

MICHIGAN FARMER

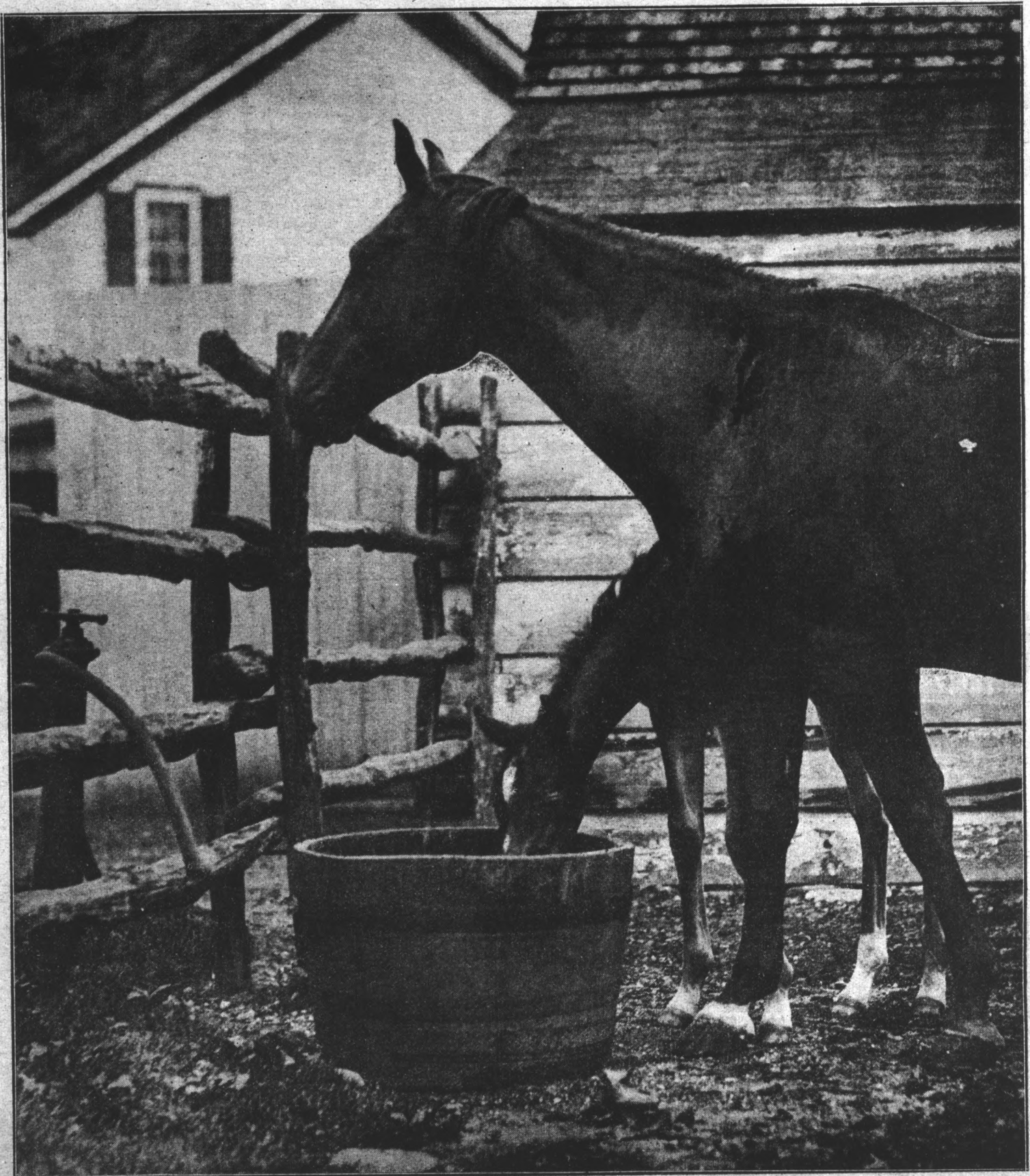
AND
LIVE STOCK
PUBLISHED WEEKLY.

JOURNAL.
ESTABLISHED 1843.

VOL. CLXI. No. 1
Whole Number 4260

DETROIT, MICH., SATURDAY, JULY 7, 1923

ONE YEAR \$1.00
FIVE YEARS \$5.00



MICHIGAN SECTION THE CAPPER FARM PRESS



Published Weekly Established 1843 Copyright 1923

The Lawrence Publishing Co.

Editors and Proprietors

1632 LaFayette Boulevard Detroit, Michigan

Telephone Cherry 8384

NEW YORK OFFICE 120 W. 42nd St.

CHICAGO OFFICE 608 So. Dearborn St.

CLEVELAND OFFICE 1011-1013 Oregon Ave., N. E.

PHILADELPHIA OFFICE 261-263 South Third St.

ARTHUR CAPPER President
 MARCO MORROW Vice-President
 PAUL LAWRENCE Vice-President
 E. H. NANCE Secretary

I. R. WATERBURY Associate Editors
 BURT WERMUTH
 FRANK A. WILKEN
 ELA A. LEONARD
 E. P. POPE Field Editor

I. R. WATERBURY Business Manager

TERMS OF SUBSCRIPTION

One Year, 52 issues \$1.00
 Three Years, 156 issues \$2.00
 Five Years, 260 issues \$3.00

All Sent Postpaid

Canadian subscription 50c a year extra for postage

RATES OF ADVERTISING

55 cents per line agate type measurement, or \$7.70 per inch (14 agate lines per inch) per insertion. No advertisement inserted for less than \$1.65 each insertion. No objectionable advertisements inserted at any time. Entered as Second Class Matter at the Post Office at Detroit, Michigan, Under the Act of March 3, 1879.

Member Audit Bureau of Circulation

VOLUME CLXI

NUMBER ONE

DETROIT, JULY 7, 1923

CURRENT COMMENT

Laughter cultivates the soil of the soul.

Some milk men cannot let well enough alone.

A sprinkling of untruth leads almost certainly to a hurricane of lying.

If we jump at conclusions, we are pretty apt to go sneaking back to the starting point.

While practice makes perfect, one can drop a hot potato as gracefully the first time as he can the tenth.

If so many persons were not imbued with the idea of getting in on the ground floor, there would be less room at the top.

The eye doctor learns never to judge by appearances, for while the cross-eyed man may be straight, he never looks that way.

Looking Ahead in Agriculture

SOME important factors which should receive the thoughtful consideration of farmers and others who are interested in the present and prospective agricultural situation are brought out by A. B. Genung, economist in the department of agriculture.

Ten years hence, this authority points out, our nation will consist of 125,000,000 people. Judging from the present movement and increase of our population we shall have at that date seventy million country dwellers and fully ninety million people who will reside off the farm.

This greatly increased non-agricultural population is certain to bring changes in the supply and demand for farm products. It must be remembered, however, that production does not adjust itself to demand to that nicety which we would like. We can see how much production and consumption are now out of line, with the result that agriculture is now struggling in the trough of the waves. It was riding a crest in 1919. How long it will be before the next crest is reached, no one can definitely say.

In the meantime, however, one of the serious problems which must be worked out during the next five or ten years, according to Mr. Genung, is the widespread debt which was contracted by farmers during 1921. This matter requires straight thinking. It cannot be confounded with the subject of

credits. While the wise use of credit facilities for production and marketing is as important in agriculture as in other lines, it must be remembered that borrowing money to pay current debts does not get the individual very far.

During the next decade, this economist declares, a large amount of new capital must be saved up and reinvested in the farm plant. The repairing of old buildings and the construction of new ones, the rebuilding of half of our fencing, the laying of millions of tile, the replacement of farm machinery and the purchase of millions of tons of fertilizer and lime, and providing of farm power, all of these items will occasion the spending of millions of dollars of capital. The patching, mending, repairing, and using of makeshifts which farmers have patiently done for nearly a decade, cannot continue much longer. It will be seen, therefore, that our credit problem has more than a single angle to it.

There is hope in the situation, however, since the domestic market is broadening at the rate of nearly a million and a half new consumers every twelve months. The time has come when farmers should look forward and take stock of their business with an eye on 1930, instead of 1920. Agriculture will recover from its present despondency and will prosper. This day will undoubtedly be hastened if farmers will look ahead instead of mourning over the past.

Michigan's Protective Tariff

WE have just received some figures from Washington which help us to understand better why our potato crop of 1922 went upon the market at such ridiculously low prices. Shipments from thirteen leading states for the season ending May 31, 1923, amounted to 242,061 cars, as compared with 234,064 cars for the corresponding period ending on the same date in 1922, and for a five-year average from 1919 to 1923 inclusive of only 202,684 cars.

These figures show that actually twenty per cent more potatoes were delivered to the markets last year than were delivered on an average for the

five years, and three per cent more than moved marketward in the season ending in 1922.

While Michigan farmers suffered heavily this past year from the glutted potato market, they were able to deliver a much larger portion of their crop than were the farmers in the western states. For instance, while the deliveries from these thirteen states were but three per cent more than were made in 1922, the number of cars from Michigan showed an increase of nearly fifteen per cent over the shipments of the previous season.

The whole matter brings to our attention again the fact that here in Michigan we have our consuming public close at hand which makes railroad tariffs actually a protective wall to our home trade.

Who Are The Law Breakers

WHO are the men that continue to violate the liquor laws of our country? According to official figures, just made

available by the federal government, the large majority of these violators are aliens or those who have been reared under alien influences.

These government figures tell us that ninety per cent of the violators in Connecticut are of the above classes. In California, they make up eighty-five per cent of the liquor law violators. In Illinois, ninety per cent; in New Jersey, sixty per cent; in Utah, eighty per cent, and in Wisconsin, ninety per cent. Figures for other states are not yet available.

It, perhaps, might be said in defense of many of these people who have recently come to our shores to establish their homes, that they, to some degree undoubtedly, have been the victims of evil-doers. Reliable authorities assert that liquor propagandists have incited many of these newcomers against the United States and its Constitution, and have represented to them that the prohibition laws were not properly passed nor sincerely intended.

Be that as it may, the figures given above tell us most plainly that true Americans have a real duty to perform in bringing those who have chosen to become citizens of the United States

to an appreciation of the sanctity of our laws.

That the general sentiment for the enforcement of our liquor laws is growing, is evidenced by the fact that the recent wet drive unexpectedly came up against a brick wall in the Wisconsin senate and against a rock in the Illinois legislative assembly, while at the same time nineteen other states were strengthening their prohibition laws.

The Fox Business

RECENTLY the securities commission of this state questioned the advisability of investing in the silver fox business. According to press reports, the reason given for this attitude was that prime fox furs could not be produced in the United States, but only in certain sections of Canada.

Not long ago a sale of pelts was held in London, England. Of the 2,375 silver fox pelts offered, approximately ninety per cent were from foxes grown in captivity on ranches in the United States and Canada. The top price of \$631.68 was paid for a pelt from a United States ranch-raised fox.

A bulletin on silver fox farming has just been published by the United States Department of Agriculture. It says, "The production of silver foxes, properly managed, has proven a profitable business. As a fur animal bred in captivity, the silver fox has no rival. Both pelts and the live foxes for breeding purposes are in demand."

The bulletin further states that silver foxes are being grown successfully in practically every one of the northern tier of states. Over five hundred ranchers are now engaged in the business in this country, and last year they had in their possession between twelve and fifteen thousand foxes representing an investment of eight million dollars.

Let us, however, give this caution, that there is no animal in captivity which needs to be handled with greater care than do foxes. The shiftless man should deliberately stay away from this line. The rancher who succeeds is one who not only informs himself on the general facts of proper feeding, breeding, selecting and providing good surroundings, but who, also, makes it his business to study the behavior of every individual animal in his charge.

HY TAKES A VACATION.

THE good readers who anxiously look forward each week to the letters from our ambitious but somewhat nerve-wracked writer, Mr. Hy Syckle, will be pleased to learn that "Hy" is now traveling through northern Michigan enjoying a two weeks vacation with Sophie.

They are motoring in their famous flivver, rigged with tent, cooking equipment and fishing tackle, and reports come from Sophie that already Hy shows much improvement. For instance, she states that he rises much earlier in the day than when there were potatoes to hoe.

We are a little suspicious about this being any real indication of improvement in his health or disposition, since we know from experience that fishing is always much better in the early morning than later in the day. Hy knows this also. Anyway, he promises to return in a week or two and give us the full benefit of his and Sophie's vacation experiences.

A man's producing years are only twenty-five or thirty at most on the average, and so no time can be wasted, lost, or spent to poor purpose.

Cultivate cheerfulness. Think success; act success; look successful, and be successful.

Well, We Have Felt This Way Ourselves



The Farmer as an Executive

Or How to Treat Help, Providing You Can Get It

By Lester G. Herbert

THE man who plans work and directs others in the doing of it, is a real executive. To be a successful executive, requires the qualities of leadership.

It is true that we can hire a man's time and strength. These represent about two-thirds of what he has to give. The other third is made up of heart interest and a genuine desire to cooperate. It might be described as Good Will.

The farmer who has several men working for him, will get the best results and have the least expense in labor turnover, if he is able to show his executive leadership by calling forth real interest, and by awakening a real joy of the job on the part of each worker.

The "hired man" who is in earnest and interested, will not be watching constantly for quitting time. He will not slight the tasks he is doing. He will not abuse the machinery he is handling. He will not be dissatisfied and over-exacting if that last thirty-three and one-third per cent of heart interest is engaged.

A few practical ideas on executive engineering which have helped build up fortunes for other business men—some of them agriculturists, will not be amiss.

First of all, the executive should be cheerful, well-poised, thoroughly informed, and enthusiastic himself. If he possesses these qualities, he will command respect, and besides, enthusiasm is contagious.

Second, he will provide good working conditions for his helpers. To require toilsome and heavy work to be done by man-strength which can be better done by machinery, arouses a protest in the worker's mind. Be perfectly ready to explain the responsibility and risks of the employer, as well as the numerous expenses of overhead, upkeep, and crop disappoint-

ments one year with another. Many a helper grumbles and thinks he is not getting a fair deal because he does not understand. Help him to understand. The more intelligent the worker, the better the service he will give.

Third, the wise executive will encourage a broader knowledge of better farming methods, of the expert

satisfied to give a fair wage, and encourage efficiency and loyalty by an opportunity for advancement. Have the duties of the position clearly understood and then require that all work be well and promptly done. The executive who permits carelessness in the beginning, will likely have to put up with it right along. Have a regular



There will be Thousands of Acres of Sweet Clover Hay Cut in Michigan this Year. This Picture Comes to us from Cheboygan County.

handling and testing of seeds, a knowledge of soils, and a disposition to read good, farm press literature, and when possible, to attend gatherings of a constructive character. A trained organization is much more valuable than an untrained one.

Fourth, in hiring a new helper, be

time for payments, even if the money has to be borrowed and interest paid. The employer who pays well and promptly, who gives right working conditions, and who is agreeable to work for, can always command the cream of the workers available.

Fifth, the far-sighted executive looks ahead and plans for tomorrow, and a week in advance, and a year ahead. He maps out a worthy schedule, and as nearly as possible lives up to it. He has a list of jobs which need to be done, and he avoids the expense of idle time by having some-

thing ready to fill in every crack of time with.

Sixth, the successful executive keeps track of his own financial affairs closely, and in every way tries to beat his own record. To do this, he knows for a certainty what each man can do best, and divides the work with this in mind.

Seventh, he never "crabs," or keeps up an irritating fire of criticism. To avoid this, he makes it clear beyond all doubt, what each man is to do, and if necessary, how it is to be done. Any expression of dissatisfaction is straight from the shoulder, and if possible, given when alone with the worker. The criticism is always constructive, and the thought is thrown out, "You can do that right, I know."

Eighth, if the farm executive finds that some one worker is a regular "pudding stick"—or always keeping things stirred up, he discharges him quietly and easily. The same thing happens if the worker shows an absolute disregard of his employer's wishes.

WATCH JESSE GREEN.

OVER in Cass county, Jesse Green has 120 acres devoted to alfalfa. Labor is scarce in his community, the same as in every other agricultural community of the state and country. To simplify his labor problem, Mr. Green is now pasturing fifty-five head of cattle, which he bought at the Chicago stock yards this spring, on some of this good alfalfa. Mr. Green holds that he is getting splendid gains on these steers.

It is estimated that the alfalfa would yield an average of three tons per acre. Green attributes his success with alfalfa on his land, which is mostly of a sandy order, to the liberal applications of finely ground limestone and to the use of northern grown seed.

Clean, oil and paint machinery before the close of the season's work, so that during the months when the machinery is less used, it will not rust or deteriorate.

A Promising Walnut Tree

National Authorities Agree that Nuts from this Michigan Tree Have Unusual Qualities

IN the spring of 1869, I cleared up a piece of new ground which I plowed and planted to corn. In one part of the field was a little cluster of bushes which were cut down and removed out of the way and the ground planted with the rest of the field.

When the corn was five or six inches high, and I was cultivating the ground at the spot where the bushes had grown, and intently watching the hills of corn in order to prevent accidents, I saw what I knew at a glance to be a tiny walnut sprout.

On stopping to examine it, I found the sprout had sprung from the stub of a little walnut tree which I had mowed down with the other bushes, not observing at the time what it was. This little sprout was making a struggle for life, pushing its leaves upward in the sunlight. I staked it to prevent its being run over and to give it a chance.

In 1920 I stood by the side of a lofty tree with its lower limbs bending down toward me from the weight of its fruits. Memory took me back, and I was lost in wonder at the possibilities that were wrapped up in that tiny sprout of years ago. So it was very natural that this question came to my mind: "Are there not equally great things in that tree of today?"

During the growth of the tree, we didn't notice anything unusual about it until it came to the age of bearing.

The surprise came then. Although I had seen peaked walnuts before, I had never seen any just like those.

Their peculiar form suggested the idea that they might be a cross between the walnut and the butternut. With this idea in mind, I sent some specimens to the M. A. C. with a request that the men of science tell me whether they were a high-bred or not. There was no response from Lansing, only that they were of a delicious flavor, which was encouraging as far as it went. But they were sent to the headquarters of the N. N. G. A., with offices on Long Island, New York.

I received a note from the secretary of the association requesting a few more nuts, and also a history of the tree, which were sent. I was then informed that a great contest was in progress in which prizes had been offered for the specimens of different kinds of nuts which they thought best for propagating purposes. The time had passed for taking in any more, but they said they would consider mine as being in the contest and give them a chance with the rest. The contest came to an end, and a product of my little walnut sprout had won and was chosen as a basis on which to build a new variety.—H. Adams.

(We have lost Mr. Adams' address, and would be pleased to have him write us.—Editors).

Takes Three Rows at Once

Finds this Equipment Saves Time in Growing Beans

By P. P. Pope

IN securing our bean growing equipment several years ago we planned to have working tools supplement each other. The drill that we chose is a regular fertilizer grain drill with eleven hoes. This permits the sowing of three rows twenty-eight inches apart and the use of the drill wheel for a marker, driving so that it returns in its own track.

We often sow fertilizer, mostly acid phosphate, with the beans, and as it is not advisable to sow it directly in the row with the seeds, due to the fact that the chemical action which takes place when the fertilizer comes in contact with the moist earth is apt to injure the very tender bean sprouts, the fertilizer is shut off from the hoes that drill the seeds and allowed to run through all the others, thus spreading it broadcast except in the bean rows.

Covering the Ground Rapidly.

We had considerable difficulty in finding a cultivator that could handle these same three rows at one sweep. It occurred to us that this would be an ideal way to cultivate beans, if the proper implement could be found, and would mean a saving of half the man

labor over either the two-row or one-row. We finally located the tool that looked right to us in a beet field, cultivating four rows at a time. We learned that this cultivator could be equipped with a double castor wheel behind which would straddle the middle bean row, and that the shovels could be arranged on the bar to suit one's convenience.

We ordered one thus equipped, and have used it for several years. Two good horses will handle it nicely. The front or outside wheels follow the tracks of the drill wheels and the rear double-castor wheel straddles the middle row. A variety of shovels may be used and spaced few or many along the bar to suit conditions.

This outfit works to perfection if used often, and the surface of the soil is fairly even. It does not work so well over dead furrows, back furrows, or where the weeds are allowed to grow big and get a strong root hold. It is much better for the beans, however, to have the soil around them stirred often and comparatively shallow, than a deep working at longer intervals.



BUSINESS OUTLOOK STILL PROMISING.

THE relative purchasing power of farm products based on farm prices changed only slightly during May. Live stock products continued unchanged except wool, which made gains during the month.

It is the assertion of the department of agricultural economists that the urban industrial boom has passed its peak. Wholesale prices are tending downward. Nevertheless business is still heavy and the outlook for fall is promising.

DATES SET FOR POTATO EXCHANGE MEETING.

THE fifth annual meeting of the Michigan Potato Growers' Exchange will be held in Cadillac, Michigan, August 15-16. Delegates and members from 130 local potato shipping organizations will attend this convention. Arrangements are being made to secure several speakers never heard before in the state.

WHEAT ACREAGE INCREASED OVER LAST YEAR.

THE acreage of wheat throughout the northern hemisphere is slightly larger than the acreage in the same countries last year, according to O. E. Stine, in charge of the statistical research division of the department of agriculture. There is a slight decrease in the United States and Canada, which is more than made up by increased acreage in Europe. Wheat already cut in India and other eastern hemisphere countries is running above last year's crop in yield.

DAIRYMEN FACE ANOTHER COMPETITOR.

ANOTHER menace to the dairy industry is arising on the horizon. A manufacturer of a nut oil combination is trying to dodge the oleo or butter substitutes tax. He makes his product out of coconut oil and peanut oil. He has a special process in which he introduces no milk or cream. The oils are churned in cold water, by which process they are emulsified and solidified. Butter color is added, giving the product the appearance of butter, but while it has an agreeable flavor it is easily detected from real butter. It is put up in triangular cartons, and the trade name has no relation to butter or other dairy products. It sells at twenty-two to thirty cents per pound and is used largely by bakers in place of butter.

This product has been put out without the revenue stamps or payment of the oleo tax or any surtax. The Internal Revenue Bureau has taken legal action against this concern.

CREAMERY BUTTER SHORT.

THERE is a shortage of creamery butter in storage, 9,907,000 pounds in storage June 1, 1923, compared with 13,302,000 pounds June 1, 1922, and 17,978,000 pounds the five-year average.

TAKING GREATER INTEREST IN CERTIFIED POTATO SEED.

ENROLLMENT for the Michigan Potato Growers' Exchange potato seed inspection and certification has exceeded all expectations. The work of inspection will be carried on as heretofore by trained men from the Michigan Agricultural College.

Kris P. Bemis, county agent in Mason county, represented the Michigan Potato Growers' Exchange on the recent seed potato growers' tour of Long Island, which is the greatest seed potato market in the country, using 500,000 bushels of seed annually. The purpose of this tour was to form business connections with the growers and dealers in seed potatoes.

GREEN PEA CROP IS LARGE.

FORECASTS of production of green peas for canning, made by the department of agriculture, indicates a crop of 181,370 tons, or seventeen per cent above the crop of last year for this purpose. Nearly one-half of the canning crop of green peas is produced in Wisconsin, where the crop this year is forecast at 85,020 tons, slightly below last year's product.

ANNOUNCE ANOTHER BOND ISSUE.

A NEW issue of \$45,000,000 of Federal Land Bank four and one-half per cent bonds has been announced. While the bond market is dull at this time these bonds are attractive, and it is thought that they will sell readily. It is said that they give a higher return than municipal or other tax-free

securities have given at any time. The last pre-empting sale of farm loan bonds was April 16, when \$75,000,000 were offered. Some who have given the subject considerable thought say that this present issue is a rather small amount to meet the credit needs of the farmers.

EGG-LAYING CONTEST.

THE extremely hot weather during the week ending June 26 had no effect on production other than to increase it from 4,085 eggs for the previous week to 4,239 eggs. With the beginning of hot weather, moist mash and an increased variety of green feed is being provided the birds.

The Barred Rocks show an increase of 6.1 per cent; the Anconas, six per cent; Rhode Island Reds, six per cent; Leghorns, one per cent, and the White Wyandottes a very slight increase. The total production for the leading pens now stands as follows:

Elmer E. Shaw, of South Haven, Mich., (Leghorns)	1,558
Northland Farms, Grand Rapids, (Leghorns)	1,410
O. S. Thompson, of Allen, (Leghorns)	1,407
E. D. Taylor, Kalamazoo, (Leghorns)	1,320
George B. Ferris, Grand Rapids, (Leghorns)	1,320
Brummers' Poultry Farm, of Holland (Rocks)	1,295
Mrs. W. H. Chilson, Grandville, (Rocks)	1,209
H. E. Dennison, of East Lansing, (Rocks)	1,178

duction of milk, number of cows in milk on farms, number of heifers, and much other detailed information which

will show the present production and prospective flow of milk for several months in advance.

W. F. Callender, statistician in charge of this work, says that numerous requests have been received from milk producers' associations and from individual dairymen for more accurate information concerning the trend of the dairy industry, especially milk production, which would enable the dairymen to judge as to whether it is advisable to increase or decrease his herd in view of future prospects.

SIGNS AMENDMENT TO PACKER ACT.

THE amendment to the packer and stockyards act, providing for the bonding of individuals and firms engaged in the live stock commission business has been signed by the secretary of agriculture. The bonds required under this act secure to the owner or consignor of live stock "faithful and prompt accounting for and payment of the proceeds of sales."

The revised regulations applying to commission men make obligatory an immediate written accounting of each sale, showing the number, weight, and price of each kind of animal sold, the name of the purchaser, the date of the sale, and such other information as may complete the account.

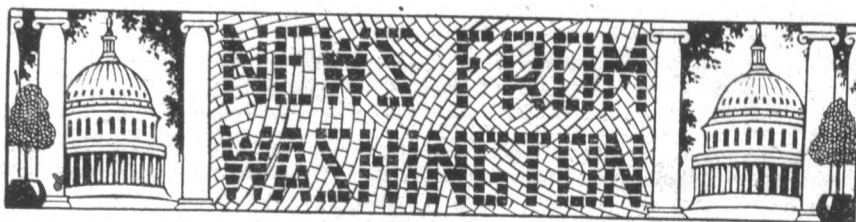
TO STOP UNFOUNDED RUMORS.

THE new regulations governing future trading grain markets have been signed by Secretary Wallace for promulgation by the department of agriculture. It was not the intention of the framers of the law to prevent future trading; hedging or legitimate speculation, says the secretary. Its purpose is to prevent the dissemination of misleading rumors or information which may affect the price of grain; to prevent manipulation of prices or the running of corners; to acquire information concerning operations on future trading markets which will make it possible to make a systematic study of the manner in which grain prices are registered on these markets.

WILL STUDY CORN, HOGS AND WHEAT.

A GROUP of agricultural economists and statisticians will be called in to conference in Washington by Secretary of Agriculture Wallace on July 11-12, to study the corn-hog and wheat situation. They will have available the results of the nation-wide pig count just completed by the department of agriculture, and also the government crop estimate of corn acreage and production to be released July 9. With these statistics as a basis for forecasts of production and a resume of the prospective domestic and foreign demand for corn and hogs, it is expected that the committee will announce information which will be helpful to farmers in planning their program for next fall and winter. The wheat situation will be considered at this conference.

Learn to think all the way around and through each job you tackle.



WANT LARGER AMERICAN REPRESENTATION.

SECRETARY of Agriculture Wallace recently invited a number of persons interested in the International Institute of Agriculture to a conference at the department of agriculture for the purpose of devising ways and means of promoting the usefulness of the Institute. The call was made at the suggestion of Arthur W. Gilbert, commissioner of agriculture of Massachusetts, who presided at the meeting.

There was much criticism by the speakers because of the lack of American representation at the annual assemblies of the Institute in Rome. While an American originated the International Institute of Agriculture, it was pointed out that the United States has very meager voting influence in the organization. We have only five votes whereas Great Britain has twenty-three and the British Empire thirty-five votes.

WOULD PROVIDE COUNTY AGENTS WITH PROJECTORS.

THE American Farm Bureau Federation has asked the Federal Department of Agriculture to supply the county agents projectors for motion pictures. The government has many thousands feet of films, but, according to Samuel R. Guard, director of information of the Farm Bureau Federation, only about 500 of the 2,500 county agents in this country have facilities for projecting the films.

It is the contention of the farm bureau that the usefulness of these films would be greatly enhanced if the department of agriculture would purchase projectors and loan them to the county agents. It is thought to be somewhat inconsistent that the gov-

ernment should spend thousands of dollars for motion pictures that cannot be used except in a limited way for lack of projectors.

TRYING TO BEAR THE EGG MARKET.

ITEMS have recently appeared in the daily papers indicating that the cold storage warehouses and all other storage facilities are over-filled with a larger supply of eggs than was ever known in this country.

Information obtained at the department of agriculture does not bear out any such conclusions. The cold storage stock of eggs is above the average, but below last year's figures. The government report shows a five-year average of 6,328,000 cases in storage June 1. On June 1, 1922, there were 8,056,000 cases in storage, and on June 1, 1923, a total of 7,884,000 cases of eggs in storage.

SEEKS MORE RELIABLE INFORMATION FOR DAIRYMEN.

THE department of agriculture is sending out a questionnaire which is intended to develop a system of nation-wide monthly reports on the pro-

GET YOUR INDEX

VOLUME one-hundred-sixty of the Michigan Farmer was completed with the issue of June 30. We are now printing a four-page index to that volume. This index is being run on the same size page as that on which the paper is published, so it can be easily bound into the regular volume. Any reader of the Michigan Farmer who desires a copy of this index for any purpose whatever may secure the same by making a request of Miss Ross, of the Editorial Department, Michigan Farmer, Detroit, Mich. This index covers the period from January 1 to June 30, 1923.

Hardigan Promises Well

This New Alfalfa Now Has Real Friends in Central Michigan

MUCH interest is being exhibited throughout the state in the new Hardigan alfalfa. The Hardigan variety is one developed by Prof. F. A. Spragg, M. A. C. Plant Breeder, and it has been distributed over Michigan. Over 300 acres should come into production this season.

The primary object of this new variety is not only to furnish long-enduring alfalfa stands of high forage producing ability, but to also give Michigan an alfalfa that will set seed abundantly under conditions characteristic of the Wolverine state.

A number of Midland county farmers were acquainted with the possibil-

In many cases the Hardigan was subjected to extreme adverse conditions. Ice sheets and flood waters covered it and late frosts tried to take their toll. The exceptional hardness of this variety was convincingly demonstrated by the fact that for all these adverse conditions the Midland fields have come through. Even where tops have frozen off new shoots have come out from the characteristic low-set crown of the Hardigan and have kept up the stand.

Seed producing abilities of Hardigan alfalfa on a large-field scale are still to be demonstrated, but if the variety lives up to the promise of its early



This Five Acres of Hardigan Alfalfa on the Farm of C. H. Garrett, of Freeland, is Very Promising.

ities of Hardigan alfalfa through their county agent, Mr. I. B. McMurtry, and made their start last year. Over forty acres are being cultivated for seed production in this one county and a survey of these fields finds the Hardigan promising excellent results.

Mr. C. H. Garrett, of Freeland, has a beautiful five-acre stand seeded in twenty-eight-inch rows on a fertile clay loam soil. J. H. Vincent, of Freeland, and Emil Jacobs, of Merrill, also have exceptional fields. In every case the growers have kept their fields free of weeds and should have available next fall seed of highest purity.

trials and its very profuse blossoming habits, there are several Midland growers as well as those in other sections of Michigan, who will have added an excellent source of income to their farming business through their Hardigan seed production project. In any case the Michigan Agricultural College has made another contribution to Michigan agriculture which, because of its superior hardness and forage producing ability alone can take its stand with Rosen rye, Wolverine oats, Robust beans and other varieties already firmly established in the esteem of Michigan farmers.—Rather.

Do You Agree with Me

On How I Would Improve Our Farming?

By Lisle Berry

TO the writer, it seems that alfalfa, corn and live stock constitute the shortest route to economic independence for Michigan farmers.

Alfalfa and corn will produce fat cattle and hogs that will top the market anywhere, and live stock and alfalfa will maintain the fertility of our soils. You do not need to be told that barnyard manure and alfalfa sod will produce bumper crops.

Live stock also furnish a profitable market for our cull potatoes. Geographical local and high western freight rates combine to place the Michigan live stock producer in a peculiarly strategic position.

Sweet clover is another legume that will assist many a farmer to increase his income by furnishing abundant cheap summer feed for dairy cows. As a pasture crop, it has no equal.

The soy-bean is a new legume crop that promises to become a very important and highly profitable crop. As a source of high protein feed, a soil builder, or a short-season hay crop, it seems to have wonderful possibilities. It will thrive on a comparatively poor soil, and will withstand drought and frost better than corn or potatoes. A frost that destroys corn, beans and po-

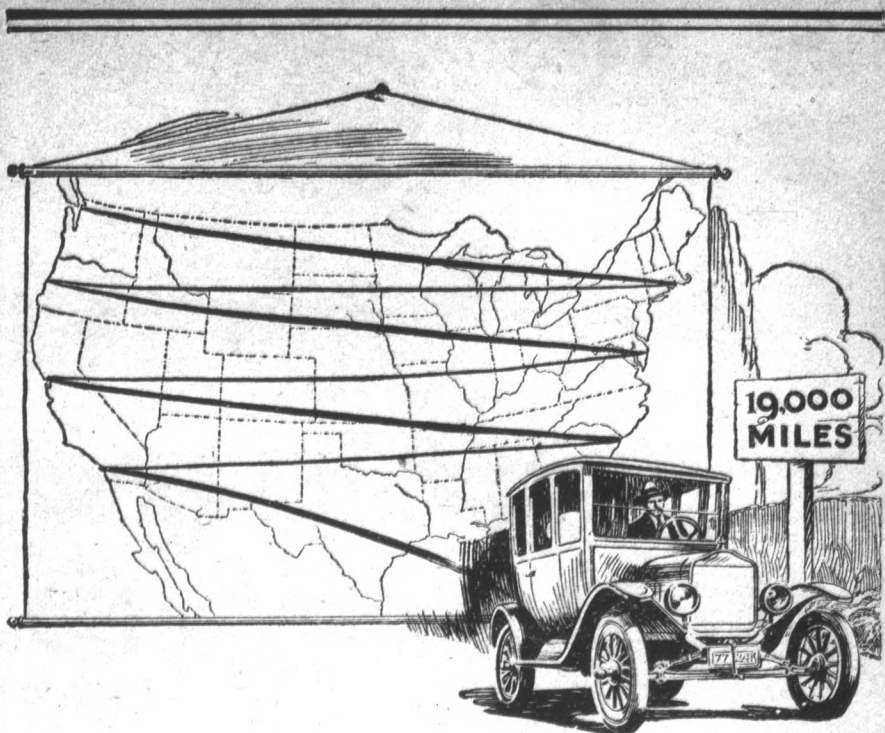
tatoes will frequently leave the soybeans untouched.

Some of the earlier varieties will mature seed anywhere that medium early yellow dent corn will mature. The writer has a strain of "Ogemaw" soybeans that have produced fully-matured seed three times in succession here in Cheboygan county.

Small fruits, onions, and other truck crops may be produced successfully and profitably in many sections in Michigan. Michigan's already large and rapidly increasing industrial population is the Michigan farmer's golden opportunity. Let's study our markets, and measure up to our opportunities in providing "Michigan food for Michigan folks."

When one fellow says, "You scratch my back and I'll scratch yours, we'll let the public take care of itself," that's politics. But when he says, "I won't scratch your back unless it does the public some good," that's statesmanship.

When we disparagingly say that agriculture has practically reached its full stature of development, have we reckoned at all on that most versatile helper, electricity?



Ford Engine No. 4913404

*Will your Ford engine make
as fine a record?*

FORD engine No. 4913404 is to be found in a Ford sedan sold in Great Neck, N. Y.

After 19,000 miles of driving the owner wrote:

"On delivery of this car I drained the crank-case of the existing oil and placed Gargoyle Mobiloil 'E' therein.

"My car has run over 19,000 miles and the engine has never been touched, the head has never been off. At the end of the above stated mileage I had new speed bands installed. The old ones were worn down to nothing, but in good condition and had never chattered."

Ford engine No. 4913404 has been given every possible care. The owner saw that the old oil was drained off at proper intervals. Nothing but Gargoyle Mobiloil "E" was ever put into the crank-case. A Ford engine, like any other engine, pays handsome dividends to the owner who gives it fair treatment.

Gargoyle Mobiloil "E" today is used the world over by Ford owners who want to approach or even better the record made by the owner of Ford engine No. 4913404. And every Ford owner who uses Gargoyle Mobiloil "E" knows from experience that it *does* lessen carbon deposit, *does* reduce over-heating, *does* reduce repair bills, oil consumption and gasoline consumption.

Why experiment? There is no oil which has as thorough or wide-spread endorsements for the Ford engine as Gargoyle Mobiloil "E."

IN BUYING Gargoyle Mobiloil from your dealer, it is safest to purchase in original packages. Look for the red Gargoyle on the container.

The Vacuum Oil Company's Chart specifies the grade of Gargoyle Mobiloil for every make and model of car. Gargoyle Mobiloil "E" is the correct grade for Fords. If you drive another make of car, send for our booklet, "Correct Lubrication."

Tractor Lubrication

The correct engine lubricant for the FORDSON TRACTOR is Gargoyle Mobiloil "BB" in summer and Gargoyle Mobiloil "A" in winter. The correct oil for all other tractors is specified in our Chart. Ask for it at your dealer's.

Address our nearest branch:

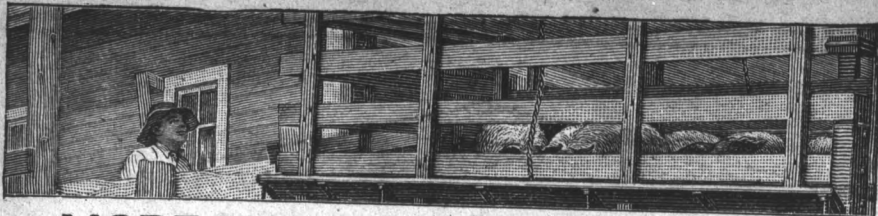
New York
(Main Office)
Philadelphia
Indianapolis
Milwaukee
Buffalo

Boston
Detroit
Minneapolis
Des Moines
Rochester

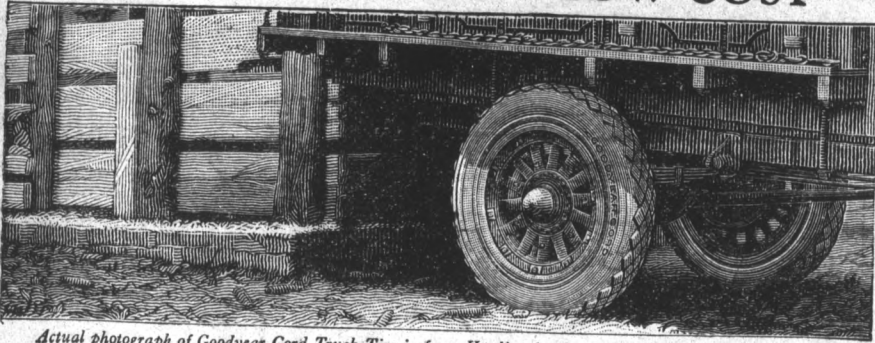
Chicago
Pittsburgh
Kansas City, Kan.
Dallas
Oklahoma City



VACUUM OIL COMPANY



MORE HAULING AT LOW COST



Actual photograph of Goodyear Cord Truck Tire in farm Hauling for George Ohrt, Bennington, Nebraska

"My truck on Goodyear Cord Truck Tires cuts threshing labor in half, makes as many as six long trips a day with supplies, and carries my livestock to market without shrinkage."

—GEORGE OHRT, Bennington, Nebr.

THE buoyant activity of Goodyear Cord Tires is one of their best qualities. They get over the roads, in any weather, at sustained speed. They lengthen the hauling radius, make more trips, and carry the loads safely, dependably, easily. Their earning power and long wearing quality result in better performance at low tire cost.

The new beveled All-Weather Tread Cord Tire is made in all sizes for trucks and passenger cars

GOODYEAR

Copyright 1923, by The Goodyear Tire & Rubber Co., Inc.

Reading Bargains

OFFER No. 584.

MICHIGAN FARMER
Capper's Weekly
Household
Total value\$2.25

All for \$1.30

OFFER No. 578.

MICHIGAN FARMER
Capper's Weekly
Breeder's Gazette
Total value\$3.00

All for \$1.75

OFFER No. 579.

MICHIGAN FARMER
Mother's Magazine
Household
Good Stories
Total value\$1.75

All for \$1.30

OFFER No. 582.

MICHIGAN FARMER
Fruit Belt
Power Farming
Modern Poultry Breeder
Total value\$3.00

All for \$1.60

MICHIGAN FARMER,
Detroit, Michigan:

Enclosed find \$..... for
which send me the papers named
in Club No.

Name

Postoffice

State R. F. D.

PATENTS

Write today for free instruction book and "Evidence of Conception" blank. Send sketch or model for personal opinion.

CLARENCE O'BRIEN, REGISTERED PATENT LAWYER, 952 Southern Bldg., Washington, D. C.

FREE BOOK for Live Stock Men



Here is one of the most complete and comprehensive Live Stock Shipping Manuals ever written. Nothing exactly like it. Complete with information on how and where to ship live stock—hogs, cattle and sheep.

You Need this Live Stock Shipping Manual

Tells how to prepare for shipping. How to keep stock in prime condition. How to secure top prices. How to minimize shrinkage in transit. How to route, etc. Limited edition ready for distribution.

SENT FREE—Mail Coupon

Write quick for your copy. Fill in the coupon. Mail today. You'll have manual within 72 hours. Address

Service Department
The Toledo Union Stock Yards
4002 La Grange St. Toledo, O.

The Toledo Union Stock Yards,
4002 La Grange St.,
Toledo, Ohio
Send me your LIVE STOCK SHIPPING MANUAL
by return mail. Also put my name on your mailing
list for literature of interest to live stock shippers.

Name

R.D. Town.

County State

OUR SERVICE DEPARTMENT

Always Give Name and Address When Sending Inquiries as Satisfactory Service Cannot be Given to Unsigned Letters

MORTGAGES.

If A. has a farm, and B., or his father, has a life lease of it, can C., who holds a mortgage on it, take the farm? And is a mortgage good where there is a life lease on the farm?—S. B.

The mortgage binds the right of the person giving the mortgage and no other.—Rood.

FIXTURES.

I am renting a farm. If I put up a poultry wire fence on the farm, can I take the fence down and take it with me when I move?—H. H. W.

Such a fence would be a fixture which the tenant would have no right to remove at any time before delivering up possession.—Rood.

DRAINS ALONG HIGHWAY.

If they cut down in front of one's house, and change the water course, who has to fix the driveways? Who has to put the culvert in—the state or the person owning the farm? Who has to keep up the culvert after it is put in? Have I the right to fill up the ditch in front of the driveway? If there is a rail fence along the road, have they any right to use the rails?—M. C.

Compiled Laws 1915, Section 4511, requires the highway commissioner to provide a passage across ditches along the highway at each field or farm entrance, the original costs being charged to the costs of the ditch, but subsequent costs of maintenance must be borne by the persons owning the adjoining premises. Any person taking the rails is liable to the owner of the farm thereof.—Rood.

RIGHT OF TENANT LEAVING.

A. rented a farm from B. and lived on the farm for three years. Now B. has moved back on the farm. A. has threshed his wheat. A. wishes to sell his two-thirds share of the straw, but has no time to haul it away just now. Can B. stop him from going on the field to get it, or has A. the right of way?—A. C. K.

It is the duty of the tenant at the termination of the lease to remove his property from the premises; and if he fails to do so the owner of the land has a right to put it off the premises at the tenant's risk; or he probably would be allowed to charge storage for its keep. He would not have a right to convert it to his own use; and in the absence of stipulation that the straw should be used upon the

premises the agreement that the tenant should have two-thirds of the crop would entitle him to haul away his share of the straw.—Rood.

CEMENT FLOOR BEST.

I would like your advice on the best kind of a floor for a henhouse. Have house which is built of modern design, with lots of light. Would cement be all right if built up high enough to be dry?—R. K.

A cement floor is the best for a poultry house, as it is permanent and keeps out rats and weasels. Last year we built a cement floor which has proven dry and satisfactory. First the wall was constructed and eight-inch bolts were set in the wall to which the sills of the building were later bolted down.

Then the fill was made with field stone to a depth of about eighteen inches. This was leveled off with sand and tamped down. Then a two-inch layer of cement was placed on the sand. Over this layer we placed strips of roofing paper with the seams sealed to keep moisture from working up. On top we placed the finishing layer of two inches of cement. The job might have cost less if we had left out the roofing paper and used less cement.

I have tried wooden floors in smaller houses, but they are soon in need of repairs. I believe cement is the only right material for a laying-house that is permanently located.

CONTROLLING SQUASH BUGS.

How can I control squash bugs?—Mrs. D. D. C.

We have been most successful in trapping them than in destroying them by any other method.

Place a few pieces of board on the ground in the vicinity of the vines and then lift these boards and examine them carefully every morning before it warms up at all. The bugs like to hide away under the boards during the time of the year when the weather is cool.

They can be removed from these pieces of boards and dumped into a bucket containing water with a little kerosene on top. The main difficulty of applying this method is that the examination must be made early in the morning before it warms up enough for the bugs to leave their night quarters.—R. H. Pettit.

NEWS FROM CLOVERLAND

FIRES CAUSED BIG LOSS.

THE drought at the end of May produced unusually bad fire conditions in the rural Upper Peninsula, resulting in serious losses. One large operator lost some 7,500 cords of wood. At one time one local railroad had nine locomotives out with fire-fighting equipment for fires along its right-of-way.

The late legislature made a considerable increase of the appropriation for the fire-fighting force of the State Department of Conservation and the commissioner recently informed the writer that a total of seventy-eight fire-towers had been erected in northern Michigan. All this is commendable, but the area to be covered is so large that it seems to be utterly impossible properly to cover the territory affected by the fire hazard.

It was not until soaking rains arrived that the situation came under control, without which exceedingly serious conditions would have developed.

ADDS FOUR STATE PARKS.

THERE will be five state parks in the Upper Peninsula when the project of taking over the Bishop's Hill location between Marquette and Negaunee is completed. These include the St. Ignace State Park on the lake shore at the Straits of Mackinac; the Brimley State Park on the Lake Superior shore in the eastern portion of the peninsula; the Baraga State Park on Keweenaw Bay Lake Superior; Fort Wilkins, Copper Harbor, Lake Superior, and Bishop's Hill. All Upper Peninsula state parks give ready access to Lake Michigan or Lake Superior.

ORCHARD AND GARDEN

OUR PROSPECTIVE APPLE CROP.

THE following comparative table forecasting the crop in states whose apples come in competition with Michigan's is of interest at this time:

New York.....	5,754,000	6,000,000
Pennsylvania	1,356,000	1,216,000
Virginia	1,793,000	1,100,000
West Virginia	926,000	881,000
Ohio	815,000	608,000
Indiana	201,000	277,000
Illinois	784,000	1,620,000
Michigan	1,832,000	1,699,000
Wisconsin	126,000	101,000
Minnesota	47,000	41,000
Iowa	97,000	147,000
Utah	188,000	198,000
Idaho	1,307,000	975,000
Washington	7,997,000	7,104,000
Oregon	1,619,000	1,260,000

JUNE DROP IS HEAVY.

REPORTS from different sections of the fruit growing sections of Michigan, indicate in a general way an unusually heavy June drop of apples and cherries. In many instances, this drop is estimated at as high as fifty per cent. This does not necessarily mean a fruit failure. The trees will have fewer fruits to mature, and often this is a distinct advantage in perfecting fruit of high quality. Judging from reports, orchards following clean cultural practices have a smaller drop than those retained in sod.

CANNERS SEEKING MORE ASPARAGUS.

CANNERS have suddenly developed faith in green asparagus. In years past, practically the only asparagus preserved in cans has been the bleached stems, produced in the west. Now the Paw Paw cannery, which packed five thousand cases from twenty-six acres, states that every case was sold as soon as packed. A Grand Rapids concern reports a similar experience. The Michigan Cannery Association is about, therefore, to make an investigation of the asparagus industry looking toward a wider utilization of this product in their canning work.

WANT SHIPPING POINT CERTIFICATION.

MICHIGAN fruit and vegetable growers are asking the department of agriculture for federal inspection of fruits and vegetables at ship-point points. Twenty-one other states are now enjoying this service. Since congress has provided that certificates issued by a federal inspector shall be prima facie evidence in all courts of the United States as to the truth of the facts stated regarding a shipment of fruits or vegetables, these certificates become highly important commercial documents in the hands of any organization making f. o. b. sales.

EFFECTIVE POISON BAIT.

COMPLAINTS are being received regarding the depredations of cutworms which seem to be working unusual havoc this season with small fruits, vegetables and other crops.

For this the poison bran mash is recommended.

Entomologists recommend an inexpensive poison bait, either broadcasted in the field or, in the case of small fruits, sprinkled about the base of each plant. The following formula will provide enough material for five acres: Bran, twenty pounds; Paris green, one pound; cheap syrup, two quarts; three lemons, and three and one-half gallons of water. The bran and Paris green are mixed dry. The juice of the lem-

ons is squeezed into the water and the peel and pulp chopped to fine bits and added to the water. The syrup is then dissolved in the water and fruit mixture and the liquid stirred into the bran thoroughly in order to dampen it evenly. If a smaller quantity is wanted, the amounts of the different ingredients may be reduced proportionately. It is recommended that the poison bait be applied in the evening, because the cutworms are night-feeders and the bait will thus be in a fresher condition than if applied earlier in the day.

CONTROLLING INSECT PESTS OF ROSES.

THERE is scarcely a garden that is not beautified by roses in greater or less abundance and the insect pests are ever present to weaken the plants and to destroy the foliage and flowers. Fortunately, however, a little care and the proper use of simple insecticides will eliminate most of these troubles.

The common pests are the leaf-eating insects, such as the slug and the sucking insects, including aphids or plant lice, leaf hoppers, and scale. White grubs occasionally attack plantings in new beds which were in sod the previous year.

The rose slug is readily controlled by arsenate of lead at the rate of one half ounce of powder, or about eight level teaspoonsful (twice as much if paste form is used) to a gallon of water, and if aphids are present add a teaspoonful of forty per cent nicotine sulphate. If slugs only are present, the arsenate of lead may be applied as a powder, either pure or mixed with equal parts of air-slaked lime or dry flour as a carrier. If aphids and young leaf-hoppers only are present, spray with a forty per cent nicotine sulphate, one teaspoonful to a gallon of water in which is dissolved an ounce of soap. Applications should be thorough, a forcible misty spray applied and care should be taken to reach the undersides of the leaves.

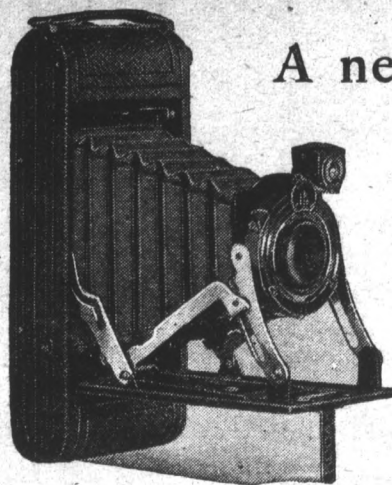
Scale insects, when present, occur on the canes and give them a scurfy appearance. During the winter months the heavily infested branches should be cut out and burned and the remaining canes thoroughly sprayed just before the buds open in spring, with lime-sulphur one gallon of liquid concentrate to eight of water.

The canning factory at Edmore started canning peas June 25. There is approximately one hundred acres of early and late peas in that community.

The first Kent county farmer to bring cherries to the Grand Rapids market this year was J. P. Munson, treasurer of the Michigan State Horticultural Society, who sold Early Richmonds at \$2@2.50 per case.

Over in Berrien county, G. P. Pullen established a record last summer when he disposed of 1,000 bushels of peaches in a single day at the roadside to motorists and truckers. E. W. Dunning, a neighbor, got rid of a 13,000 bushel peach crop in the same manner.

The outlook for fruit in Ottawa county is excellent. The only failure of account seems to be the strawberry plots located on high land. Winter apples promise a heavy crop, while early apples will prove moderately heavy. Peaches will also yield moderately. Showers are needed and would result in a heavy output of raspberries and grapes.



A new model—
always in focus

Pictures,
2½ x 4¼ inches
Price \$15

No. 1A Pocket Kodak Series II

For pictures you will want to make on the farm, whether for pleasure or business, here is a Kodak that hits the mark.

It is strikingly simple to operate—just open the camera, pull down the bed and the fixed focus lens springs into picture-making position with a snap. It is strictly sized to fit the pocket and neatly finished to please the eye.

Many pictures that you will make need the date and title to complete their usefulness—photographs of crops and livestock, for example. By means of the autographic attachment, found on all Kodaks, you can write the date and title on the film at the time of exposure and the picture becomes a complete, authentic record.

At your dealer's

Eastman Kodak Company, Rochester, N.Y.

CORN HARVESTER cuts and piles on harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only \$25 with fodder tying attachment. Testimonials and catalog FREE showing picture of Harvester. **PROCESS MFG. CO., Salina, Kan.**

Cut Cost The

of your insurance. Insurance companies recognize the value of our **SECURITY SYSTEM** of lightning protection by lower rates on **SECURITY** rodged buildings. Any purchaser of a **SECURITY SYSTEM** can have an official Okay on his installation free of charge by writing to us and describing it in detail. Proper installation is the paramount feature in the purchase of lightning rod protection. The

SECURITY SYSTEM gives guaranteed protection by our plan of permanently Moist Grounding with the "SECURITY Water Ground." Our policy is to see that the property owner gets protection, and there is a strong distinction between getting guaranteed protection and merely buying lightning conductors. Such protection is obtainable from us. Begin to save now. Delay may mean disaster. An investment in a **SECURITY SYSTEM** calls for no risk on the part of the investor. His investment is held by us subject to demand if the **SECURITY SYSTEM** fails to work. Tell us your needs. **WRITE TODAY.**
Security Lightning Rod Co.
607 Pine St., Burlington, Wisc.

DOG BOOK FREE

32 page book—how to keep your dog well—how to care for him when sick. Result of 35 years' experience with every known dog disease. Mailed FREE. Write today. Dept. 3107
H. CLAY GLOVER, V. S.
129 West 24th St. New York

Send for FREE Book!

Make water-soaked hillsides and rolling land yield 100%! The free Martin Book tells how thousands of farmers are adding immensely to crops at smallest cost.

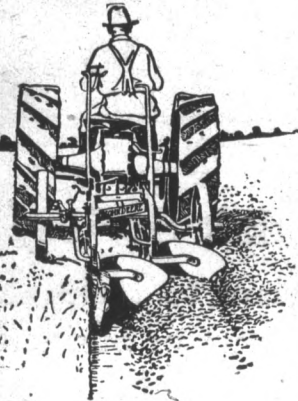
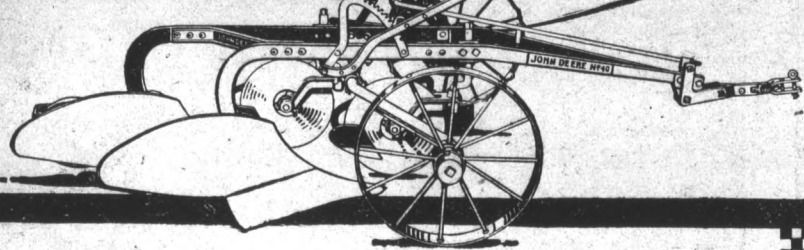
10 Days Trial
OWENSBORO DITCHER & GRADER CO., Inc.
OWENSBORO, KENTUCKY

Flies!
HOE STRA
Kills 'em
also kills—

Ants, Roaches, Fleas, Chicken mites and lice, Mosquitoes, Bedbugs, Potato bugs and Worms. Refill 15c loaded metal guns from packages. 30c, 60c, and \$1.20; At Grocers and Druggists.

NOT A POISON

The "40" for Your Fordson



The "40" has—

GENUINE JOHN DEERE bottoms, famous for good work, scouring and long wear. A type for every soil. Strong, close-fitting quick detachable shares.

BEAMS GUARANTEED not to bend or break. Frame connections hot riveted—no "give" anywhere.

SIMPLE, STRONG and positive power lift.

LEVER CONTROL of depth and leveling from the tractor. You don't have to go behind the "40" to adjust it.

The John Deere "40", built exclusively for the Fordson, co-operates with it in the field with the unusually good plowing that has made John Deere plows famous and with unusually light draft.

The "40" is the plow with the self-adjusting hitch and rolling landside, the great draft reducing combination possessed by no other plow for the Fordson.

The plow always operates in the true line of draft automatically, because the hitch adjusts itself correctly when depth is changed. That means lighter draft—less fuel and less tractor wear—and better work.

Rolling landside rolls rear weight just as front wheels roll front weight. Eliminates all dragging friction. A great draft-reducing feature.

Get acquainted with these and other great features of the "40". See it on display in your town. Find out for yourself that it is the plow your Fordson needs.

Free folder—write today for your copy. Address John Deere, Moline, Illinois; ask for Folder FC-422.

JOHN DEERE
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

HEAVES

Is your own horse afflicted? Use 2 large cans. Cost \$2.50. Money back if not satisfactory. ONE can at \$1.25 often sufficient. In powder form. Most for cost.

NEWTON'S
A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion, Worm expeller, Conditioner. At dealers' or by parcel post.

MINERAL COMPOUND
FOR SYMPTOMS OF HEAVES
Booklet Free.
\$3 Pkg. guaranteed to give satisfaction or money back. \$1 Pkg. sufficient for ordinary cases.
MINERAL REMEDY CO. 463 Fourth Ave., Pittsburgh, Pa.

CONCRETE STAVE SILOS
Write for our Free Silo Book. Tells how we build them for you from the ground up. Our perfectly processed concrete staves give you construction that lasts forever, yet costs no more than wood stave silos. Fire and wind resisting. No painting, no guy wires. No tightening of hoops. Keeps silage fresh and sweet. Unequalled for cold climates. Write for illustrated fact-proving catalog.
MICHIGAN SILO CO., General Offices, Kalamazoo, Mich. Factories at Kalamazoo, Mich., Peoria, Ill., Bloomfield, Ind.

Imported Melotte
\$7.50
After 30 Days FREE TRIAL

90 days' free trial—then, if satisfied, only \$7.50 and a few easy payments—and the wonderful Belgium Melotte Separator is yours.
No Money Down!
Catalog tells all—WRITE!
Caution! U. S. Bulletin 201 shows that vibration of the bowl causes cream waste! The Melotte bowl is self-balancing. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins 45 minutes after you stop cranking unless you apply brake. No other separator needs a brake. Bowl chamber is porcelain lined.
Catalog FREE
Send today for free separator book containing full description. Don't buy any separator until you have found out all about the Melotte and details of our 15 year guarantee.
MELOTTE H. B. BARSON, U. S. Mar. Chicago 2643 W. 19th St., Dept. B-310

ABSORBINE

will reduce inflamed swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly as it is a positive antiseptic and germicide. Pleasant to use; does not blister or remove the hair, and you can work the horse. \$2.50 per bottle, delivered. Book 7 R free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price \$1.25 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.
W. F. YOUNG, INC., 468 Lyman St., Springfield, Mass.

Milking Machines

Sterilized

It is easy to clean milkers and separators with a few spoonfuls of B-K in water. It penetrates to every part, cleansing and sterilizing and kills the germs that sour milk. Will not harm rubber or metal parts. Clean, clear, destroys all odors—not poisonous—but very powerful. At your dealers. Write for free booklet on dairy sterilizing.

GENERAL LABORATORIES
430 Dickinson St.
Madison, Wis.

B-K

THE HANDY MAN'S CORNER

TO conserve space, and to give strands are usually employed, but the readers of this page the benefit of the many suggestions upon the post; or where there is a possibility of the wires rusting, three made in our last contest on how best to secure end-posts, I am endeavoring to bring together the various ideas in this little story.

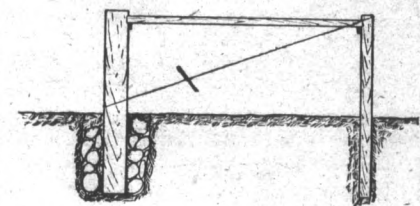
A Good End-post.

The majority of our correspondents prefer a large cedar post for this purpose. A few, however, mention osage orange, oak, Catalpa and some other varieties. The sizes range from eight

where a heavy strain will be placed upon the post; or where there is a possibility of the wires rusting, three

wires are used. After these wires are placed, a stick is inserted between the wires and they are twisted until the proper tension is secured. A few eliminate the wood brace by guying the top of the anchor-post to a heavy stone buried a few feet distant on the opposite side of the post from the direction of the pull. Combinations of the two ideas are also employed as illustrated in one of the cuts.

Breaking away from these established ideas, one farmer cuts a saw-log twelve feet long and buries over half of it in the ground. No braces are used. Another correspondent digs a trench sixteen inches wide, four and one-half feet deep, and five feet long,



in line with the fence. He has sheet metal forms which he places over the far end of this trench. He then inserts a reinforced concrete brace from the end of the trench in the direction from which the pull comes to a hole in the form. The cement is then poured, making a solid block of the post and brace. Reinforcing is used to thoroughly anchor the post to the block of cement in the trench.

The prize winners in this week's contest are as follows: Allen E. Eaton, of Eaton Co.; Chas. Johnson, Gratiot Co.; Wm. J. Austin, Shiawassee Co.; Wesley Hille, Ionia Co., and Roy B. Cline, Branch Co.

FOR THE BUSY FARMER.

A REPRESENTATIVE of the department of agriculture has been looking over the ground in Michigan and interviewing men interested in the establishment of a forestry experiment station in the lake states.

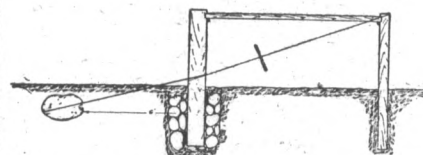
Last winter, Wexford county farmers were very much indisposed regarding the potato crop. However, the plantings this year will approximate those of normal years. Rainfalls have placed ground in good condition to receive the tubers.

Fishermen should take notice. A goose belonging to Albert Weston, of Bellevue, recently laid a fourteen-ounce egg. This monstrous product was turned over to Mother Hen who, at first, beheld the egg rather suspiciously, but finally did her duty and now two lively goslings reward her for her trouble.

William F. Johnson, county agent of Wexford county, is pulling off a poultry tour this week. Culling, breeding and feeding will be discussed and demonstrated.

Ottawa poultrymen have decided to cooperate with automobile dealers of their district this coming winter in staging a combined automobile and poultry show. The date set is December 4-7.

J. A. Hannah, secretary of the West Michigan Poultry Association, and a graduate of the M. A. C., joins the poultry extension staff of the college on July 31.



post and over the cross pieces. The size of the stone varies from two to six inches in diameter. They must be firmly tamped to prevent the posts working loose in the hole. A few writers recommend cement or dirt for the filling.

The Triangle Principle.

The principle of the triangle is employed in anchoring these ends. The post itself forms one side of the triangle. Another side consists of a brace, and the third is two or three strands of No. 9 soft wire running from the end of the brace back to the post which is being anchored.

In the majority of cases, the brace extends from the anchor post to a second post in the line of the fence. It may run horizontally, as shown in the illustration, or diagonally from the top of the end-post to a point near the ground on the brace-post.

Wiring is done as illustrated. Two

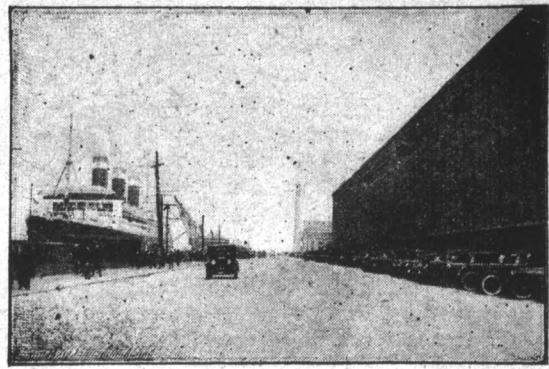
WORLD EVENTS IN PICTURES



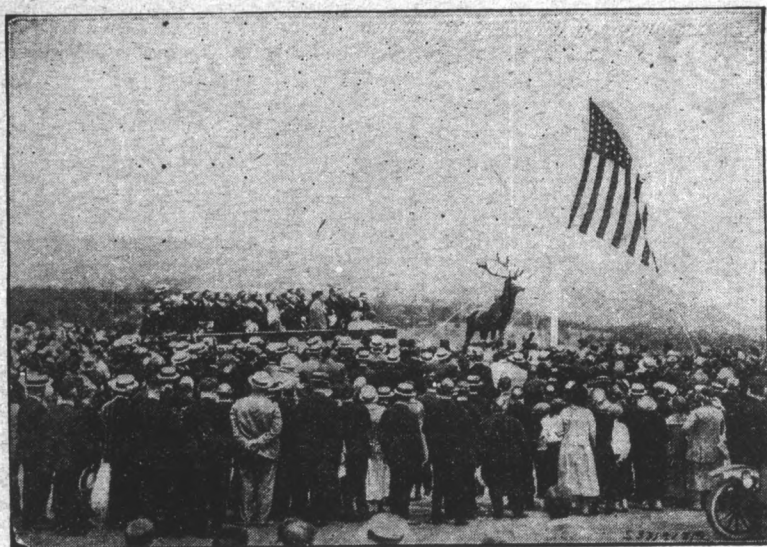
Beaumont, Texas, enjoys a rainfall of twelve and one-half inches, the heaviest for past twenty-five years.



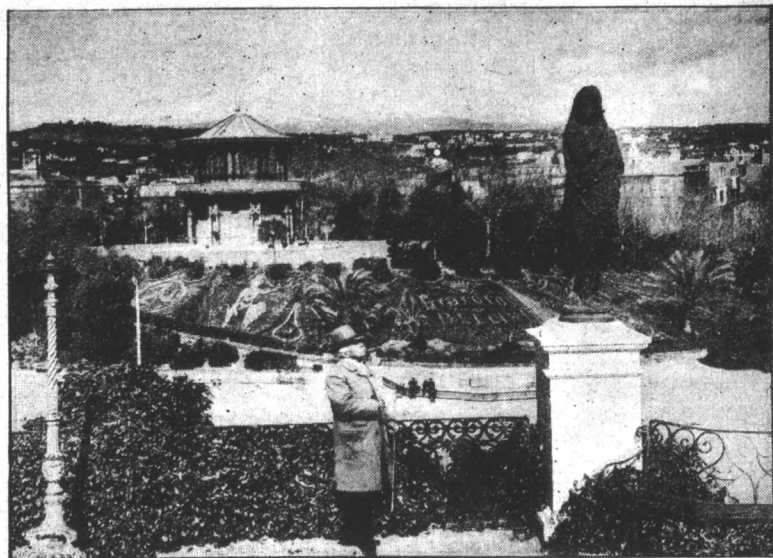
An American ear specialist goes abroad to treat son of Spanish king for deafness.



The great Leviathan about to leave the Boston docks with a large party of newspaper men and shipping experts aboard.



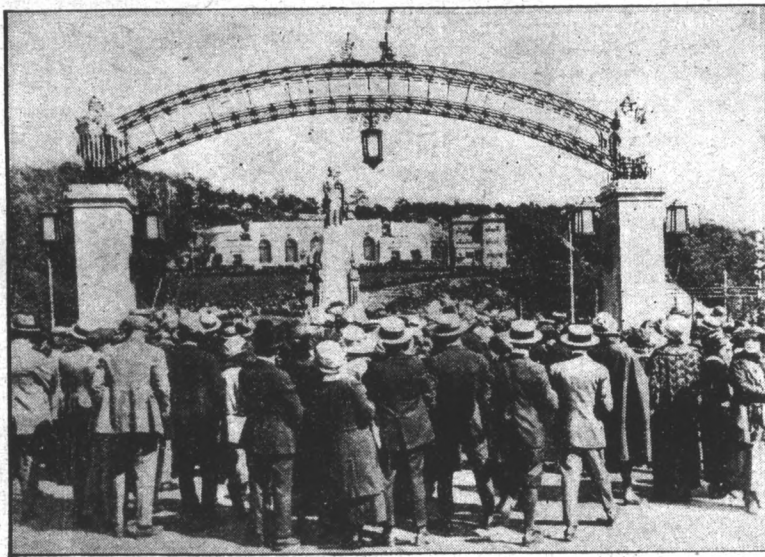
More than ten thousand persons walked or drove to Whitcomb's Summit to attend the unveiling of the Elks' memorial as a tribute to those who gave their lives in the World War.



In the distance is Mt. Aetna, from which lava streams are slowly creeping upon the villages in the foreground. Already 50,000 refugees are seeking homes in Catania and elsewhere.



Seven surviving members of the class of seventy-three, Elmira, College, N. Y., hold reunion.



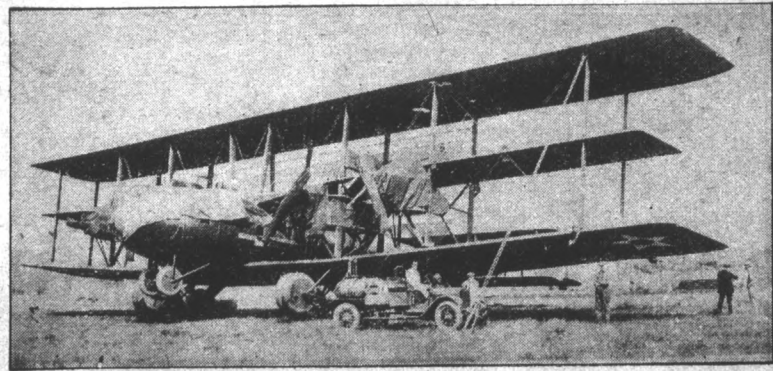
Pilgrims from all over the American Continent are attending the noted Canadian shrine at Mt. Royal, Montreal, where a rapidly increasing number of miraculous cures are being made.



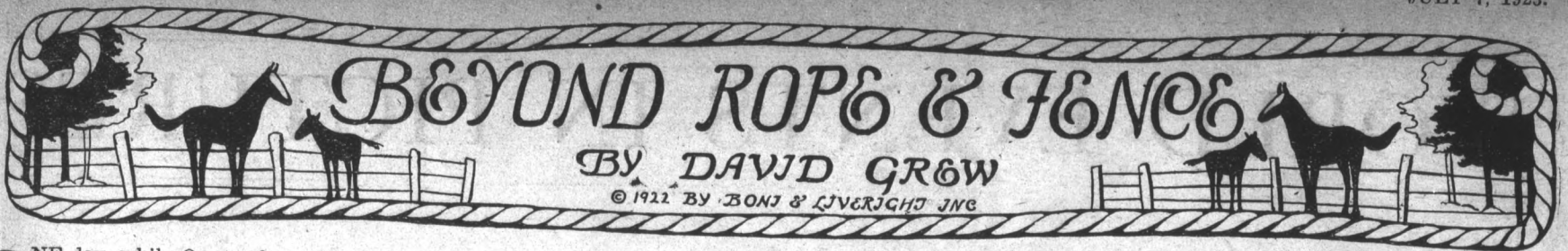
American Legion head believes in presenting the evidence before questions are asked.



At the annual Harvard Regatta, Yale oarsmen make a clean sweep by finishing in the 'Varsity race more than six lengths ahead of Harvard. Yale's Juniors and Freshmen also captured the purple.



This giant Barling bomber triplane is the largest airplane in the world and its 120-foot wings, driven by six 450-H. P. Liberty motors, will be given official trial in a few days.



ONE day, while Queen, for want of something better to do, was dozing over her empty manger from which she had eaten up every spire of hay, she heard the dog, outside, bark with unusual excitement. By the increasing rapidity with which his barks succeeded each other, she knew that something was coming. She soon heard the rumbling of a wagon and when that sound came very close and stopped it was followed by the clatter of many voices. She had allowed herself to worry about many sounds that had resulted in no harm to her and experience was teaching her not to worry. So she soon went back to her dozing, especially since the rapid patter of hoofs, as the horses drawing the wagon pulled into the yard, had quickened her memory of life with the herd.

In the midst of her dreaming she was suddenly disturbed by the entrance of two strange horses whose heavy feet beat the floor of the barn so hard that she felt every beat. The harness on these two huge horses was massy and bits of metal on it flashed with the reflection of the light of the doorway. They were led into the stall next to Queen and with absolute indifference to her they began to rummage in the manger and the oats boxes, calling greedily for food. Queen watched them with no little interest. She was afraid of the men who had come in with them but in spite of the men she could not resist the desire to touch noses with the horse nearest to her. She pushed her nose anxiously through an opening in the partition and the big horse touched it with his nose a moment, but immediately returned to his voracious search for oats. But the touch of the big nose had only intensified the burning desire in her heart for companionship, and she called more loudly and with greater appeal.

SUDDENLY she felt a slap upon her back and when she almost flounced into her manger in fright, she heard laughter behind her. The man who had slapped her then went round to the front of the manger and when Queen's eyes fell upon him she recognized him. It was he who had helped the man of the place capture and brand her. The smell of him was most repellant and she backed away as far as she could go; but he untied her ropes and pulling their ends together, around a steading of the back wall of the manger, he pulled on them, dragging her forward till her knees struck the manger, and her head was over his shoulder as he stooped. He held on to the ropes keeping her head immovable; while her owner, coming from

the other end of the barn with a bunch of straps, threw them upon her head.

She struggled desperately to pull her head away but the ropes were relentless. The evil-smelling hands of her owner moved all over her face and she was powerless even to show her resentment. His big thumb forced its way between her teeth and while her jaws were apart a piece of iron slipped in between her teeth; and before she could dislodge it, the straps were forced over her ears and fastened around her neck.

With teeth and tongue she struggled to eject the annoying iron from her mouth but try as she would she could

earth with a stick and was looking at her. Under the wagon sat the dog on his haunches. As soon as he saw her he raised his muzzle and barked at her.

She tried to back into the barn but the man who stood in its doorway struck her with a stone which he threw at her. She dashed forward and reared. Her owner pulled down on the reins and once more the bend in the center of the rider's bit struck her tender palate. The pain terrified her. It seemed as if her enemies were able to strike her from within. She jumped involuntarily but she realized at man at the bridle immediately jerked

Her palate by this time was sore and the pain was so excruciating Queen again lost her temper and for ten minutes both men were obliged to hang on the ropes and the reins as she reared and kicked and balked. But in her enraged kicking one of her hind legs struck one of the rear wheels of the wagon and the pain that shot through her whole body had a quieting effect upon her. While they had her up against the wagon from which the boy and the dog had fled, they placed the saddle upon her.

THE saddle securely fixed, they led her off again, but walking was now difficult and painful. The cinch, the strap that keeps the saddle in place, was so tight that it was almost completely hidden by the skin which lopped over it from both sides. It cut her painfully every step she took. In two places on her back some hard parts of the saddle pressed against the backbone.

But all this, miserable as it made her, was as nothing compared with the horror that swept over her when the man suddenly seized the horn of the saddle and threw himself upon her back like a beast of prey. She sprang forward to get away from the farmyard; then on the open prairie she began in real earnest the attempt to throw him. He pulled on the reins till she felt the bend in the bit boring into her tongue. He dug his spurs into her sides. He lashed her savagely with the knotted ends of the ropes. But in her desire to rid herself of the frightful weight she seemed to have lost her sensitiveness to pain. She shook her body as a horse will shake water from him. She reared. She kicked backward. She shook the rear of her body while she braced her front legs against the earth. Then failing in all these attempts, she threw herself to the ground.

He jumped in time to avoid a broken leg. Then thinking that she had conquered she struggled to her feet intending to fly, but to her consternation, she was no sooner on her feet than he jumped back upon the saddle. She was determined to get rid of him and was about to throw herself again when she received a blow upon one ear that almost stunned her. The man had leaned forward and struck her with his hand in which he held his hat; but she thought it was some ferocious bird come out of the air to assist him. She turned in the opposite direction and dashed away. When he wanted her to turn back he struck her on the other ear and this time when his wing-

The Chinch-Bug

By Al. Rice

When all the earth is dry and hot,
Beneath the sun a boiling-pot,
And dust-dry winds with heat are
shot,

In rattling fun;
Then comes the chinch-bug to the spot
With gattling gun.

We poison him—but what's the use?
He doesn't eat all kinds of juice,
Perhaps the Devil turned him loose
Bad case the cuss.
Perhaps the Devil turned him loose
To pester us.

The moon-shine dope that's death to sin
He wouldn't eat with sugar in;
He likes his "corn-juice" free of gin
And "snake of death,"
Nor even stops to wipe his chin,
Or take a breath.

Bad cess to them! For shame, for
shame!
The chinch-bug isn't even game;
But travels like malignant flame,
So slow and sly,
Our curses rest upon the name,
We know it by!

not move it to the edge of her teeth. They then loosened the ropes and her owner seized them all with one hand. Taking the reins which hung from the bridle bit in the other hand, he jumped over the manger. Seeing him she sprang back nervously and he followed her. She started for the doorway and when she got out into the open, she was going a little fast for him. With a vicious jerk on the reins he halted her. The iron in her mouth was bent in the center and the least jerk on the reins forced the bend to strike the tender palate with the force of a hammer.

THE full light of day to which she was no longer accustomed hurt the joints paining her with the exertion of her first activity in so long a time. A wagon stood not far off with its tongue extended before it. On the seat was a fur robe. It appeared to her like some sort of animal and she was afraid of it. Against its wheel leaned the boy. He was pounding the once that every jump inflicted its own

punishment. So she tried very hard to control herself, though her every nerve was on edge.

The man then walked forward and pulled on the ropes. She did not know what he wanted, so she braced herself against his pull. Again he jerked the reins and to avoid the force of his pull she moved hastily toward him. At once he moved off again and a few repetitions of this taught her to follow when led. Around and around the yard the man led her and with eyes aflame with fear, her skin quivering with nervousness, Queen hastily followed him, desiring to resist but anxiously afraid to do so.

She was beginning to think that that was all they wanted of her when the man in the doorway of the barn came forward with a heavy leather affair from which straps and things hung and dragged on the ground. She was standing quite still, breathing rapidly when this new apparition appeared. As the man swung it upon her she jumped to the side in fright. The reins and with impatient force.

AL ACRES—It Looks as if Slim's Nose Is out of Joint

By Frank R. Lee



like hat reached her ear, he sent forth a most fiendish shriek.

Away she leaped over the plains as if some awful monster were at her heels. She seemed to get relief in the running. Her rider ceased pulling on the reins and ceased poking her sides with his spurs. He showed no displeasure in any way and Queen began to realize that that was what he wanted. When with his reins he pulled her head sideways she involuntarily turned in that direction and as soon as she turned he stopped pulling.

She was finally so worn out running, that she dropped back into a weary walk and as she looked up she was surprised to find herself but a few rods from the barn. Rebellion was futile. All her failures proved it to her, yet when the man near the barn-door came forward to take hold of her, she tossed her head wildly, gripped the bit between her teeth and reared. Then when he ran off to the side to get away from her hoofs, she fell back and rushed for the barn-door.

(Continued next week.)

Gossip from Cherry Hill

By O. W. B.

THEY had a different sort of celebration at Cherry Hill this year. Henry tells about it in his letter. Also a new idea is born into the community. All are doing well.

Cherry Hill, July 4.
Sittin' on the Porch.

DEAR UNCLE DAVID:

Well the Great and Glorious is about over. I'm out here on the porch with Vera watching the fireworks down at Carey. We can see them real plain from here, an the skyrockets an Roman Candles and the explodin' bombs makes me glad that I'm here an not in France four years ago wen we had fireworks a plenty an more than I ever want to see again.

We didn't go to Carey Celebration but our Community put on a Picnic down in Charley Gilkey's grove near the crick. That's in Charley's pasture an about the finest, most peaceful place for such doings that I ever see.

Well we first thot we'd make it a Sunday School Picnic but Charley, wat is a little more progressive than most of us, thot why it wouldn't be better not to limit it to Sunday School but make it Community, so that's wat we did.

We didn't invite no outside speakers but just brought ourselves and families an dinner an we had about the best time I ever had. You see Uncle we are getting interested in this Better Community Movement and things is comin fine as silk.

Well we played some games, drank pure water out of Charley's bubbling fountain that he has fixed up to that spring coming out of the rocks, swung in the swings, played baseball and the boys went in swimming for Charley has dammed up the creek an make a nice pond, an then we had dinner.

Say Uncle we didn't have any supper atall. I didn't want any an Vera says she ain't going to force anybody to wat doesn't want to. Had coffee cooked over a fire in a nice brick stove Charley had built for the purpose an then after things was cleared up we set down an talked things over.

Well I ain't going to tell everything about it. They elected me chairman an then we figured wat we wanted and wat we needed. Well, we made up a Community Council. One representative from every organization existing in the community. Runs something like this, one from the Sunday School, one from the Agricultural Club, one from the Woman's Society, one from the Church, one from the School Board, one from the Boy's Base Ball Club, an one from the Literary Society.

They will meet once each month an talk over community problems an decide wat to do. Well that's a good start for one day aint it Uncle? Everybody was interested and stayed till it was time to go home for chores and we all voted it had been the best Fourth of July we ever spent.

You know Pete Robertson lives down the road about a mile from our place. He an I 'Fit an Bled in the Great Warrh together' as the old Scotchman says. Well Pete's been down at the

Agricultural College workin' for his degree as I should hav done if I hadn't married Vera in such a hurry and got on this place. Well Pete's mother and pappy are gettin' rather old an dependin' on Pete to come home to work this summer, but Pete had a fine job offered to him for more money an he up an accepts.

Well it made me rippin' mad to see him leave his folks in the ditch an go off just for a few more sheckles. It wasn't like Pete an I wrote him purty sassy but it didn't have no effect, leastwise he didn't come home rite then. But he's home now an expects to stay all summer till school opens.

Well it made me rippin' mad to see Well it took a mite of a woman to wake Pete up. You know Mary Martin, been teaching our district school this year. Never was a finer girl, only don't tell Vera I said that. She'd be makin' comparisons. Well Mary an Pete's been purty thick for some time. Pete use to tell me bout her when we was in France an sometimes when things began to fly kinda thick around and the cooties got ornery and the mud in the trenches stinkin' Pete use to hone for Cherry Hill and Mary.

He'd swear if he ever got out of this dirty mess alive he'd be satisfied to spend the remainder of his days on Cherry Hill and try to make his folks and Mary happy. He wrote her as many letters as the censor allowed an then wrote some more he never mailed but kept in case he "went west" an somebody could give them to her.

Well Mary went to Summer School at the AG. College an I guess Pete forgot his folks an thought he'd just have a fine time down there with Mary this summer. But Mary went down there for work an she told him that if that was the way he felt about his folks he'd better forgit her. Well, day or two after Mary went down there Pete come home an ever since he's pitched in like a good feller an taken the load off his folks back.

Pete is pitchin' right in to our community affairs too an is going to be a lot of help. Pete's pa an ma are going to take a vacation when the corn is laid by. First vacation I guess they ever took, an Pete's responsible for that. They got him one of them Speed-wagons an has built a little bungalow on it all fitted out with everything comfortable an cozy an they plan to just amble over the country an take their time visiting the old home an old friends an no particular destination cept to get home some time before school opens.

Well I give Pete a long mark for that. They aint had no rest for years an it's about time they did something to spell the load a bit. Pete made the plans for them an I reckon the little Girl doin' summer school work down at the college had a hand in it too. Pete says its his conviction that every farmer is entitled to a vacation just as much as any feller wat works over a desk an he's going to see that his folks gets it from now on.

Guess he's right don't you Uncle?
HENRY.

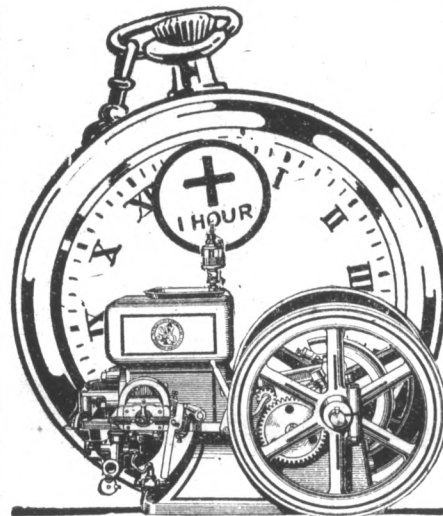


YOU don't look for the lowest priced farm implements because you know the best are cheapest in the end. Sealpax costs a little more — but it lasts longer.

The strong, light, fabric, cut wide and roomy, keeps you cool! The webbed shoulder, triple webbed waist, double crotch keep you comfortable and double the wear! The sanitary envelope brings you Sealpax spotlessly clean! Ask your dealer for it.

THE SEALPAX CO. - Baltimore, Md.
Also makers of Sealpax for Women and Children

Sealpax
The Better Athletic UNDERWEAR
Sold in a Cleaner way



"What's an hour worth to a farmer?"

WOULD you pay two cents for an hour's spare time a day? Would your wife? It doesn't cost that, even, to gain an hour on pumping water alone — with a Hercules Engine.

Saves so much time on so many chores!

Suppose you pump 60 gallons of water from a well 50 feet deep, and carry the water 100 feet. Time you've done that little job, you've lugged 500 pounds a quarter of a mile. And it will take you all of fifteen minutes to do it.

For less than two cents, a 1½-h. p. Hercules will pump 60 gallons a minute for sixty minutes—and deliver it 100 feet or more away.

It will saw wood, or grind feed, or run a separator, or a fanning-mill, or do any of a dozen other muscle-racking chores just as easy—and just as cheaply!

And still you worry along without a Hercules! Why don't you send for the book that tells you what one can actually SAVE you and gain for you?

THE HERCULES CORPORATION
Engine Division, Dept. K, Evansville, Ind.

HERCULES
ENGINES

If You Can Sell

We Will Buy Your Full Time 6 Days per Week 52 Weeks Each Year

If you can devote your entire time to our sales work

We Have an Attractive Opening for You

One that will enable you to build a permanent profitable business for yourself. You need not have had sales experience in order to handle our work. Your own car and a willingness to devote at least eight hours per day of honest efforts is all we ask.

Fill in and send the coupon below. It involves no obligations and we will advise you of our sales plan that will enable you to have a permanent business of your own.

E. A. SHEARER,
MICHIGAN FARMER
Desk C. 1632 Lafayette Blvd.
DETROIT, MICH.

Gentlemen:—

Please tell me of your sales plan that will enable me to build a permanent business of my own.

Name.....

P. O.....

R. F. D. or Street.....

State.....

County.....

STERILIZATION TABLE

Item	Water Bath	Boiling
Beans	100	100
Chickens	100	100
Pears	100	100
Rubbers	100	100
...	...	...

"team work"

A GOOD LUCK rubber will keep a jar of sterilized fruit sweet and delicious for years. But the ring will not sterilize; this must be done by heat.

During the canning season keep a good sterilization table where you can consult it easily. There is one in our canning book, or you can send to the Department of Agriculture. Many women's magazines have prepared reliable sterilization tables. They tell you the exact time needed for sterilizing each product after the boiling point has been reached. You can't fail if you use a good reliable table and

GOOD LUCK
RED JAR RUBBERS

The germs inside the jar are killed by the heat; the germs outside can't get in. The food is safe until you want to use it.

GOOD LUCK Jar Rubbers have been tested and approved for all methods of canning by the experts of the Home Canners' Association of America. They come packed with the following leading brands of fruit jars: Atlas E-Z Seal, Atlas Good Luck, Schram Ever Seal, Schram Acme.

If your dealer cannot supply you send 10 cents for sample dozen. For 6 cents in stamps we will mail you our book on cold pack canning, containing many novel and excellent recipes.

BOSTON WOVEN HOSE
and RUBBER COMPANY

49 Hampshire Street,
Cambridge, Mass.

Largest Makers of Jar Rings in the World

PEONIES 10 roots for \$3.00. Write for Special Offer.
NORTHERN NURSERY CO., Wausau, Wis.

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER

ALBION

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main pinion bearing subject to wear. This is oilless, and easily replaceable. Governed by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours now with a good Windmill? This is your chance—F. O. B. Albion. Get it yourself. Ask your dealer, or write direct to:

Union Steel Products Co. Ltd.
Dept. 44, Albion, Michigan, U.S.A.



Woman's Interests



When Threshing Time Comes

Julia Learns Some of the Many Labor-Savers When Feeding Hungry Men

THE telephone bell rang out its imperative jingle as Mrs. Stanley was in the midst of her usual Wednesday morning bread-mixing act. As she began to hastily rid her fingers of the dough, Julia came in from the garden with a pail of big red strawberries.

"I'll answer it, mother. I think it is Jane calling about the picnic," she sang as she hurried to the telephone. But this is what Mrs. Stanley heard: "Hello!"

"No, this is Julia."

A minute's pause.

"Yes, Mrs. Gray, I would be very glad to help you. When do you want me to come over?"

"Yes, I have the berries all picked and will be right over."

As Julia turned away from the tele-

children on the farm, she gets along splendidly. She had planned a very simple but ample meal, and it seemed to appeal to every one of the hungry men. She served:

Roast Beef Mashed Potatoes
Browned Gravy
Bread and Butter String Beans
Cucumber Pickles Radishes
Fresh Cherry Pie Lemonade

"The meat she had roasted yesterday, so it had only to be re-heated. I peeled the potatoes and got them ready while she prepared the string beans. I helped make the cherry pie, too, and now I know how to keep them from running over. Just add about one and a half or two tablespoonfuls of flour mixed with the sugar, and they will never run over a bit. Mrs. Gray also added about one-quarter teaspoon of soda to the sugar for each pie, and it didn't take only about three-quarters as much sugar, and the flavor was just as good.

Sweeten Lemonade with Syrup.

"In making the lemonade, we used half oranges and half lemons, and sweetened it with syrup instead of the dry sugar, and this helped to beat Mr. Sugar Profiteer, too. Several of the men complimented her on how good it was, and said that in warm weather they preferred it to coffee.

"It was no trouble at all for us to arrange the dinner on the table, as Mrs. Gray has one of those handy lit-

tle wheel trays, or tea carts. We could put so many things on it at once and wheel it right in beside the dining-room table. It was just made of one of those old-fashioned washstands like we have up in the back bedroom, painted in white, trimmed in buff and blue. But it saved a good many steps and the draw is used for silverware."

"I am so glad you went," interposed Mrs. Stanley. "You have gained some good experience that will help you when you and Jerry start housekeeping on the farm."

At the mention of her future, a maidenly blush crept over Julia's cheeks.

"But," she continued, "the best part of it all is that there was no extra washing to do."

Save on Washing Day.

"I don't see how she could eliminate that," said Julia's mother, "there must at least have been a few towels."

"No, not even any towels," declared Julia. "She had purchased a roll of paper toweling and the men never complained about using them at all. She had also purchased a large paper tablecloth and napkins. When the table was cleared, all were chucked into the stove and there was no thought of extra washing on Monday."

"I have missed you today, daughter, with the canning," said her mother, "but I am so glad you went, for you certainly have come home with a pocket full of experience."

Use More Water

It Will Lighten Housework and Save Steps

I CANNOT resist the temptation to describe to you the handiest convenience in my farm home. It is strange so many farm homes are not equipped with water in the house. Nine years ago we put in a pressure tank of thirty gallon capacity, piped the water first to this from the well and then on to the barn. All water

plete. Also, one easily uses three times as much water to good advantage when it is right at hand.

If more wives would investigate this handy arrangement, I am sure many more homes would be likewise equipped very soon.—M. B. F.

Household Service

INTERESTED IN GIRLS' ATHLETICS.

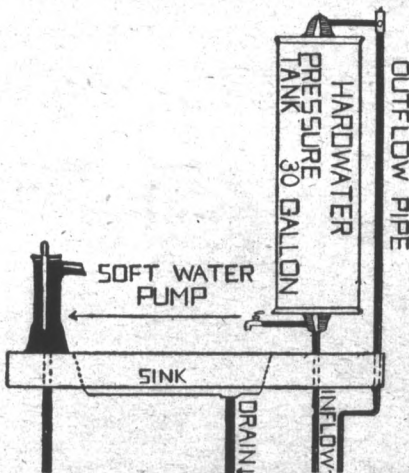
Can you furnish me with the names and addresses of any managers of a girls' base ball league? Any information you can give me would be much appreciated.—H. T. H.

This request comes from one of our subscribers, interested in the development of girls' athletics. Can any of our readers furnish H. T. H. with this information? Do you know of any girls' base ball league that is anxious to play other teams?—Martha Cole.

CANNING CORN.

I have used a water seal canner for eight years and have good canning success with everything but the sweet corn. For several years flat sour has developed.—Mrs. C. G.

If your corn has flat soured the trouble is probably that you let the corn stand too long after picking. It should be canned as soon as picked, allowing not more than two hours to elapse before it is in the cans. A little experience is also necessary in selecting corn for canning. It should be mature and picked just before it enters the dough stage and should be processed three hours in hot water bath.



Simple Arrangement for Running Water.

pumped passes through the house tank hence always fresh. This tank is in the corner of my kitchen, with a good white porcelain sink, and a cistern pump at the other end of the sink, which has a good underground drain.

During the nine years of constant use we have never had to put on one cent's worth of repair and I consider it has saved days of time, besides doctor's bills, of which five or six visits would fully cover the cost of all, com-

phone, there was a determined look in her expression.

"Mother, if Jane calls, tell her I can't go to the picnic," she said. "I am going over to help Mrs. Gray with the threshers."

The Stanleys had recently moved from the city and were new at the farming game. With plans to marry a young farmer of their community in the fall, Julia was anxious to grasp the opportunity to get some first-hand experience in feeding farm help on the farm. With this in view, the picnic did not enter into consideration.

And so, armed with an apron and a Ford, she was very soon in Mrs. Gray's kitchen assisting her in preparing the dinner for fifteen or more hungry men. It was all a wonderful revelation to Julia. She had lived the greater part of her nineteen summers in the city and small town, and to her the haying time, threshing time, and silo-filling time on a large farm was an enormous task, one greatly to be dreaded. But that afternoon as she returned home, it was with a much changed viewpoint, and she was eager to tell her mother of the new things she had learned.

She found her mother on the porch doing the mending and in answer to her mother's question as to what she had learned that afternoon, she sat down beside her to tell her all about it.

"Mrs. Gray is certainly a wonderful little housekeeper. With the three

What a Woman Learned

Our Weekly Sermon—By N. A. McCune

WHEN we think of Mary, the Mother of Christ, it is of a woman beloved of millions. By the Roman Catholics she is regarded with peculiar reverence as being the mother of the world's Messiah. Some one has divided her life into three parts thus: Mary the learner, Mary the mourner, and Mary the worshipper. She had much to learn.

She did not know the certainty of the things which she heard, yet in her simple and trusting heart she believed them. No one else believed the shepherds as far as we know; but Mary pondered over what they said. When the wise men came from the east Mary must have been set to thinking still more, concerning the Babe at her breast.

There were hard things to learn, too. One day she and her husband lost the Boy in a great city. They searched for him three days, "sorrowing," we are told. When they found him they did not know what to make of it. He was discussing deep theological questions with the sages. Everyone was amazed, his parents with the rest. They did not understand Him. And yet He was surprised to think that they had thus looked for Him.

A recent writer on the life of Christ says that this whole incident was a rebuke to the parents. "They had left Him to live His inner life alone." Perhaps there is something in it. Like a companion to Him, and He was obliged to consider the questions that pressed on Him without outside sympathy or help.

Again, Mary had to learn. One day she thought He was nervous and tired; worse than that, that He was "beside Himself." She and His brothers went to bring Him home. When it was told Him that His relatives were on the edge of the crowd looking for Him, He replied that they had no more claim on Him than other good people; that everyone who did the will of God was His mother and sister and brother.

These were hard spots in life's road for Mary. But we are glad to know about them. It is clear that she had to learn, like other people. She did not understand her wonderful Son. The person who never grows is dead without knowing it. That is one of the weak spots in the church. Many church folk will apparently do anything but grow. If the minister departs from the ancient theological landmarks, it is a subject of complaint. "Us never done it that way," said an old man to a young minister who was trying to persuade the pillars in his church to undertake something new. Not infrequently the preacher himself is averse to the new. Growth is a law of life.

Prof. Thomson, the noted Scotch biologist, says that a snail is capable of a new idea. That seems to be more than can be said of some humans. Fish can be taught. Human beings are expected to push back the horizon of their mental and spiritual world. Many never do. All may.

There is a wonderful picture of Mary and her Child, at the time of the flight into Egypt, by the French painter, Merson. It is called "The Repose in Egypt," and represents the mother, weary with the long dusty journey, lying between the long stone arms of the sphinx, in Egypt, with the Child at her side. The stars are out and all is still. In all the long series of expe-

riences, Mary never was despondent nor spoiled. She remained the simple minded, devout woman, ready to profit by life's teachings. Such is the essence of greatness.

WHEN we turn to Mary the mourner, there is tragedy indeed. When the infant Christ was brought into the temple, you will remember how aged Simeon came up and blessed Him, and said to his mother, "A sword shall pierce thine own soul also." He was right. The sword piercing became actuality. We can only imagine how she felt as her Son stood trial, and the crowd hooted; or when He was led to Crucifixion Hill. No words can describe that. We are not told how she felt. It could not be told anyway. It must be left to the imagination. "Woman, behold thy Son!" he said to her in the closing agonies of the cross. No words could better express how He felt. And she made no reply. There are times when silence is the only speech possible.

The story is being told in England that the Prince of Wales recently visited a hospital for crippled soldiers. There were twenty-eight beds. The Prince saw twenty-one men. "Where are the other seven?" he asked. He was told that the others were so badly crippled that it would be depressing to see them. But he insisted, and was taken to see six. "But there is one more I haven't seen." He was told that this man was so horribly mutilated by shell that he was hardly human; a mere mass of flesh, a horrible object. His Highness ought not to see such a tragic sight. "But I want to see him," said the prince. He was taken into the room where the shapeless mass of human flesh lay on a bed. For an instant he turned pale, then stooped and kissed the victim of war and walked out. No word was spoken. There was nothing to say. Silence was the highest eloquence. Was not this true of Mary, as she stood, a mourner, at the cross?

WHAT became of Mary after the resurrection? John had taken her to his home, and there is reason to believe that John belonged to a family that had considerable means. Very likely she lived with him the rest of her days. She must have been with the disciples in those excited early days of the infant Christian church, when persecution was rife. She would know of James' death, of Peter's imprisonment and release, of the conversion of Paul. No doubt she heard some of Paul's letters read to the church at Jerusalem. She may have wished to go with John when he organized the church at Ephesus. But the Bible tells us nothing more. And it is as well. But the peasant girl who became the woman of gentleness and love is the most famous woman of history.

Here is what another says of her character, with her quietness of spirit; her admirable self-control; her devout and gracious gift of sacred silence. The story of her life and of her relationship to Jesus is consistent throughout and touched with manifold unconscious traits of truth. Such a narrative could not have been feigned or fabled."

SUNDAY SCHOOL LESSON FOR JULY 8.

SUBJECT:—Mary, the Mother of Jesus. Matt. 1:18 to 2:5; 12:46 to 50. Luke 1:26 to 56; 2:1 to 52; John 2:1 to 11 and 19:25 to 27.

GOLDEN TEXT:—Thou shalt call His name Jesus; for it is He that shall save His people from their sins.—Matt. 1:2.

Lily White

"The Flour the Best Cooks Use"

From the Finest Wheats

From the finest wheat one has reason to expect the best flour. From the finest flour one may well expect the best baking.

Lily White is milled from the finest wheat grown in this country and not surpassed anywhere. It is scrupulously cleaned, scoured and washed, and milled by the famous six-break system to a granulation that is perfect. Its volume, color and flavor are just right for the making of appetizing, wholesome breads. From Lily White you may expect the best baking. We guarantee it. You will produce better baking and like it better than with any flour you ever used.

Our Guarantee

We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price. He is so instructed.



Parker House Rolls made with Lily White

You are protected while trying out Lily White.

Call your grocer now.

VALLEY CITY MILLING COMPANY

GRAND RAPIDS, MICHIGAN

"Millers for Sixty Years"

PENINSULAR

Work
Shirts

Kindred
Lines



Here's the shirt for you! The Peninsular work shirt—a leader for 50 years! Join the thousands of satisfied Peninsular customers. The double stitching, pointed neck-yoke and 36 inch length will make a hit with you. Ask your dealer!

GEO. F. MINTO & CO. Inc.
DETROIT MICH.



**NATURAL MOTION
ARTIFICIAL
LEGS
and
ARMS**

Authorized U. S.
Gov. Mfg'rs.
Stumps - Socks
Repairs
All Makes Solicited

DETROIT ARTIFICIAL LIMB WORKS
27 West Elizabeth St. Detroit, Mich.

Michigan Farmer Pattern Service

Send fifteen cents either in silver or stamps for our up-to-date spring and summer catalog, showing color plates, and containing 500 designs of ladies', misses' and children's patterns, a concise and comprehensive article on dressmaking, also some points for the needle (illustrating thirty of the various, simple stitches), all valuable hints to the home dressmaker.

All orders for patterns and catalogs should be addressed to Pattern Department, Michigan Farmer, Detroit, Mich., and be sure to state the size wanted.



No. 4406—Ladies' Apron. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires 4½ yards of 36-inch material. The width at the foot is 2¼ yards. Price 12c.

No. 4405—Ladies' Under Garment. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires two yards of 36-inch material. Price 12c.

Reduced Prices BABY CHICKS

Best Paying, Heavy Laying, Purebred Strains. Tom Barron English S. C. W. Leghorns—25, \$2.50; 50, \$5.00; 100, \$10.00; 500, \$45.00; 1000, \$90.00. Park's Strain Barred Rocks; S. C. Rhode Island Reds—25, \$3.00; 50, \$6.00; 100, \$12.00; 500, \$55.00; 1000, \$110.00. Good strong broiler chicks \$8.00 per 100. Place your order at once, avoid disappointment. Get your chicks when you want them. 100% live delivery guaranteed postpaid. Instructive catalogue free. Prices on mature stock, 8-12 weeks old pullets on request.

Brunner Frederickson, Poultry Farm
Box 20 Holland, Mich.

PULLETS

Now is your opportunity to buy laying and breeding stock for next season.
8 Weeks Pullets—White and Brown Leghorns, Anconas, Barred Rocks. These pullets are all grown from carefully built up laying flocks. They will lay this fall and winter.
Yearling Hens—White and Brown Leghorns, Anconas, Barred and White Rocks, Rhode Island Reds. First class selected hens, laying and breeding stock for next year.
All stock is guaranteed to be satisfactory to you. Write to us for description and prices.

STATE FARMS ASSOCIATION
Room 201 Chase Block, Kalamazoo, Michigan.

Whittaker's R. I. Reds

Hatch of July 11th \$14 per 100; \$7.50 per 50; \$4 per 25.
Hatch of July 19th \$13 per 100; \$7 per 50; \$3.75 per 25.
Grade "A" Chicks \$20 per 100; \$10.50 per 50; \$5.50 per 25. Prepaid by parcel post and safe delivery guaranteed. Here is your opportunity to improve your flock with Michigan's Best Reds at rock bottom prices. Order from this ad. and state whether you want Rose or Single comb. Do not delay as July 19th will be our last hatch this season.

INTERLAKES FARMS
Box 39, Lawrence, Mich.

JUST-RITE LOOK! Baby Chicks

A Hatch Every Week All Year

NABOB HATCHERY,

POSTAGE PAID, \$5 live arrival guaranteed. MONTH'S FEED FREE with each order 40 Broods chicks, 4 breeds ducklings, select and exhibition grades. Catalog free, stamps appreciated.

Dept. 15, Gambier, O

BABY CHICKS

Of quality from real winter layers, mated by pedigreed males from Michigan Agricultural College. All our matings are inspected and accredited by our state Dept. Agri. as to their laying ability and health. By close culling year after year we can say we have a real improved egg machine in S. C., American and English strain, White Leghorns and S. C. Sheppard strain, Anconas. Write for our 1923 catalogue and price list, it's free. Chicks 10 cents and up. Reliable Poultry Farm & Hatchery, Zeeland, R. I. Mich.

PULLETS AND COCKERELS

Order Now for Early Fall

WHITE LEGHORNS AND MOTTLED ANCONAS Also Black Leghorns, Brown Leghorns, Buff Leghorns, Black Minorcas, R. C. Rhode Island Reds, Barred Plymouth Rocks, White Plymouth Rocks, Silver Wyandottes, White Wyandottes. **WE HATCH** eggs from Hoganized flocks on free range on separate farms, where also our stock is raised.

CRESCENT EGG COMPANY
Allegan Send for Prices Michigan

GREENLAWN CHIX AFTER JUNE 15th

White Rox, Barred Plymouth Rox, R. I. Reds, or Black Minorcas, 13¢ each. White Leghorns, Anconas or Broiler Chix 12¢ each in 100 lots. All chix less than 100 lot 14¢. Order now for June, July and August. Our 13 years producing chix that please. Sept. Chix 15¢ straight. Greenlawn Poultry Farm, South of High School, Fenton, Mich.

Baby Chicks \$12.00 per 100 and up

Hatching eggs, \$1.50 per setting to \$15.00 per 100. We are listing 17 varieties of pure bred fowls: Chickens, Geese, Ducks & Guinea. Also breeding stock. Send for prices and circular. Booking now for early delivery. **CLINTON HATCHERY & POULTRY FARMS**, Wilmington, Ohio.

RHODE ISLAND WHITES

win over all breeds at the egg laying contest. 30 eggs \$5; 50 \$8; 100 \$15 order from this ad. Some chicks H. H. JUMP, 175 Prospect Blvd., Jackson, Mich.

KEEP BEES

Complete Beginner's Outfits with or without bees. Full line of Beehives, Sections, Comb Foundation, Smokers, etc. (General Agents in Michigan for the A. I. Root Co. Send for 1923 catalog. Beeswax Wanted.

M. H. HUNT & SON,
Box 525, Lansing, Mich.



SAVE MONEY

WRITE FOR

FREE CATALOG

OF

AUTO SUPPLIES

MANY BARGAINS. POSTAGE PAID. Join Profit Sharing Club, no dues. Send for Membership Card. **HERMAN BUMILLER COMPANY**
4321 MAIN STREET CINCINNATI

CABBAGE PLANTS Right varieties for late planting Per- paid 100, 40¢; 500, \$1.25; 1000, \$2.25. **W. J. MYERS,** R. 2, Massillon, Ohio.



What the Postman Brought

A Few Interesting Letters from Merry Circlers

Dear Uncle Frank:

Helping out! That's me, all right! Listen, boys, I'll tell you all about my big ideas. They're not air castles, either, and I'm not blowing bubbles, as they call it. I'm in earnest this time.

Here is what I'm planning on pulling through this summer. It may sound big for a boy of twelve, but I mean it.

Well, I'll start now. I'm going to work out and earn money until I can get enough to buy books. I'm going to run the tractor, milk the cows, and take care of them. I'm going to help my father fix his little old bus.

I'll help my mother wash the dishes, sweep the floor, and dust the furniture. I am going to plant a garden, and I'm going to make a garden of my own. I'm going to plant carrots, tomatoes, pumpkins, beans, and I'm going to try to plant celery and peanuts.

After all my garden plants are up I'm going to go down town and sell everything I raised, and with the money I've made I'll be helping out. From your nephew, David Johnson, Gladstone, Mich., R. 1.

You'll be a helper, all right, if you do all these things. I hope you will keep close to the fulfillment of your program.

Dear Uncle Frank:

We have three cows and three horses. We also have a nanny goat which had two little kids. They are the cutest things I ever saw.

It makes me mad when I see bobbed haired girls with knickers. I have neither. In our school there is one girl besides myself who has long hair, that is out of fourteen girls.

Hoping to be your niece, Elizabeth Pionke, Lawton, R. 2, Box 102.

I can't help but be slangy by suggesting that you should be careful not to get the kid's goat when you play with them. It looks like twelve to two in favor of bobbed hair.

Dear Uncle Frank:

Say, Uncle Frank, I will send you a pansy to wear on your knickerbockers, and a comb to comb your bobbed hair back.

I agree with Harold Coles about going to the asylum.

From your niece, Dorothy Richardson, Alto, Mich., R. 1.

I'll be waiting for the pansy and comb. I can't just get your meaning regarding the asylum. Do you mean that it is the place for me?

Dear Uncle Frank:

Well, Uncle Frank, I am trying one of your contests. I know I won't win because I never do win anything.

I wonder how long it took Rex Ellis was good just the same, so were all the rest. I do love poetry, don't you, Uncle Frank?

Harold Coles is quite hard against "Bobbed Hair" and "Knickers." I am not on his side about them.

Well, Nature seems natural again. All the trees are budding and the grass is nice and green, and the wild flowers are blooming. I guess spring is here now. It was a long time coming.

Well, I guess I will say good-bye to all. Beatrice Mayette, Pinconning, Mich.

It's no use of trying if you know you won't win. Yes, I like poetry, that is, good poetry. I'm glad you appreciate Nature.

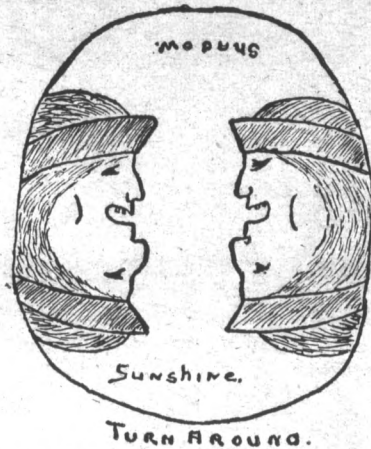
Dear Uncle Frank:

I think Harold Coles hit the nail on the head, all right. But paint is all right if put on the outdoor buildings. Knickers are all right if kept in their place. As for bobbed hair, it is not so bad. I have it, so I had not ought to say anything about the others. From another niece, Edith Newell, Hart, Mich., R. 1, Box 32.

Yes, I agree. Paint on barns makes them look better. Paint on faces makes them look worse.

Dear Uncle Frank:

I am getting real interested in the department, so thought I would try my luck in the contest. This is my first try. I am a boy nine years old, in the fourth grade. I passed on ninety per



This little drawing by Marion MacKellar, of Decatur, reminds us that the pleasures or sorrows of life come to us largely as the result of the way we look at things.

cent this year; my lowest mark was eighty-six.

Will close, as this is enough for the first try. Hope to be your nephew, Versel Galley, Reroy, Mich., R. 1.

Good for you! I am glad to know that boys can get high passing marks. Let's hear about some other scholarship records.

Dear Uncle Frank:

The most careless thing I ever saw was a boy kissing a girl.

What is Harold Cole's address? I've got something to tell him.

I would like a riddle contest some time.—Lemon Ade, Sutton's Bay, Mich.

I think you have a wrong idea of

carelessness. Even if it is carelessness, it isn't the worst thing that could be caused by carelessness. I think, though, that young folks should be careful about kissing.

Dear Uncle Frank:

Today it is raining so I thought I'd drop in and give my thanks for the Merry Circle button and membership card. Thank you very much for them, and I'm sure I'll do what is expected of me as a member.

I think "Work to Win" is a good motto for the club.

I have tried to be a winner of some of your contests, but failure seems to be in the way so far, but I'll try, try again until I succeed.

Thanks again. Your niece, Rose Sasek, Owosso, Mich., R. 4.

All who do what is expected of them as members make good members. Therefore, you will be a good member. I hope it rains again so that you will write again.

Dear Uncle Frank:

Hello, Uncle Frank No. 2. How's your good health this morning? I hope yours is better than mine, because I'm sick abed. I had the lockjaw and have been in bed since Sunday.

I'll tell you how it happened: I felt just fine Sunday until I started to eat my lemon pie. Then my jaws locked. They took me to the doctor and he couldn't get them open. So he put me to sleep and then pried them open. They said it sounded like a shot gun. My mother said she thought he had broken them, but I guess I'm going to get better. I hope so, anyway.

My neighbors and friends are so good to me. They bring me flowers and come to see me, and I receive lots of nice letters from them.

I'll tell you, Uncle Frank, friends are the nicest things on earth, except your own folks.

Well, I will close. Your loving niece, Louisa Lamphier, Oxford, Mich., R. 4.

You certainly have had an unfortunate occurrence. I hope you get over your trouble soon. I agree with you about friends.

What Made Me Laugh Most

By the Prize Winners

By Josephine Wells, Pokagon, Mich.

The thing that I remember as having made me laugh most was when my mother told the following: Once when my oldest brother was about three years old my grandmother put his playthings out under a shade tree and tied him to the tree (for he ran away if left alone a moment). She then went into the house. At noon she went to get him for dinner but there were no signs of him there, so she went around to the side of the house, and there he was, tied to another tree.

When she asked him how he got there, he said, "Well, grandma, I got tired of staying over there at that tree, so I tied myself over here."

By Lola Court, Allen, Michigan.

The other day mother and I were talking about what we would do on Daddy's birthday, which is on June 20. Mother looked at the calendar and exclaimed, "Why! today is the twentieth."

We decided we wouldn't say anything about his birthday to him, and after he went to work at noon, I went out and ran a chicken down and killed

it all alone. We just flew around so as to have a regular birthday supper all ready as soon as he unhitched, so he wouldn't know we were doing it until he was ready to eat.

When we sat down to supper Dad said, "Well, what does all this mean? How did it happen you have so much for supper tonight?"

Mother said, "We are celebrating your birthday."

He looked very much surprised at this, then he said, "This is only the thirteenth, and my birthday isn't until a week from today."

When we saw we were celebrating a week ahead of time we all began to laugh, and every little while Daddy will ask us if we aren't going to have another birthday supper pretty soon.

By Beulah Gale, Pontiac, Michigan.

The thing that made me laugh the most was when a young couple sat on the davenport at a party. They were just going to kiss when one of the neighbor men who was always fooling, stepped up behind them and put a plate between them, so they both kissed the plate. They were so mad that they went home.

About the Contest

THE Read-and-Win Contest this week brought the usual flood of letters to my desk. The boys must have been busy helping Dad in the hay field, for the girls won by quite a wide margin.

The winners this week are as follows:

Pencil Box.

Letta Hooker, Paris, Mich., R. 2.
Milo K. Chew, Bay Shore, Mich.

Pencil.

Howard Robinson, Michelson, Mich.
Isabelle Campbell, Pickford, Mich., R. 1.

Lola Harwood, Tecumseh, Mich.

Maps.

Ruth McShea, Rosebush, Mich.
Maydah A. Neddermeyer, Fair Haven, Mich.

Ellsworth Randall, Inkster, Mich., R. 2.

Ethel Thompson, Addison, Mich., R. 2.

Marjorie Kay, Pickford, Mich.

The answers for the questions are as follows:

1. Flushing nostrils with salt and water twice daily—a teaspoonful of

How I Earned My First Money

THE summer time particularly gives every boy and girl an opportunity to earn some spending money for their very own. It is a great experience when one first receives payment for an honest effort.

Your letters this week are to tell about "How I Earned My First Money, and What I Did With it." Perhaps your method will be a new and worth-while suggestion to some of the readers of this department.

The two best letters will receive an ever-handy pencil box; the next three, nickled pocket pencils, and the following five our Michigan Farmer maps of the world and New Europe.

Address your letter to Uncle Frank, Michigan Farmer, Detroit, Michigan. This contest closes July 13.

salt to a pint of water—17-829.

2. On page 13-825.

3. Session of laws of 1917, No. 272—818-6.

4. N. A. McCune—13-825.

5. \$894.28 per head—17-829.

6. Weeds—818-6.

7. Yes—828-16.

8. Pea vine silage—7-819.

9. A new canning bulletin—824-12.

10. Nobody—5-817.

DON'T BE CARELESS.

By Mary Marcis, North Branch, Mich.

One day one of our neighbors went to town with his two little girls, and when they were coming home it started to rain. He had to stop at a place on returning. As it was raining he was in a hurry to get home. He took the rope and tied the horses to a pole and left the two children on the wagon. He did not notice how he had tied the horses, but went on to the house to get what he was after.

By this time the rain was falling faster and faster, and, of course, the horses didn't like this and they started to jerk their heads about until at last the rope broke loose. They started on a run, and this frightened the two girls. They started to scream and at this the horses ran faster.

When they came near our house we heard the children screaming and mother and I ran out and tried to stop the team. They did not stop, but as we were on the east side of our gate they ran in our yard. There we stopped them, an dmy sister Elizabeth got the two children off. They were both sick for a week or so from the shock they got. The father said that it taught him a lesson to be more careful.

Farm Dairying

ORGANIZES FOURTH COW-TESTING ASSOCIATION.

COUNTY Agent K. K. Vining, of Kent county, has completed the organization of the fourth cow-testing association and is already started on the fifth. The Alto-Kent Association consists of twenty-five herds in the vicinity of Alto. Its officers are: A. Behler, president; R. G. Bancroft, vice-president; Elmer Yeider, secretary-treasurer; which officers, with C. W. Johnson and Glen Loveland, constitute the board of directors.

HANDLING THE COWS DURING HOT WEATHER.

MILCH cows should be handled very carefully in hot weather. There is a great deal more danger of injuring cows giving a large flow of milk in hot weather than there is in cold weather.

Cows on good pasture and well-grained produce a large flow of milk during the summer season, consequently along with the irritation of excessive heat are called upon to perform heavy physical labor. To hurry the cows or cause them to run from excitement is likely to overheat them and produce digestive disorder and sickness.

Many dairymen find it necessary to drive their cows some distance to and from pasture. Where cows are brought up from the pasture at 4:30 o'clock in the afternoon, as most dairymen practice in order to begin milking, the cows are exercised during the hottest time of the day. Every measure of precaution should be taken not to hurry the cows at this time.

In handling the herd to and from pasture it is not unusual for a cow to cause a little annoyance by running out to one side, back to the pasture or perhaps refuses to go immediately into the stable with the rest of the herd. Have patience with her. Do not yell at her and call the dog, but work quietly and talk kindly and she will generally go in without trouble.

Cows handled carefully at all times give a larger yield of milk, keep in better flesh and prove more profitable. —Leo C. Reynolds.

MORE LEGUMES MEAN BETTER FARMING.

ALTHOUGH Michigan is one of the leading producers of legumes, specialists are thoroughly convinced that the acreage could be greatly increased to the advantage of the state. At the present time, statistics tell us that 18.7 per cent of our improved land is growing legumes, mixed hay, clover, alfalfa, soy-beans, sweet clover, dry beans and dry peas. Only two per cent of the total improved land is in clover. It is estimated that for the most economic type of farming fully twenty-five per cent of the improved land should be planted to some kind of legume.

Someone says that Opportunity grabs us. It is the other way around. We must be ready to grab Opportunity.

YEARLING HENS and PULLETS

Heavy laying stock at very reasonable prices. Write us your needs and we will send prices and catalog.

Zeeland Poultry Farm
ZEELAND, MICHIGAN



The "Sweetest" Running De Laval Ever Made

The 1923 De Laval Separator which has now been on the market for over nine months, and of which there are already more than 75,000 in use, is acclaimed on all sides as being the best De Laval ever made, and that is saying a lot.

This new De Laval has all the efficiency, quality, durability and the advantages of former De Laval, plus:

—A self-centering bowl which eliminates vibration, causing it

to run smoother and adding to its efficiency and life;

—More uniform separation and less variation in the cream test;

—Still easier running, and

—Greater convenience, through the use of a bowl holder which is now attached to the supply can support. In addition, this new De Laval has other improvements and refinements, all of which give its owner the greatest value obtainable in a cream separator.

Saves the Most in Summer Months

A De Laval will soon pay for itself any time, but more quickly during the summer months. Then the greater capacity, easier cleaning and handling of the De Laval are most appreciated. Quick, easy and thorough handling of milk and cream in hot weather maintains

the highest quality of both and often means the difference between profit and loss.

Why not see your De Laval Agent or write us about securing one of these new De Laval Separators? Sold on easy terms, from \$50 and up.

The De Laval Separator Co.

NEW YORK CHICAGO SAN FRANCISCO
165 Broadway 29 E. Madison St. 61 Beale St.



Sooner or later you will use a

De Laval
Cream Separator and Milker



"Special Sale of July Chicks"

Here is your opportunity to buy good quality Chicks at these remarkably low prices.

LOOK— Assorted lots of chicks \$70.00 per 1000, \$36.50 per 500, \$7.50 per 100, \$4.00 per 50, lot. Guaranteed live delivery to your door. Write for Special and regular price list and free catalog. Order early direct from ad.

W. VAN APPELDORN, R. No. 7, Holland, Mich.



CHICKS \$7.00 per 100 and up

Barron English White Leghorns, Brown Leghorns and Anconas \$9.00 per 100, \$42.50 per 500, Broilers (Odds and Ends) \$7.00 per 100, \$32.00 per 500. Every shipment is sent by prepaid parcel post. 100% live delivery guaranteed. Order direct from this ad, last hatch on July 17th.

WYNGARDEN HATCHERY

BOX M. ZEELAND MICHIGAN

Sturdy Pure Bred Day Old Chicks



The famous Tom Barron, English, Imported White Leghorn and Sheppard's famous Anconas. Bred direct from our thoroughly culled selected stocks that are headed with pedigreed males of 250 to 280 egg strain. Carefully hatched in our large up-to-date incubators. These high grade, vigorous chicks will increase your profits. **Special bargain prices for June, July and August delivery** if you order now. 10% with order—balance ten days before shipment. 100% live delivery guaranteed. **Satisfaction guaranteed or we return your money.** Our illustrated catalog of chicks free for the asking, write for your copy tonight. Or order direct from this ad enclosing remittance in full. We will ship immediately at the following extremely low prices: Extra selected stock 25-\$3.25; 50-\$5.50; 100-\$10.00; 500-\$45.00; 1000-\$90.00.

Silver Ward Hatchery, Dept. D Zeeland, Michigan, U. S. A.

Wanted an Experienced Truck Gardener

Must understand poultry as well. Full charge of small place. Excellent position and all year around work. MR. BERLIN, 1535 Broadway, Detroit.

PURE BRED FOX HOUNDS all ages. Pups bred especially for Coon, Skunk and Rabbits. W. E. LECKY, Holmesville, Ohio

COAL Blue Ribbon Lump. Get our attractive carload prices. Farmer agents wanted Theo. Burt & Sons, Melrose, Ohio.

BREEDERS' DIRECTORY

Andy Adams
LITCHFIELD, MICHIGAN
Michigan's Leading Live
Stock Auctioneer
DATES and TERMS on APPLICATION



Our Product Is The Best

Painstaking, modern and scientific methods, coupled with the finest of breeding animals makes possible our enviable accomplishment.

You, Mr. Breeder, would enjoy and profit by a visit to this unique establishment of superlative breeding.

Your correspondence and inspection are invited.

WILDWOOD FARMS
ORION, MICHIGAN

W. E. SCRIPPS, Prop. SIDNEY SMITH, Supt.

Registered Aberdeen-Angus 10 heifers, 6 bulls from eight to fourteen months. Best of breeding. The growthy kind that make good. Reasonable. Inquire of F. J. Wilber, Clio, Mich.

Registered Guernseys
A fine Bull ready for light service, special terms if you wish. J. M. Williams, No. Adams, Mich.

For sale Registered Guernsey cows, May Rose Breeding also bull calves \$50 each. Registered A. R. dams. JOHN EBELS, R. 2, Holland, Mich.

Guernsey Bull for sale. Registered. 2 years old. C. H. Hodges Farm, Bloomfield Center, P. O. address. R. 3 Pontiac, Mich. Phone 7183 F 12.

WINNWOOD HERD

Registered Holsteins

?

Ask us about a Real Bull a
Maple Crest or an Ormsby.

JOHN H. WINN, Inc., Rochester, Mich.

The Traverse Herd

We have what you want in BULL CALVES, the large, fine growthy type, guaranteed right in every way. They are from high producing A. R. O. ancestors. Dam's records up to 30 lbs. Write for pedigrees and quotations, stating about age desired.

TRAVERSE CITY STATE HOSPITAL
Traverse City, Mich.

WANTED: Pure bred Holstein cows or registered Scotch Shorthorns in exchange for my \$8500 equity in an 80-acre farm, highly improved and well located. W. H. Schendorf, 953 East 47th St., Chicago, Ill.

Holstein Friesian heifer and bull calves, purebred registered and high-grade. Price \$20 up. Splendid individuals and breeding. Write us your requirements. Browncroft Farms, McGraw N. Y.

A Good Note accepted in payment of finely bred registered Holstein bull calves. Quality of the best, and at prices within reach of all. Write GEO. D. CLARKE, Vassar, Mich.

If you want practically pure HOLSTEIN or GUERNSEY calves, write Edgewood Farms, Whitewater, Wis., before ordering anywhere.

HEREFORDS

10 extra nice Repeater and Fairfax heifers from 14 to 20 months old for sale, also 10 cows.

ALLEN BROS.

616 So. West St., Kalamazoo, Mich.

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under favorable Hereford Beef Plan to pay for themselves within a year to 18 months. Bulls including prize winners at the largest shows at practical prices. Herd headed by Straight Edge 1169756, one of two sons of perfect Fairfax out of a daughter of the Famous Disturber. F. F. B. Sotham & Sons, (Herefords since 1839), St. Clair, Mich.

BROOKWATER JERSEYS

BULL CALVES FOR SALE

From Register of Merit dams and sired by Majesty's Intense 127191 and Brookwater Veda's King 169615. Write for Prices and description. Herd is on federal accredited tuberculosis free list.

BROOKWATER FARM. Ann Arbor, Michigan. H. W. Mumford, Owner. J. B. Andrews, Lessor.

Jersey Cows and Heifers. Having met with misfortune, I am offering my herd of Federal Accredited Jerseys at a sacrifice. They are of Oxford, Eminent, Flying Fox breeding, of the best type and very high production. If you can not see them, write. C. S. Bassett, Kalamazoo, Mich.

BUTTER BRED JERSEY BULLS
CRYSTAL SPRING STOCK FARM.
Silver Creek, Allegan County, Michigan.

For Sale Jersey Bull Jacoba's Minute Gun No. 113711 2 yrs. old. Sire Jacoba's Irene's Hero, Dam Brown Lassie's Ethel. Any one interested write to, E. V. Lamb, Jeddo, Mich.

FOR SALE: Jersey bulls ready for service. All cows Register of Merit. Accredited herd. SMITH AND PARKER, R. 4, Howell, Mich.

Registered Jersey cattle, young bulls, for sale. Tuberculin tested. J. L. CARTER, Lake Odessa, Mich.

30 Head of Jersey cows and heifers for sale. Chance to select from herd of 70. Some fresh, others bred for fall freshening. Colon C. Lillie, Coopersville, Mich.

CLOVERDALE Shorthorns

Ruby's Knight 472893, winning 1st Wis. State Fair; 2nd Minn.; 3rd Ill. State Fairs, and a winner at International, Chicago; having retained all his heifer calves. We offer a bargain for some one needing a high class herd bull. Also have a red yearling, a roan 3-year-old and a red 7 months old, priced for immediate sale.

Bellfeul Bros., Wilson, Mich.

Shorthorns Bidwell Revolution Jr. heads herd. Sire, Revolution, Dam, Maxwellton Rosewood 3d, 2d Dam, Imp. Rosewood 88th. Now offering one good roan two year old bull out of a Marr Marigold dam, also a few cows and heifers, safe in calf. Prompt attention to correspondence-visitors welcome. State Accredited herd. One hr. from Toledo, O. N.Y.C. Ry. BIDWELL STOCK FARM, Tecumseh, Mich., Box 10

Francisco Farm Shorthorns

and Big Type Poland Chinas. One 2 yr. old bred Heifer, \$200. Two choice yearlings, \$150. Each. Three bulls, \$100. up. 3 boars, \$25 each. Lots of spring pigs of March farrow. P. P. Pope, Mt. Pleasant, Mich.

Two Scotch Shorthorn Bulls For Sale
J. A. BARNUM, Union City, Mich.

Richland Shorthorns

Special offer: Twelve Bulls from twelve to twenty four months old. Red, White, Roan. Good size, best of breeding from good milking dams. Priced for quick sale. Write for particulars.

C. H. Prescott & Sons,
Office at Tawas City, Mich. Herd at Prescott, Mich.

HURON County Shorthorn Breeders' Assn. can supply your needs with high class individuals. Write for list to E. E. Twing, Bad Axe, Sec. Treas.

For Sale at a Bargain, Cows and heifers from the horns, Representatives of the Oxford, Peri, Young Mary and Phoenix families, All T. B. tested. J. E. Tanswell, Mason, Mich.

Milking Shorthorns priced reasonably. An accredited herd selected for beef and milk. Beland and Beland, Tecumseh, Michigan

HOGS

Woodlawn Farm Duroc Hogs meet present day requirements, length, size and quality. Young stock for sale at reasonable prices and fully guaranteed. Write your wants. W. E. BARTLEY, Alma, Mich.

I AM OFFERING BRED SOWS
fall yearling and spring gilts, bred for March and April farrow, that are tops. Mated to O. C. K. Col. 2nd and Orion Giant Col. Write for price list. W. C. TAYLOR, Milan, Mich.

Is It Worth While?

A real boar pig sired by Woodford Sensation, Dams of Defender or Pathfinder breeding.

If so,
We have them of Sept. farrow, not only showing extreme quality, but greater size than you will expect to find. Follow M 29 to

Kope-Kon Farms, Coldwater, Mich.

DUROC JERSEYS Spring pigs either sex of March April and May farrow, sired by three outstanding herd boars. If you want size type and quality combined come and see or write us. F. J. Drott, Monroe, Mich. R. 1

Duroc-Jerseys A few Pathfinder Gilts bred to a good son of Foust's Top Col., E. D. Heydenberk. Wayland, Mich.

Durocs, April farrow \$12.50 reg. for a short time. Fall gilts, \$20. to \$25. breeding quality. Satisfaction or money back. B. E. Kies Hillsdale, Mich.

DUROC JERSEYS AND DELAINE MERINOS.
CAREY U. EDMONDS, Hastings, Mich.

Benjamin's BIG TYPE CHESTER WHITE'S
Early maturing, prolific, heavy weight, prize winner kind from bloodlines of Champions and Grand Champions, now making big money for thousands. I have started more breeders on road to success than any living man. Let me help you. Easy to start. Costs little. C. S. Benjamin R. F. D. 10, Portland, Mich.

CHESTER WHITES WATCH our ad for fall bred sows and gilts. WEBER BROS. 10 Mile Rd. West Royal Oak, Mich.

Chester Whites Herd headed by The Monster and Lohan's Jumbo. Two great Big Type boars of the breed. FRED L. PODIMER, Reese, Mich.

Chester Whites Gilts bred for fall, also spring pigs. C. O. D. recorded free. Albert Dorr, Clinton, Mich.

Live stock AND DAIRYING

TON LITTER IN SIX MONTHS.

I AM only a woman, and we are doing our first year of farming. My son has brought a litter to a ton in six months. We had no corn, but cooked potatoes and rye for feed.—Mrs. C. E. Leome.

NEW CHAMPION HOLSTEIN IN MICHIGAN.

EMPRESS PRILLY ROSEWOOD, a Holstein cow owned by E. M. Bayne, of Romeo, Mich., has surpassed all former records of butter-fat production for the breed in 305 days as a junior four-year-old, and is declared new state champion by the Advanced Registry. In 305 days she produced 20,746.9 pounds of milk and 650.23 pounds of butter-fat.

SWARDLAND HOLSTEINS.

A LONG the trunk line not far from Blissfield lie the farms of Kinsel & Sons. Their fields are spread out over the best of the rich level land common in that section of the state.

The quality of their neat little herds of Holstein cattle and the business-like way in which they are handled is worthy of special mention. Well appointed barns, with suitable, not extravagant, equipment are conveniently arranged for the welfare of both the cattle and their keeper.

The men were not at home on the Saturday afternoon of my call, but I found a pair of wide-awake youngsters who seemed to know Dad's business pretty well, and took pride in telling about the cows, their records and feeds, and in rounding up the slick, well-fed animals before the camera.—Pope.

WILL YOU ATTEND THE WORLD'S DAIRY CONGRESS?

ALL persons who expect to attend the World's Dairy Congress are asked to send in their names to President H. E. Van Norman, of the World's Dairy Congress Association, Star Building, Washington, D. C., as soon as they can possibly do so. The Congress will hold its opening sessions at Washington on October 2-3, adjourn to Philadelphia, Pa., for October 4, and continue at Syracuse, N. Y., from October 5-10.

In advance of the opening session of the Congress, printed matter is being prepared, such as the abstracts of speeches, which will be available to delegates at the time of registration. In printing these, it is desirable to know for how many requests to provide. Many foreign delegates have already sent in their names.

Committees are at work, planning for entertainment and comfort; so prospective attendants need have no hesitancy as to taking their pens in hand forthwith and getting off their announcement to Washington.

FARMER ANDERSON MEETS NEIGHBOR SPANGLER.

FARMER ANDERSON had to go to town to get repairs for his mowing machine. He had selected this particular morning because it had rained the night before and he could go with less interference with his farm work. Anderson was one of those men who didn't wait until he wanted to use his mower before he thought of re-

pairs for it. He wanted it already to go when he was ready.

As he came to Neighbor Spangler's place he saw him mowing his lawn. He pushed out the clutch and applied the brake suddenly and vigorously, at the same time veering his machine just out of the road for it had become a habit with these two men to stop and talk for a few moments, whenever they met. Sometimes it was about current, neighborhood events, just gossip, but usually it was about some question pertaining to their business.

"Say, Spangler, what you going to do about flies this summer? What kind of 'dope' you going to use? Last summer the dope I bought didn't seem to do much good. What did you use?"

"I didn't use any."
"That so? Why, man, I thought everyone used some fly repellent now days. It's advertised in all the papers and it makes the cows more comfortable, doesn't it?"

"Yes, it keeps the flies off pretty good, helps about milking. But I got in wrong on that stuff. I was told, and I believed that cows would hold up better on their milk in hot weather if we could keep the flies from tormenting them so much. Then I read that it wasn't the flies that made them drop off on their milk, but because the pasture got short and they didn't get enough to eat."

"Now, Anderson, I'd never thought of that. Funny thing, ain't it, but a fellow forgets that dry hot weather cuts the yield of pasture and he's busy and lets her go. Well, when I read that it kinda brought me up with a snub. I made up my mind we'd see about that, so last year I just cut out the fly treatment altogether to make a test."

"Well, the first thing I did was to put that meadow over there into the pasture. That increased my pasture fully twenty-five per cent, and they kept right up on their flow of milk all through July, but in August they began to shrink, so I begun to feed grain and hay in the barn. My wife said I'd have to buy hay and, by gosh, I did, but we got more milk than we ever did before. Of course, they twitched their tails more when we milked, not having any fly medicine. The cows kept up in flesh, too, better than ever before."

"I've made up my mind that if you feed your pasture down close in June you got to make it up in some other way, if you get the milk and keep your cows up in flesh. I'll admit I've been careless about this question. I told my wife that that one piece in the old M. F. made me enough money to pay for all the papers in the country."

"What you say is real sensible, peers to me. I've kinda 'let her go Galliger' when we turned to pasture, it's such a relief to git rid of so much work. But I do know, now that you mention it, that my cows dropped off in milk last summer, fly dope or no fly dope."

"Sure they'll do it every time. It's the feed, I tell you."

"Well, you didn't have to put any work into making that hay, either. It's too late now to turn into a meadow for more pasture, they would waste half of it, but I'll feed in the barn just as soon as they begin to drop off in their milk. You bet your life I see that point. But I'm going to use the fly dope, too, you ain't so apt to swear when you milk."

"Oh, understand, I ain't saying anything agin the fly dope, but I had to cut it out to get the effect of feed."

HOLSTEIN MEN PLANNING TOURS.

BREEDERS of Holsteins are planning a series of tours to start July 24 and to cover twenty-five of the main Holstein counties of the state.

The plan is to spend one day in each county visiting farms where matters of Holstein interest are to be found—a boy's calf, a prominent sire, a well-arranged barn, a profitable cow-testing association bunch, a herd of good individuals, cows with creditable A. R. O. or semi-official records, etc. The tourists will halt at noon for basket lunch and a speech or two.

Among the corps of speakers secured for the several counties are D. D. Aitken, ex-president of the National Holstein Association; Earl Cooper, calf club leader, and C. M. Long, manager of field work, both of the Extension Service of the National Holstein Association; E. L. Smith, president, and H. W. Norton, secretary of the State Holstein Association. A. C. Anderson, farmer head of the Dairy Department of M. A. C., etc.

The tours are being arranged by the local Holstein officials and the county agents in cooperation with J. G. Hays, the Holstein field man for Michigan. Full details will be announced later, meanwhile Holstein fans should start grooming the old flivver for the chase.

DAIRYMEN'S LEAGUE HOLD ANNUAL MEETING.

DELEGATES representing the sixty-five thousand dairy farmers in the New York area held their annual meeting at Utica, New York, June 21.

The delegates favored the prohibition of the manufacture, sale and importation of oleomargarine and kindred products in the United States the same as the Dominion of Canada in the interest of the health and general welfare of her people has done.

During the past year the gross sales of the association have amounted to over \$80,000,000, an increase of \$20,000,000 over the preceding year.

The association on April 1, had 64,351 pooling contracts on hand, and since that date contracts have been coming in at the rate of about 600 a month.

The treasurer's annual report shows that the assets of the organization amount to over \$19,000,000, of which real estate and equipment make up about \$6,000,000.

The marketing program is now being directed along two lines; first, the development and expansion of the fluid milk business, and second, the development of the evaporated milk business. In the matter of direct sales, the organization reached a new high level on June 13, when 10,257 cans of milk were marketed in New York City. The association has adopted "Dairy-leaf" as the trade name for its dairy products.

The association holds that the big problem yet to be solved is the distribution of milk in the metropolitan district of New York City. Export sales are being promoted. Over 100,000 cases have been sold abroad since January 1. The league milk is now on sale in Germany, England, South Africa, Palestine, Syria, Cuba and Panama.

Eighty-four plants are now being operated. Of these, forty-six ship milk or cream. Eleven manufacture, case goods and twenty-five make butter or cheese.

Five veterinarians are employed by the association for examining herds and dairy barns throughout the territory. The central laboratory at Utica keeps a daily check on the character and quality of every product put upon the market.

It was emphasized at the meeting that the great progress being made by the association arises largely at the production end. Figures clearly demonstrated that there had been a large

increase in the amount of high quality milk being delivered by the dairymen and a decrease in the percentage of milk used for the manufacture of cheese.

Prices for the month of July for three per cent milk in the 201-210-mile zone are announced by the league officials as follows: Class 1, \$2.33; Class 2-A, \$2.05; Class 2-B, \$2.40; Class 2-C, \$2.35; Class 3, and the remaining classes are based upon the price of butter.

BACK FIRES.

Do you plan your schedule of work day by day, and as far as possible, live up to it?

Do you have a goal in sight, keep your eye on it, and make your assets, equipment and helpers assist you in reaching that goal?

Do you realize that the man who sat on the log and waited for sweat as a preliminary to work, was entirely out-distanced by the man who hustled after the job and got up sweat doing it?

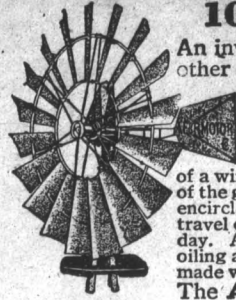
Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Advice through this column is given free to our subscribers. Letters should state fully the history and symptoms of each case and give name and address of the writer. Initials only are published. When a reply by mail is requested the service becomes private practice and \$1 must be enclosed.

Acute Indigestion.—I have a mare, about nine years old, that has just had a severe attack of acute indigestion, and her general health is not good, her coat is not fresh. What can I give her to improve her health, also guard against future attacks of indigestion? Also, can a cure be expected? J. K., Goshen, Ind.—Functional derangement of the stomach and bowels of the horse is very common. When a horse is constantly fed on bulky, coarse food the stomach becomes distended. The distention taking place at the expense of the walls of the stomach, the walls become attenuated, and when any acute form of disease attacks the stomach, rupture of the viscus is likelier to occur than if the horse had been properly fed, and consequently the stomach in a normal condition. When the food does not digest properly a condition as indigestion becomes established. In a large majority of cases the intestines are involved. Indigestion goes on quickly, the stomach of the animal being very small in proportion to the size of the body. This is one of the wise provisions of nature, and allows the horse to undergo more or less severe exertion after a full meal, without any great amount of inconvenience. Simple indigestion is by no means uncommon in the horse, and may be indirectly caused by sharp and projecting teeth, poor quality of food, etc. Acute indigestion is a very common as well as a very fatal disease. A common cause is giving the animal a big feed, and then subjecting him to severe exertion. The exertion of traveling causes the blood to be drawn away from the stomach, where it is needed in the process of digestion. Feeding largely when the stomach is weakened is another cause of the disease. Sometimes a very slight change of food will cause an attack of acute indigestion. It is important to feed the animal a good quality of food, in proper quantity, at regular intervals. Don't put her to severe exertion immediately after a full meal. It is also a mistake to allow her to drink too much water at a time when working. Avoid the causes I have pointed out. Mix half a pound of bicarbonate of soda, one pound of common salt, and two pounds of Glauber's salt together. Give a tablespoonful in each feed.

Bone Spavin.—I have a horse eight years old; he came from Montana last fall and I am told he was hurt in car. Lameness seems to be in left hip, very lame when first started, but after working a few minutes he does not limp much. Have never been able to find a wound or bruise on this leg and no swelling. G. B., Kinross, Mich.—Look for small bone spavin, if you find bunch, apply one part red iodide of mercury and four parts lard every ten days.

4 TIMES Around the World with ONE OILING
100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The Auto-oiled Aermotor after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting windmill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write **AERMOTOR CO.** Chicago, Kansas City, Dallas, Minneapolis, Des Moines, Oakland



Better Silos—Bigger Profits

The Prosperous Farmer today is the one who is milking cows and feeding stock. Good silage is the most economical feed for livestock and dairy cows. It cuts down cost of production and yields greater profits. World's Standard Kalamazoo Silos make 100 per cent perfect silage. Our Glazed Tile Silos are built of moisture-proof glazed tile. Blocks have three dead air spaces—resist heat, cold, moisture, vermin, will not burn. No paint, no repairs. Will not warp, decay or blow down. Last a lifetime. Modern, permanent, beautiful, economical buildings for your farm. Free information on how to judge tile and how to plan your new buildings. Write today. **KALAMAZOO TANK & SILO CO., Dept. 223 Kalamazoo, Mich.**

COMPLETE DISPERSAL SALE
OF MAPLE AVENUE STOCK FARM HOLSTEINS

AT FAYETTE, OHIO, JULY 17, 1923

More animals from this farm have made 30 pounds or more butter, more have been used for foundation stock in new herds than from any other farm in Ohio. 2 great herd bulls, 2 service bulls, 23 cows milking, 23 heifers not bred. Accredited herd. Send for catalog. **I Hope to See You Here.** L. E. CONNELL, Fayette, Ohio.

PERMANENCE

To Our Friends and Customers: Owing to the great expansion of our business in Hoosier Building Tile it has been decided to adopt a corporate name that will better describe our company and service. Therefore, the Hoosier Tile Company of Albany, Indiana, has changed its corporate title to the Hoosier Building Tile & Silo Company. The company organization is exactly the same as before, except in name. Write for illustrated circular and prices. Hoosier Building Tile & Silo Co., Dept. M-99 Albany, Ind.

The Famous Cyclone Dust Conveyor for threshing machines; also the sliding box Grain Register and Copper Tub Washing Machines. A liberal discount for cash. Write for prices and save Money.

J. N. LINT, Meyersdale, Pa.

HOGS

O. I. C's and Chester Whites
Gilts sired by Mich. State Fair Gr. Champion 1921, and bred for March and April farrow to Mich. State Fair Jr. Champion 1922, the common sense type and price.
ANDY ADAMS, Litchfield, Mich.

O. I. C. and Chester Whites, Spring Boars sired by Monster Boy, Col. Denby and Hill's Big Buster. Bred gilts all big type reg. free.
J. W. Howell, Ovid, Mich.

O. I. C's. Orders booked for late farrowed spring pigs at \$10 to \$12, each. Registered free.
O. J. THOMPSON, Rockford, Mich.

O. I. C. Spring pigs, single or in pairs. Price right. Satisfaction guaranteed.
E. C. Badgley, Jackson, Mich. R. F. D. 1.

O. I. C. One last fall boar, 10 last fall gilts bred, 100 this spring pigs, recorded free, 1/4 mile west of Depot, Citz's Phone, Otto B. Schulze, Nashville, Mich.

O. I. C. March pigs, single or in pairs, also bred gilts for August farrow.
CLOVER LEAF STOCK FARM, Monroe, Mich.

O. I. C's One yearling boar and March pigs. Young Brown Swiss bull, Milo H. Peterson, Elmhurst Farm, Ionia, Mich. R. 2.

Pig Type P. C. some very choice boars double im pure, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Burr Oak, Mich.

Line Bred Liberators
By Revelation and Peter, The Great, boars. The last word in Poland China Breeding. Bred sows and spring pigs of either sex. Prices right. Vaughan's Seed Farm, Ovid, Mich.

RADIO GIANT

Represents the worlds largest strain of Poland China Hogs, Boars, Sows, Pigs at bargain prices from Mich. pioneer herd. We have bred them big for 30 years. We can furnish what you want.
JNO. C. BUTLER, Portland, Mich.

L. T. P. C.

Choice Gilts \$25 to \$40. Boars \$30. Fall Pigs \$15. **HART AND CLINE, Address F. T. HART, St. Louis, Mich.**

BOARS READY for service, Spring boars at weaning time and gilts bred to (Ambit. ion Again) for Sept. farrow. They are priced to sell and shipped on approval. Dorus Hoyer, Akron, Mich.

Large Type P. C. Largest in Mich.
A few fall pigs for sale. Sired by "The Wolverine" a grandson of "The Rainbow and Big Bob" the greatest yearling boar I ever owned has size combined with quality. Come and see the real kind.
W. E. LIVINGSTON, Parma, Mich.

Large Type P. C.

The Real Kind. A few of those big, smooth, stretchy, bred gilts for sale. Bred for March, April and May farrow. Priced right.
N. F. BORNOR, Parma, Mich.

Large Type Poland Chinas

For sale Fall Boars, Gilts bred or open. Herd headed by two Grand Champion boars.
A. A. FELDKAMP, Manchester, Mich.

Large Strain P. C. 2 nice gilts with pigs by side, also pigs at weaning time.
H. O. SWARTZ, Schoolcraft, Mich.

WALNUT ALLEY Big Type Poland China Boar pigs ready for new homes. Give me a chance to tell you about them. A. D. Gregory, Ionia, Mich.

B. T. P. C. Fall Sows, Big Bob and Peace and a son of Alaska. M. O. Mount, Mayville, Mich.

Lone Maple Farm L. T. P. C. Spring pigs ready. Also yr. boar. Write for description and prices. F. R. Davis & Son, Belding, Mich.

Large Type P. C. Pigs for sale. Registered \$15. Enquire Sunnyside Farm, Hillman, Mich.

Hampshires A few bred gilts left. Place your order now for your boar pig. Pairs not akin. 10th year.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

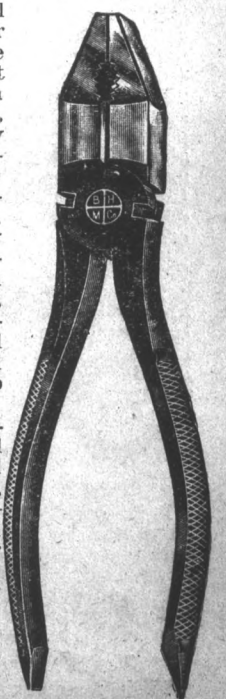
Handy 8-Inch Pliers

Five-in-One

A tool that will serve you in your repair work. Made from the best grade of open hearth steel. Light, compact, easily carried in the pocket. This tool can be used as a wire cutter, wire splicer, staple puller, screw driver, rod gripper, together with the many uses a plier can be applied to. You will find it a practical article for the auto tool kit.

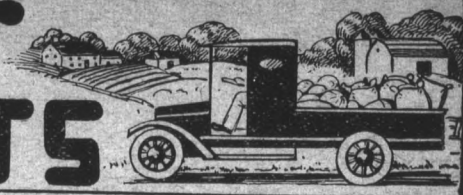
OUR OFFER.—These pliers will be sent you, all charges prepaid, for two subscriptions to Michigan Farmer, at regular rates, each subscription to be for one year or longer. Your own subscription may be counted as one in earning the reward.

Send orders and remittance to **The Michigan Farmer, Detroit**





THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Tuesday, July 3.

Wheat.

Detroit.—No. 2 red \$1.14; No. 2 mixed \$1.14; No. 2 white \$1.14.
Chicago.—July \$1.03½@1.03¾; September \$1.03¾@1.03½; December at \$1.06¼@1.06½.

Toledo.—Cash \$1.13.

Corn.

Detroit.—Cash No. 2 yellow at 91c; No. 3, 90c; No. 4, 88c.

Chicago.—July 78¾@79¼c; September 74¾@74¼c; December 62¾@62¾c.

Oats.

Detroit.—Cash No. 2 white 48c; No. 3, 47c; No. 4, 46c.

Chicago.—July 37¾c; September at 35¾c; December 37¾c.

Beans.

Detroit.—Immediate and prompt shipments \$5.95 per cwt.

Chicago.—Choice \$7.50; red kidneys at \$8.15.

New York.—Choice pea \$8; red kidneys \$8.

Rye.

Detroit.—Cash No. 2, 68c.

Chicago.—July 63¾c; September at 65¾c; December 69¾c.

Toledo.—Cash 66c.

Seeds.

Detroit.—Prime red clover cash at \$10.25; alsike \$9; timothy \$3.30.

Barley.

Detroit.—Malting 72c; feeding 68c.

Chicago.—62@68c.

Hay.

Detroit.—No. 1 timothy \$15.50@18; light mixed \$16.50@18; No. 2 timothy \$14@15; No. 1 clover at \$13@14; No. 1 clover mixed \$14@15; straw at \$11@11.50.

Feeds.

Bran \$31; standard middlings \$35; fine do at \$38.50; cracked corn \$41; coarse cornmeal \$39; chop \$35@35.50 per ton in 100-lb. sacks.

Fruit.

Gooseberries, 16-qt case \$1.75; currants, 16-qt case \$2.50.

Strawberries, 16-qt case, Michigan, good \$1.50@2.25.

Cherries, Michigan white \$1@1.25; dark \$2.50; small \$1.50.

WHEAT

Wheat prices have declined to the lowest level of the season and almost to the lowest point since pre-war days. Crop prospects have improved recently and unofficial estimates now place the yield at about 20,000,000 bushels higher than a month ago. Canada continues to report prospects of a crop nearly as large as last year, the Australian drouth has been broken and European weather has become more favorable. Broomhall estimates that exporting countries will have an exportable surplus of 768,000,000 bushels while importers' needs will not exceed 656,000,000 bushels, suggesting a fair factor of safety in favor of the buyer if these conditions are maintained. Producers have sold less new wheat than usual by this time but a rather large after-harvest movement is almost inevitable as many growers are unable to hold. In the last few days flour buyers have shown more willingness to purchase for deferred shipment and sales for export have broadened since wheat has approached the \$1 mark at Chicago. Some signs indicate that larger export sales are being made than are reported but they have not been large enough to offset the hedging sales of the new crop.

CORN

Corn prices declined last week, very largely because of better prospects for the new crop. Moisture is ample in nearly all sections and hot weather has forced rapid growth. Industries are buying corn less actively and feeding demand has fallen off, thus neutralizing to some extent the light receipts, and small stocks at terminals.

OATS

New oats will be available before July is over and receipts of old oats and terminal stocks are large enough to prevent any tension. They are selling at an unusual discount below corn. A few sections report damage to the new crop from recent hot weather.

HAY

With new crop alfalfa and prairie hay coming on the markets, prices are adjusting to a lower level. Some new

clover is arriving also. Total receipts are not large. Demand for timothy has declined and prices are weaker on some markets.

WOOL

Opening sales of wool at the London auction which began last week were at a decline of only five to seven and one-half per cent which was better than generally expected. Boston reports a more optimistic tone as a result of the London opening but the market is not strong. In the west a deadlock exists as most growers refuse to sell at prices which show a decline of five to ten per cent from the peak. In the bright wool states around 46 to 50 cents is the ruling price.

POULTRY AND EGGS

Storage stocks of eggs at the four leading markets continued to increase last week in excess over the same period a year ago so that it is believed a surplus of holdings in the United States of 200,000 to 250,000 cases will appear July 1 as compared with the same date last year. Receipts of really fine eggs are becoming smaller which may be a factor in maintaining prices on this grade.

Chicago.—Eggs, miscellaneous 20@20½c; dirties 17½@18c; checks 17½@18c; extras 27@28c; fresh firsts at 20½@21c; ordinary firsts 19@20c.

Live poultry, hens 21c; broilers 40@42c; roosters 12c; ducks 23c; geese 20c; turkeys 20c.

Detroit.—Eggs, fresh candled and graded 23½@24c. Live poultry, broilers 45@48c; heavy hens 23@24c; light hens 17@18c; roosters 13c; geese 12c; ducks 20@25c.

BUTTER

Storing demand for butter bearing the June mark maintained prices on high scores last week. The movement into storage was heavier than the preceding week and a year ago. Receipts at the four leading markets during the month were larger than during the same period last year, but consumptive demand was so broad that storage stocks showed for the month eight per

cent loss over June, 1922. That the peak of production arrived during the week was the opinion of the trade. Imports of 2,774,000 pounds of foreign butter at New York, weakened that market and kept its prices below those of Chicago. Prices on fresh 92-score butter on June 30 were:

Chicago 37½c; New York 37½c; Boston 39c; Philadelphia 40c. In Detroit fresh creamery in tubs sells for 35@37c.

POTATOES

The shortage in shipments of new potatoes is still largely offset by a heavy movement from the old crop so that the total market supply is large. Prices have declined further with Carolina Cobblers quoted at \$4.50@5.50 a barrel in leading cities. Southern Bliss Triumphs are quoted at \$2@3 per 100 pounds in midwestern cities.

PEACHES

Total shipments of peaches from producing sections to June 25 were 1,417 cars compared with 2,788 cars to the same date last year. Georgia is still the principal shipper, with Carmons quoted at \$2.50@3.50 per six-lb. basket carrier and Hiley's at \$3.75@4.75 in consuming cities.

GRAND RAPIDS

Early varieties of raspberries began moving to the Grand Rapids market this week. The first cases of reds sold at \$6 each but as the supply increased, prices worked slightly lower later in the week. Canning factories have been contracting reds at \$2.25 a case and blacks at \$1.75. Sour cherries are in liberal supply with the market ranging around \$1 per case on the market and four cents per pound at canning factories. Sweets are in moderate supply, selling from \$1.25@2.50 per case. Hot-house tomatoes were steady at prices ranging from \$1.40@1.50 per seven-pound basket. Cucumbers were easy at \$1.50@1.75 a dozen. There is a fair demand for poultry during the furniture season but the supply is so heavy that prices have not changed from 18@20c for heavy fowls; 13@15c pound for light;

20@22c for Leghorn broilers, and 30@35c pound for heavy broilers. Eggs were steady at 18@19c.

DETROIT CITY MARKET

Old potatoes have been arriving by rail in increased quantities and as a result the market is a little weakened with prices at \$1.25@1.40 per sack. New potatoes are moving about the same as last week, and the trade is steady to stronger at \$5@6 per barrel. On the municipal markets, supplies are moderate at 70@90c per bushel, with the going prices at 75@80c. The strawberry season will finish this week for the local crop. Prices are up to \$5@7 per 24-qt. case. Cherries are arriving on track and selling at \$1.75@2 per 16-qt. case of Early Richmonds. On the farmers' market they are bringing \$3.50@4 per 24-qt. case. There is a moderate supply of eggs, which are wholesaling at 28@30c and retailing at 30@40c. Hens bring 22@26c wholesale, and 25@30c retail, with broilers at 30@50c. Receipts are moderate and demand good. Veal is in light supply and lower at 14@17c, mostly 14@15c. New cabbage brings \$1.75@2 per bushel; peas \$1.50@2.50; green beans \$4@5.50; gooseberries \$4@4.50 per case; red currants \$4@4.50.

THE FARM BUSINESS OUTLOOK.

The specialists who forecast business trends are still divided in their opinions as to the outlook.

The Harvard Committee on Economics Research is optimistic. It declares that "the business situation remains sound; and we forecast firm or rising money rates for the remainder of 1923. Nowhere is there evidence of a reversal in the trend of the business cycle. After all, the important consideration during the prosperity phase of the cycle is not the short time movement of commodity prices; it is the movement of interest rates. The relatively easy condition of the money market sustains our forecast of good business in 1923."

The Bokmire Agency says that a high rate of business activity can be expected, at least, up until the end of the present year. It points out that basic conditions indicate a depression early next year, but that some of them are already improving again so that there is now a strong probability that a favorable forecast will be justified a little later on and that the business reaction will not occur.

Moody suggests that plans for the future "should be formulated on the basis of a trade reaction beginning before the end of the present year, and running far into next year," but declares that nothing very serious is indicated.

Babson states that "events of the last two weeks have shaken our faith" and he now forecasts "a sagging tendency in the average of raw material prices in the next few months" and a gradual decline in business activity which will be reflected in a period of low prices for industrial stocks which have already dropped about fifteen points from the high point reached in March.

Upon certain points opinions are fairly well agreed:

1. That the business reaction if it comes in the next six or eight months will be much less severe than in 1920 and 1921.

2. That retail buying of goods will be maintained at a high rate through the rest of 1923, which implies an excellent consumptive demand for such farm products as live stock, and dairy and poultry products. While the demand for cotton and wool usually declines sharply during business depressions, these commodities have the advantage of present scarcity.

3. That one reason for the termination of the prosperity phase of the present cycle is the fact that agriculture has not prospered proportionately and that prices of farm products being already low, may not suffer quite so much as prices of finished products in which present high labor costs are so important a factor.

Live Stock Market Service

Tuesday, July 3.

DETROIT

Cattle.

Receipts 264. Market steady on good and very slow on common.

Fancy light yearlings.....	\$ 9.25@ 9.75
Best heavy steers.....	8.50@ 9.00
Handyweight butchers	7.75@ 8.50
Mixed steers and heifers	6.75@ 7.50
Handy light butchers.....	5.75@ 6.50
Light butchers	5.00@ 5.75
Best cows	5.25@ 5.75
Butcher cows	3.50@ 5.00
Cutters	2.50@ 3.00
Canners	1.50@ 2.25
Choice bulls	5.25@ 5.75
Bologna bulls	4.75@ 5.35
Stock bulls	4.00@ 4.50
Feeders	6.00@ 7.25
Stockers	5.50@ 7.00
Milkers and springers.....	45.00@90.00

Veal Calves.

Receipts 429. Market 75c@1 higher. Best \$11.50@12.50 Others 6.50@11.00

Sheep and Lambs

Receipts 155. Market steady. Best lambs \$14.50@15.50 Fair lambs 10.00@14.00 Light to common 9.50@ 9.75 Fair to good sheep 5.00@ 6.00 Culls 1.50@ 3.00 Yearlings 7.00@11.50

Hogs.

Receipts 1,382. Market 25c higher. Mixed hogs and porkers..... \$7.50 Pigs 6.75

CHICAGO

Receipts 24,000. Market active on better grades, 15@25c higher; plainer grades slow; bulk good and choice 160 @250-lb average mostly at \$7.25@7.35. Tops at \$7.40; 260@350-lb average butchers \$7.10@7.20; packing sows at \$6.25@6.50; strong weight pigs active at \$6.40@6.90.

Cattle.

Receipts 5,000. Market active, generally 15@25c higher on most killing kinds. Tops matured steers at \$11.50; weight about 1,400-lb yearlings, showing relatively most advance, in between grades numerous \$9.50@10.50; others about steady. Calves 25@50c higher at \$10@10.50.

Sheep and Lambs.

Receipts 4,000. Market active. Fat lambs steady to strong. Sorting light bulk good natives \$15.50@15.75; culls \$8.50@9. Six double decks of prime Idahos \$16.50. Bulk medium weight ewes \$5@6.50; extreme heavies downward to \$3.50.

BUFFALO

Cattle.

Receipts 80 cars. Market 25c lower. Prime shipping steers at \$10.75@11; good choice shipping steers at \$10@10.50; heavy fat, medium quality \$9 @10; medium to good \$9@9.50; light native steers, fancy quality \$10.50@11; medium to good \$9@9.50; best handy steers \$9@9.50; plain \$8@8.50; handy steers and heifers and grassers \$7.50@8; western heifers at \$7.50@8; light Michigan butchering heifers \$8 @8.50; best fat cows \$6.50@7; medium to good \$5.50@6; grazing \$3.75@4.25; cutters \$3.75@4; canners, good weights \$2.50@2.75; best fat bulls at \$6@7; light fat bulls \$6.50@7; heavy bologna bulls \$4.50@5; feeding steers \$6.50@7.50; stockers \$5.50@6.50; milkers and springers \$6.50@12.50.

Hogs.

Receipts 60 cars. Heavy at \$7.65@7.75; mixed and yorkers \$7.70@7.85; pigs \$6.75@7.

Sheep and Lambs.

Receipts 15 cars. Market is strong. Top lambs \$15.50@16; yearlings at \$9 @12.50; wethers \$7.50@8; ewes \$4@6.50. Top calves \$12.

LIVE STOCK SALE.

Holstein.
July 17—L. E. Conell, Fayette, Ohio.

REDUCE INSPECTION RATES ON BEANS.

IT has been announced by the Central Freight Association that the plea of the Michigan Bean Jobbers' Organization for a reduction in the stop-over rate charged for inspecting beans at Grand Rapids, Saginaw, Port Huron and Detroit has been heard and the rate reduced from \$6.30 to \$2.70 per car. Under this new arrangement, the six bean inspectors in the state will find it less difficult to examine shipments since all cars can be routed through one of the four terminals for inspection service.

EXCEEDS LAST YEAR'S SHIPMENTS.

THE sales of potatoes made by the Michigan Potato Growers' Exchange this season will reach the 3,000 car mark, or about 500 more than last year. A uniform and healthy growth has marked the whole history of this big commodity organization.

OPENS OFFICE AT EDMORE.

THE Michigan Potato Growers' Exchange has opened a branch sales office at Edmore to take care of the rapidly increasing business from the Montcalm-Mecosta territory. George Wager, a well-known potato buyer and salesman, has been engaged for branch manager.

RULING A BLOW TO CONTRACT TRUCKING.

THE opinion recently received by the State Public Utilities Commission from the attorney-general's office, holds that contract trucks must operate under the provisions of the common carrier act passed by the last legislature. The attorney-general contends that the operators of contract trucks must secure common carrier permits, pay the necessary fees and

be subject to common carrier regulations. Owing to the large number of farmers and other people interested in this opinion, it is expected that a complete code of regulations to govern motor vehicle carriers will be drafted by the commission soon.

ELECT DIRECTORS OF LAND BANK.

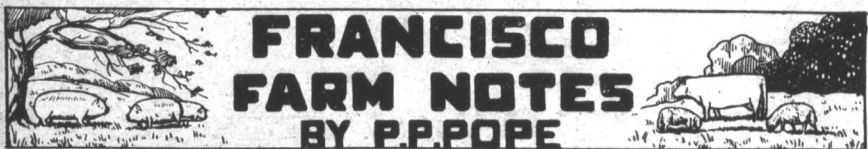
THE Federal Land Bank of St. Paul has finally reached a permanent basis as contemplated in the federal loan act through the recent reorganization, the election of officers and appointment of directors. The district directors are: E. G. Quamme, H. K. Jennings and Paul A. Preus; director at large, B. F. Faast, Wisconsin; director for the third division, Michigan and Wisconsin, E. J. Van Leuven, of Mount Pleasant, Michigan. It is anticipated that with this organization, more interest and more satisfactory results will be secured. The total resources of this bank are now over a hundred million dollars, making it the largest financial institution in the northwest.

MR. PUGSLEY RESIGNS.

MR. CHARLES W. PUGSLEY, for the past two years assistant secretary of agriculture, has tendered his resignation, effective October 1, to become the president of the South Dakota Agricultural College.

In his letter of resignation, Mr. Pugsley said he felt he had made his contribution toward efficient, business-like administration of government affairs. One reason pointed out by Mr. Pugsley for his resignation was the insufficient salary, which was not enough to enable an assistant secretary to serve long without other income.

None of us can control the weather, but we can have jobs ready and waiting for all kinds of weather.



FRANCISCO FARM NOTES

BY P. P. POPE

I DON'T suppose any one else has so much trouble as we have these days. At least I hope not. It has been just one thing after another for a month past, and "the greatest of these" is waiting for repairs to come. Delays of five to ten days each time repairs had to be ordered, was more than we had counted on. Hence, we are, as one of the neighbors put his case recently, "hopelessly behind."

It will no doubt result in a change of plans that will mean the cutting of some fifteen acres more hay, and the summer fallowing of one field that we had intended to plant to beans. By so doing we should be able to keep the rest of the work up in fairly good shape, and in the end come out as well or better than if we should insist on carrying out the original plans, and be late all around.

Dragging the Alfalfa.

We have a small plot of Hardigan alfalfa that we have been growing for seed. It was sown in the spring of 1922 with seed furnished by the Michigan Crop Improvement Association. The soil where it was sown is very variable and we are learning some valuable lessons from watching its development on the different types of soil.

There has been a prodigious growth of well-nigh pure alfalfa on the better land, with a more or less generous admixture of other clovers, grasses and even weeds on the spots not so suitable to alfalfa. After cutting and removing the crop we have set the

spring-tooth harrow deep and dragged it both ways.

It does not look much like an alfalfa field now, to be sure, but we surely have headed off a lot of grass and weeds that otherwise would have offered rather stiff competition to the oncoming crop of alfalfa which will be allowed to mature its seed.

An Abundance of Grass.

In a drive across country the last week we have been much impressed with the wealth and profusion of the earth's natural covering of grasses. Through the counties of Ogemaw, Gladwin and Clare there will be thousands of acres and thousands of tons of rich grasses and clovers that will go back to the land this season. Not all of the abandoned acres in this territory are productive of rich grasses, to be sure, but there are extensive areas that are, and there is surely some way that they can be utilized with profit.

It looks to me like a grazing proposition, pure and simple, and the man who can solve the details of the problem, will find in much of this northern county a chance to convert enormous quantities of these rich grasses into prime beef, and milk, and wool, and mutton. He should see to it, however, that it is prime beef and not scrub beef that is used in the conversion process; otherwise, the grass may serve mankind better to return to the land, and thus enrich it for the welfare of future generations.

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates. Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922

Words	One time	Four times	Words	One time	Four times
10.....	\$0.80	\$2.40	26.....	\$2.08	\$6.24
11.....	.88	2.64	27.....	2.16	6.48
12.....	.96	2.88	28.....	2.24	6.72
13.....	1.04	3.12	29.....	2.32	6.96
14.....	1.12	3.36	30.....	2.40	7.20
15.....	1.20	3.60	31.....	2.48	7.44
16.....	1.28	3.84	32.....	2.56	7.68
17.....	1.36	4.08	33.....	2.64	7.92
18.....	1.44	4.32	34.....	2.72	8.16
19.....	1.52	4.56	35.....	2.80	8.40
20.....	1.60	4.80	36.....	2.88	8.64
21.....	1.68	5.04	37.....	2.96	8.88
22.....	1.76	5.28	38.....	3.04	9.12
23.....	1.84	5.52	39.....	3.12	9.36
24.....	1.92	5.76	40.....	3.20	9.60
25.....	2.00	6.00	41.....	3.28	9.84

Special Notice All advertising copy discontinuance orders or change of copy intended for the Classified Department must reach this office ten days in advance of publication date.

MISCELLANEOUS

LEAF TOBACCO, five pounds chewing \$1.75; ten, \$3.00; twenty, \$5.25; five pounds smoking \$1.25; ten, \$2.00; twenty, \$3.50. Pipe and Recipe free. Send no money, pay when received. United Tobacco Growers, Mayfield, Ky.

TOBACCO—Natural Leaf, 4 years old. Satisfaction guaranteed. Chewing, 5 pounds \$1.50. Smoking, 5 pounds \$1.25. Second grade smoking 6 pounds \$1.00. Pay when received, including postage. Cob pipe free. Hancock Pool, Hawesville, Kentucky.

TOBACCO—Extra Smoking, 5 lbs., \$1.00; 10 lbs., \$1.50; 20 lbs., \$2.75. Chewing, 5 lbs., \$1.50; 10 lbs., \$2.75. Quality guaranteed. O'Connor Smokehouse, S-133, Mayfield, Ky.

ONE STATION WAGON for sale, good as new—exactly what you want to go to town—four heavy draft horse harnesses. Inquire Voight Milling Company, Grand Rapids, Michigan.

MONEY TO LOAN ON FARMS, 6% interest. No commission. No mortgage tax. Security Mortgage Corporation, 1018 Majestic Building, Detroit.

ELECTRIC PLANT—for sale, Silent Alamo, 120 Lights. Good running order. Fred Stein, R. 2, Box 130, Inkster, Mich.

WANTED—A good Farm Lighting and Power Plant. Ed Lindsey, Delton, Michigan.

BUSINESS OPPORTUNITIES

FOR SALE Up-to-date Meat Market, will sell or lease the building for same. Doing a good business, reason for selling is on account of health. Box 352, Mason, Mich.

The Real Estate Market Place

Special discount given when used in combination with 7 other Capper Publications. Write for special real estate advertising rates on these papers which reach over a million and a half families

RATES

For Real Estate Advertising On This Page

35c a line per issue on 4 time orders

40c a line per issue on 1 time orders

40 ACRES, 20 acres cleared, 4 room frame house, small comfortable barn, good drive well, a short distance from a fine summer resort lake, 3 1/2 miles to town, price for immediate sale \$1,000, with this will go the share of crops coming to owner this year. Write or phone W. F. Umphrey, Evart, Michigan.

Own a Farm in Minnesota, Dakota, Mon. or Oregon. Crop payment or easy terms. Free literature. Mention state. H. W. Byerly, 71 Northern Pacific Ry., St. Paul, Minn.

Poor Man's Chance \$5 down, \$5 month. productive land near town. Some timber. Price \$225. Other bargains. Box 425-Z, Carthage, Mo.

80 Acres Improved \$65 per acre \$1000 cash. 160 acres improved \$67.50 per acre \$1000 cash. THE ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

CASH YOUR PROPERTY QUICKLY, location immaterial. Give best price. Universal Sales Agency, Box 43, N. Topeka, Kans.

Want to hear from party having farm for sale. Give particulars and lowest price. JOHN J. BLACK, Capper St., Chippawa Falls, Wis.

IF YOU WANT TO LIVE in California write Kings County Chamber of Commerce, Hanford, California, for free booklet.

FOR SALE Southeastern Colorado—irrigated and non-irrigated farms and ranches. Write for free information. Gregg Realty Company, Lamar, Colorado.

Sell your property quickly for cash, no matter where located. Particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Neb.

FOR Rent—Farm, furnished, 115 acres, good buildings, fruit, meadows, joining Raby siding on Interurban two miles East Lansing, Mich. full possession. Arnold, Box 64, Lansing. (or might hire)

Farm Wanted Near school; at spot cash price. Mean business. Fuller, Wichita, Kas.

Farm Wanted, Immediately. Send particulars. Mrs. BALDWIN, 1931 Forest, St. Louis, Mo.

Wanted to hear from owner of farm for sale. Mean business. J. W. Houck, Tiffin, O.

WANTED buyer for improved irrigated farm by J. L. Pelton, Eden, Idaho.

TRY a Michigan Farmer Classified Liner—They cost little and bring big results.

RURAL HEALTH

By Dr. C. H. Lerrigo

SCARLATINA IS SCARLET FEVER.

I WANT to point a moral by citing a case of "scarlatina" that has just been brought to my notice. The little chap did not seem to be very ill, and the parents were very much relieved when a "friendly" doctor said it was only scarlatina and would not amount to much. A week later the child had a very bad earache. After much suffering the ears began to give out a running discharge. The pain was somewhat better so they were satisfied to call the friendly doctor on the telephone and receive his assurance that no treatment was necessary and everything would be all right.

Everything was not all right. Six weeks later the ear discharge was still running. A little relative who visited at the house for a day went back to his home and developed a malignant form of scarlet fever. The doctor in charge, searching carefully for the origin, got word of this scarlatina case with the running ears and was easily able to connect his case with that. Then the parents woke to the fact that the "friendly" doctor had done them a very unkind deed, indeed. They were still more positive of this when investigation by an ear specialist showed that the untreated discharge from their boy's ears had resulted in such destruction that he would always be very deaf; perhaps totally.

Never neglect an ear discharge. Do not attempt to treat it yourself as you are likely to do more harm than good, but get good treatment. An ear discharge that originated in scarlet fever is contagious long after all other signs of the illness have disappeared. There is no such separate disease as "scarlatina." Light forms of scarlet fever are sometimes given that name, but they should be called by their true name so that they will be given the quarantine and the attention that such a dangerous disease always demands, no matter how light may seem to be the attack.

RUNNING EAR.

My boy has a running ear following earache. How often should I syringe it? Is once a day enough?—J. F. G.

No. Don't syringe it at all. The discharge indicates a ruptured ear drum. If left alone it has a good chance to heal, but the use of a syringe breaks down the repair tissue. If the ear continues to run, after an interval of a week or two, be sure to take the boy to an ear specialist. His hearing may depend upon it.

RED NOSE.

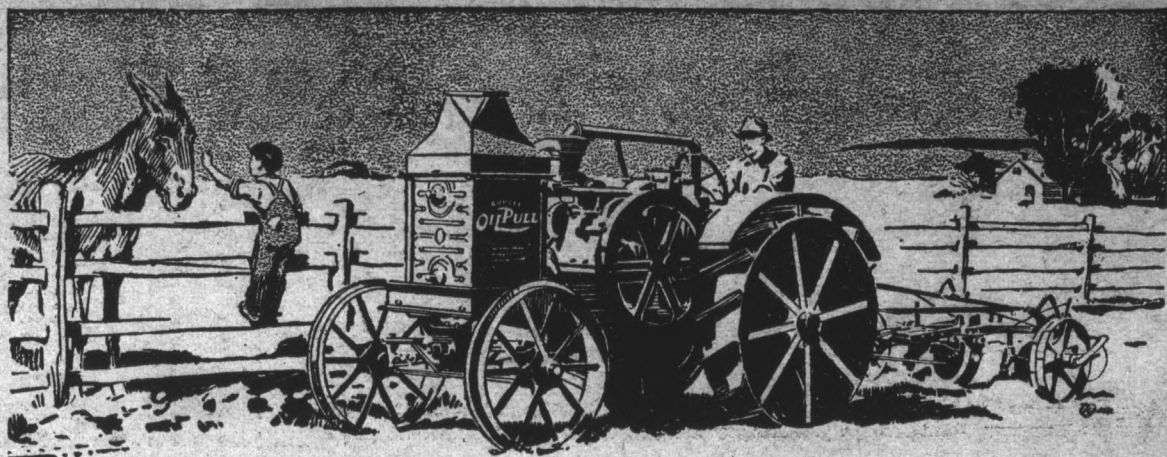
I am going to ask you about my nose. It has had little festers or sores on the inside for eight or nine years; sometimes so sore can hardly touch it, and gets all red on outside. Please let me know what to do for it.—H. B.

After so long a time I scarcely expect that you can clear this up by home treatment. It is a chronic infection such as should have been easy enough to handle in the early days. Get a good antiseptic ointment such as borated vaseline and use freely in the nose. If good results are not prompt go to a nose specialist. He may have to apply stronger remedies than would be safe in your own hands.

CORRESPONDENCE.

Please send me the address of B. B. as I wish to write her.—Mrs. A. R. D.

Such requests are frequent, but I must remind readers that letters to this column are distinctly confidential in character, and therefore destroyed as soon as answered.



"Like the old gray mule —they never die"

Mr. Wesley Overton, Bridgeport, Oklahoma, owns four OILPULLS. In a recent letter he says, "I have put these OILPULLS in places where a good horse could not go and they pulled out easily. They are a good investment. I have never found an OILPULL in the scrap pile. They seem to be 'like the old gray mule—they never die.'"

Long life is only one result that comes from the careful building of the OILPULL. Letters received from every section of the country mention this. But there also are thousands of other letters which point out the unusual dependability—the great saving in fuel—the remarkably low upkeep cost—farmers are experiencing. All are largely the result of Triple Heat Control, dual lubrication and other OILPULL features. We have pointed these things out to you for some time. These letters give the verdict of the farmer himself—the man who has used the OILPULL and knows from experience.

Write for letters from your district

No matter where you are located we can send you letters from your district—maybe from neighbors—who have used and proved out the OILPULL. Read these letters. They are interesting. They are convincing. They tell the story of the OILPULL from YOUR side. Just ask us to send along the letter. We will include our new booklet on Triple Heat Control and other interesting literature.

OILPULL

"The Cheapest Farm Power"

ADVANCE-RUMELY THRESHER CO., Inc., La Porte, Ind.

Battle Creek, Mich.
Dept. C

The Advance-Rumely Line includes kerosene tractors, steam engines, grain and rice threshers, alfalfa and clover hullers and motor trucks

Serviced through 33 Branches and Warehouses

Oil Cooling— One reason for OilPull long life

No boiling—no evaporation in hottest weather—goes indefinitely without refilling.

No freezing in coldest weather—no need of ever draining radiator.

No deposit of scale or sediment—circulating system always open.

Oil is a preservative—prevents rusting—the OilPull radiator lasts as long as the tractor.

The OilPull oil-cooling system automatically keeps the motor at the right temperature at all loads—warm for low loads—increasingly cooler from half load to full load. The harder the OilPull works, the cooler it runs.

No cooling fan is necessary—no loss of power—no belt troubles.

FREE BOOKS



3 BIG BARGAINS

Wait! Before you buy an Engine, Separator, Spreader or any other machine get Galloway's new low prices, save one-fourth to one-half. 500,000 pleased customers testify to faultless designs, best materials. Satisfaction guaranteed. Send for new 1923 catalog. Wm. Galloway Co., Box 187, Waterloo, Iowa.

Free Catalog In colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

Electric Wheel Co., 35 Elm St., Quincy, Ill.

FREE JIM BROWN'S NEW FENCE CATALOG

Here it is! My new catalog of Fence, Roofing and Paints. Send for it today. It's free. Filled with money-saving bargains. DIRECT FROM FACTORY, FREIGHT PAID. Over half million farmers save money buying from Brown—you can too. Send for free Catalog. THE BROWN FENCE & WIRE CO., Department 2805, Cleveland, Ohio.

You Change Blades Right in the Machine

What if you do hit a stone; you don't have to rivet up new sections with the



A-M-F SICKLE

"The Safety Razor of the Fields"

You change dull blades for new ones with the knife right in the cutter bar.

GUARANTEED FOR ONE YEAR

Just a turn of the wrist to remove, yet the blades are locked so tight they cannot come loose. You keep a "dozen" package of new blades in your tool box, and keep your mower working.

ASK YOUR OWN DEALER

American Machine & Foundry Co., 511 Fifth Avenue, New York

World's Best Roofing at Factory Prices

"Reo" Claster Metal Shingles, V-Crimp, Corrugated, Standing Seam, Painted or Galvanized Roofings, Siding, Wallboard, Paints, etc., direct to you at Rock-Bottom Factory Prices. Save money—get better quality and lasting satisfaction.

Edwards "Reo" Metal Shingles have great durability—many customers report 15 and 20 years' service. Guaranteed fire and lightning proof.

Free Roofing Book Get our wonderfully low prices and free samples. We sell direct to you and save you all in-between dealer's profits. Ask for Book No. 187.

LOW PRICED GARAGES Lowest prices on Ready-Made Fire-Proof Steel Garages. Set up any place. Send postal for Garage Book, showing styles. THE EDWARDS MFG. CO., 717-721 Pike St. Cincinnati, O.

FREE Samples & Roofing Book