent that the farmers of Michigan will be the gainers by what the state has done for them only in so far as they avail themselves of the services placed at their disposal.

Of necessity, much of the extension work must be done by means of letters and bulletins. Of the latter the college has published a large number upon subjects of importance to every farmer. If the farmer makes no other use of the college, he ought at least to write in and ask to have his name placed upon the mailing list to receive all publications of value to him.

The modern farmer can not afford to remain in darkness about state service. Ask your county agricultural agent and don't oblige this helper who is capable and anxious to assist you, to sit on the fence while you toil.

All outdoors is a big shed, but not the best place for the wagon or the cultivator when finished with it for a few days. If a regular implement shed is not provided the barn is always available, all the extra work entailed is to open and shut the doors.

Every farm should have a workshop. Too much valuable time is lost in running back and forth from the village blacksmith shop for minor repairs which, with forage and navil, vice, dies, etc., could be made at home.



The fuller the milk pail the more you need a DE LAVAL

Your need of a DE LAVAL CREAM SEPARATOR is greater right now than ever before

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And no farmer can afford to lose even a little cream when butter-fat is selling at from 40 to 50 cents a pound.

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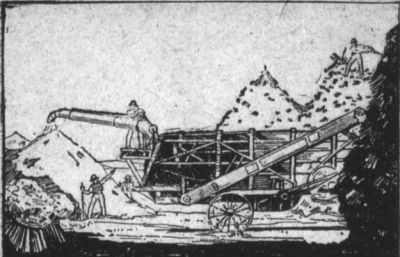
\$125 a month and expenses to start; short hours; travel; three months home study, under guarantee; we arrange for position. No age limit. Ask for booklet L28. FRONTIER PREP. SCHOOL, Buffalo, N. Y.

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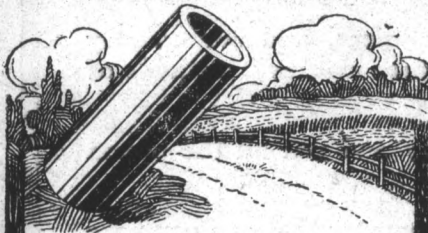
NOW when the nation wants every bushel of grain that you can produce, you cannot afford to lose any of it. Do your bit by saving every bushel—make more money for yourself and produce more for the boys in the trenches. "Hoover-ize" your grain crop with a

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More Tomatoes by Pruning

By ANNA WADE GALLIGHER

DURING the past five years we have been growing early tomatoes for the local market. We do not try to compete with the hot-house kind nor with those shipped from the south. But we never fail to have nice ripe tomatoes on the market four or five weeks ahead of the other gardeners in this locality. We have often been asked, by customers, what kind of tomatoes we raised and how it happened that they ripened so early in the season. These people claim that they have been unable to get as nice large tomatoes anywhere else. Good cultivation and pruning does it. Cultivation is usually begun a few days after setting. Nothing will respond any more quickly to good cultivation than the tomato. We use both wheel-hoe and hand-hoe frequently, the latter being used to bring the soil up around the plants, which is very beneficial to their growth. We stir the soil after every rain.

A tomato plant that is properly set has a much better chance to grow and produce a crop, than one that is carelessly planted. The tomato is not over-particular as to soil but good cultivation at the proper time is an important factor.

Then, there are many ways of pruning, nearly all of which are worse than no pruning at all. Never prune a tomato plant (or anything else) by guess. Better let it alone, entirely, than to cut off branches that ought to remain and vice versa.

Method Good for All Varieties:

We do not always grow the same varieties year after year, but always plant some early sort as well as several late, or rather, main-crop varieties. However, we can take any of the standard main-crop varieties and by judicious pruning, produce a crop of tomatoes ready for market several weeks ahead of the same variety unpruned. We have done it with a number of varieties, early and late.

When cultivation is no longer necessary, the space between the rows and all around the plants is covered with straw. This serves a two-fold purpose. No stakes are necessary and when the dry weather sets in, (as it usually does here in summer), the straw helps to conserve the moisture in the soil.

Some varieties of tomatoes will stand erect without any kind of support. Others will fall over. No mat-

ter whether straw is used or not, we never attempt to change their position. It does not agree with a tomato plant to be "worried." We learned this by experience as we learned how to prune.

We claim originality for the most important points in pruning, as practices by the writer during the past five years. Here is how we do it: We begin to prune a short time after the plants begin to branch. If the first branches, which appear at the base, are small and stunted looking (as they usually are) they are removed. We then leave from four to six good, strong side-branches as near the base of the plant as possible. Above these all the branches are removed from the main vine. When the remaining side branches reach a height of one and a half to

will appear at each leaf. These are removed as soon as possible, leaving intact all the leaves that grow upon the bearing branches. Never strip the leaves from a tomato plant when removing surplus growth. Pruning a tomato plant is easy work, and if properly done need not be repeated more than twice during the season.

Remember it is the unnecessary growth that retards the development of the tomato crop. Pruning, as above directed, will not only cause tomatoes to ripen earlier and more evenly, but will increase the yield at least fifty per cent. Late tomatoes are also benefited by pruning.

FERTILIZER EXPERIMENTS IN APPLE TREES.

In a report from the Maine station some notes are given on fertilizer experiments conducted at the Highmoor Farm in orchards that had been

A Potato Planting Suggestion

On many farms two or three acres are planted to potatoes each year. This is not enough to pay to purchase potato-planting equipment, and yet is enough to make quite a task when

planted by hand. The accompanying illustrations explain themselves and if followed will eliminate much of the drudgery from potato planting.

No. 1 is a double shovel cultivator with one shovel removed. A strip of wood, 60x1x1½ inches, with chains on both ends should be placed just where the handles join the cultivator to mark the rows, that they may be of uniform distance apart.

No. 2 is a tool to cover the potatoes as they are dropped in the trench dug by the shovel cultivator. It should be thirty-six inches in front and about sixty-two inches at the reverse and with a length of forty-eight inches.

This draws the dirt over the potatoes, forming a ridge above them so that they are planted quite deeply. They should then be gone over with a roller. The results are much more satisfactory than when hand planting is employed.—D. D. Woodin.

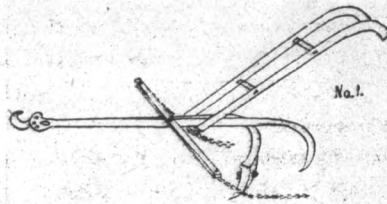


Fig. No. 1.

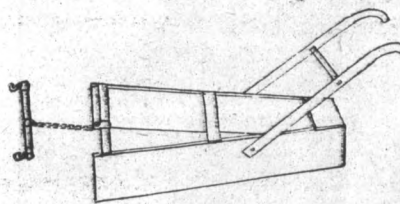


Fig. No. 2.

two feet (according to variety), and a sufficient number of tomatoes and buds have set to produce a good crop, the tip of the vine is removed.

Make Plant Stocky and Prolific.

When the remaining side branches are nearly as high as the center or main vine and from two to four clusters of buds have formed upon each branch, the tips are all removed.

*This causes a new growth of side-branches. These young branches appear in a very short time, but not all at once. Sooner or later a small branch

brought into good condition before the experiments started by cultivation and fertilization for a period of three years. In one test a number of Baldwin trees all received the same application of standard fertilizer and a portion of them received an additional application of nitrate of soda at the rate of one hundred pounds per acre. As far as has been observed the additional nitrate of soda has had no effect in forcing the trees into bearing. Another test was begun in 1912 in an orchard of Ben Davis trees in which one plant has received no fertilizer for a period of three years; another plant has received annually a fertilizer, at the rate of five hundred pounds per acre, carrying four per cent nitrogen, eight per cent available phosphoric acid, and seven per cent potash; and a third plant has received 1,000 pounds of the same fertilizer per acre. Thus far no results which could be attributed to the fertilizer have appeared.

GOOD ROADS IN MICHIGAN.

Muskegon county is building its first mile of concrete on the Muskegon-Grand Haven road. It is sixteen feet wide.

An improved highway between Grand Rapids and Kalamazoo is almost assured for this season. Both Kalamazoo and Kent counties have good roads leading to the Allegan county line and now contracts have been let for seven miles of this road through Allegan, with prospects that state reward money will be available for building the additional six miles necessary to complete the highway.

Grading for the six miles of monolithic brick pavement between Albion and Marshall is completed and the highway will be in use this fall. The road between Battle Creek and Marshall will be paved next season.

Swat the Cabbage Worm

By DON B. WHELAN

CABBAGES during their development are beset by many foes, both plant as well as insect. Many do not survive the seed-bed to be transplanted, and if they do survive they are liable to attack by the flea-beetle or the root-maggot. Escaping these and right after they are transplanted, if not before, they are attacked by the cabbage worm.

Very often we notice that the cabbages we have watched over so carefully during the early spring have the leaves badly eaten or, a little later, holes through the forming head. Upon closer examination a number of small green worms, varying in size, are found. Owing to their color, which is like that of the leaves upon which they feed, they are hard to see.

The adult of the cabbage-worm is the common white butterfly that is seen early in the spring. In the summer they gather in moist places along the road. It lays its eggs on some available plant and the larvae emerge in about a week. The entire life-history in summer requires about five weeks, there being about three gener-

ations per year. The last generation spends the winter as a pupa among the old stalks and other rubbish in the fields.

Just as soon as they are set out is the time to start fighting the cabbage worms. The more effective the control during the early part of the season the less worms there will be to work havoc later in the year. Cabbage worms can be controlled by the use of powdered arsenate of lead dusted on before the heads have formed. A spray of arsenate of lead and water is good if a little soap is added, which will make the spray stick better. Care should be taken about using this after the heads begin to form, as there is a chance of poisoning. When the heads have formed the best and safest spray to use is that consisting of half an ounce of pyrethrum or Persian insect powder in a gallon of water will prove efficient in controlling the "worms." Besides this spray is harmless to man. One spray will not be sufficient under ordinary conditions, but the spray will have to be repeated at intervals all through the summer.

With the Live Stock Men

THE Berrien County Cow-testing Association finished its second year with satisfactory results, according to the report of Louie Weber, tester. Nineteen herds were tested, or about 250 cows, during the full year. In individual records Earl Hemingway's grade Guernsey won highest fat record, with 513.6 pounds. Ed. King's grade Holstein won highest milk record, with 11,813 pounds. M. L. Becker's Guernsey made most profit, or \$115.11. In herd records Ed. King's herd won first on fat, with average of 360 pounds per cow; also first in milk, with average of 9,586 pounds. Young Bros.' herd was first in profit, the record being \$70.06 per head. M. L. Becker had highest testing herd, averaging 5.5. One herd failed to pay for feed. One herd produced milk for ninety-eight cents per hundred, while production cost with another herd was \$2.08. One herd produced fat for twenty-one cents per pound, while with another herd the cost reached forty-four cents.

The Northern Michigan Shorthorn Breeders' Association met June 6 at Petoskey, with breeders present from Antrim, Cheboygan, Charlevoix, Emmet and Grand Traverse counties. There were talks by Prof. Edwards, of the M. A. C., Wm. Johnson, of Indiana, representing the American Shorthorn Breeders' Association, and others. A committee was named to visit different herds and select a number of animals for a sale to be held this fall under the auspices of the local association.

The long drought in the southwest is compelling sheep and cattle men to seek new fields and many of them are coming to Michigan.

W. A. Colt and S. C. Lee, of Colorado, have located on a ranch of 12,000 acres in Chippewa county and by the last of June will have 2,000 sheep there.

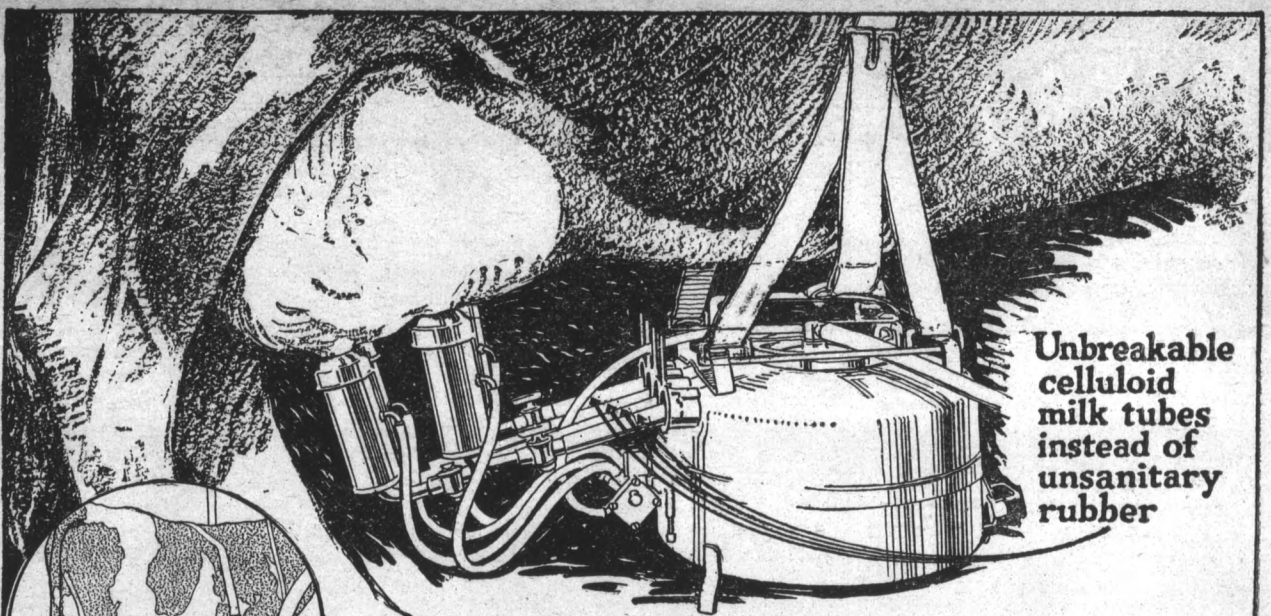
W. B. MacBeath, of New Mexico, has 625 head of cattle on grass in Marquette and Dickinson counties and expects to have 2,000 head there soon.

F. R. K. Hewlett, prominent live stock man of South Dakota, is selling his interests there and moving to northern Michigan. He has taken over the Emblagaard Farm near Marquette and by next year expects to have 40,000 to 50,000 head of sheep there. He says: "With proper handling I believe it possible to lamb out 100 per cent or better from young ewes in Cloverland. Lambs born in May will weigh from seventy to eighty pounds by the first of November. All the tracts of land that I have inspected in Michigan are suitable for grazing sheep."

W. T. Bishop, of Texas, has taken a lease of 7,000 acres in Alger county and will raise cattle on an extensive scale. After visiting the upper peninsula he says: "The country is ideal for grazing. I never saw such grass in my life. Grazing will be a tremendous success in Cloverland and you are opening up a new industry which promises to be one of your greatest enterprises. Your lease option plan is a winner. It proves to us that you have faith in your country and that you are not after our money."

PAY HIGH FOR STOCK PIGS.

While prices for hogs in the Chicago market have undergone extremely large declines recently, farmers have paid fancy prices for pigs to ship back to the country. The other day, while the choicest of matured hogs were selling for \$16.80 per hundred, Illinois farmers actually paid as high as \$17.25 per 100 pounds for 120-pound stock pigs to take back home. This is the first time on record when pigs outsold the best shipping hogs at this season of the year.



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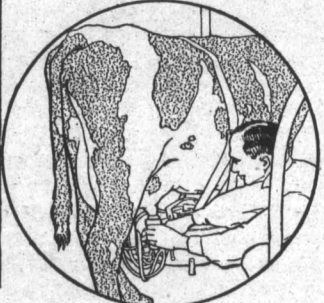
Adaptable to any kind of cow—the hard milker, the nervous cow and the cow that holds up her milk. All take to the Omega because of the natural way it milks. It's easy on the cow.

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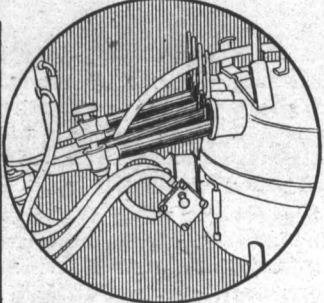
You can find out about it from our new book—"Better Milk from Contented Cows." It tells all about this model milker—how it is made, how it works, how it will help you. Mail the coupon today.



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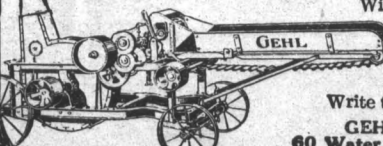
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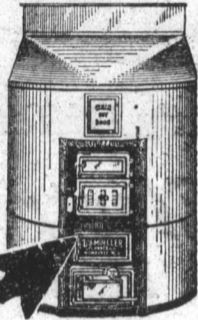
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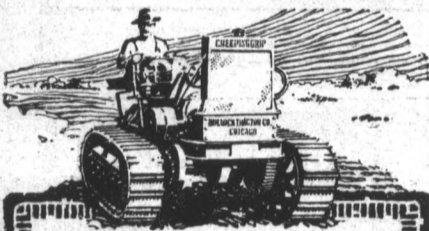
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Rural Clergymen to be Born Again

MEN who are observing the trend of the times see in the announcement by the Michigan Agricultural College of its plans for conducting a short course for pastors this summer the coming of a new type of clergyman in the rural communities of the state—one who in addition to furnishing cheer to his flock can make himself of real value to the community in its practical, every-day affairs.

The school for clergymen to be opened by M. A. C. will start on July 8, and will run for two weeks. It will be out of the ordinary only in its object, for as a short course it will be similar to those which are given farm boys every winter. Practical lessons, lectures and demonstrations relating to agricultural subjects will be taken up,

with the idea that the rural pastor who would most ably serve his congregation must be a man equipped to know and deal with all the problems of country life.

A conference of rural pastors will also be conducted by the college from July 8 to 15, while the short course is in progress. A number of the country's leading churchmen, among whom will be Dean E. I. Bosworth, of Oberlin College, and Dean Shaler Matthews of the University of Chicago, will be in attendance with members of the M. A. C. faculty.

The conference will be open to every clergyman and layman in the state. More than two hundred of the country pastors of Michigan sat through the sessions of the conference a year ago.

Sheep and Victory

"SHEEP and Victory" mass meeting and upper peninsula war conference was held June 12-13 at Escanaba, with every county in Cloverland represented and with Governor Sleeper and staff, including officials of Michigan, present. The governor and party were given a hearty welcome and there was a big public reception in their honor.

The theatre was crowded with people at the opening session, the audience including representative men of the upper peninsula, the supervisors, county and city officials, bankers, farmers and men of affairs.

Colonel R. M. Andrews of Menominee, opened the conference and he predicted that Cloverland will play a very important part in winning the war. In part he said: "All other essentials having been provided for by the United States it now appears that we will win the war. The Upper Peninsula Development Bureau grasped this situation and during the past six months has conducted a nation-wide campaign to interest wool growers in our cut-over lands. Sheep raisers of New Mexico alone are seeking 100,000 acres of grazing land, and they produce only a small proportion of the wool of the country. Hundreds of inquiries have been received by the development bureau and the dawn of a vast new industry, destined to surpass all others in the upper peninsula, is breaking. Cloverland comprises one-third of this great state and our low-priced pasture lands are at the very door of the Chicago market only 250 miles away. Cloverland is larger than Massachusetts, Delaware and Connecticut combined, and has more people than Idaho, Wyoming, Arizona or New Mexico. There are more miles of railroad in Cloverland than in Nevada, Utah or Wyoming. In the past four years Cloverland has spent three million dollars for good roads. There are seventy-five savings banks in Cloverland, with savings deposits greater than all the savings deposits in Colorado, Kansas, Montana or Oregon. The upper peninsula offers the sheep and cattle men hundreds of thousands of rich cut-over clover lands for grazing on a two-years' test free. Can you beat that in all the world today?"

In response Governor Sleeper said: "We are all proud of the upper peninsula, so aptly called Cloverland. In every war activity you have proven your unselfish patriotism and it is fortunate for the country that this great cattle and sheep campaign of yours has come at a time when this country and her allies so sorely need the beef, mutton and wool that your cut-over lands will so abundantly produce. I am happy indeed to learn that already this year more than 200,000 acres of your lands have been taken by newcomers from the finest class of western sheep and cattle men."

"Cloverland today faces its greatest opportunity," said President Harmon, of the Upper Peninsula Development Bureau. "There will be scores of western grazers visiting our lands during the summer. We must show them what we have and be open and above-board in everything. The stranger who comes here deserves every bit of moral support we can give him. Let's get away from the money grasping idea. Let's pull together. Let's make a bit of sacrifice ourselves for Cloverland and then sit back and watch it grow. The sheep and cattle that will be placed in Cloverland during 1918 will consume every pound of hay now produced in this section and much more. We are thus creating a large local market for hay heretofore seeking an outside market. I therefore appeal to everyone, lest we fail in supplying the necessary winter feed, to do his utmost to raise more hay, especially clover hay. The future of Cloverland's unused lands today depends on the attitude of her people. The stranger within our gates must be made welcome in a true and practical sense."

The next speaker was C. A. Nebeker, of Salt Lake City, an authority on sheep, who is interested with a number of western bankers of Utah in the sheep industry. He is highly pleased with upper peninsula prospects. He stated that sheep are cold weather animals, that the wool growth of acclimated sheep in the upper peninsula is much greater than is that of the western or southern sheep, also that the wool is much cleaner. Sheep need lots of clover hay to winter over on and Mr. Nebeker believes that the cost of wintering sheep is no greater here than in the west, for in Idaho the sheep men must drive their flocks to the Texas border in winter. The saving on freight alone amounts to \$1 per head between the grazing lands and Chicago, the market center.

Secretary Rowell, of the Upper Peninsula Bureau, said in part: "Twelve grazers have been located in Cloverland. There are sixty-seven more who have set dates for coming here, 131 have said they were coming and 123 others have said they were interested. The crowded-out western grazers are turning toward Cloverland."

Governor Sleeper presided at the war conference held at Escanaba and T. M. Judson, secretary of the Delta County War Board, welcomed the delegates. Hon. C. C. Vaughan, secretary of state, responded in behalf of the Michigan War Preparedness Board; Hon. J. H. Winterbotham, of Washington, in behalf of the council of national defense, and Hon. George O. Driscoll, of Ironwood, in behalf of the upper peninsula war boards. Committees were named and divisional meetings were held, the conference closing with a public meeting held Thursday evening. The upper peninsula will do its part, and more, towards winning the war.



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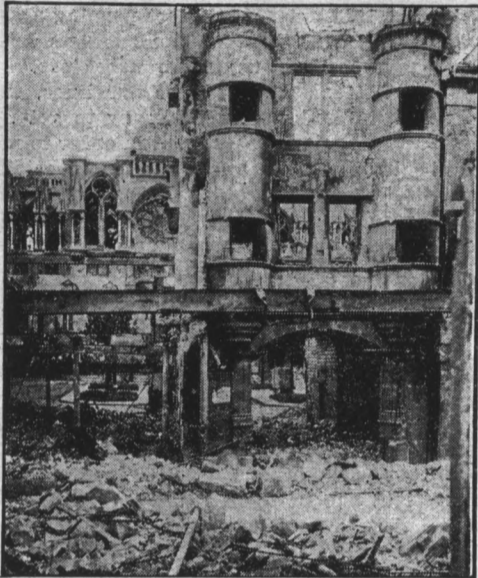
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In foreground, ruins of Rheims court house; Cathedral in Background.



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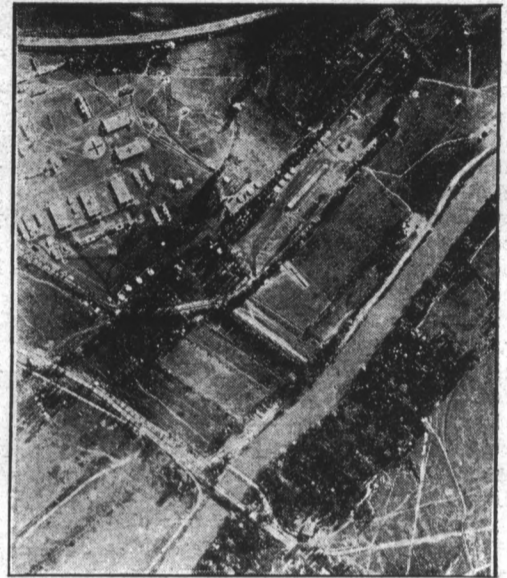
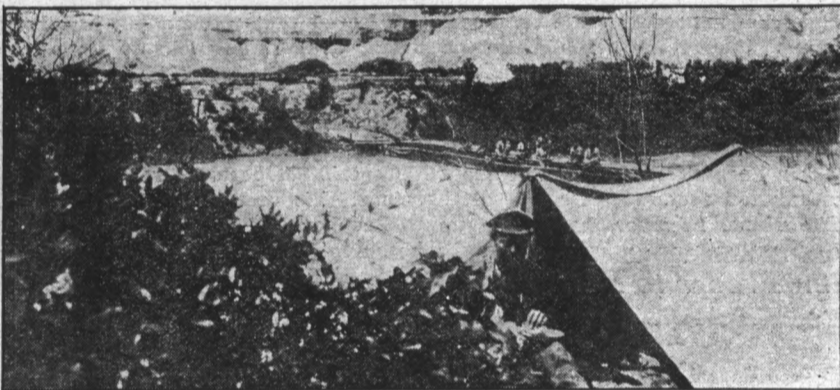
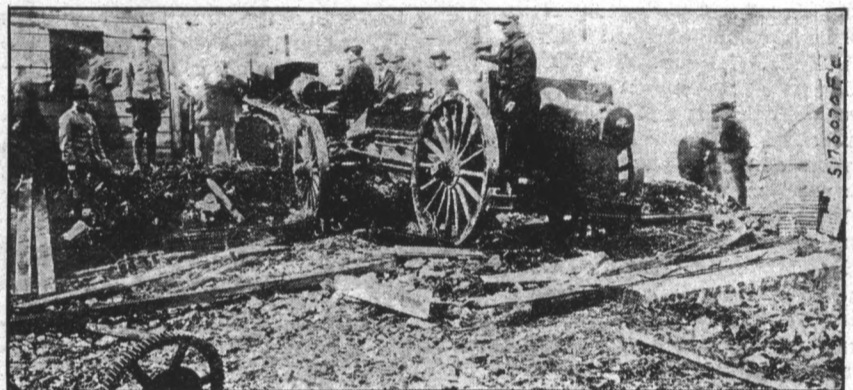


Photo taken from aeroplane shows French hospitals near Soissons.



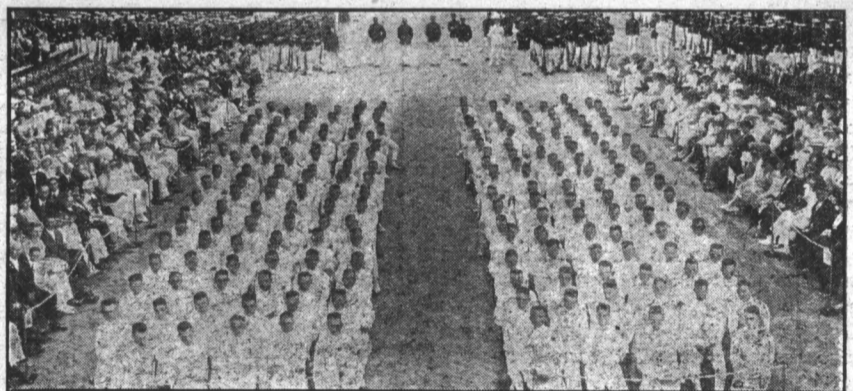
River Jordan in Palestine. British soldiers are resting on pontoon bridge which they have constructed at this point.—(British Official Photo).



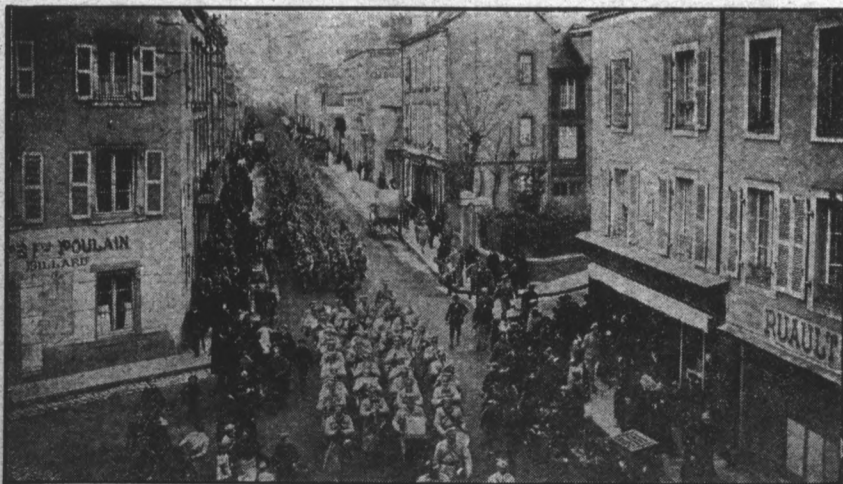
New tractor put to severe tests in hauling a field piece over many obstructions, will be used by War Department to move heavy guns.



This overturned tank was captured by Allies in the recent drive. The top of the tank was covered with branches to camouflage it.



Graduating Class of 1918 at Annapolis Naval Academy assembled to receive their diplomas from Secretary Daniels.



Volunteer Polish American Regiment, trained in the United States, marching through Laval, France, on their way to the front.



French commander's post on Mount Kemmel before the battle in which Germans captured part of the hill after many stubbornly opposed attacks.



(Continued from last week).

CHAPTER IX.

My First Hun.

THE next trip I made aloft was made as gunner in a fighting airplane. We were on patrol for three hours, and I had a busy time of it trying to keep my mind on the gun and flying at the same time. On my next trip I spent a hundred rounds from a Lewis gun at a target and the same day I was sent as gunner on another patrol.

We had been up for an hour, when the pilot spotted a Hun battery and gave its direction to some of our guns. We were then about six miles behind the German line. All went well for a time until I saw another machine at about our own level, to which I called my pilot's attention. Though the other craft was at least a mile away the pilot recognized it immediately as a Hun. He began to tap out something on the wireless key which, as I afterwards learned, was a message to the battery with which we were working to cease firing. The hostile machine was also an observer and the flash from our guns would have shown its pilot where our battery was located.

The thought that there was a Hun in the air and that we might have to meet him gave me a nervous thrill since I somewhat doubted my ability to handle a machine gun. The man in the other machine might be much more proficient than I; and while I had broken bottles on the range, fired on the outline of a Hun plane on the ground for practice, and done other trial stunts I had never before tried issues with a real live Hun.

But I found a great deal of comfort in the fact that my pilot was a good man (he had been decorated for bravery) and I made up my mind that I was not going to disappoint him. He had shown that he had faith in me, and for that reason I had myself well in hand when the German machine came nearer to us.

But it was not our business to fight down the hostile machine. We were observers. It was rather risky, moreover, to take up a fight with a Hun above his own territory, where a forced landing would have resulted in our being made prisoners of war. Consequently we started for home, but Fritz saw fit to follow us.

We were over No Man's Land when finally we turned on him, and I got ready to work the machine gun. I knelt down in the seat and when we were close enough the pilot turned around and gave me the signal to fire. But the Hun was miles past, and I wondered if the pilot thought I was the champion trap shot of the world. There were no synchronized machine guns in those days, and to shoot through the propeller meant of course that there would be a sudden landing since the bullets would splinter its blades to pieces. We came along side of each other and I had put a drum of cartridges in the gun and was in the act of aiming at the Hun machine when something hit a strut alongside of my head. A glance in the direction of the strut showed me that a bullet had gone through. Quick as a wind I pulled the trigger and the little gun began to jump and bounce about on its mounting.

What the effect of my fire would be I was anxious to know. The racket made by the machine gun was deafening, and since its muzzle was directly above my pilot the man had to crouch down into the cockpit. But he, too, was interested in seeing what I was

doing and after a few moments he sat up again.

I was shaking with excitement by now. The machine gun was spitting bullets at a fast rate, but on the Hun plane everything remained in order. The two machines were keeping to a parallel course and I was beginning to fear that my aim was too poor to bring down our opponents, who were meanwhile keeping up their fire.

Of a sudden the enemy machine lurched forward. Then something detached itself from it. It was the form of a falling man.

My excitement reached its height. My aim had been good after all. As I saw the body speed towards the ground turning over and over again, a sensation of sickness seized me. So intense was this that I hoped the next enemy would get me in order that I might not have to go through this agony again.

Meanwhile the pilot had seen the falling Hun. There was a smile on his face as he shouted:

"That's good!"

The Hun machine had curved back to the rear of its own line and we also made a turn during which we ascertained that the man had fallen inside his own lines, having hit the ground behind the reserve position.

Something had gone wrong with the Hun machine, however. After a while it began to volplane rapidly; finally, it hit the ground with such force that the wings left the body of the machine.

While I was taking the empty ammunition drum from the machine, the pilot sent something over the wireless and before long our battery was at work again.

When our period of patrol was over

we went home and made a good landing. The other men crowded around us. They had seen the fight and were eager to shake hands with us. I pretended not to be excited, but I wanted to get up and shout to the world that I had brought down a Hun in the air, and assisted the pilot looking over the machine to find what damage the Hun machine gunner had done to it. We found that he had eight hits to his credit. A ninth bullet had gone through the pilot's leather coat at the shoulder.

The commanding officer of the squadron also congratulated both of us.

I confess that I was rather pleased with myself, and at the mess that night my brother sergeants contributed not a little to that feeling. One of them, however, a Cockney, proceeded promptly to take some of the conceit out of me.

"Ay, mytes, look at that bloke! 'e don't 'alf fauncy 'isself, 'cause 'e pitched down a bloomin' 'un," he remarked, laughingly.

Since he had not done even that much, I could not see why he should put in his jaw, and so I came back at him with. "Well, I don't see any medals on you for anything that you ever did." He lost his temper but the rest of the boys soon brought him to his senses.

It was not long before some of the other sergeants made me feel that they did not like me any too well. Several of them remarked that I was a Yankee, and the way of saying it was uncomplimentary. Finally the Sergeant-Major put a stop to the argument, but before he did this I learned that it did not pay to argue with sergeant-majors when you are a junior.

The following week, while on reconnaissance about thirty miles behind the German lines, our machine and another were flying along merrily when we were tackled by six Germans. The odds were against us, so we headed for our own lines at an elevation of about six thousand feet.

The Huns, however, had made up

their minds that we should not get away if they could prevent it, and they attacked us. Some of them were trying to go directly underneath us, so that they could reach us the better with their machine guns. One of the machines got over us. In fact, they overlooked no point of vantage to put an end to our career. Finally, one of the Huns, who seemed more daring than the others, made straight for the other machine. I began to fire. After a while the tracers hit his engine and then he glided to earth. I cursed my luck for having only disabled him.

The other machines were still flying around us, though by this time in larger circles. Although we were now near our own lines, they kept pegging away at us and some of their bullets kept spinning past us dangerously close.

Just as we got over our lines, the Huns made another big try to get us. Our machines separated in order to not give the Germans a chance to attack us together. Two of them went for my machine while the other three attacked the other. I fought my opponents at long range, hoping to hold them off in that manner. But they were energetic and daring enough. They closed in on us and the rattle of their machine guns could be heard above the roar of my engine, so close were they.

The Huns decided to try other tactics. One of them started to climb while the other kept on a level with us. Not one of them remained in any position very long. Of a sudden the Hun machine which had managed to get well above us, began to dive (and as he did so its gunner landed a bullet in the shoulder of my pilot, Captain Robertson.

I feared that the captain had been disabled, and was ready to jump into his place. If he lost consciousness the machine would be out of control, and in that case it would have been the last trip for both of us.

Captain Robertson remained conscious. He seemed unable, however, to keep control of the machine. We began to descend rapidly towards Hun land and I had visions already of being captured and made a prisoner of war.

To find out in what state the pilot was I shouted at him. Instead of saying a word, however, he pointed up at one of the Huns who had just passed us. That signal, as I presently came to understand, was intended to show me that we were to dive to the ground.

A grand nose dive came. It was made at so steep an angle that the oil rushed out of the breather pipes and covered my face. It also blinded my goggles so that I was obliged to waste time in wiping them off with my handkerchief.

But that was soon done. There was a whole drum of cartridges, on the machine, and as the Hun came to my level I let fly at him. I saw him raise himself, then he dropped back in his seat—dead.

With that machine out of the way the pilot pulled ours up once more, and soon we were headed for home.

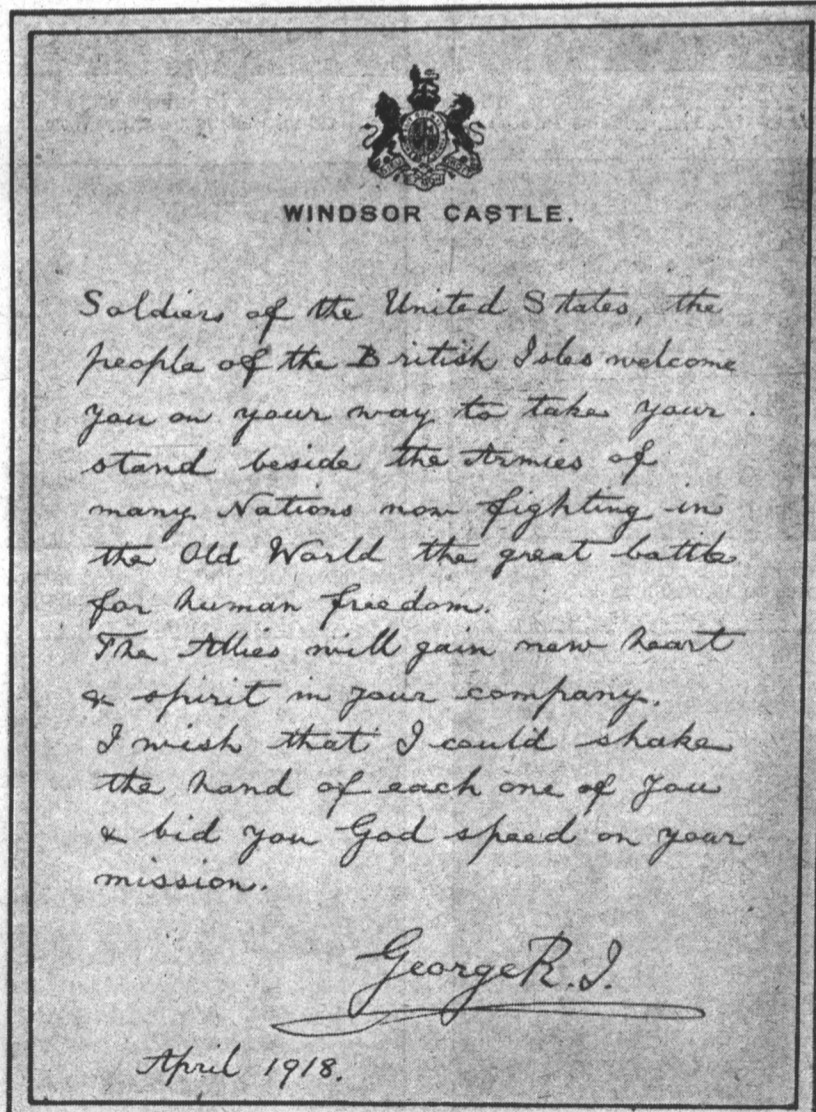
Captain Robertson was getting weaker all the time, however, and I began to doubt whether we would get over the line. In the course of our fight with the Hun machines, we had gone back over the German lines, as I now discovered, and our speed had fallen off alarmingly.

I am not much of a praying man, but right there I said the little prayer my old mother taught me. Meanwhile, I kept my eyes open for the remaining Hun, who was still near us. I hoped that he would decide to stay away for I had only one drum of ammunition left—forty-seven rounds. He was obliging enough to do this.

But now we were again within range of the German anti-aircraft batteries, which began to fire at us. They hammered away industriously, but luck was with us.

We crossed the lines without further injury and landed at a French aero-

King George Welcomes Our Troops to Britain



This is a fac-simile copy of the letter of welcome King George addressed to our troops when they arrived in Great Britain. (British Official Photo).

drome. Though disabled, my pilot made a very fine landing. He was bandaged up by the French and sent by motor car to the hospital. I telephoned to the commanding officer of the squadron to tell him what had happened and he sent another pilot down to get the machine. On our arrival at the squadron aerodrome I was welcomed by the commanding officer and learned that the other machine which had accompanied us had been helped out of a tight fix by two French machines.

Between the three of them they had brought down two of the Huns, the third having made a rapid retreat as a captive balloon of ours had observed.

From the same captive balloon my fight had also been seen, and its observer reported that the machine whose pilot I had shot had come down with a crash behind the Hun lines.

My month of probation was not yet over and such time as I did not spend in the air had to be devoted to study. Finally I was sent to H. where at the headquarters of the Royal Flying Corps I was told that I was to proceed to England to get my officer's kit, this being the first intimation that I had been given a commission. Needless to say, I was as proud as a peacock, and the prospects of seeing England again increased my happiness. There was no holding me, and I blew myself to a wine dinner in a little French hotel. I was a stranger and for that reason had to celebrate all alone. The celebration ceased on the arrival of my train.

CHAPTER X.

My Commission.

ARRIVED in London too late in the evening to report at headquarters so decided to have a look at Piccadilly Circus, which I had no difficulty in finding this time. I also met two boys from home, who were on leave, and the three of us went all over town, finishing up at Murray's Club, which was then open all night.

After a short period of enjoyment, I settled down to business, getting ready, among other things, my officer's equipment. The uniform I now put on impressed me very much more than did the one I had donned in Canada. It was a novelty to have the Tommies and non-commissioned officers salute me. But that sensation soon wore off; there were so many of them that my right arm was nearly paralyzed by night time.

There is nobody who can take the conceit out of a man as well as one's friends. I had my picture taken in my uniform and sent photographs to some friends at home who promptly discovered that the old uniform had fitted me much better. A week later I was back on my way to France, meeting at the port of embarkation a pal from my end of the world, James Newton. He was very much surprised to see that I was an officer now, but said that he would not salute me if I were a general.

I had orders to report to the embarkation officer in France, and he sent me to one of the aircraft parks further inland. The commanding officer of the squadron to which I had been detailed gave me what seemed to be a chilly reception.

"I don't know anything about you at all, old chap," he said, as he sized me up. I was dead tired and hungry and did not care whether he knew anything about me or not.

"Well, give me something to eat," I said, "and a bed for the night. Tomorrow we can call up headquarters and find out where I am to go."

I managed to get some food all right, but no place to sleep. The commanding officer of the squadron spent a good part of that evening getting in touch with headquarters, and when at eleven o'clock he had finally managed to do that I was packed into a motor car and sent to the headquarters in question. It was a three hours' drive to get to my destination, and I was almost frozen when I got there.

(Continued on page 753).

"By the Way"

LEARNING TO KNIT.

My good wife is learning to knit, to knit,

It's solemn to sit near by,
And look, as she frets in a panicky fit,
At the blood of her loving eye.
Knit, knit, lickity split,
Bound and determined to finish her bit,
Casting and purling, disdaining to quit,
My good wife is learning to knit.

My good wife is learning to knit, to knit,

Our home's in an awful mess;
I've had nothing to eat since the knitting craze hit,
And I won't have, either, I guess.
Knit, knit, doing her bit,
Nothing to eat till she comes out of it—
Was ever a fellow so pesky hard hit?
My good wife is learning to knit.

LOOKED SPEEDY.



The tall, fidgety man hurriedly entered the depot and, addressing a bystander, asked: "Do you think I can catch the flyer for Chicago?"

The man addressed slowly surveyed the other's long legs and, slowly removing the cigar from between his lips replied: "Well, it looks like you ought to, but you'd better hurry, for she's been gone half an hour."

Don't waste any vinegar on your countenance.

CONSERVATION HINT.

Greater love hath no woman than this: that she keep her mouth shut when she has something on her enemy.

"Papa, what do you call a man who runs an auto?"

"It depends upon how near he comes to hitting me."

NOT MUSICAL.

"I can't stay long," said the chairman of the committee from the colored church. "I just come to see of you wouldn't join the mission band."

"Fo' de lan' sakes, honey," replied the old mammy, "doan' come to me. I can't even play a mouf organ."

The Sunday-school teacher put to her class a number of questions touching the history of the cities mentioned in the Bible.

"What happened to Babylon?" was the first query.

"It fell," said one boy.

"And what became of Ninevah?"

"It was destroyed."

"And what of Tyre?"

"Punctured."

AGAIN.

How dear to our hearts was that good old tired feeling we used to expect as a symptom of spring. We used to lie down and gaze up at the ceiling and vow that we simply could not do a thing. They dosed us with gentian and sulphured molasses, and they urged us to travel to lovelier scenes; they fed us on tonics from bottles and glasses, and begged us to try one more plateful of greens. That good old tired feeling, that work-dodging feeling, that splendid tired feeling that came in the spring.



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Woman and Her Needs

At Home and Elsewhere



A Proper Kind of Slacker

THERE was an awful lazy woman in the little village where I grew up. At least, the most of the neighbors said she was—and they could prove it. She didn't work afternoons! And she had a husband and three children and a great big ten-room house. How any woman could do all the work that meant, and find time to sit around afternoon, reading or doing fancy work, or maybe gadding the streets, was beyond the virtuous housewives of our town. That is, it was beyond most of them. Some, secretly, and two or three quite openly, were frankly envious, and wished they could do it, too. But they couldn't. "What would folks say?" was too strong for them.

A neighbor girl found out how it was done. One spring the woman was ill and the girl—this was the good old days—went in to "help out." When the woman got up again the girl stayed on and they worked together.

"I've always planned every way I could to do my work in the quickest and easiest way," explained the woman, "whether it was the way my grandmother did or a way I just thought up myself. When I was first married I made a solemn vow I would not spend all my time doing housework, and I haven't. I've always had time every day to change my dress and rest and read in the afternoon unless there was sickness. Even in canning time I make it a point not to work every minute.

"To begin with, I have a schedule. I never could get through just working haphazard. Monday I tidy up, mend and put the clothes to soak; Tuesday, wash; Wednesday, clean silver and cupboards; Thursday, iron; Friday, clean the house except the kitchen, and Saturday clean the kitchen and do all the baking that is done for the week. No woman can do all the work expected of her and keep up, so I leave out half what the rest do. My 'man' thought when we were married he had to have home-made bread, but it didn't take him long to decide that he'd rather eat bakers' bread and have a companionable wife, than to have home-made bread and a wife who was always tired out and catty. He used to like rich frosted cakes, too, and he always had stomach trouble. He's found out with a simple sponge cake once a week and fruit or plain puddings for dessert he is just as well pleased and much better as to health. So I've not only saved myself a lot of work, but I've saved money and improved our physical condition by cutting out so much baking.

"Washing I've robbed of its terrors by using preparations to loosen the dirt and save rubbing. Paraffin will not injure the clothes, and if melted with the soap and added to the boiler of clothes, half the rubbing is cut out. Of course, I have to rinse with hot water, but that is easier than breaking my back over a washboard. Ironing is made simple by putting away at once all knit underwear, stockings, bath towels, dish towels and dust cloths. I've seen some of our women stand in a hot kitchen on a boiling August day and iron salt-bag dust cloths. But not I. I'd rather be on the porch.

"The beds we all throw open as

soon as we get up, and leave the windows open. At noon two boys go upstairs and with one on each side it takes only a jiffy for them to make them, while the other boy and I whisk the dishes out of the way. The boys might better be doing that than hanging around a street corner, I figure, and they still have plenty of time for play before the bell rings.

"When I get fruit to can I always have it delivered late in the afternoon. Then we all sit down after supper, and with five working it is soon cleaned. I let it stand in the sugar over night, or put it on the cellar bottom, and can it first thing in the morning.

"You see I work it by letting everybody help. I figured it out that an unselfish mother meant selfish children and a selfish husband, and worse—a mother always tired and scolding. If

each one does a little no one is ever tired out, and all have a little time to play. Of course, there are days when things pile up, but I stop the minute I begin to feel exhausted. I figure it out that the work will be here tomorrow, and if I keep on too long I may not. So I stop and rest, and let the work wait for me. It always seemed wicked to me, for women to work all day long and then entertain the family at night with a tale of how tired they were and how abused. I hate a dusty room, but not half so much as I do a nagging woman. So if I have to choose between dusting and losing my temper, or keeping both dust and temper, I pick the latter. It is surely as necessary to feed your mind and soul as to feed your body, so I try to take care of all three."

DEBORAH.

Some Wheatless Shortcakes

The following wheatless shortcake recipes have been worked out in the experiment kitchen of the government food administration:

Barley Shortcakes.

1 cup liquid,
4 to 6 tablespoons fat,
1 tablespoon sugar,
1 teaspoon salt,
6 teaspoons baking powder,
4 cups barley.

Corn Flour Shortcake.

1 cup liquid,
6 to 8 tablespoons fat,
1 tablespoon sugar,
1 teaspoon salt,
6 teaspoons baking powder,
2 3/4 cups corn flour.

Rice Flour Shortcake.

Follow direction for corn flour, using 2 1/4 cups of rice flour instead of corn flour.

Barley-corn Shortcake.

1 cup liquid
6 tablespoons fat,
1 tablespoon sugar,
1 teaspoon salt,
6 teaspoons baking powder,
2 cups barley flour,
1 1/2 cups corn flour.

Barley-oats Shortcake.

Follow directions for barley-corn flour, using 1 1/2 cups rolled oats ground in food chopper instead of the corn flour.

Corn-oats Shortcake.

1 cup liquid,
4 tablespoons fat,
1 tablespoon sugar,
1 teaspoon salt,
6 teaspoons baking powder,
1 1/2 cups corn flour,
1 1/2 cups ground rolled oats.

All measurements are level. Mix the dry ingredients, cut in the fat and add the liquid. For individual servings, place dough on slightly floured board, pat to three fourths inch thickness and cut as for biscuit. If a large shortcake is wanted, place dough in well-greased biscuit tin and pat to desired thickness.

These shortcakes are light and tender. An egg added to rice or corn flour makes a softer dough.

The slightly acid taste of barley may be overcome by using one-quarter tea-

spoon of soda dissolved in one cup of liquid. The flavor of oat and corn is especially good. The shortcakes made from corn or rice flour are very white and flakey and similar in appearance to wheat flour.

Do not split these cakes as they crumble easily. Pile strawberries or other fruit on shortcake. Add whipped cream, if desired, and serve. These shortcakes can be used instead of pie crust in a great variety of desserts.

SUGAR RATIONS.

This season of the year suggests summer fruits, canning, preserving and the sugar supply. Three pounds per person per month, the voluntary ration, permits little margin for preserving, and careful householders are asking, "will there be more?" The United States Food Administration answers that it is endeavoring to supplement this allotment and provide ample sugar for the home canning season. Provident housekeepers, however, can cooperate with this plan by saving from their present supplies for the time when they begin to put up summer fruits for winter use.

On account of the shortage of ships the January and February sugar receipts in this country were far below those of the corresponding months of last year. Our sugar supplies are further limited by the fact that America and the Allies draw on the same source for sugar, and that source is principally Cuba. So even with an improvement in shipping facilities housekeepers cannot get the pre-war supply of sugar.

PRESERVING EGGS IN WATER-GLASS.

BY ELLA E. ROCKWOOD.

There are a number of methods in vogue for preserving eggs, most of them fairly reliable. Different housewives have different formulas and it is hardly to be expected that all should unite upon one. Some women prefer to pack eggs in oats, some in salt and some use other mediums. The use of the so-called waterglass, however, is

far superior to any of these as a single trial will prove. After giving this method a personal trial I am ready to recommend it over any method ever tried. Eggs put in this solution in July last year kept a full ten months in excellent condition, or until the last one was gone.

Use one pint of the waterglass to nine pints of boiled water. The solution may be mixed while warm but no eggs should be placed in it until it is thoroughly cold. Keep preferably in stone crocks on the cellar bottom. Be sure the eggs are fresh. They may be put in a few at a time if more convenient. Keep under the surface with a plate weighted if necessary, and at least two inches of the liquid should be over the top. No uneasiness need be felt should the solution thicken and assume a soapy condition after a while. So long as the eggs are well below the surface they will be all right. Housewives will do well to abandon other methods of preserving eggs in favor of this one. Twenty-five cents worth of the preparation will cover from six to eight dozen.

THE NERVOUS CHILD

BY L. M. THORNTON.

Some children are as stolid as Comanche Indians, and some are little bundles of nerves that shrink from an unkind word. Nothing is more pitiful than to see the sensitive child with a stolid mother, or a high-strung vitally alive mother with a Comanche child.

The nervous child is very seldom created nervous; she is made so by environment, and the cause being removed, she is very apt to prove only the sensitive child after all.

Never refer to the peculiarities of a child inclined to be nervous. If she draws down the corner of her mouth ignore it; if she puts her finger in her mouth, ignore it unless the habit seems forming, and then the wearing of a finger cot will remedy the trouble without need of reproof. If she has an unpleasant way of walking a step behind you, to your anxiety, ignore it. Better any of these little things than a child who, from frequent chiding becomes super-sensitive or whose over-taxed nerves bring on an attack of St. Vitus dance.

One very sensitive little child became suddenly much worse, losing flesh and starting at the slightest sound. She slept in the same room with her parents, in her own little bed, and her mother, being of the same temperament, discovered that an alarm clock standing on a dresser not far from the little bed had a peculiarly loud and insistent tick. The clock was removed to another room and the child began to gain within a few days. The light from a corner street lamp falling on another child's face was proving alike mischievous when the trouble was discovered and the position of the bed changed.

If a child becomes suddenly nervous look for the cause. It may be a teasing companion, some little misdeed unconfessed and unforgiven lying heavy on the wee conscience, a pair of uncomfortable shoes, even a heartily disliked hat that maternal authority says must be worn. Before resorting to medicine, search out if possible, this primal cause and nature will work wonders in restoring lost nerve equilibrium.

Food

FOOD DEPARTMENT'S EXPERIMENTAL KITCHEN.

An experimental kitchen where substitutes for wheat are being tested has recently been established and equipped by the Office of Home Economics. In this kitchen some of the good old recipes which were in use fifty and seventy-five years ago, when corn, buckwheat, rye and barley were in more common use, are being revised and standardized, and new recipes in which wheat substitutes play an important part are tested and standardized. A group of women—laboratory specialists and housekeepers with special training—work side by side in the new kitchen. Before a recipe is made public it must not only pass the test of the laboratory specialists but must also meet the test of actual experience in the hands of a housekeeper who studies it for its practical value in the average kitchen.

BUTTER A NECESSITY.

Experiments conducted recently by leading scientists and chemists have given a sure foundation to the dairyman's claim that butter-fat is a better food than the many so-called substitutes, composed of fats and vegetable oils. As a food, butterfat contains certain growth-building and life-giving properties, properties without which normal growth in children does not take place.

Too many hesitate to buy butter when prices are high, thinking that it is a luxury rather than a real food necessity.

One pound of butter on an energy basis equals: 11.6 pounds of potatoes; three loaves of wheat bread; forty pounds of lettuce; 3½ dozen eggs; four pounds sirloin steak; eight quarts of oysters; 34.3 pounds of tomatoes.

Every housewife should, in her study of economy, give careful consideration to the above facts before she eliminates butter from the diet of her family.—Col. Ag. College.

AVOID CANNING COMPOUNDS.

With the approach of the canning season canning compounds and preservatives to use with fruit and vegetables will no doubt appear. The United States Department of Agriculture advises housewives not to use any preservative. They are usually made with salicylic acid or boric acid as a base. Salicylic acid is a poisonous substance and its extensive use leads to indigestion. If food is properly cooked and stored in sterilized cans, with new rubbers, it will keep without any compound.

Have you signed your card for sugar for canning? Strawberry season is here and from now on canning will be the order of the day. Estimate how much you will need, basing the amount on the quantity you used last year, and ask your grocer for a sugar card.

HOME QUERIES.

Household Editor.—I have an ice box which I enameled a few years ago with what was supposed to be good refrigerator enamel, but it smells so strongly of paint I cannot use it. Could you advise me what to do with it, or give me the name of some good enamel that I can put on? I have tried everything to get the smell out but have not succeeded.—A. G.

Have you left the refrigerator outdoors, unopened? Charcoal is the best thing I know of to absorb odors. I could not give the name of any enamel in this column. You would have to send a stamped and self-addressed envelope for that.

A FLYING FIGHTER.

(Continued from page 751).

At headquarters I met a good old staff colonel, who did his best to make me comfortable, so that soon I was sitting beside a fire and had a glass of Scotch beside me. A little later they had found a nice room for me and I was asleep in less time than it takes to tell it.

During the day I was called into the office of the Colonel and was then given my route orders and instructed to report to a squadron in the south. I had been attached to a squadron in the part of France to which I was going and I wondered whether my orders would send me there again.

I should have liked to get back to that squadron, but it was not to be.

The commanding officer of the squadron to which I was attached gave me to understand that his was the crack organization of the corps, but they all do that. After that he told me minutely what he expected me to do, and, believe me, it was a whole lot.

He seemed quite nice about it, so I made up my mind to do my best.

About a quarter of a mile away from the aerodrome was a little wood into which the Boches were in the habit of putting shells all through the day and night. In the woods was an Armstrong hut which was assigned to me as my quarters, and my real flying life had begun. Next morning I was given a set of maps of the country we had to work in and, from the number issued to me, I arrived at the conclusion that this squadron covered most of France. I was also assigned to a pilot by the name of Smith.

It was in this squadron that I received my first nickname; it happened in this manner: The squadron, being English, its men followed the English custom of having breakfast at seven in the morning, lunch at one in the afternoon, tea at four, and dinner at eight or nine in the evening. The breakfast was very good, but lunch was a cold meal with canned tongue or a cold ham and salad. In the parts of the world that I came from we have the habit of calling the midday meal dinner, and it was the big meal of the day. For that reason I found it hard to get used to this cold meal. I felt the need of something warm in the middle of the day, so I went to A. and there bought myself about fifteen cans of pork and beans. The cook used to warm these up for me for lunch, and it was not long before I had the squadron eating pork and beans. That led to my being known to the commanding officer as "Beanface." The name stuck.

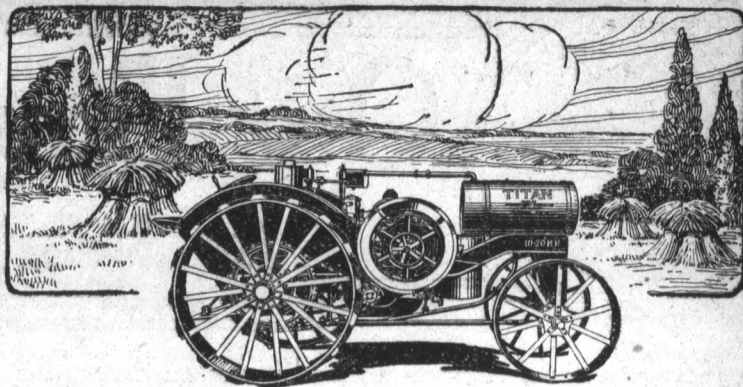
Before long I had another nickname—Casey. That name came to me from a rag-time record on our phonograph popularly known as "Casey Jones," the same Casey Jones who went down on the Robert E. Lee. I learned the thing by heart and used to sing it at the weekly concerts we gave our men. The concert always was a big affair and we used to get a batallion band to play for us. But my Casey Jones song continued to be a feature of the concerts, hence the nickname.

As I said my pilot's name was Smith. I called him "Smithie." His other name I never learned.

Pilot Smithie was a good sort and aside from having a wholesome fear of the Hun "Archies," he was a brave boy, as I soon found out.

We were assigned to a patrol and for a week nothing much of importance happened. On a Sunday afternoon, while aloft, I noticed that the aircraft sign intended to warn us of danger had out the figure "8." Looking in the direction indicated by the arrow on the ground I saw eight German machines on reconnaissance behind our lines. Our "Archie" guns were hammering at them and before long one of the Hun machines detached itself from the flock and headed for home.

(Continued next week).



International Tractor Service

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Our Boys and Girls

At Work and play



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

NOW I want to talk to our boys and girls a little more about the matter of going in debt. I touched on this point in one of the former articles but want to emphasize the point a little more.

Don't be afraid to go in debt, in fact, court it if you please. The only thing to be afraid of is what you go in debt for and to whom you incur this indebtedness.

If I were to lay down one hard and fast rule and one that I have personally always adhered to it would be never go in debt to anyone but your banker. First, it is good business to do this, and next, it will prove a safety valve for you.

When you go to your banker and ask him to lend you some money he is more than apt to ask you what use you intend to make of it, and here is your safety valve—if, after you have explained it to him he insists that it is not good business for you to make this debt, the chances are ninety-nine in one hundred that he is correct and that you had better pass it by.

Many times you will see something that you want or think at the time you want, and the eager salesman, ever ready to do business, urges you to buy it then and there, and "pay when you can," and perhaps on the spur of the moment it looks easy to you and you may "fall" for it before you have really had time to think just where the money is coming from to repay, or really whether it is a good buy for you at all or not. This habit of borrowing only of your banker will prevent any of these snap purchases or spur of the moment buys, and this in itself becomes an asset to your education.

It is not a good plan to buy on credit of anyone who will sell you, or to borrow money here and there, anywhere that it may be had, first, because it will surely come to the notice of your banker and he will very soon begin to wonder where the end of it all is and have a feeling of insecurity as to your responsibility and then again with the careless methods of business that all too many of us pursue one may hardly realize one's self just how deeply involved one has become until some day we are brought up with a snap, facing the fact that we have more obligations due than we can care for and then we turn to the banker—our banker—and want his help and assistance.

Now, if you have not heeded this advice, which is good, and have not been consulting with your banker, don't let this make you afraid. It is never too late to mend. Go to him frankly and tell him just what your needs are, tell him exactly how you are situated and what your obligations are—do not conceal one single dollar of indebtedness, for if you are to seek his assistance at this rather late day he is entitled to know, and you are entitled to tell him every single bit of business obligations you have incurred, and if you are worthy of enough credit to help you by, he will no doubt grant it, but how much better it is to start right—and

start right here—at the bank, never going in debt anywhere but with your banker, for he is in the money-lending business and has studied its every phase and is in a position to know perhaps better than you yourself know what will be wise and safe for you to do and will advise you perhaps to your own financial salvation. If you don't know how much you do owe, rest assured he will know if you owe to him only as you should do. You will find it the very best safeguard that you can erect for he will at once ask you—what do you want with this money, Tommy, and perchance when you have told him he will point out to you that it is not a wise thing for you to borrow this money, and he will tell you so just as frankly if your credit is good and you have offered abundant security, as he will if it were not so, if he thinks it is not to your interest to make the purchase.

A country banker must and does



The Old Swimming Hole.

have the best interests of his customers at heart all of the time. I have rarely known an exception to that rule.

Sometimes you may feel a bit hurt if he does not fall in readily with your views of the matter and advises against lending you the money, but don't get angry, just let it rest a few days, think it all over carefully, and see if his judgment is not better than your own in the matter. You have looked at it from the standpoint of desire, he from the cold logic of business sagacity. Probably he is right and you are wrong.

In any event, I am ready now to make a venture guess and take a chance on the success of the farmer boy or farmer girl that starts out first with a savings account in the bank when young, who adds a little something to that account every month no matter how small—it's the system that counts for the beginning, never goes in debt except to his banker, makes a friend and confidant of the banker and by, he will no doubt grant it, but how much better it is to start right—and boy or girl will make a business suc-

cess of his life just as surely as the springtime will follow the bleak winter.

I can look back among the boy and girl acquaintances I have had and in case after case I can see the assurance of the truth of this observation, and, too, little friends, I think it really makes better boys and girls of you, it has a tendency to set you thinking along right lines, to make you provi-

dent and thrifty and to see and know the needs of others, as well as yourself. To show you very early in life how you may advise and direct some other person who has not been so fortunate as yourself, and in turn be a help to them, and this is the final test in life anyway—viz, how to do the most good in your sphere and how to render most service to most people.



Boys' and Girls' Club Notes

Conducted by E. C. Lindemann



The Boys' and Girls' Club Leaders' Conference in Detroit on May 28-29 was attended by eighty-five leaders from all sections of the state. It was the most successful of any of the monthly conferences.

George E. Farrell, of the United States Department of Agriculture, has been in Michigan during the past two weeks assisting in the organization of community canning centers.

Reuben Trippensee has replaced C. P. Pressley as County Club Leader for Saginaw county. Mr. Pressley is now

Ralph Sill, East Jordan, Charlevoix county.

J. F. Rutledge, Goodrich, Genesee county.

Community canning centers are being organized at Battle Creek, Grosse Pointe, Bloomfield Hills, Jackson, Lansing, and East Lansing. Fifteen centers are about to be organized.

There are forty-three poultry clubs now in operation in the state.

The annual school for club leaders will be conducted at the Michigan Agricultural College, East Lansing, from July 9 to 13. Persons interested should write to Dean E. H. Ryder.

Upper Peninsula club leaders will hold a conference at Marquette during the week of June 24. All interested persons are invited. Write to R. N. Kebler, Marquette, Mich.

Following are some new songs which were used at the Detroit Club Leaders' Conference:

Are you gard'ning?
Are you gard'ning?
Boys and girls,
Boys and girls,
Food will win the War,
Food will win the War,
Hoe your row,
Hoe your row.

Are you canning?
Are you canning?
Boys and girls,
Boys and girls,
Food will win the War,
Food will win the War,
Can all you can,
Can all you can.

The Kaiser looked over the Ocean;
The Kaiser looked over the Ocean;
The Kaiser looked over the Ocean;
The Kaiser looked over the Ocean;
To see what he could see,
To see what he could see,
To see what he could see,
The Kaiser looked over the Ocean to see what he could see.

The Michigan Boys' and Girls' Clubs;
The Michigan Boys' and Girls' Clubs;
The Michigan Boys' and Girls' Clubs;
As busy as they could be,
As busy as they could be,
As busy as they could be,
The Kaiser looked over the Ocean, (and that's what he did see)
"That's enough for me," says he.

We're coming Uncle Samuel, with our brave little band;
On the right side of Hoover we now take our stand.
We'll raise all the food that ever we can,
And what we can't use we'll learn how to can.
Down with old Kaiser Bill,
Down with his gang.
And when we get 'em down, we'll keep 'em down, down, down.
(Note.—Clap hands in place of last two downs as variation).
And when we get 'em down, we'll keep 'em down, down, down.
And when we get 'em down, we'll keep 'em down, keep 'em down, down, down, down.

POULTRY QUERY DEPARTMENT.

Tuberculosis.

I have been breeding fancy stock for some time and have always fed good wholesome food. I have kept the coops as sanitary as possible and well ventilated. Have had very healthy fowls for some time but now something is wrong with them. My very best hens will be laying right along and from all appearances are in the best of health. All at once they will get lame and will gradually get thin. They are rather notional about what they eat, and do not drink any more than the well hens do. As they get thinner the droppings get yellow and greenish, and sometimes there is diarrhoea. Some will die very soon after becoming lame, with their comb and wattles looking as if they were in perfect health; others will limp around until they are so poor that I kill them. All that I have opened, and I have opened nearly every one that I have had to kill, has a very spotted liver and when cut into it is full of little round bunches, some as small as a pinhead and some as large as a pea. None of the other organs seem to be affected. M. J. C.

After careful thought, we are led to believe from the symptoms you give that your fowls have tuberculosis. In this disease the liver is the organ which shows the effect more than any other, and when it has the raised-like nodules from the size of a pinhead to that of a pea, one can be quite sure that tuberculosis is the disease. The spleen, which lies near the liver, is also usually quite enlarged, and occasionally the intestines will show these cheese-like nodules. Several other diseases affect the liver, but none of them have these characteristic raised spots.

The lameness is due to tuberculosis in the joints, and the yellowish and greenish diarrhoea is also an indication of this trouble. I would suggest that you kill all the birds that are thin or show indications of being in any way abnormal. Place the rest of them in a sanitary, well ventilated coop, which should be on new ground. Then thoroughly renovate the old coops by collecting all the droppings and litter from the floors, scrape the walls and ceiling, cleanse all hoppers, drinking fountains and roosts and saturate everything in the hen house and yards with a reliable commercial coal-tar disinfectant prepared according to the directions given by the manufacturers. Be sure to do a thorough job in disinfecting and repeat the application in ten days.

It is also advisable to board up all spaces under hog pens, corn cribs and other outbuildings where hens may stray. Fill in with dirt all sink holes and hollows and put in crops wherever possible all places where chickens have been allowed to run. Be sure to burn or bury very deeply all the fowls you kill. If the old coop is so built that it does not allow of proper ventilation or permit of sunshine, remodel it so that these defects are remedied.

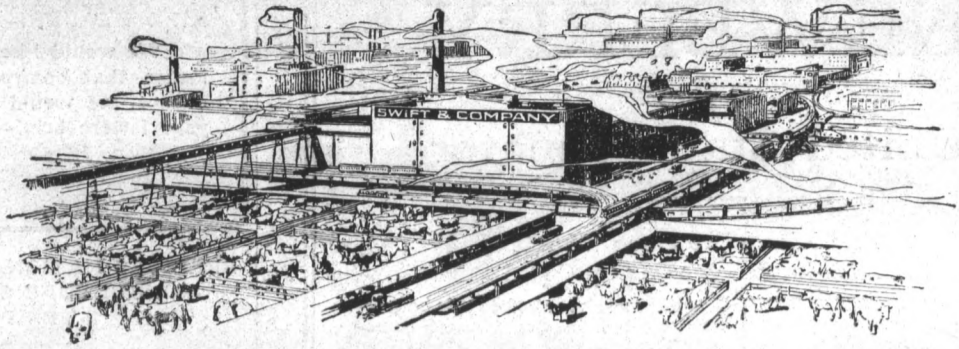
We would suggest that if you are still in doubt, consult a local veterinarian before taking any drastic action.

Cottage cheese made without seasoning is one of the safest and best foods for poults. It furnishes protein in abundance and they thrive on it amazingly. The turkey mother may be trusted at large with the late hatch and will range the fields with the young where they destroy great numbers of insects. A regular feed at night will bring them home.

In order to keep vermin in check in the poultry-house nests, perches and walls should be frequently cleaned and thoroughly disinfected. Hens will not lay if they are tormented at night by mites, and during the day by lice. Cleanliness in the pen is essential to success in poultry raising.

Hens and chicks require a large amount of water during warm weather. See that the drinking fountains are filled with fresh water every day.

Give the growing chicks access to shade if possible. The orchard or corn field makes an ideal place to rear chicks.



A business that is as big as its job

KEEPING a nation of over 100 million people regularly supplied with meat and meat products is a big and complex job.

And a still bigger job when to it is added the needs of the American soldier here and in Europe and of the Allies as well.

It is a job of converting the live stock of the West into meat and meat products and distributing them in perfect condition over long distances to the consuming centers—the North, South, East, West and abroad.

A job of supplying with *unfailing regularity* products that in the main are perishable, in the exact qualities and quantities needed, to the smallest out-of-the-way village as well as to complex and congested metropolitan centers.

Only organizations like that of Swift & Company, with its highly-

specialized methods of meat-dressing, its hundreds of branch-distributing houses, and its thousands of refrigerator cars, could have handled such a job efficiently and at a minimum of expense in the present war emergency.

Today American meat and meat products are the recognized standard of the world.

And the economy with which these products are produced is indicated by the fact that today the meat of a steer, dressed, is sold for less than the cost of the steer on the hoof! The proceeds of by-products, made out of what once was waste, have made this possible.

The size of the job has dictated the size of America's packing industry. And America's packing industry has proved itself to be equal to its job.

Swift & Company, U. S. A.

A nation-wide organization with more than 20,000 stockholders



POULTRY



BABY CHIX

Hatched for 5 Cents Each

Do you know that the chicks hatched by your hens cost you 22 cents each?

They do. Let us prove it to you.

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

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

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.

THE SMITH STANDARD CO.,
1967 W. 74th Street, Cleveland, Ohio

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

HOMESTEAD FARMS

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 Minorca Cockerels to mate with the hens.

HOMESTEAD FARMS, Bloomingdale, Mich.

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 222A, Zeeland, Michigan.

BREEDING COCKERELS

Bred-to-lay S. C. White Leghorn and Barred Rocks. Would advise ordering early. Price reasonable. Write us your wants. Sunnybrook Poultry Farms, Hillsdale, Mich.

FOR SALE—S. C. White Leghorn Chix \$12 per 100; hens \$1.25. Ferris 200 to 250 egg strain. Herbert Hammond, Williamston, 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 \$18.00 per 100; Barred Rocks, \$18.00 and \$15.00 per 100; R. C. and S. C. Reds, \$13.75 and \$5.00 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.

Hubers Reliable Hatchery,
333 West Fremont Street, Fostoria, Ohio

BABY CHICKS

\$5.50 per 50; \$10 per 100. S. C. White and Brown Leghorns. Bred for egg production. Safe arrival guaranteed. Express or parcel post. Catalogue free. Wolverine Hatchery, Box 202, Zeeland, Mich.

Barred Rocks—EGGS FROM STRAIN with records to 200 eggs a year; \$2 per 15. Delivered by parcel post, prepaid. Circular free. **FRED ASTLING,** Constantine, Mich.

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

Chicks from our Bred-to-Lay White Leghorns. Ferris and Young strains \$10 per 100; from our Barred Rocks, Thompson strain, \$15 per 100. **RUSSELL POULTRY RANCH,** Fostoria, Mich.

Choice Chicks; June and July Brown or heavies at 14c. Also Minorcas, Anconas and Buff Leghorns at 15c. **Orescent Egg Company,** Allegan, Mich.

Additional Poultry Ads on Page 759

NEWBERRY

for
United States Senator

The Man Who Does Things



Truman H. Newberry

Commander Newberry is now serving in the Third Naval District. He is going to continue to stay by his work and to do all he can to help win the war. His friends are actively presenting his qualifications to the people of Michigan as a man who would make a splendid United States Senator. Men of all walks of life are behind the movement because Truman Newberry would be a Senator who would stand squarely for right, for justice and for equality.

Published by The Newberry Senatorial Committee
A. A. Templeton, General Chairman
Paul H. King, Executive Chairman

(Advertisement)

Now as never before this country must have in the United States Senate able men, experienced men, men far sighted and unafraid.

TRUMAN H. NEWBERRY is such a man. He is always to be depended upon. He is not a dreamer, but a worker, a man who does things. He is a business man of rare judgment. He is unhesitating and well-balanced. His breadth of vision, his ability to handle large affairs, and his sense of justice and fair play splendidly qualify him to serve in the United States Senate and to help solve the big problems arising and to arise out of the war.

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.

BELIEVES NATIONAL BOARD OF AGRICULTURE SHOULD BE TRIED.

For one who has an optimistic view of the hope that agriculture may be placed on a just, constructive, conservative basis by wise business foresight, Mr. James N. McBride has the best and most advanced thought on the subject, and his proposal to establish a National Board of Agriculture on the lines he suggests, should be tried. His proposal contains the best thought on the subject.

But it is the opinion of many farmer students of the subject that, naturally, the old habit and practice of exploiting agriculture will continue in spite of all well meant and noble efforts to prevent it, until impoverished soil and famine conditions compel serious attention. Famine, the emptiness of the folly of exploitation pretense, and "great promise and no fulfillment" is the natural compensation for the nation's treatment of agriculture.—John E. Bell, Lapeer County.

poses as our friend. If not now, some time in the future, you may be certain he will use the privilege to exploit us.—A. W. Smith.

BELIEVES IN THE HAMMER.

enjoyed reading W. F.'s letter in your June 1 issue very much, but can't say that I agree with him entirely. I think he must have written same right after having eaten a big dinner—or making a good horse trade. He seems pretty well contented and satisfied with the world in general.

Now, I believe in boosting, too. In fact, it's a great deal pleasanter to boost than to knock, but when it comes right down to getting results, and waking the people up to a raw deal, then the hammer beats the tin whistle all to pieces. When everything is running smoothly and when the powers in control of affairs are on the level and doing their best, then the serenade is O. K., but when the politicians and middlemen try to give us the wrong end of the poker to hold, it's time for us to get our little hammers and do some thumping where it will do the most good.

TOO MUCH GRAFT.

Our schools are one of our large items of expense. We have always been in the grip of the book trust. They have prevented our having uniform text books, much to the detriment of the scholars, as well as to the great expense parents are put to in buying books when they move from one district to another.

A member of the prison board says if the state could do its own printing, it would clear up the deficiencies for the support of all prisons, and he could furnish text books for which we now pay \$1.25 for seventeen cents. But someone says that wouldn't be fair to the printers. It is considered perfectly fair for the state to buy hundreds of acres of land and work it with convict labor, and for all the state institutions to own large farms and have them worked by the inmates, and for the state to keep herds of thoroughbred cattle in competition with the private breeders, but farming, of course, is not a competitive business and anyone can do it.

If your farm happens to be so situated that you are interested in a public drain, one of the useless items of expense you will be up against is advertising, which frequently is twenty-five per cent of the total cost of the drain, and is absolutely useless. The remedy is to have that law in regard to advertising repealed.

Now, all the useless expenditures must eventually be paid by the consumer, and add to the cost of living.—N. N.

FARMERS THINK FOR YOURSELVES.

You do right in giving farmers an opportunity to air their opinions. I have one that I want to get before my brother farmers, particularly the potato growers. It seems to me that we potato raisers paid dearly for the past winter's experience. Had we gone on and marketed our 1917 crop as we usually do instead of getting excited and calling the other fellow names we would have been many thousands of dollars better off today. One thing we farmers must do is not to assign the right to think over to the fellow who

I agree with W. F. in regard to the main issues, and believe that the real trend of the government as well as the spirit of the people in general, is towards fair play all around, but the facts are that the middleman, the politician, and the profiteer, are organized and in a position to put their side of a question before the proper authorities at the proper time and before injurious legislation is enacted, but us farmers who, as a rule, are unorganized and who seldom hear of such legislation until too late, can only make our opinions known by a big kick afterwards.—S. L., Eaton County.

THINKS LAW ON GRINDING FEED NECESSARY.

It is coming now to be a frequent practice when a farmer takes a grist to the feed mill to be ground, for him to lose from three to five times the regular charge of ten cents a bag for grinding. Farmers who weigh their grists before and after grinding are apt to quit if they have a similar experience to one recently had by the writer. I took two bags of old corn broken up to get more in the bags, and three full bags of oats to be ground together, including the cobs. Ordinarily I should have had six full bags in my return grist. They put this grist in six bags, but when I reached home all six were put in five bags, which could be tied easily. In other words, we took 409 pounds of oats and corn to the mill and received 328 pounds, or a loss of eighty-one pounds.

My grist, therefore, cost me as follows: I paid ten cents per bag for the grinding, or fifty cents for the grist. I lost eightyone pounds of grain, which at \$3 per cwe. would add \$2.43, making a total of \$2.93 for the grinding of the five bags of grain.

Unless we farmers are careful, this kind of profiteering is likely to be practiced against us. If a law is necessary for our protection, it would seem wise for farmers to insist upon our legislators taking appropriate action. To those who have feed ground for their live stock, it would be well to watch carefully to see that they are not being cheated.—W. H., Reading, Mich.

The Farmers of Michigan Lose Annually More Than \$2,500,000.00 Worth of Live Stock Horses, Cattle, Sheep and Hogs FROM ACCIDENT AND DISEASE

The animals are destroyed and their cash value lost not only to the farmer but to the community, the State. This amazing sum of money can be saved to the farmers and the State if they (the farmers) will but avail themselves of

The Michigan Live Stock Insurance Company

organized expressly for the purpose of indemnifying owners of live stock against death from any cause. We want agents to carry this great message to every farmer.

Colon C. Lillie, Pres. and Sup. of Agts.,
319 Widdicomb Bldg., Grand Rapids, Mich.
Harmon J. Wells, Sec. and Gen. Mgr.
Graebner Bldg., Saginaw, W. S., Mich.

BREEDERS' DIRECTORY.

Change of Copy or Cancellations must reach us
Ten Days before date of publication.

We Offer a Few Special Bargains
In S. C. White Leghorn cockerles, Rambouillet rams, Hampshire pigs (either sex) and Holstein bulls. A good chance for a small investment to reap the benefit of a large expenditure of capital and years of expert breeding.

Flanders Farm, Orchard Lake, Mich.

CATTLE.

Wildwood Farms

Breeders of Best Strains of
Aberdeen Angus Cattle
and Duroc Jersey Hogs

Several young bull calves on hand, three of which are of serviceable age, out of Black Monarch III, three times Grand Champion, Michigan State Fair. Also several AI Brood sows. Will be glad to correspond with you by letter regarding stock. Write

SIDNEY SMITH, Supt.

Wildwood Farms, Orion, Michigan
W. E. SCRIPPS, Proprietor.

WOODCOTE ANGUS

TROJAN-ERICAS & BLACKBIRDS (BLACKCAPS) only. The most fashionable strains of the breed. Great care given to matings and pedigrees. Every animal BRED IN THE PURPLE. Breeders and feeders of many INTERNATIONAL WINNERS.
WOODCOTE STOCK FARM, Ionia, Mich.

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.
G. A. WIGENT, Watervliet, Mich.

Cloverly Angus Good quality bulls of serviceable age and younger. Inspection invited.
Geo. Hathaway and Son, Ovid, Mich.

For Sale—Three Aberdeen Angus Bulls ready for service. LANG BROS., Davison, Michigan

GUERNSEYS must reduce herd, so offer a few choice females of Glenwood breeding also bulls, all stock of A. B. breeding, herd tuberculin tested.
T. V. HICKS, Battle Creek, Mich.

Registered Guernseys
Two choice heifer calves, \$300. One bull calf with above \$75; this bull calf is no relation to heifer calves.
J. M. WILLIAMS, North Adams, Mich.

Guernseys—2 Registered bull calves. Good breeding, cheap for quick sale, note accepted in payment. Hicks' Guernsey Farm, Saginaw, W. S., Mich.

Guernseys 45 Registered head, all tb. tested. Nora's May King, son of Imp. May Rose King heads our herd, 19 of his half sisters sold averaging \$1950 each. His bull calves are booked ahead at reasonable prices.
Avondale Stock Farm, Wayne, Mich.

For Sale Registered Guernsey bull calves May Rose breeding.
JOHN EBELS, R. 2, Holland, Mich.

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

CLUNY STOCK FARM

100--REGISTERED HOLSTEINS--100
When you need a herd sire remember that we have one of the best herds in Michigan kept under strict sanitary conditions. Every individual over 6 mos. old regularly tuberculin tested. We have size, quality, and production records backed by the best strains of breeding.
Write us your wants.
R. BRUCE McPHERSON, Howell, Mich.

I Always Have Holsteins To Sell

If wanting Registered cattle write me your wants before placing your order elsewhere.
L. E. CONNELL, Fayette, Ohio

OK Leaf Farm. Herd sire Lenawee Pontiac Calamity King offer Registered Holstein bull calves from A. B. O. cows and the above sire whose dam holds the milk and butter record in the state of Ind. 7 days milk 796.3, butter 22.51—315 days milk 23782.3, butter 926.775.
E. H. GEARHART & SON, R. 4, Marcellus, Mich.

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

Flanders Farms Dispersion Sale

65 HEAD

Holstein-Friesians

At the Farm

65 HEAD

Orchard Lake, Mich., June 26, 1918

An Opportunity for the Dairyman and Breeder

This sale which comprises the entire Flanders Farms herd of sixty-five head will include: A 31-lb. cow—two 30-lb cows—a 29-lb. three-year-old—a 24-lb. three-year-old—a 20-lb. two-year-old daughter of the great Rag Apple Korndyke 8th—a 19.90-lb. two-year-old daughter of King Segis Pontiac Alcartra from a 35.61-lb dam. Twin daughters of King Segis Pontiac Alcartra from a 20.75-lb. daughter of a 36-lb cow, both have made over 15-lbs. butter as junior two-year olds. Another 15½-lb. 2-year-old by the same bull and from a 27-lb. cow. Several others with good records and bred in the purple—All but twelve are from A. R. O. dams—Eight are from dams with records 30.28 to 35.61 at 4 years—Three from 29.31-lbs. three-year-old—Fourteen others whose dams have records ranging from 20-lbs. as a junior two-year-old to over 28-lbs.—Thirty two are sired by that great young sire King of the Pontiacs Segis—"The Best Individual Son of King of the Pontiacs"—whose dam is Hilldale Segis, a 33-lb. daughter of King Segis.—All females of breeding age have been bred to King of the Pontiacs Segis—A son of Pontiac Apollo, he by Hengerveld De Kol, from a 31-lb. daughter of Pontiac Burke. Several young sons of King of the Pontiacs Segis from high record dams. Maplecrest De Kol Ogden, a son of Friend Hengerveld De Kol Butter Boy from a 28-lb. daughter of Pontiac Aaggie Korndyke.

To Stay From This Sale Will Be A Loss To You.

Special Notice
There will also be sold at the same time and place fifteen head of registered and high grade Percheron horses including the famous Flanders Farms brood mares, stallion and colts. Some of the very best in this country.

FLANDERS FARMS,
W. E. Flanders, Owner Thos. Clement, Supt.
Col. B. V. Kelley, Auctioneer S. T. Wood, Sale Director
Liverpool Sale & Pedigree Co., Inc., Sale Managers

Tuberculosis Guarantee
The Flanders Farms Herd has been under Federal supervision for several years. Every animal over six months of age has been tuberculin tested and will be GUARANTEED FREE FROM TUBERCULOSIS FOR SIXTY DAYS.

CATTLE

"Top-Notch" HOLSTEINS

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

A Few Fine Bulls For Sale

Bigelows Holstein Farms, Breedsville, Mich.
\$50 Liberty Bond gets 1 mo. old grandson of Pontiac Maid 311-3 lb. Other granddam sister to grand sire 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. CLARKE, Redford, Mich.

Stonyhurst Stock Farm

Has a few fine bulls for sale. Are offering one this week from a 21.79 lb. Jr. 4 and sired by Pet Johanna Sir Hartog whose daughters are just coming fresh, one at 2½ 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, 45.5 milk 7 day. Priced Cheap.
F. A. BARNETT & SONS, Rochester, Mich.

The Pontiac Herd "Where the Champions come from"

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

There is more money in dairying with high producing purebred

HOLSTEINS

They thrive anywhere, subsist upon coarse feeds and yield enormous quantities of milk and butterfat. Most profitable cows on earth. Free booklets. The Holstein-Friesian Association of America, Box 164, Brattleboro, Vt.

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 677, 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 Kol Butter Boy, four of whose daughters have records over 1000 pounds and she is also a granddaughter of Pontiac Aaggie Korndyke, with six daughters above 1000 pounds of butter in one year.
Peaceland Stock Farm, Three Rivers, Mich. C. L. Brody, Owner Port Huron, Mich. Charles Peters, Herdsman

Holstein

Three bull calves born Sept. 21, Oct. 6, and Dec. 26, that are straight, deep bodied, well grown. Good A.R.O. backing both sides, 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, created 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 49427 at head of herd. 11 bulls for sale all ages either polled or horned. EARL O. McCARTY, Sec'y Mich. H. B. Ass'n, Bad Axe, Mich.

Choice Bulls ready for service. Also heifers for sale. Strong in the Blood of Royal Majesty. Come and see them or write for particulars. THE WILDWOOD HERD, Alvia Balden, Osgo, 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 Pegis 99th of Hood Farm. IRVIN FOX, R. 3, Allegan, Mich.

For Sale Jersey Bull

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

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.

BROOKWATER FARM
REGISTER OF MERIT JERSEYS

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. B. WEHNER, R. 6, Allegan, Mich.

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

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

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

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.
C. H. PRESCOTT & SONS, Farms at Prescott, Mich. Office at Tawas, Oity, 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. HNSCHMIDT, R. 5, Reed Oity, Mich.

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

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

Dairybred Shorthorns of best Bates Strains, young stock of both sexes for sale. J. B. HUMMEL, Mason, 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 Archers Hope, Avondale, Maxwellton Sulton and White Hall Sulton by the Oacola 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

2 loads feeders and two loads yearling steers. Also 2 can show you any number 1, 2 and 3 years old from 600 to 1200 lbs. Isaac Shanstun, Fairfield, Iowa, R. 3

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

Registered Berkshire gilts and sows for fall farrowing, 3 boars and spring pigs, either sex. CHASE STOCK FARM, R. 1, Marlette, Mich.

Durocs. Choice spring pigs out of selected sows and sired by our best herdsboars. They are of the big type, strong boned, smooth and of excellent quality and include some of the most popular blood lines such as Orion Cherry King, Top Col. Defender, Brookwater etc. Prices reasonable. The Jennings Farms, Bailey, Mich.

50 Duroc Sows and Gilts

for fall farrowing, bred to Orion's Fancy King 83357 the biggest pig of his age ever shown at International. 1 mile N. E. of town. Visitors welcome 7 days in week. Newton Barnhart, St. Johns, Mich.

Duroc Jerseys For Sale

Herd bear and spring pigs. Write Wells Parish and Sons, R. 3, West Olive, Mich.

DUROC JERSEYS

M. D. HEYDENBERG, Wayland, Mich.

Additional Stock Ads. on Page 759

LATEST MARKET REPORTS

FIRST EDITION.

The markets in this edition were revised and corrected on Tuesday afternoon, June 18.

WHEAT.

General market conditions remain unchanged. Receipts amount to really nothing, and trading is greatly restricted. Regarding the new crop, harvesting has already started in the southern and southwestern sections. The quality of the grain promises to be very good, the aggregate yield of which is estimated at nearly 600,000,000 bushels. The United States visible supply decreased 325,000 bushels last week to 821,000 bushels as compared with 23,758,000 bushels a year ago. Export clearances of flour and wheat from North America totaled 1,584,000 bushels compared with 2,841,000 bushels the previous week, and 8,595,000 bushels for the corresponding week last year. At Detroit No. 2 red wheat sold at \$2.70 per bushel at this date in 1917. Present quotations are:

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

CORN.

The volume of business in the corn markets was considerably increased last week with values substantially advanced. While a considerable amount of corn has reached market centers during the past few months, only a comparatively small percentage of it has been of good quality, in fact, much too little to take care of the demand for the better grades. Dealers also expect an immediate restriction in deliveries at country elevators, due to the early arrival of haying and harvesting. The new crop is developing under almost ideal conditions, and farmers thus far have been able to cultivate the crop well, with the exception of a few isolated communities. The North American visible supply decreased 450,000 bushels to 14,804,000 bushels. One year ago the local price for No. 3 corn was \$1.73 per bushel. Present quotations here are:

- No. 3 corn.....\$1.50
- No. 3 yellow..... 1.60
- No. 4 yellow..... 1.50
- No. 5 yellow..... 1.35
- No. 6 yellow..... 1.25

At Chicago the trade is fluctuating on higher levels, with cash prices as follows: No. 2 yellow \$1.70@1.71; No. 3 yellow \$1.63@1.67; No. 4 yellow \$1.50@1.55; July corn closed at \$1.45 3/4.

OATS.

While the government reports suggest a crop of over one and a half billion bushels, prices made gains during recent days. This perhaps was due largely to the influence of more liberal export buying. The United States visible supply decreased 1,782,000 bushels last week. Standard oats here at this date a year ago sold at 72c per bushel. Present quotations are:

- Standard oats.....79
- No. 3 white.....78 1/2
- No. 4 white.....77 1/2

RYE.

This trade is again inactive, with the price of \$1.95 for cash No. 2 at Detroit, and the trade showing a weaker tone at Chicago.

BEANS.

There is no change in this trade. The outlet for navy beans seems just as restricted as it was a month ago. Farmers and country elevators are becoming anxious to deliver their surplus, which encourages the easy feeling among those who buy. The local price for cash beans is steady at \$10 per cwt. The Chicago trade reports a limited inquiry at the old prices. 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.

Further additions to local stocks and a quiet demand is working prices to a lower level. Here are the latest quotations:

- No. 1 timothy....\$18.50@19.00
- Standard..... 17.50@18.00
- Light mixed..... 17.50@18.00
- No. 2 timothy..... 15.50@16.00
- No. 1 clover..... 12.50@13.00

Pittsburgh.—At this point hay receipts show a falling off, while the de-

mand is gradually improving. For better grades the market looks rather good. Inferior stock is not wanted. Quotations are:

- No. 1 timothy....\$18.00@18.50
- No. 2 timothy.... 16.00@17.00
- No. 1 light mixed 16.00@17.00
- No. 1 clover mixed 15.00@16.00
- No. 1 clover..... 14.00@15.00

POTATOES.

The volume of old potatoes moving is much reduced, Michigan still being the heaviest shipper. While a slightly easier feeling obtains in some markets, the situation is generally steady at unchanged prices. The early Irish potato crop in Virginia is reported as not more than 75 per cent of a yield on one-half the acreage of the last crop. The condition and prices paid per cwt. by jobbers for Michigan stock U. S. Grade No. 1 at various market centers as reported by the local office of the U. S. Bureau of Markets, are as follows:

- Detroit (good).....\$1.80@1.83
- Buffalo (firm)..... 1.70@1.85
- New York (steady).... 1.80@2.00
- Cleveland (supplies exhausted).
- Cincinnati (steady).... 2.00
- Columbus (firm)..... 2.25
- Indianapolis (weaker).. 1.70@1.80
- Chicago (unsettled).... 1.55@1.60

BUTTER.

The butter trade is not following its usual course. At this season prices usually sag and give the storage men a chance to lay in supplies. This season however, values continue to hold firm and even advance during the period of heavy production. Current consumption is unusually large and purchases for military use are taking care of nearly all the remaining stocks. Storage men are now beginning to get anxious and have started buying in competition with others. Detroit board quotes fresh creamery firsts at 41 1/2 c; do extras 42 1/2 c per lb. Chicago prices have advanced to 36@42 1/2 c, with the market holding steady. The New York trade is firmer with creameries ranging from 42 1/2 @45 1/4 c. Philadelphia is paying up to 49c for fancy creameries.

CHEESE.

It was announced last week that the Food Administration will hereafter buy all cheese for our government and our allies. Price changes in this trade, particularly in centers nearest producing sections, have been in an upward direction. The trade is firm and consumption is generous. Production is increasing and the movement is large from producing districts. Local prices for flats are 21@24c; daisies 22 1/2 c; limburger 21@22c. In Chicago Young Americas quoted at 23@23 1/4 c; daisies double 22c; do singles 22@22 1/4 c. New York trade firm with fresh specials selling at 23 3/4 @24c; do average run 23 1/2 c; full creams bring 22@25c in Philadelphia.

EGGS.

As production decreases, the price of eggs moves upward. Receipts at primary market show a general falling off, except in a few instances. At Detroit prices are now ranging from 32 1/2 @35c to jobbers, with current receipts in new cases bringing the top price. The Chicago market rules steady at prices slightly advanced over those quoted a week ago, firsts being 30 1/2 @32 3/4 c; ordinary firsts 26 1/2 @30 1/2 c at mark, cases included 29@32c. The trade is also steady in New York, with values for fresh gathered extras at 39 @40c; do storage packed 37@38 1/2 c. In Philadelphia the trade is firm, with western extra firsts quoted at \$11.55 per case.

WOOL.

Chief of the Wool Division Louis Penwell, states regarding the establishment of prices by local dealers to the grower, that this cannot be determined with any degree of certainty, and cannot be anything more than an estimate. He says the buyer should leave himself a sufficiently liberal margin to make his allowed profit, and then the whole matter will be finally adjusted at the end of the season, he being limited to a profit of 1 1/2 c per lb.

DETROIT CITY MARKET

Trading is becoming more active at the city markets, with offerings liberal and demand active, especially from householders. Strawberries were in

active demand at \$5.75@8 per bushel; peas \$1.75@2.50; onions \$2@2.25; radishes \$1@1.25; head lettuce 65c; ordinary lettuce 25c; beets nine bunches for \$1; butter 50c; eggs 48c; hay \$23 @25 per ton.

GRAND RAPIDS

Dry weather is cutting short the strawberry season and prices continue high, berries retailing at 20@25c per quart. Grain prices at the mills are as follows: Wheat \$2.07; rye \$1.75; oats 82c; buckwheat \$1.25; corn \$1.70; beans \$8.50. Hay worth \$18@20. Eggs are quoted at 32c. Some of the sheep owners are selling their wool at 65c. The farmers cannot see why the price should be just what it was last year when feed and everything else during the past winter almost doubled in price.

LIVE STOCK DETROIT

Tuesday, June 18, 1918.

Dry-fed cattle are steady. Grassers rule 25@50c lower.
 Best heavy steers.....\$14.00@17.00
 Best hdy wt bu str (grs) 11.50@13.00
 Mixed str and hfrs (grs) 10.50@12.00
 Handy lt butchers (grass) 9.00@10.50
 Light butchers (grass) ... 8.00@ 9.00
 Best cows (dry-fed)..... 10.00@11.00
 Butcher cows (grass).... 8.50@ 9.00
 Cutters..... 7.50@ 8.00
 Canners..... 6.50@ 7.25
 Best heavy bulls..... 10.00@11.00
 Bologna bulls..... 8.50@ 9.50
 Stock bulls..... 8.00@ 9.00
 Feeders..... 10.00@13.00
 Stockers..... 8.00@11.00
 Milkers and springers.... \$60@ 120
 Veal Calves.
 Market strong and 50c higher than last week
 Best grades.....\$16.75@17.00
 Others..... 10.00@15.00

Sheep and Lambs

Market steady.
 Best lambs.....\$ 17.00
 Fair lambs..... 15.00@16.00
 Light to common..... 10.00@14.00
 Fair to good sheep..... 10.00@13.00
 Culls and common..... 8.00@ 8.50
 Hogs.
 Market rules steady with Monday. Pigs are 50c below last Tuesday.
 Pigs.....\$ 17.00
 Mixed..... 16.50@16.70

BUFFALO.

Tuesday, June 18, 1918.

Pigs sold here today* at \$13, while other grades brought \$17.65@17.75. Best lambs also brought \$18, while the calves sold up to \$18.50. Dry-fed cattle continue steady with yesterday's market, while grassers are \$1 lower than the sales last week.

WHAT THEY DID AT BUFFALO ON MONDAY.

Here are the quotations based upon the transactions at the live stock markets of East Buffalo on Monday of this week:

Receipts today were 205 cars. The good dry-fed grades were steady, others 50@75c lower than Saturday.

Cattle.

- Prime heavy steers.....\$17.55@18.35
- Best shipping steers..... 16.50@17.50
- Plain and coarse..... 15.00@15.50
- Native yearlings..... 16.00@16.25
- Best handy steers..... 15.00@16.00
- Fair to good kinds..... 13.25@14.25
- Western heifers..... 13.75@14.50
- Handy str and hfrs mixed 12.50@13.00
- Best fat cows..... 12.50@13.00
- Butcher cows..... 10.00@11.25
- Grazing cows..... 7.50@ 8.00
- Fancy bulls..... 12.00@13.00
- Butchering bulls..... 10.50@11.50
- Common bulls..... 9.00@10.00
- Best feeding steers..... 10.50@11.50
- Medium feeding steers .. 9.50@10.50
- Light common..... 8.00@ 9.00
- Milkers and springers.... \$65@ 150

Calves.

Receipts 2000. Market rules strong at the following prices:
 Tops.....\$ 18.50
 Fed calves..... 6.50@ 8.50

Sheep and Lambs.

- Receipts 15 cars. Market is steady.
- Top lambs.....\$18.00@18.50
- Yearlings..... 15.00@16.00
- Wethers..... 14.00@14.50
- Ewes..... 12.50@13.00

Hogs.

Receipts 45 cars. Market has ad-

vanced 10@15c. Medium to heavy.....\$17.40@17.50
 Yorkers..... 17.50@17.60
 Pigs..... 17.75@18.00

CHICAGO.

Cattle.

Tuesday, June 18, 1918.

Estimated receipts today were 23,000. Market for stock selling above 17c is steady, with other kinds slow and lower.

Good choice prime steers \$16.65@18; common and medium butchers at \$12.35@16.65; heifers \$8@15; cows \$7.90@14.75; bulls \$8.50@13; common and cutters \$6.75@7.90.

Good calves were steady and others unevenly lower.

Hogs.

Estimated receipts 31,000. Early selling was full steady with Monday's close. Packers are buying slowly.

Tops \$17; bulk of sales \$16.60@16.95; heavy \$16.60@16.70; mixed and light \$16.75@16.95; packers' hogs \$16 @16.30; medium and mixed \$16.25@16.75; roughs \$15.60@15.90.

Sheep and Lambs

Estimated receipts are 8,500. Sheep are steady; lambs strong at 25c higher. Best lambs \$17.25@17.75; spring lambs \$19.50@20; sheep \$11@13.50.

THE SITUATION AT CHICAGO ON MONDAY.

June 17, 1918.

Our special representative in the Chicago Stock Yards reports as follows:

Cattle.

- Total today.....24,000
- Total last week.....62,424
- Total previous week....54,005
- Total week year ago...53,003

Hogs.

- Today's total.....33,000
- Total last week.....142,091
- Total previous week....82,389
- Total week year ago...111,806

Hogs are active today and mainly 10@15c higher, with sales at \$15.75@16.95 for rough heavy packers to the prime light shipping barrows. The best heavy shipping hogs sell about a dime below top figures, and pigs sell mostly at \$15.50@16.85.

Shorn Lambs.

Last week saw prime clipped lambs advance to \$18.50, with a much lower closing. Spring lambs sold this morning at \$15@20, whereas at one time last week the top was \$20.50. Inferior native clipped lambs sold down to \$12 recently. Sheep are scarce.



DR. HESS DIP and DISINFECTANT

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

For Scab, Ticks and Skin Troubles

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

DR. HESS & CLARK
 Ashland Ohio

Veterinary.

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

Cow Gives Bloody Milk.—I am anxious to know of a cure for my cow that gives bloody milk. D. A. H., Marian, Mich.—Apply one part tincture arnica and eight parts water to bruised part of udder three times a day. Rough milking is one of the common causes of cows giving bloody milk.

Indigestion.—Weak Heart.—I have a bull calf nine months old that was wintered on roots and straw, kept in a comfortable barn where he had exercise. During the cold weather he seemed to shiver, but my other cattle, receiving same food and care, were seemingly comfortable. He is now running on good pasture with the rest of my cattle, but is not thriving. In moderately cool weather he frequently pants with mouth open and tongue protruding. He is seemingly quite uncomfortable when weather is warm. I forgot to say that his appetite appears to be good. G. H. B., Levering, Mich.—

Give him 30 drops of fluid extract of nux vomica, 20 drops of fluid extract lobelia and 2 drs. of Fowler's solution at a dose in feed or drinking water two or three times a day.

Warbles.—I have a cow that has lumps on her back about the size of a quarter. These bunches have small holes and pus can be squeezed out. This cow is fed chopped oats twice a day and is running in good pasture. D. F. F., Clare, Mich.—The grubs should be squeezed out and killed, then apply to wounds on back one part coal tar disinfectant and 20 parts water or apply equal parts oxide of zinc and boric acid once or twice a day and the skin will soon heal. If you are sure that the bunches contain pus, first apply a few drops of peroxide hydrogen which will free cavity of pus. It is perhaps needless for me to say that the peroxide should be dropped into the cavity.

Indigestion.—Urinate Too Often.—I have a twelve-year-old mare which, when plowing, is inclined to perspire too freely and occasionally staggers. This same mare is troubled with worms and I have thought that her kidneys act too often. A. G. I., Utica, Mich.—Mix one part ground nux vomica, one part powdered sulphate iron, one part salt and three parts ground gentian—give her a tablespoonful at a dose in feed night and morning.

Blind Stagers.—I have a seven-year-old Percheron mare which, while working, is inclined to toss her head, move sideways and very often backs as if having a fit; however, after allowing her to stand still for a few minutes she seems to be all right. This mare has a good appetite and so far as I can tell is in a healthy condition. Some two months ago she showed lameness in left hind leg; there was soreness on inside of thigh which disappeared, and lately she is showing lameness in the right thigh, but less lame than heretofore. Subscriber, Linden, Mich.—Give her 1 dr. of bromide of potash, 40 drops of fluid extract of nux vomica and a tablespoonful of cooking soda at a dose in feed two or three times a day. Apply camphorated oil to inside of right thigh twice a day.

LIVE STOCK NEWS.

Less Beef Consumed.

The consumption of beef throughout the country has undergone a great falling off recently, cheaper vegetables being largely substituted for high-priced meats. Choice beefs carrying much weight are getting very scarce, and not many of the cattle marketed in Chicago are weighing as much as 1000 pounds. The demand from surrounding states for good stockers and feeders is urgent, with a scarcity of choice lots, a few of which have sold for \$13.60 to \$13 per hundred pounds.

Spring Lamb Market.

Spring lambs from Kentucky and Tennessee are beginning to move to market, but the movement is unusually late, as sheepmen everywhere are awake to the importance of making their flocks a choice as possible at this period of extremely high prices. Most of the good-sized consignments of spring lambs reaching the Chicago market thus far have come from California, and they have sold on the whole very well. The southern spring lambs are described as never better in quality, and the lambs are averaging heavier than usual, while in numbers they are said to show a small increase over last year. A further increase is expected by another year as thousands of breeding ewes were shipped into Kentucky and Tennessee last year from the corn belt states.

SEPARATORS SPREADERS AT BIG SAVINGS ENGINES

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

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



HOG FEED CHEAPER

Kiln Dried Mahogany Corn
is being used extensively by hog feeders with very satisfactory results. It can be bought approximately 60c cheaper than No. 2 Yellow, and the feeding value compares very favorably. Our corn is very dry, around 12% moisture, so there is practically no danger of it getting out of condition even in warm weather. We have a special grade of Kiln Dried corn that we can offer as low as \$1.25 bushel. (\$46.40 ton) F.O.B. Jackson in any quantity desired. Bags charged extra 20c each with same refund, when returned. Corn guaranteed satisfactory or money refunded. Mail check for your summer supply.

J. E. Bartlett Co., Jackson, Mich.
Michigan's Largest Shippers Feed and Grain.

A Chemical and Mechanical Education Free.

This summer The Dow Chemical Company will start a course of training for young men between seventeen and twenty-one interested in learning either a trade or getting fundamentals of a chemical engineering education. The educational requirements are that the boys should have finished the eighth grade. A high school education is still more desirable. The young men spend three hours a day in the Company School under competent instruction and the rest of the day in the plant. Compensation will be allowed for the time spent in school as well as while at work in the plant, so that it is possible for any boy, whether he has a family to help or not, to avail himself of this opportunity. For further information write to W. H. Clark, The Educational Department, The Dow Chemical Company, Midland, Mich., stating your age and education and an interview will be arranged if possible.

Is Your Truss a Torture?

Are you suffering from rupture without any hope of relief? Get the Brooks Rupture Appliance on free trial and know the comforts of a sound man. The automatic air cushion clings closely without slipping or chafing. Guaranteed to comfortably retain the hernia. Draws and binds together the parted tissue and gives Nature a chance to knit them firmly. As specialists of 30 years' experience we have perfected a comfortable, sure relief from hernia in the Brooks Rupture Appliance. Endorsed by thousands of physicians. Sent on trial to prove its worth. Made to your measure. Durable—cheap. Write today for measure blanks.

BROOKS APPLIANCE CO.
494 State St. Marshall, Mich.

Two Giants of the Great Lakes

Regular steamer service between Detroit and Buffalo. The two Giant Steamers of the Great Lakes—City of Detroit III and City of Cleveland III—make daily trips between Buffalo and Detroit, leaving Detroit at 5 p. m., leaving Buffalo 6 p. m. Daily service is also given between Detroit and Cleveland. The steamers Eastern States and Western States leave both points at 10:45 p. m., arriving at destination early the following morning. Four trips weekly are made between Toledo, Detroit, Alpena, Mackinac Island and St. Ignace over the Coast Line to Mackinac. (Railroad tickets are honored on all D. & C. steamers.

MINERAL HEAVE COMPOUND

CULL BEANS
Machine picks one dollar per bu. Girls picks one dollar and a quarter truck Grand Ledge. Samples sent if desired. W. L. TRELAND & CO., Grand Ledge, Mich.

DEATH TO HEAVES! NEWTON'S

STANDARD REMEDY PER ANNO INDIGESTION COMPOUND Cures Heaves by correcting the cause—Indigestion. Prevents Colds, Staggers, etc. Best Conditioner and Worm Expeller. 25 years sale. Three large cans guaranteed to cure Heaves or money refunded. The lot or 2nd can often cures. \$5.00 and \$1.10 per can at dealers' or prepaid by parcel post. Booklet free.

LIME EGGS:

LAKE SHORE STONE COMPANY, Milwaukee, Wis. P. O. Box 15.
We are paying good premiums for eggs not over four or five days old, direct shipments from the farm. Ship to us or write for particulars.

HAY FRUIT

Ship To The Old Reliable House Daniel McCaffrey's Sons, 623-625 Wabash Bldg., Pittsburgh Pa.
We want your entire crop. Write for rubber stamp. The E. L. Richmond Co., Detroit

Farms and Farm Lands For Sale

150 Acre Farm, Crops, \$1800
Borders River and Private Lake stocked with 11000 trout; boating, bathing, fishing; 150 acres dark loam land divided into level machine-worked fields, river, lake and spring watered pasture; estimated 1000 cords wood, 50,000 ft. timber, apple orchard, 8-room house, veranda, 41x56 ft. barn, silo, ice house, carriage house, other buildings with piped spring water; 1/2 mile milk station, mule school, on improved road convenient to depot, 2 villages. To insure quick sale owing to loss of wife owner includes crops price only \$1800, \$700 down, easy terms. All details page 8 Strout's Big Catalogue of this and other farm bargains many with stock, tools, growing crops included; mailed free. E. A. STROUT FARM AGENCY, Dept. 101, Union Bank Bldg., Pittsburg, Pa.

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.

POULTRY

Fowlers Buff Rocks Booking orders now at \$3 for 15; \$4 for 30; \$5.50 for 50; \$9.00 for 100. R. B. FOWLER. - - - Hartford, Mich.

Ferris White Leghorns

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

IMPROVE YOUR POULTRY

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

Laybilt S. C. W. Leghorns

Large, great layers pure white. Day-Old Chicks last hatch June 25th, \$12 per 100 prepaid. Choice 2 Year Old Hens large and vigorous will lay till late fall. \$1.00 each. Yearling hens, \$1.25 each. 8 weeks old pullets \$1.00 each. Everfresh Egg Farm, Ionia, Mich.

DUROCS

service boars, bred sows, fall pigs. Express paid. J. H. BANGHART. E. Lansing, Mich.
Duroc Jerseys for sale. Service boars & spring pigs also Shorthorn bulls, calves, milking Sires. 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.

Raise Chester Whites

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

Chester White Pigs

Excellent type and quality 2 1/2 to 3 months old, either sex. Price \$25.00 each. Pedigree free, also express paid. L. C. SELLECK, Breckenridge, Mich.
Chester Whites, spring pigs either sex, can furnish a few pairs or trios not akin from strictly big type mature stock at reasonable prices. F. W. Alexander, Vassar, Mich.
Spring Pigs Breeding and prices on request. J. D. CRANE & SON, Plainwell, Mich.

CRANDELL'S Big Type O. I. C.'S

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

BRED GILTS and SERVICEABLE BOARS

J. CARL JEWETT, Mason, Mich.
LAST fall gilts all sold, have a good lot of last spring litters from 3 sires good growthy stock. Farm 1/2 mile west of depot. Citizens Phone 124. OTTO B. SCHULZE, Nashville, Mich.
O. I. C.'s all sold except some fall gilts. Order your spring pigs now. C. J. THOMPSON, Rockford, 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 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 litters all queens of the breed go at private treaty. W. J. HAGEMSHAW, - - - Augusta, Mich.

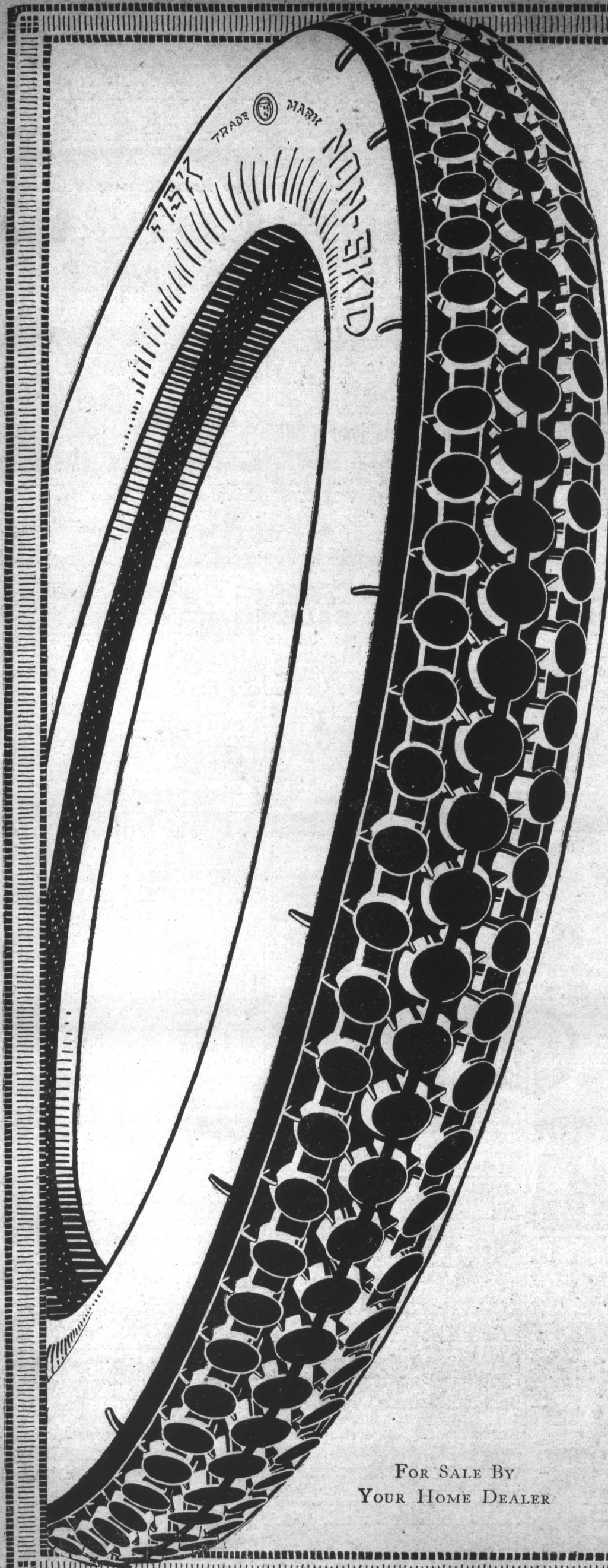
Nothing for sale at present. Spring pigs are coming fine.

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

Hampshire

Pigs only for sale now, a bargain in boar pigs. JOHN W. SNYDER, R. 4, St. Johns, Mich.
HORSES
Percherons, Holsteins, Angus, Shropshires, Durocs DORR D. BUELL, Elmira, Michigan.
Percheron Stallions and mares of reasonable prices; inspection invited. F. L. KING & SON, - - - Charlotte, Mich.
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.
SHEEP
KOPE-KON FARMS. Coldwater, Mich.
Hampshires & Shropshires. It's a wise man who orders his ram for August delivery now.
About July 1 we will offer for sale choice Shropshire Rams. ARMSTRONG BROS., R. 3, Fowlerville, Mich.
Some Good Breeding Ewes and registered RAMS for sale. Barnard Sheep Ranch, R. 5, Clare, Mich.



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