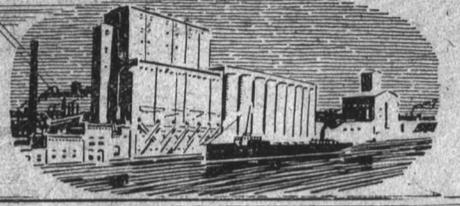


The Michigan
BUSINESS FARMER



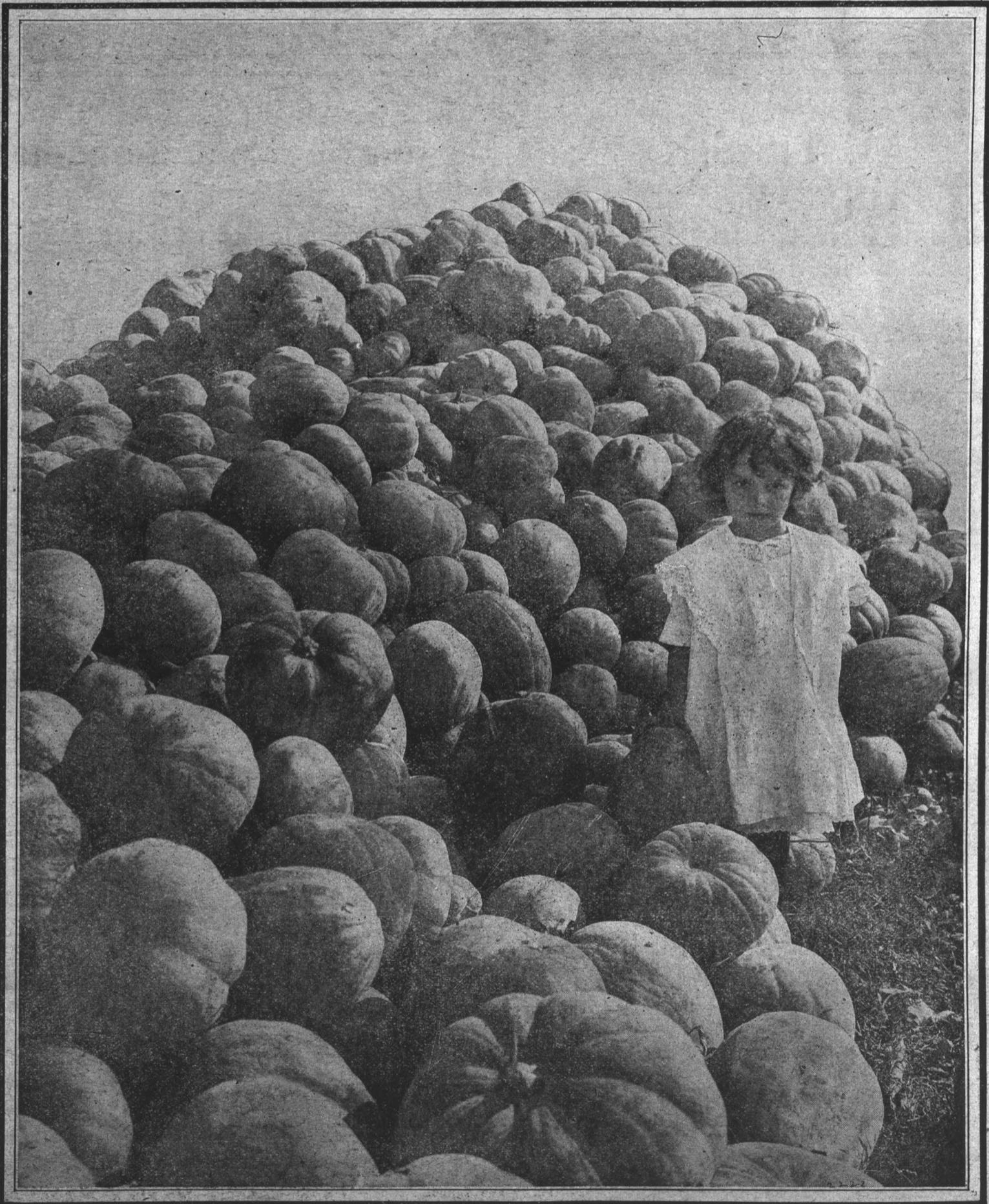
An Independent
Farmer's Weekly Owned and
Edited in Michigan



Vol. VIII. No. 2

MT. CLEMENS, SATURDAY, SEPTEMBER 18, 1920

\$1 PER YEAR



"Some Pumpkins"

Does the Michigan Live Stock Producer need the Detroit Packing Co.

???

ANALYSIS SHOWS: That out of two and one-half MILLION cattle in the state 8 1-3 per cent found their way to Detroit, while the Detroit Packers are reputed to have slaughtered 72,000 head more than came to the local stock yards.

WHY was it necessary to divert so much out of the state as was evidently the case, and why did the Detroit Packers see fit to **IMPORT** so many as the figures indicate?

WHY did but 26 per cent of Michigan's hog population come to Detroit and **WHY** did the Detroit Packers go out of Michigan for about 62 1-2 per cent of their live hogs?

We leave it to you on sheep.

It is the intention of The Detroit Packing Company to work with the Michigan producers intelligently, honestly and consistently in the firm belief that the best interests of all concerned, which are so closely bound together, will be thus well served and the prosperity of all assured.

<p>A census of livestock on Michigan farms January 1st, 1919, shows:</p> <p>Dairy Cattle . . . 843,768 Beef Cattle . . . 1,721,299 Total Cattle (presumably Cattle & Calves) 2,565,067 Total Sheep . . . 2,893,032 Total Swine . . . 1,423,090</p>	<p>Official report of livestock receipts at Detroit Stock Yards during 1919 shows:</p> <p>Cattle . . . 128,201 Calves . . . 86,447 } 214,648 Hogs . . . 374,903 Sheep . . . 314,898</p>	<p>While same report states that Detroit Packers slaughter annually approximately</p> <p>Cattle 200,000 Calves 100,000 Hogs 1,000,000 Sheep 500,000</p>
--	--	--

If Interested Write for Prospectus

THE DETROIT PACKING COMPANY

EDWARD F. DOLD
President and General Manager

HON. L. WHITNEY WATKINS
Special Live Stock Advisor

FRANK L. GARRISON
Vice-President

JOSEPH GARDULSKI
Secretary-Treasurer

PLANT AND YARDS:
SPRINGWELLS AVE. AND MICHIGAN CENTRAL E. E.

DETROIT

How Committee of Seventeen Can Help Farmer

Should Instruct Farmer in Intelligent, Systematic Marketing of His Products

By J. W. SHORTHILL

A FARMERS' problem that is now being much discussed is grain marketing. The last organization to take this matter up is the American Farm Bureau Federation. The entire matter will be investigated by its "Committee of Seventeen." The recommendations of this committee will be awaited with much interest, and its report will mean much for the success or the failure of the Federation.

The organized farmer will do well throughout all of his investigations and in all of his ventures in the marketing of grain, to remember the fundamental things that have been so well established in the world's business, and especially to remember that it is impossible to make any permanent progress in business except through greater economy or through increased efficiency. His success in his undertakings will be quite accurately measured by the nearness of his approach to this cardinal principle of good business practice.

In any case it is not worth while to consider arbitrary methods. They always were tried in vain. The result will always be the same. It will avail nothing for farmers, no matter how strong their organization to try to succeed by arbitrary methods. No organization of theirs will ever be able to collect an arbitrary price of their own fixing, on a single product of the farm, unless conditions justify the collection of that price. The utmost that such an organization can ever do will be to secure the most of economy and efficiency in the production and distribution of the products of the farm, and in that way increase the income of the farmer.

The farmers' organization that helps the farmer in marketing his grain will do so through greater economy or increased efficiency in marketing and that organization will retain the support of the farmer only because it enables him to make more money.

These statements may seem harsh to the superficial thinker but they are cold business facts. The farmers' organization that ignores them will do so at its peril.

That's because the big thing in this world is successful business. You may not believe it. But think it over carefully and you will easily discover that you are wrong, if you don't believe it.

Neither will it be worth while for any farmers' organization to look for sustaining support from the outside. It is idle for the farmer to expect that the consumer is going to help him get better prices. In business transactions he is not more anxious to help the farmer than he is to help any one else. He has always wanted to buy as cheap as possible. He always will. He would be foolish if he didn't. What he pays and what he gets for his money are the matters of his chief concern. So it will not be worth while for the American Farm Bureau Federation to spend much time on the consumer expecting that he will help the farmer market his grain at a greater profit.

All of which is no indictment of consumers. It is simply a recognition of the fact that they are possessed of the universal human tendencies. They are just human like all other folks. Were they divine things might be different.

No farmers' organization can fix and enforce an arbitrary price and it can not secure and retain the aid of the consumer in getting better prices for the farmer.

But there are some worth-while things that the American Farm Bureau Federation can do to help the farmer market his grain with great

THE ACCOMPANYING article was published in a recent issue of the Rosenbaum Review, a former grain trade journal, but now devoted to both agricultural and grain trade interests. We are presenting it here because it presents a somewhat different viewpoint than we have been accustomed to upon an important subject. We positively do not agree with all the sentiments expressed. We think the writer is wholly wrong in economic theory to argue against the construction of additional storage facilities at terminal markets. Of course, he does not favor state-owned elevators because the patrons of his paper consist largely of people who are in the elevator business. Perhaps for the same reason he opposes further construction of terminal elevator facilities. In a later article we will discuss our reasons for believing that his argument in favor of farm storage as against terminal storage is fallacious. In the meantime, read this article with care, keeping in mind all the time that the author is neither a farmer nor directly interested in the farming business.—Editor

or profit. These things will be a real help to the farmer and a valued service to the country.

All true investigations that have ever been made have shown that the greater part of the margin between producer and consumer is found at the two ends of the line of distribution. The big expense is incurred in the first stage of collecting the products from the producer and in the last stage of distributing them to the consumer. In marketing grain the farmer has already pretty well taken care of any excessive expense at his end of the line through his farmers' elevators. He has probably reduced the margin of expense for collecting grain from the producer as much as it is possible to reduce it. There will be a further increase in the number of farmers' elevator companies in the country and an increase in the volume of the business handled by them, but on the whole the influence of these concerns is now so nearly universal that there is not the possibility for the great reduction in the expense of collecting the grain that there once was. The Farm Bureau's Committee of Seventeen will find much difficulty in making a recommendation that, if carried out, will appreciably improve present conditions of marketing grain at the country end. This committee may not try. It will do well to place proper appreciation on what the farmers have already done through

their farmers' elevator companies and to give full recognition to the field which they are filling.

The other end of the line is the consumer's end. It is up to him to look after that. If the distribution costs which he pays are exorbitant he can not expect the farmer to reduce them for him. The farmer is not going to be interested in an attempt of that kind even tho his own organization might take the lead in the matter. The present farmer-labor movement is an attempt to get the farmer to help the laborer-consumer to live cheaper with no increased benefit to the farmer. There is little chance that the farmer will listen long to this song of the professional labor promoter, but it be well for the American Farm Bureau Federation to tell the farmer the truth about the matter and call his attention to the fact that any venture for the benefit of the farmer that is not a clean cut producers' movement is of no real value to producers.

This Committee of Seventeen will find, if it investigates that feature of the grain marketing business, that there are some things that it may well recommend for the improvement of the present system of marketing grain that the farmer can do himself. In fact, the greater part of the improvement that can be made will be made because of what the farmer himself does. Although grain mar-

keting in this country is very highly specialized, the farmer, up to the present time, has contributed less than others to bring this about. The worst fault he has is his lack of system in marketing. He is utterly ignoring any system at all. The committee might well recommend a system by which farmers might market their grain from the farm. No community of farmers is ever justified in dumping three-fourths of their year's crop of wheat on the market in ninety days, yet they do it whenever they can. Deliveries to country stations should be made more gradually and if the financial conditions are not such that farmers can finance their operations in such a way that they can control the delivery of their grain from the farmers then here is an important problem for the Farm Bureau Federation.

As to price, the farmer guesses at that. This committee might well recommend that the Federation supply its members with such information as will assist the farmer in securing the best price. What a farmer wants is a price that will make grain raising profitable—a price that will pay him the cost of production and a reasonable profit. Investigation shows that if the farmer will, in normal times, determine his cost of production on an average crop and add a fair profit, including all actual costs, and determine the price which he should have accordingly that there are very few years that will not at some time during the year enable him to get that price providing that more attention be given by farmers to keeping a record of the cost of production and that they be encouraged to determine what price will pay them a profit and to sell at that price when they can secure it.

If the American Farm Bureau Federation can induce the farmer to study intelligent, systematic marketing of grain right from his farm as assiduously as he has studied the matter of production and then help to make it possible for him to apply that knowledge to his business it will have done a wonderful thing for the farmer and for the country. The country needs a prosperous agriculture. Contrary to the belief of most farmers, a proper degree of prosperity in agriculture depends almost entirely on the proper kind of activity among the farmers themselves. The trouble lies inside and not outside the industry—a thing which no farmers' organization can overlook in its work and permanently succeed.

There is a tendency among farmers and their leaders that this committee will do well to be brave enough to discourage. These people think they want to get into the terminal elevator business and that they should get in by building terminal elevators of their own or have the state build them. My idea goes to the point of building new terminal elevators. This is a case of the farmer wanting something that he ought not to have. More terminal elevator capacity would be a detriment rather than a benefit to the farmer. The reason is that grain stored at market centers is a bear factor on the market always. The more there is stored the more bearish the effect will be. When farmers get in a mood to sell they will sell as long as they can—until storage and transportation facilities are congested and the movement stopped. If more storage facilities were provided at market centers, and especially if those facilities the farmer called his own, he would be led to dump his grain from the farm even more spas-

(Continued on Page 17)

Grain Marketing Committee of 17 Named

THE COMMITTEE of seventeen men who will outline a plan of co-operative grain marketing for the middle West grain growing territory of the United States has been appointed by J. R. Howard, President of the American Farm Bureau Federation. At a grain marketing conference of all farmers' organizations in the United States in Chicago, July 23rd and 24th, delegates were solidly united on the need of a grain marketing system which will stabilize grain prices and take out the hazard and gamble grain growers are subject to in selling their products. The conference requested President Howard to appoint this committee to analyze the present marketing system and map a program of action to submit to the conference later.

This committee represents the National Society of Equity, Farmers' National Grain Dealers, Farmers' Union, National Grange and the American Farm Bureau Federation. The Federal government, the public and the agricultural press are represented on the committee. These are the farmers organizations of the United States interested in grain marketing, and all of them have state and national associations. All organizations have endorsed their

representatives. This committee was picked from a list of 150 available men recommended by their organizations, and is supposed to represent the best agricultural brains of the middle West on grain marketing.

J. M. Anderson, Equity Co-operative Exchange, St. Paul, Minn.; C. A. Bingham, Farm Bureau, Lansing, Mich.; P. E. Donnell, Farmers' Grain Dealers Association of Missouri, Waco, Missouri; John L. Boles, National Farmers' Equity Union, Liberal, Kansas; Wm. G. Eckhardt, Farm Bureau, 130 N. Wells St., Chicago, Ill.; C. V. Gregory, Agricultural Editors Ass'n, Chicago, Ill.; C. H. Gustafson, Farmers' Union, Lincoln, Neb.; William Hirth, Missouri Farmers' Clubs, Columbia, Mo.; C. H. Hyde, Farmers' Union, Alva, Okla.; Dr. E. F. Ladd, Agricultural Colleges, Fargo, N. D.; Dr. Geo. Livingston, U. S. Dept. of Agriculture, Bureau of Markets, Washington, D. C.; H. R. Meisch, Farmers' Nat'l Grain Dealers, Argyle, Minn.; A. L. Middleton, Farmers' Nat'l Grain Dealers, Eagle Grove, Ia.; Ralph Snyder, Farm Bureau, Oskaloosa, Kan.; L. J. Taber, Grange, Barnesville, O.; Clifford Thorne, Farmers' Nat'l Grain Dealers Association, Chicago, Ill.; Dr. H. J. Waters, Representing the Public, Kansas City, Mo.

More and Better Books for Rural Communities

American Library Association Plans to Establish More County Libraries and Assist in Various Ways to Get Books to the Farmer

By F. ELLISON ADAMS

THE UNITED States Bureau of Education recently compiled statistics which show that 2,170 of the 2,964 counties in the United States do not contain a public library of 5,000 volumes or more. This is not astonishing when we are told that the libraries of the county receive an income of only \$16,500,000 while an adequate income would be six or seven times that amount. But an active movement is on foot for the establishing of county libraries throughout the entire country—the opening up of a complete library system to the sixty million or more Americans who live on farms or outside of the big cities. Then every farmer and his family, no matter in how remote a place he makes his home, how difficult to travel are the roads, or how small his community may be, can have books delivered to him at his door.

This movement is being fostered by the American Library Association which during the war supplied more than seven million books to the men in uniform here and overseas. In its enlarged peacetime program the A. L. A. will promote, as one of its principal features, the establishment of county libraries in every state in the union.

This program includes the increasing of the supply of reading material for the blind, the development of better citizenship and the giving of an adequate library to our merchant marine.

County libraries are now operating with much success in the few states where tried out. California, Maryland and Ohio, in particular, having proven to their own satisfaction the value of such libraries. The circulation of all kinds of books is growing rapidly among the rural populations of these states, and in California 42 of the 58 counties already have adopted the county library plan.

One of our best authorities on the subject, Dr. P. P. Claxton, United States Commissioner of Education, tells us that he considers "the county library plan an important stage in the educational development of this country."

"Generally speaking," said Dr. Claxton recently, "the cities of the United States are well supplied with library facilities, but there still remains the great problem of giving the rural citizens the same opportunities of contact with the world of books as are enjoyed by his city brother. Personally, I believe that the inhabitants of rural districts profit even more from reading than do those who live in the centers of population. My own experience, as well as that of other educators, has been that country people read better books than townfolk; they read better books and get more out of them."

Now that the war is over and peace has come back, the American Library Association has turned its efforts from war-work into other channels, ready to give us the full benefit of its forty years of experience and the co-operation of its membership of 4,000 active librarians in all parts of the United States. The success which the organization had during the war in circulating books among our fighting men inspires us with confidence for the accomplishment of the enlarged program. The A. L. A. plans to raise a fund of two million dollars this year to carry out the work, this money to be obtained not by a campaign or drive, but by the librarians, library trustees and friends of libraries.

The county library plan, in brief, is as follows:

It is proposed to establish at the county seat or in the largest town in every county in the United States one central library, stocked with an up-to-date collection of books and pam-

phlets, giving the best and latest information on subjects of special interest to farmers, and also carrying a wide variety of reading matter of general interest and fiction. In communities of any size in the county, branch libraries will be maintained of similar nature. The county library will also lend books to any number of deposit stations in the

Mexico where libraries are scarce, "who traveled over ninety miles thru the mountains with thirty span of horses and three lumbering wagons of provisions for the stores of the Navajo reservation. He tried to beg books to read by the camp fire at night. The only three he could find, at the little jerk water station where he met the freight that brought in



Good Books are the Making of Good Men and Women.

county, so that the smallest community therein, no matter how remote or inaccessible, will have a library of its own. Deliveries will be made by trucks or book wagons to country stores, toll-gates, post offices schoolhouses, private homes, or wherever the deposit stations are maintained, and upon request new collections will be sent out in exchange for the books on hand. In this way every farmer will have access to the entire collection. The expense of the service is to be met locally, by county taxation; the rate to be governed in each case by the needs of the county—but limited to a small assessment. In California, the state in which county library service has reached its fullest development, considering the great advantages afforded to the individual and to the community, "the small expenditure is readily seen to be an investment which will bring returns that cannot be estimated in terms of dollars and cents."

Many remarkable stories are told of the mission which books have performed in out-of-the-way rural communities. They constitute the biggest appeal we have for the extension of the county library system.

There was a teamster in New

the provisions, was a small, testament, a collection of dry essays, and 'What a Young Man Should Know.' The station was three hundred miles from the nearest library at Albuquerque, but the man's disappointment was so great that the telegraph operator—a young woman—wrote to the librarian and asked her to please send, charges collect, any old books

she had on hand which were too worn for further use in the library. She immediately received two large boxes full of dilapidated books and set to work repairing them. She pasted in all the loose leaves and tightened each book securely in the back, then she made covers of cardboard over which she sewed pretty cretonne, fastened each cover to its book and stenciled the name in ink on the front cover. The next trip the teamster made he had a dozen or more books of fiction to read. He was much pleased and the news spread among some lumber men, a few miles up in the hills, who quickly came for their share of books. Before the operator was transferred to another station she had repaired three other large boxes of books, and they went like hot cakes."

In a remote and wild little mountain settlement in Washing-

ton Co., Md., between the foot hills of the Blue Ridge and the Cumberland mountains, "live the descendants of two families between whom the feud has been waged for several generations. Gradually they are becoming industrious, law-abiding citizens, though to this day, the men, when intoxicated, are the terror of the surrounding country. When the Book Wagon first visited these people, the men were seldom at home and the women were shy and fearful of strangers. It was with them as

with the Indians—once a friend, always a friend. For, by degrees the library visitor has found a place in their lives and now every door is thrown open in friendly welcome on the Book Wagon's semi-annual visit. From the beginning, one young married woman was more responsive than any of her neighbors. She was always eager for books for herself and easy ones to read to her children. One day, after three or four years had passed, she met the librarian with her usual smile and said: "Do you know, this Book Wagon is one of the best things we folks have? Since you've been coming around, my husband has learned to read from the children's books. Sometimes I have helped him with hard words, but now he can read real good." Today he is enjoying Zane Grey, Ralph Connor, Dillon Wallace, Jack London and Dr. Grenfell, or any books that deal with out-of-door life."

The following story, also from the mountains of Mary-

land gives us another view of the question. "When the Wagon made its first trip to the mountains about Garrett's Mill, none welcomed it more eagerly than a lad of ten years. The son of industrious but illiterate parents, he possessed a natural fondness for books and a bright, active mind that was the joy and frequently the despair of the rural school teacher. Up to this time he had borrowed everything that could be read from the neighbors, but, as few subscribed to a daily newspaper, his opportunities had been limited. Now, with a wagon load of books to choose from, he read more than ever, day and night, until his eyes began to trouble him. After several years, school had to be given up and his parents forbade his borrowing any more books from the Book Wagon. They felt that he would never again be able to read and that his eyesight was seriously impaired. The librarian tried to persuade them to have his eyes examined at once. After a year of waiting, many hours of which Wilbur spent idly in a darkened room, he was taken to an oculist and fitted with glasses. Books were once more taken from the Book Wagon and the following winter the boy was sent to Hagerstown to high school, twenty miles away. As the library was not far from the railroad station all his leisure time was spent there. This winter he is attending another high school nearer home where there is no library of any kind. Recently the library received from him a request for books that would aid him in preparing to uphold the negative side of the debate: 'Resolved: That Capital Punishment Should be Abolished.' The request, legible in form, punctuation, spelling, etc., was all that it should be."

It is the farmer himself who must lend his good will for the realization of the nation-wide, county library system now being promoted by the American Library Association. Without his co-operation nothing can be accomplished; and as this movement is entirely for his benefit, as well as for the benefit of his family, his community and the future generations he should give it his whole-hearted support.



"Reaching for Knowledge."

Uncle Sam's Hired Men Who Serve the Farmers

Here is Charles F. Marvin, the Weather Man, a Scientist and Inventor, who, the Records show, is Right 90 Per Cent of the Time

By JOHN ANSON FORD

CHARLES F. Marvin, Chief of the Weather Bureau, was "discovered" by a famous Arctic explorer—not while the latter was in the Northland, to be sure, but in Washington, D. C. The story goes back to the '80's, not long after young Marvin had passed a Civil Service examination and secured an appointment as "junior professor"—an odd title designating a position in the Signal Corps, which in those days carried on weather forecasting and related work known to science as meteorology. It was the famous discoverer of new land north of Greenland, Major General A. W. Greeley, who discerned, while head of the Signal Corps after his return from the North, that Marvin possessed exceptional ability in mechanical engineering. He foresaw the great service which the young man might render to his country in the weather forecasting organization, and opened the door of opportunity for him.

If it seems a far cry from mechanical engineering to weather forecasting, let the reader remember that 85 to 90 per cent of the day-to-day forecasts of the Weather Bureau are accurate and that this remarkable record has been possible because of the increasing skill of the forecasters, supplemented by one of the most extraordinary collections of scientific apparatus and instruments to be found anywhere in the world. Among the inventors of these meteorological instruments Mr. Marvin stands first.

Had Mr. Marvin spent his life in private employment and made as many fundamental inventions for some chosen industry as he has while in government service he would have been rewarded many times over what Uncle Sam has paid him. When he became chief of the Weather Bureau in 1913, after 29 years of service in subordinate positions, his salary was placed at \$5,000. There it has remained, regardless of the H. C. of L. and his invaluable contributions to a government service which annually saves the farmers, through its timely warnings, hundreds of thousands of dollars loss in live stock and crops; a service which also acts as the trusted lookout for numberless shippers on land and water, warning them of approaching storm, cold or heat; a service performing a score of other important tasks touching the nation's daily life. One of the most remarkable facts about the Weather Bureau is that in recent years not a single great storm has occurred in this country which has not been adequately heralded by the government's forecasters.

Mr. Marvin's contributions to his chosen science have received gratifying recognition in the scientific world. When the office of chief of the Weather Bureau became vacant in 1913, President Wilson asked the National Academy of Sciences to submit a list of men it would recommend for appointment. Mr. Marvin's name was one of four submitted. His appointment as chief came as a well-merited reward.

Everybody has heard of box kites, but few know that an improved type of box kite which will go up a mile or more was devised by Marvin and built to carry what is called a kite meteorograph which also is a Marvin invention. This little instrument weighing about 1 1-2 pounds records the atmospheric pressure, temperature, the humidity, and the velocity of the wind. Large numbers of these kite meteorographs are in use by the Weather Bureau. Incidentally, the reeling apparatus by which each kite's 40,000 or 50,000 feet of steel wire that is wound up automatically, is also Marvin's invention.

Of prime importance in studying soil moisture is knowledge of the rate at which evaporation takes place on the surface of bodies of water. One of the instruments used in this work is also the product of his brain. Still another Marvin invention is a barograph of exceptional precision which makes a continuous record of atmospheric pressure so that one can tell at a glance how much the barometer has risen and fallen during a given period. No weather forecasting can be done without knowledge of changes in barometric pressures.

A study of the clouds, their character and movements, is another important phase of the work at the Weather Bureau. To carry it on better, Mr. Marvin devised a nephoscope by which an observer views clouded conditions of the sky, and by means of scales and sighting arrangements, determines the motion of clouds and their apparent velocity.

Of all the varied services under Marvin's supervision, first in importance is the work of the Forecasting Division, which receives and charts twice daily telegraphic reports of prevailing weather conditions and issues statements of impending weather changes. In the case of se-

vere disturbances, warnings are issued along the lakes and sea coasts. The frost and cold wave warnings are invaluable to many interests, including the trucker and fruit grower, especially in the spring when tender vegetation needs protection.

The aim of the Weather Bureau, as guided in its enlarging program by Mr. Marvin, has been to serve

wherever its facilities and a special need made service practicable. The variety of special uses of the storm warnings illustrate another phase of the practical value of the forecaster's service. In advance of a predicted storm, the rice planters flood their crops to prevent the straw from being broken by the wind. Agents of marine insurance companies stop insuring cargoes after a storm has been predicted. Fishermen take steps to protect their boats and nets. Lumbermen make

their standing booms secure and regulate their log towing. At lake ports vessels load hurriedly if they can get off two to five hours in advance of off-shore winds. If snow is expected shippers must start 17 to 18 hours in advance.

Not only on the farms and on the water is the service of the Weather Bureau invaluable, but cities also are constantly dependent upon it. With notice of an approaching cold wave greenhouses are closed and their boilers fired. Preparations are made at once by heating and lighting plants in all cities, whether gas, electric, steam or hot water. Fire plugs, exposed mains, and general plumbing are protected. Large stockyards drain their machines. Gasoline engines are drained. Work in concrete is stopped. Street railway companies arrange for more heat in their cars. Natural gas companies turn a larger amount of gas into their lines to provide for increased consumption. Dredging of sand and gravel ceases, and iron ore in piles

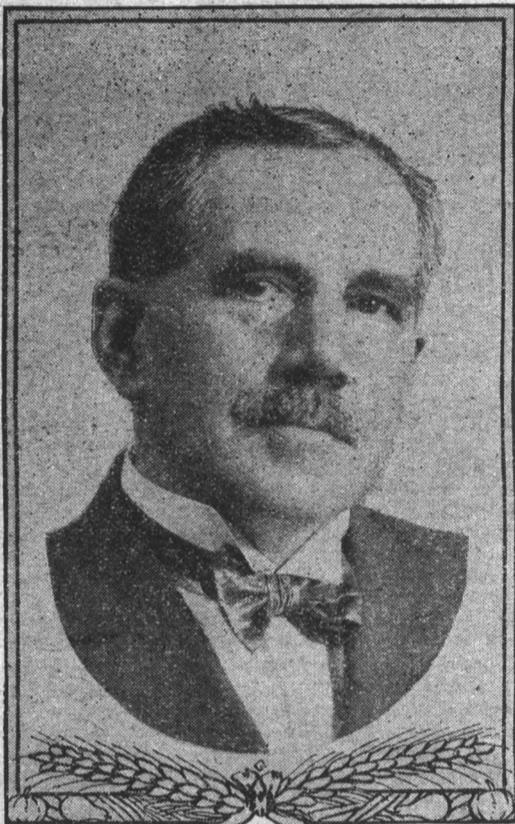
for shipment is placed in the holds of vessels to prevent the wet mass from freezing.

The Division of Agricultural Meteorology, another branch of the bureau supervises the work of about 400 special observers maintained in connection with the corn, wheat, cotton, sugar, rice, tobacco, fruit, and other industries. It has charge of the distribution of the special warnings issued for the benefit of certain crops and publishes data showing weather conditions throughout the country and the effect of these conditions on certain important crops.

The bureau maintains throughout the United States, in the West Indies, Alaska and Hawaii about 200 meteorological stations employing from 1 to 15 persons, especially trained in gathering data on which the forecasters, located at five points in the United States, base their daily predictions which combined cover the entire country. Mr. Marvin, while not specializing in forecasting himself, feels that these men at the observation station and the forecasters deserve a larger measure of credit than is popularly accorded them.

"The public does not always realize the tremendous responsibility resting on these men," said Mr. Marvin in discussing weather forecasting. "It's no 'fair weather' job that they have. Eternal vigilance is their motto. We can measure the responsibility that is theirs when a great storm sweeps across the country? Did you ever stop to think what would happen to ships, trains, live stock, unsheltered stores of goods, and a thousand other interests, if the Weather Bureau was not on the job when one of those West Indian hurricanes comes roaring up out of the Caribbean? I know of no other man whose task equals the forecaster's at such a time. He must be in touch every two hours with all our stations down in the southwestern section of the United States and points beyond our coast. At the earliest possible moment he must warn the section of the Gulf coast which he believes will be struck by the monster of destruction. It may be Pensacola; it may be Galveston; or it may be in between. He must decide, and send forth the warnings. I take off my hat to these men, and if I can devise an instrument or a piece of apparatus that will make their task easier by giving them more complete and accurate data, I am proud to make such a contribution as part of my service to this great national servant, the Weather Bureau."

And this is only one bureau of the seventeen that go to make up the United States Department of Agriculture, all working together, each using information furnished by the others in planning and suggesting better methods in agriculture for the direct benefit of the farmers and also for the benefit of every other citizen of the United States.



DR. CHAS. F. MARVIN
Chief of U. S. Weather Bureau

Farm Land and Joint Stock Banks Loan Farmers 435 Million Dollars

ALMOST one-half a billion dollars worth of loans have been made to farmers of the United States under the Federal Farm Loan Act in the three years of its operation. More than one hundred thirty-five thousand farmers have been directly benefited. In addition to this all farmers who borrow, no matter of whom they borrow, have received indirect benefits, because the Joint Stock Land Banks and the Federal Land Banks operating under the Farm Loan Act have provided competition which the farm mortgage bankers have had to meet and which resulted during the years of 1917, 1918 and 1919 in the reduction of interest on farm loans in every part of the United States.

Of course, it is evident that the banks of the Federal Farm Loan System cannot make all the farm

loans and never can be expected to make the bulk of the loans on farm lands. However, the fact that the Federal Farm Loan System, with its two plans of borrowing, is in the field does and will serve as a great regulating and stabilizing influence upon rates of interest.

But the saving in interest is only incidental. The greatest benefit of all, from the farmers standpoint, has been the fact that under the Federal Farm Loan System the farmer may now secure his loans on the long time amortization plan. Under this plan these four hundred thirty-five million dollars of loans, made by the banks of the Federal Farm Loan System, were made for periods from twenty to thirty-five years and the farmer was given the opportunity to repay the principal in small annual or semi-annual payments amounting

to only one per cent in excess of the rate of interest.

The Farm Loan Act provides two different plans, under which the farmer may borrow and receive the benefits of the farm loan system.

Under one plan, the Joint Stock Bank, the farmer borrows direct of the bank, the loans being made under supervision of the Farm Loan Board, the rates of interest being limited by law and commission charges being prohibited. These banks have made total loans aggregating 80 million dollars.

Under the other plan, ten or more farmers may organize a National Farm Loan Association and secure loans from the Federal Land Banks upon a mutual or co-operative basis, each borrower having stock in the bank to the amount of five per cent

of his loan and each borrower participating in the profits of the bank. The Federal Land Banks also are under the supervision of the Federal Farm Loan Board and the rates of interest are limited by law. These banks have made total loans of 350 million dollars.

Following is a table which shows the total loans closed by both banks in a number of important states:

California,	\$12,170,500;	Illinois,	\$17,321,000;
Indiana,	\$19,241,000;	Iowa,	\$47,586,000;
Kansas,	\$19,001,000;	Michigan,	\$6,285,000;
New York,	\$5,376,000;	Ohio,	\$4,250,000;
Pennsylvania,	\$3,337,000;	Texas,	\$44,158,000;
Washington,	\$11,864,000;	Wisconsin,	\$6,318,000;
Grand Total,		Total number of loans closed,	135,641 amounting to \$435,483,000.

Michigan Agriculture Enriched by Great Fair

Criticisms Cannot Blind People to Value of Fair as Educational Institution

By H. H. MACK

THE MICHIGAN State Fair for 1920 has come and gone; its daily details are now a matter of history. The evidences of its outstanding merit and worth as an agency through which to advance the cause of agriculture in a great state, are to be seen on every hand; in the meantime imperfections and inconsistencies cannot be overlooked. One of the sensations of fair week resulted from the caustic criticisms of the fair as a whole and of the policy adopted by the board of managers, which appeared in the columns of a local newspaper. In the opinion of the writer, some of the criticisms "hit the nail on the head" but many of the leading counts in the indictment can hardly be made to stick; many of the salient features of the fair were minimized and underestimated while some of the weak points in the management were magnified and distorted. One thing must be conceded, namely, the annals of agriculture in Michigan have been amplified and enriched by the great exhibition that was held in Detroit, last week and the week before.

Features That Should be Changed
As intimated above, there are features which were given prominent position in connection with the fair that may well be dispensed with when the details for future exhibits are arranged. The writer interviewed a large number of exhibitors and visitors on the grounds and without a single exception the abnormal size of the "midway" and the hair-raising sky-jumping were condemned. Not a word against aeroplane exhibitions was heard but everyone favored the elimination of the dare-devil stunts in which human life was endangered. Without a single exception, live stock exhibitors were eloquent in their commendation of the generous policy adopted toward them, personally and toward the caretakers in the live stock department of the show. Many favorable comments were heard concerning the two splendid banquets which were tendered by the managers to the exhibitors; occasions of this nature under such auspices are always productive of good-fellowship and these were evidently no exception to the general rule. The only valid complaint, voiced by live stock exhibit-

H. H. MACK gives herewith his impressions on the Michigan State Fair just closed. He makes some criticisms, both favorable and unfavorable which we believe are justified. To manage a fair successfully requires brains, foresight and keen business ability. The problem of all fairs is to make their exhibits interesting enough to draw the crowds that are necessary to pay the expenses. This subject will be discussed in a later article on "The Making of a Fair."—Editor.

ors, was concerning the small amount of premium money offered as compared with the amounts offered by the state fairs of other states. Enthusiastic commendation was heard on every side for the thorough sanitation which was in evidence in all parts of the grounds.

Wonderful Live Stock Exhibit
Never before in the history of the state were so many richly bred domestic animals brought together in one place. Pure-bred live stock, from six states of the Union and Canada, combined to make an exhibit of pedigreed live stock which is seldom seen within one enclosure, except at the International at Chicago. The prejudice against opening the Michigan State Fair to show herds from outside the state, which formerly prevailed, has almost entirely disappeared and, hereafter, Michigan breeders will welcome competition from all parts of the country. One of the weak points in the fair equipment was revealed when the tremendous rush of animals and poultry filled all of the buildings and required the erection of several rows of tent-sheds.

In the cattle department of the show, the beef breeds led in both the number and the quality of the exhibits. Michigan has good reason to be proud of the splendid pure-bred beef herds which are being rapidly developed within her borders and last week's developments in the show ring prove that our breeders can hold their own fairly well when brought into competition with the leading show herds of other states. C. H. Prescott & Sons, Tawas City; John Lessiter & Sons, Clarkston, with their magnificent herds of Short-horns. Wildwood Farms, Orion, Mich.; Woodcote Stock Farm, Ionia, Mich.; Dr. R. G. Martin & Son, Cros-

well, Mich., and Coupar & Curry, Marlette, Mich., with their splendid herds of Aberdeen Angus are all doing their level best to produce animals of the best beef type that will meet the requirements of modern market demand. The only real discouraging feature connected with the exhibit of beef cattle was the fact that no buyers appeared for the splendid load of fat Shorthorn steers exhibited by C. H. Prescott & Sons. The Hereford exhibit brought a tremendous list of richly bred animals but only two Michigan breeders, Allen Bros., Paw Paw and J. B. Davidson of Eaton Rapids were included in the list of entries.

In the Galloway classes, W. M. Vines, Howell was the only Michigan exhibitor. In the Polled Durham classes, Michigan was represented by the Kelley Bros., of Plymouth, Mich.; W. W. Kennedy, Grass Lake and the Herbison Bros., Birmingham.

Very naturally, the dairy division called out an extended list of entries but in the department devoted to the exhibition of Jerseys very little competition developed; the Brookwater Herd, Ann Arbor, and Brennan, Fitzgerald and Sinks, Farmington, were the only exhibitors. The Farmington firm only showed a few cattle but the Ann Arbor herd was a complete exhibit of outstanding quality. There were three competitors for the honors in the Guernsey classes, all Michigan men: W. T. Barbour, Birmingham; H. W. Wigman, Lansing and John Ebels, Holland. The judge in the Holstein division had a difficult task to pick winners from the uniformly meritorious animals which showed up in this class. The Michigan exhibitors of Holsteins were as follows: C. L. Hulett & Son, Okemos; C. J. Spencer, Jackson; The Lenawee County Holstein Breeders'

Association and George Bench, Plymouth and John P. Hehl, Detroit. The Pickering Farm, Belton, Missouri, was the only exhibitor of Holsteins from outside the state.

One of the striking features of the fair was the splendid order and deportment observed by the immense throngs of visitors that were going and coming all day long throughout the fair. Not one drunken or disorderly person was seen within the grounds and the entire throng of sightseers seemed to be on their good behavior. During the afternoon of Labor Day, the entire grounds, including the space surrounded by the race track, was packed with a countless throng of young people but everyone was good-natured and well-behaved.

Nothing at a state or county fair pleases the average countryman more than to find everything well kept, clean and wholesome; past experience has demonstrated that it can be done and the consensus of opinion is that it should not be neglected. To permit conditions to exist at a fair that endanger the health of man or beast is without warrant and should not be permitted. The state fair ground during this year's fair was a model of cleanliness; all of the latest, up-to-date methods of sanitation were utilized and the results achieved contributed to the comfort and pleasure of everyone in attendance. The manure was removed from the stock barns at frequent intervals and taken away from the grounds every day; the barns and pens, containing the show animals, were thoroughly disinfected every day during the fair. One of the members of the board of fair managers, H. H. Halliday, president of the State Sanitary Live Stock Commission, had charge of the work.

The Detroit Packing Co., a concern which is preparing to open for business in West Detroit before many weeks had a fine booth and an educational exhibit on the grounds; a well-appointed plant, strictly modern in all of its details, is nearing completion and facilities for handling a large volume of business are being installed as rapidly as possible. Stock in the new enterprise has been sold very largely to farmers and the
(Continued on page 9)

Michigan Crops Reported in Fine Condition by Dept. of Agriculture

THE CONDITION of all crops, except spring wheat, harvested during the past month and yet to be harvested is well above the ten-year average. Weather conditions have been generally favorable and the excellent prospects of August 1 have been maintained throughout the past month for nearly all crops. Abnormally large yields of oats are being reported and the prospects for potatoes, sugar beets and truck and fruit crops are especially good, according to the September crop report for Michigan, prepared jointly by Verne H. Church, Agricultural Statistician, U. S. Bureau of Crop Estimates and Coleman C. Vaughan, Secretary of State.

Wheat: The spring wheat prospects are much lower than early in the season. The yield is disappointing, and the grain is badly shrunken. The estimated production is only 540,000 bushels.

The amount of wheat marketed at mills and elevators in the state during August, estimated from the reports of grain dealers is 1,428,000 bushels.

Corn: If no severe frost occurs within two weeks, Michigan is assured of another good corn crop. It is earing well in most sections, and the condition is good except in a few southwestern counties where a severe drought has prevailed since early in the season. The outlook is for a crop of 60,258,000 bushels, about 40 per cent of which will undoubtedly go into silos. The percentage of condition is one point above last year, and 12 per cent above the ten-year average.

Oats: The condition of 93 per cent at harvest time forecasts a total production of 54,464,000 bushels as compared with 36,875,000 bushels raised last year. The volume of the crop exceeded expectations, and the quality is very good, except in some eastern counties where those standing in the shock were discolored by heavy rains.

Barley: The crop was harvested under generally favorable conditions, except in a few eastern counties where some were discolored by rain while in the shock. The condition at time of harvest was 90 per cent, as compared with a ten-year average of 87, and 61 per cent one year ago. The forecasted production is 6,968,000 bushels.

Buckwheat: Buckwheat has made very satisfactory growth under generally favorable weather conditions, except in the extreme southwestern counties where the weather has been too dry. Reports indicate that the crop is filling well. The condition of 88 per cent is ten per cent better than the one year ago and nine per cent better than the ten-year average. The estimated production is 684,000 bushels.

Potatoes: The condition is one point lower than last month. While the crop in general is in excellent condition and promises a large yield, late blight has made its appearance in a number of counties and the extent to which the crop will be injured by it is not yet known. The condition of 91 per cent is 22 per cent better than one year ago and 18 per cent better than the ten-year average. A report from the agricultural

statistician for Maine states that there is considerable blight in Aroostook county.

Beans: Beans have declined from 80 to 84 per cent in condition during the past month, mainly as the result of an attack of bacterial blight which is quite prevalent in the Saginaw Valley and some other localities. Anthracnose has also made its appearance but it is thought the damage by it will not be great. The crop is ripening and harvesting is general in many sections. The present outlook is for a crop of 3,440,000 bushels.

Hay: The estimated production of all tame or cultivated hay is 3,149,000 tons. This is based on an average yield of 1.2 tons per acre; last year's yield was 1.15 tons per acre. The crop of wild hay is estimated at 58,000 tons. The yield of alfalfa from all cuttings is placed at 2.3 tons per acre, as compared with 2.0 per acre last year.

Clover Seed: Clover seed is filling well, and the outlook is for a good crop and somewhat larger acreage than last year. 126,000 bushels is the estimated production from present condition.

Stock Hogs: An inquiry develops the information that the number of stock hogs on farms September 1 is four per cent less than one year ago. The estimated number is 1,214,000.

Wool: The total production of wool is estimated at 9,841,000 lbs. which is a slight increase over last year.

Sugar Beets: The condition of sugar beets is 90 per cent, four per cent better than one year ago and

five per cent above the ten-year average.

Fruits: The apple prospects have increased to 89 per cent of a full crop, or 13,350,000 bushels. 49 per cent of this crop is considered as commercial, or 2,165,000 barrels. Nearly all varieties promise well, and the quality is very good except in some of the northwestern counties, where scab is quite prevalent. There is a large supply of early apples and the market is very dull.

The peach crop is generally good, and promises a production of 1,360,000 bushels. This is 80 per cent of a full crop. The quality is 91 per cent.

Pears also show an 80 per cent condition, which is equivalent to 880,000 bushels. The crop varies considerably in different localities and orchards.

The outlook for grapes is exceptionally good, being 94 per cent of a full crop as compared with a ten year average of 78 per cent. The quality is excellent.

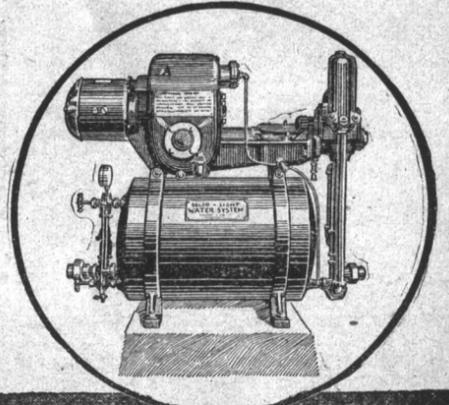
The amount of grain and seed threshed as reported by threshermen up to and including August 21, 1920: Winter wheat 332,168 3,099,017

	Acres	Bushels	Av. Yield
Winter Wheat	332,169	3,099,017	15.4
Spring Wheat	6,962	88,698	12.0
Rye	218,838	3,081,239	14.1
Oats	176,112	6,710,570	38.1
Speltz	1,276	51,686	14.8
Barley	41,858	1,112,269	26.6
Buckwheat	27	615	22.7
Peanut	517	10,361	20.0
Timothy Seed	280	818	2.9
Clover Seed	8,015	8,113	2.7
Beans	6	27	4.6

VERNE H. CHURCH, Agricultural Statistician.

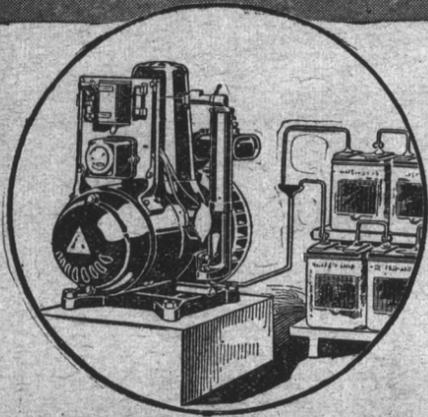


Improving Living Conditions *on over* One Hundred and Twenty-Five Thousand Farms



A compact direct connected automatic Delco-Light water system to operate with Delco-Light.

DELCO-LIGHT



A complete electric light and power plant for farms and country homes, self-cranking—air cooled—ball bearings—no belts—only one place to oil—thick plate, long-lived battery.

**Valve-in-Head Motor
Runs on Kerosene**

Electricity furnished by Delco-Light is replacing the old back-breaking hand pump with running water and the modern bath.

It is providing an abundance of bright, clean, safe electric light throughout the house and barn—

It is furnishing power to operate the washing machine, the churn, the separator and other labor saving electrical conveniences—

It is taking much of the drudgery out of farm life and helping to make happy, contented farm homes—

And, in addition to all this it is actually paying for itself in time and labor saved on over *one hundred twenty-five thousand farm homes.*

DELCO-LIGHT COMPANY, DAYTON, OHIO

DISTRIBUTORS:

M. L. Lasley, 23 Elizabeth St. East, Detroit, Mich.
Pringle-Matthews Co., 18 Fulton St. West, Grand Rapids, Mich.



There's a Satisfied User near you

MARKET FLASHES

TRADE AND MARKET REVIEW

If there is any one thing that Americans should be proud of and devoutly thankful for it is the federal banking system. A country that is solely dependent upon agriculture and productive industry is completely at the mercy of the shifting currents in the stream of national and international finance. It is appalling to think what might have happened to us, during the war and afterward, had the federal banking system never been established. The wonderful things accomplished by the federal reserve system, in times of financial stress and strain, is explained by the New York Evening Post in its Monday financial review as follows:

"Before the federal reserve system was established the New York banks used at this time of year to send out every week to interior banks \$5,000,000 to \$10,000,000 actual currency. Nowadays the transaction is effected in a different way, but the result is equally to pull down New York reserves and New York bank reserve ratio was already very low when the season began. Two weeks ago, the further depletion of New York reserves was averted thru New York's borrowing from the Boston and Cleveland reserve banks, of \$47,500,000 on its holdings of re-discounted paper.

"In that week the New York bank lost \$20,000,000 from its own gold holdings, but increased its credit in the central gold fund \$26,000,000. Last week another expedient was adopted: the New York reserve bank taking up \$45,000,000 of short term treasury bills from the private banks of this city and selling them to the Cleveland and Boston reserve banks. The week's loss of \$13,400,000 from the New York banks actual gold holdings is thereby more than counter-balanced through \$25,400,000 addition to its credit in the central gold fund.

"These two expedients have brought New York's reserve ratio to 39 1-2 per cent as against 38 5-8 a week ago and 38 1-2 two weeks ago. In the same fortnight the reserve ratio at Boston has decreased from 53 1-8 per cent to 44 7-8 and at Cleveland from 48 3-4 to 46 7-8. The average ratio for the whole reserve fund has changed very little it was 43 1-4 two weeks ago, 42 1-2 a week ago and is now 42 7-8.

"The whole transaction illustrates the promptness and facility with which on strain a credit can be distributed under our present system. It was essential that New York should be relieved, in view of that districts disproportionately great share in the present week's quarterly income tax payments."

There are many indications that the strain on the money market is gradually relaxing. On the New York stock exchange, on Monday, Sept. 13, money was available for 7 per cent a condition which is really remarkable in view of the tremendous income-tax disbursements which were impending on the following Wednesday. Recent liquidation of large accumulations of food stuffs, held for purposes of speculation and the selling, on a bargain-counter basis, of large quantities of merchandise, has liberated a tremendous amount of money which is now available for legitimate investment.

The resumption of activities by four woolen mills at Lawrence, Mass., the announcement that eastern shoe manufacturers are about ready to begin operations and the calling back of employes by the ship-building companies of the country, all foreshadow a material reduction in the great eastern army of the unemployed. In some cases, wages have been reduced, it is true, but in the same connection we note that many of the necessities of life have been recently reduced in price. If, in the process of readjustment that seems to be rapidly developing, the cost of living can be reduced in the same proportion that wages are lowered, great hardship to the working classes of the country will be avoided.

LAST MINUTE WIRE

DETROIT—Wheat and rye firm under heavy export buying. Corn and oats lower. Beans weak. Fat cattle steady; grass cattle lower. Hogs higher.
CHICAGO—Active trading in wheat. Export buying active in lard and cured meats. Hogs higher on small receipts.

(Note: The above summarized wires are received AFTER the balance of the market page is set in type. They contain last minute information up to within one-half hour of going to press.—Editor.)

WHEAT FIRM

WHEAT PRICES PER BU., SEPT. 14, 1920			
Grade	Detroit	Chicago	N. Y.
No. 2 Red	2.65	2.59 1/2	2.75
No. 2 White	2.62		
No. 2 Mixed	2.62		2.77 1/2

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
No. 2 White			
No. 2 White			
No. 2 Mixed			

The wheat market continues to show remarkable strength, the inference being that export demand is growing and that the millers of the country are beginning to become somewhat interested in the continued gain in values. Large orders for flour are reported from many sources and much improved demand for wheat for immediate milling purposes. The only weak features, in the present situation, is the declining tendencies of foreign exchange and the fact that the gambling gang seem to be all on the bull side of the market. On Monday spot wheat was from one to three cents higher in Chicago than on the close of the previous week. No. 1 hard wheat is selling 10 to 11 cents over December. No. 1 Red is selling 11 to 12 cents over December. There is an active call for all of the speculative option with plenty of outside speculators in the market, nearly all of them bulls. Canadian wheat is now offered on a working basis and some American millers are turning their attention in this direction. Press & Co., of Chicago, advise purchase on all breaks.

CORN WEAK

CORN PRICES PER BU., SEPT. 14, 1920			
Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	1.55	1.43 1/4	1.66 1/4
No. 3 Yellow			
No. 4 Yellow			

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	1.55	1.42	1.54
No. 3 Yellow	1.55	1.42	
No. 4 Yellow	1.55		

At the present writing all signs point to a continued decline in the price of corn and the killing frosts, which are counted on to save the market from a slump, will have to hurry if they get a chance to spoil

any large percentage of the crop. Recent reports from the corn belt indicate that more than one-half of the crop is already safe from damage from frost and a few days of the right kind of weather will put the entire crop, with the exception of late planted fields out of danger. Good judges of weather conditions assert, that a light frost at this time, would do more good than harm as it would check the growth of the plant some and help to ripen the grain.

Disappointing receipts, on Monday of this week, drove the shorts to cover and helped to balance up the market. Pressure on December corn is still very light because of firmness in the wheat market and the near approach of the usual frost period from September 20 to October 10. On Monday, the visible supply of corn was increased by 22,800 bushels, making the total 2,792,000 as against 1,360,000 on this date last year. Grain dealers report that it is easy to buy corn but hard to find buyers for it; formerly conditions were exactly reversed and dealers lost many orders because they could not get the corn to fill them with.

OATS EASY

NEW OAT PRICES, BU., SEPT. 14, 1920			
Grade	Detroit	Chicago	N. Y.
No. 2 White	.68	.66	
No. 3 White	.66 1/2	.63 1/4	
No. 4 White	.64		

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
Standard	.72	.69	.71
No. 3 White	.70	.69	
No. 4 White	.70		

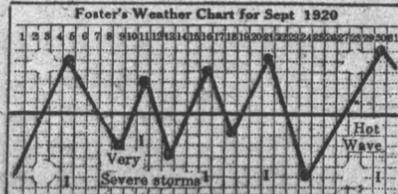
Oats, just now, seem to have a few friends, all of the dopesters inclining toward the bear side of the deal and all visible indications pointing to lower prices, temporarily at least, for this cereal. On Monday an increase of 3,418,000 bushels in the visible supply was announced making the total 16,216,000 against 21,000,000 on this date last year. Press & Co., of Chicago, advise the sale of oats on all hard spots.

RYE FOLLOWS WHEAT

The rye market is sharing the prosperity that has recently come

THE WEATHER FOR THE WEEK

As Forecasted by W. T. Foster for The Michigan Business Farmer



WASHINGTON, D. C., Sept. 18, 1920—Warm wave will reach Vancouver, B. C., about Sept. 18 and temperatures will rise on all the northern Pacific slope and northern Rockies. It will pass eastward by way of the great lakes, crossing continent in about five days and out onto the Atlantic by way of Newfoundland. As the storm wave crosses continent all the country south of it will be warmer than usual; north of it cooler than usual. The cool wave following this storm will go most below normal in the middle northwest and northern Rockies, least below normal in the Missouri, Ohio and lower Mississippi valleys. Near normal temperatures in eastern sections and Pacific slope. Not much rain anywhere.

October promises warm weather first and last weeks with unusually cool between. Not much change in precipitation. Most precipitation the

first half of the month. Most severe storms during the weeks centering on Oct. 1 and 27. Most severe frosts in northern sections during the week centering on Oct. 4 and in the cotton states during week centering on Oct. 28. Present conditions are favorable to sowing winter grain. Business and financial conditions are very promising for 1921 and still more promising for agriculture. A great change is coming for America and Canada favorable to the farms, instead of over-crowding the cities.

Dangerous and destructive hurricanes occur in the three great oceans, the north Atlantic, north Pacific and Indian. Those that occur in the Atlantic are called by their proper names, hurricanes, those in the Pacific are called typhoons and those in the Indian cyclones. But they are all of the same nature and are all organized by the planetary physical forces which I call electro-magnetism. It has been known for a long time that a hurricane in the West Indies pulls down a cold wave in the middle northwest—Alberta, Saskatchewan or Manitoba, or sometimes covering all of these Provinces and then coming into the States.

W. T. Foster

into the wheat deal. Chicago, on Monday reported good buying of rye by houses with eastern connections. No. 2 rye is selling 2 cents over September. Detroit quotes No. 2 at \$1.94.

BEANS SHAKY

BEAN PRICES PER CWT., SEPT. 14, 1920			
Grade	Detroit	Chicago	N. Y.
C. H. P.	5.75	7.00	7.50
Red Kidneys		15.50	17.50

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
C. H. P.			
Prima			
Red Kidneys			

Weakness seems to be the dominating note in connection with the current bean market and all conditions, bearing upon the situation, tend toward lower prices as the season advances and the impending harvest brings the crop into the market. The weather during recent weeks has been ideal for maturing the crop and it will soon be almost entirely out of danger, except from the risks which attend the final gathering in of the crop. In a recent interview with the writer, a representative of the Isbell Bean Co., of Detroit, one of the largest handlers in this part of the state, expressed the belief that beans would be very much lower before they turned for the better.

POTATOES STRONGER

SPUDS PER CWT., SEPT. 14, 1920		
	Sacked	Bulk
Detroit	2.65	
Chicago	2.95	
New York		2.40
Pittsburg		2.70

PRICES ONE YEAR AGO		
Detroit		
Chicago		
Pittsburg		
New York		

Very little has developed of late, in connection with the potato market which would seem to give a line on future prices but the situation has developed no sign of weakness; in fact, there are well-defined rumors that many early potato fields in the state, that have shown a heavy growth of tops, are not yielding nearly as large a crop as was expected, earlier in the season. Blight has made its appearance in many Michigan fields of late potatoes, jeopardizing the yield to some extent.

HAY FIRM

	No. 1 Tim.	Stan. Tim.	No. 2 Tim.
Detroit	34.00 @ 32	30.00 @ 31	29.00 @ 30
Chicago	37.00 @ 33		35.00 @ 32
New York	45.00 @ 47		41.00 @ 45
Pittsburg	38.50 @ 38	36.50 @ 36	33.00 @ 34

	No. 1 Light Mix.	No. 4 Clover Mix.	No. 1 Clover
Detroit	30.00 @ 31	29.00 @ 30	28.00 @ 29
Chicago		35.00 @ 36	
New York	41.00 @ 44	35.00 @ 40	
Pittsburg	33.00 @ 34		

HAY PRICES A YEAR AGO			
	No. 1 Tim.	Stan. Tim.	No. 2 Tim.
Detroit			
Chicago			
New York			
Pittsburg			

	No. 1 Light Mix.	No. 1 Clover Mix.	No. 1 Clover
Detroit			
Chicago			
New York			
Pittsburg			

The hay trade is showing firmness in all departments and the prospect of lower prices seems to be rather remote; the effect of the new freight rates upon hay prices is still problematical but the general conclusion seems to be that the increase will be shared by both producer and consumer with the former getting much the worst of the bargain. An example of the effect of increased freight rates is cited in connection with the cost of shipping alfalfa, from Idaho to Kansas City, a trifling matter of \$15 per ton and the question arises: What will the grower have left after paying the freight? Hay is scarce and firm in all Michigan markets, many owners of horses finding it difficult to secure necessary daily supplies.

DETROIT PRODUCE MARKET

The Detroit produce market has been dull and quiet of late with the exception of eggs and peaches which have been decidedly active, the sup-

ply of fresh eggs is unequal to the demand. Peaches are beginning to come freely but the demand takes everything offered at strong values. The demand for butter is fairly active and prices hold firm and steady from week to week. The strength in the poultry market which prevailed early last week has partly disappeared because of the generous offerings that come to hand, late in the week. Dressed calves and dressed hogs are both in light supply and gradually hardening in price. The supply of vegetables is fully adequate to the current demand and prices are working lower in many cases.

LIVESTOCK MARKETS

Many encouraging features, in connection with the demand for live stock, have developed during the past week and the general outlook for all animals that show killing quality, is much better than on this date, last month. From all parts of the country comes reports of an improved demand for all kinds of cured and fresh meats. The demand for all kinds of raw materials and by-products, which are developed in connection with killing operations, such as hides, wool, tallow, lard, etc., is becoming more and more active as the cool weather of fall approaches.

Chicago had a splendid trade in high-grade steer cattle all last week, more than 500 head changing hands for \$18 per cwt. The weight of the bullocks that brought the top price ranged from 1,147 to 1,825; only a few yearlings were received that were good enough to bring the top of the market. Last week's average price for good killing steers in the Chicago market was 25 cents per cwt. higher than that of the week before. On Tuesday, the opening market day for last week, a two-day supply of butchers cattle showed up and prices eased off temporarily but came back later as the result of an active demand from many sources from which very little has been heard of late. Cannery and cutter cows were dull and unchanged and with the exception of the bologna kind which were a trifle higher, bulls sold level with last week.

Stockers and Feeders Higher

An improved demand for all of the better grades of killing cattle has had a favorable effect on the selling value of well-bred feeders. From all parts of the country comes information concerning pastures "knee deep" and huge crops of corn, much of it practically out of danger; a good attendance of countrymen is reported from all markets, thousands of good feeding prospects are going back to the country. Chicago has had an over-supply of undesirable stock cattle during the past week and this kind has been hard to sell.

Fat lambs scored a sharp upturn last week and closed fully 50 cents per cwt. higher than the week before. The trade in mature sheep was dull and slow all the week and with very few fat wethers to help out, the average was only \$6.75; this price was \$1.05 lower than the previous week, \$1.15 lower than the corresponding week, last year and \$5.10 lower than two years ago. The general average price of all fat lambs in the Chicago market was \$13.50 being 15 cents higher than the previous week, \$2 lower than on the corresponding date one year ago, \$3.75 lower than two years ago and \$4.25 lower than three years ago. Feeding lambs were active and higher in Chicago, early last week but they eased off, somewhat, before the close of the week's trade. The week's average

price for feeding lambs was \$13.45, being 65 cents per cwt. higher than that of the week before.

Live Hogs and Provisions

The value of live hogs has made a substantial gain during the past week, fully establishing the reliability of the predictions that have been made in this department during the past five weeks. There are seasons of the year and certain market conditions which will cause big receipts of hogs to follow a sharp upturn in market values but the present is not one of these times. Farmers, confident of a further rise in hog quotations, are sure to hold all light hogs back for the purpose of utilizing the tremendous corn crop which impends. The speculative provision market is beginning to show strength and the feeling seems to be quite general that values will go very much higher in this department of the trade. The week's top in Chicago was 60 cents per cwt. higher than that of the week before and ten cents higher than the previous high mark for the year.

Facts About the Detroit Market

Detroit trade in cattle has been rather quiet this week because of the absence of many of the Jewish

buyers who make a specialty of the commoner grades of cattle. On Monday of the current week Detroit received 1,200 head of cattle and prices were easy all day with a downward tendency. Sheep and lambs were slow and steady in the Detroit market all last week and on Monday the same price levels prevailed. Live hogs showed an advancing tendency, nearly all last week and on Monday the best brought \$17.25 per cwt. On Monday in the Detroit market, 1,175 cattle, 248 calves, 1,440 sheep and 1,703 hogs came to hand.

MICHIGAN AGRICULTURE ENRICHED BY GREAT FAIR

(Continued from page 6)

names of several tillers of the soil appear on the list of directors. Edwin Dold, a member of the famous Buffalo family of meat packers, will manage the plant. The plant is located on the main line of the Michigan Central railroad, the grounds are ample and the location ideal for an establishment of this kind. A buyer will be located in the Detroit Stock yards and the methods followed in the development of the enterprise, will be practically the same as those in vogue in other local pack-

ing plants. The new firm will make an effort to increase the amount of high-grade steer beef consumed in Detroit.

Ladies who visited the fair this year were eloquent in their appreciation of the educational program, including lectures and practical demonstration, which was put on in the Gleaner auditorium. The practical demonstration of how the ideal American home should be arranged and decorated was certainly one of the most practical and useful exhibits made at the fair; what could be more appropriate and practical than that the young people of this state, who visit the fair from year to year, should learn there lessons of thrift and household economy. The lecture and demonstration of appropriate dress and ladies apparel in general, which was given every afternoon during the fair in the Gleaner building was not only entertaining but useful and instructive. In the opinion of the writer, there are many other departments, connected with the fair exhibit, that could be treated in a similar manner to those described above, with great profit and satisfaction to the patrons of the fair.

Why are Hudson Owners Indifferent to Other Cars?

Isn't It Because Contentment In Hudson Ended Inquiry Into Others?

Thousands of Hudson owners know no other make of car. Their satisfaction in the Super-Six leaves nothing to tempt them to experiment elsewhere.

Our experience gives confidence to count every Hudson purchaser as a permanent owner.

Naturally we expect men of wide motor knowledge to select Hudson. But isn't it a revelation of the convincing way Super-Six performance overshadows the field, that thousands who profess little mechanical knowledge are just as unerring in their choice?

Can Any Endorsement Rival This?

For nearly five years Hudson has outsold all the world's fine cars. And today its distinction is so wanted that we see no curb to sales except the production limitations that fine, accurate building imposes.

More than 100,000 Super-Sixes are in service. That exceeds the output of any car in its price range by many thousands.

It is a verdict—100,000 strong—for qualities and abilities no other car can

share. It fixes the specific reason for dominance of a type, unlike any other car.

This chief issue is Hudson endurance. And it is exclusive, because it results from a patented principle. Others cannot use this invention, which by reducing vibration to within 10% of vanishing, make Hudson's unequalled reliability marks possible.

Its Endurance Limits Still Undiscovered

Years must elapse before we know the final limit of Super-Six endurance. We tried to establish those limits by test. Speedway trials, a double trans-continental run that no other car ever endured to finish, and the abuse of high-speed racing, failed to reveal the point at which Hudson endurance would yield. But they did establish that the Super-Six possessed greater durability than any other car ever proved.

The earliest Super-Sixes, built nearly five years ago, and still serving with undiminished satisfaction, testify how car life is practically doubled through this invention.

Hudson Motor Car Company, Detroit, Michigan

8%

There is still a limited amount of the investment which pays 4% twice-a-year available, which will be sold in lots of \$100 or more, to those who apply for it.

If you have extra money which is paying you less than Eight (8%) per annum, please inquire of Mr. Geo. M. Slocum, President, Rural Publishing Company, Mt. Clemens, Mich., regarding this.

Automobile Thieves

Work in Country Districts

On August 14th Joe Ashton of Sturgis was driving his Ford automobile state license No. 391,669, factory No. 4083351, in the country near Lenawee Junction, when he was held up by six young men, the automobile and \$75 being taken away from him.

On August 22nd the car of Chas. S. Novak of Bay City was stolen and later found in a ditch near Utica, Michigan, with five tires stripped.

On August 4th, during the night, the Buick car of George L. Spillane, president of the Farmers' Mutual Fire Insurance Company of Genesee county, was stolen from the garage on his farm. The car had state license No. 105,178 and factory No. 567,085.

On August 24th the Buick automobile belonging to Ex-Sheriff Frank Green of Genesee county was stolen and a few days later found in the ditch near Napoleon, Ohio.

On August 16th the Buick automobile of Doctor R. C. Mahaney was taken from the street near his office at 11 o'clock and recovered in Lansing two hours later in possession of three young men, two of whom were sent to prison by Judge Collins for from one to ten years.

All of the above mentioned cars were insured in the Citizens' Mutual Automobile Insurance Company.

MR. AUTOMOBILE OWNER:—Keep your car locked and when in the big cities place it in a garage and see that you have a policy in good standing in the

CITIZENS' MUTUAL
Automobile Insurance Co.
HOWELL, MICHIGAN

Genuine Aspirin

Name "Bayer" means genuine
Say "Bayer"—Insist!



Say "Bayer" when buying Aspirin. Then you are sure of getting true "Bayer Tablets of Aspirin"—genuine Aspirin proved safe by millions and prescribed by physicians for over twenty years. Accept only an unbroken "Bayer package" which contains proper directions to relieve Headache, Toothache, Earache, Neuralgia, Rheumatism, Colds and Pain. Handy tin boxes of 12 tablets cost few cents. Drug-gists also sell larger "Bayer packages." Aspirin is trade mark of Bayer Manufacture Monoaceticacidester of Salicylicacid.

Newly Invented SAW RIG
COSTS so little no one with wood to cut can afford to be without it. Will saw your winter's wood in a few hours. Does all practical work any other saw rig can and makes unnecessary the expensive, cumbersome rigs used in the past. For a small part of their cost you can now own the

OTTAWA SAW RIG

Powerful 4-cycle motor. Suitable for driving belt driven machinery. Easy to operate, light to move, simple to handle. Users say they make \$11.00 per day cutting wood for the neighbors. **30 Days' Trial; 10-Year Guarantee.** Let the Ottawas do your sawing 30 days to prove our claims. Free Book. **OTTAWA MFG COMPANY**
249 Main Street,
OTTAWA, KANSAS.
Ottawa Ships 'em Quick.

Read the Classified Ads

—IN—

M. B. F.'s BUSINESS FARMER'S EXCHANGE

Big Bargains are constantly offered

MOST mad dening of all was a running stream not a hundred yards away, tree-fringed beyond, with lush meadow grass leading gracefully down the slope to it from the side. And in the tree-shadowed water knee deep and drowsing, stood several cows of the dwarf breed peculiar to the Valley of Lost Souls. Occasionally they flicked their tails lazily at flies, or changed the distribution of their weight on their legs. He glared at them to see them drink, but they were evidently too sated with water. Fools! Why should they not drink, with all that wealth of water flowing idly by!

They betrayed alertness, turning their heads toward the far bank and pricking their ears forward. Then, as a big antlered buck came out from among the trees to the water's edge, they flattened their ears back and shook their heads and pawed the water till he could head the splashing. But the stag disdained their threats, lowered his head and drank. This was too much for Torres, who emitted a maniacal scream which, had he been in his senses, he would not have recognized as proceeding from his own throat and larynx.

The stag sprang away. The cattle turned their heads in Torres' direction, drowsed, their eyes shut, and resumed the flicking of flies. With a violent effort, scarcely knowing that he had half torn off his ears he drew his head back through the slitted aperture and fainted on top of the skeleton.

Two hours later, though he did not know the passage of time, he regained consciousness and found his own head, cheek by jowl with the skull of the skeleton on which he lay. The descending sun was already shining into the narrow opening, and his gaze chanced upon a rusty knife. The point of it was worn and broken and he established the connection. This was the knife that had scratched the inscription on the rock at the base of the funnel at the other end of the passage, and this skeleton was the bony framework of the man who had done the scratching. And Alvarez Torres went immediately mad.

"Ah, Peter McGill, my enemy," he muttered. "Peter McGill of Glasgow who betrayed me to this end.—This for you—and this!—and this!"

So speaking he drove the heavy knife into the fragile front of the skull. The dust of the bone which had once been the tabernacle of Peter McGill's brain arose in his nostrils and increased his frenzy. He attacked the skeleton with his hands, tearing at it, disrupting it, filling the pent space about him with flying bones. It was like a battle, in which he destroyed what was left of the mortal remains of the one time resident of Glasgow.

Once again Torres squeezed his head through the slit to gaze at the fading glory of the world. Like a rat in the trap caught by the neck in the trap of ancient Maya devising, he saw the bright world and day dim to darkness as his final consciousness drowned in the darkness of death.

But still the cattle stood in the water and drowsed and flicked at flies, and, later, the stag returned, disdainful of the cattle, to complete its interrupted drink.

CHAPTER XXVIII.

NOT FOR nothing had Regan been named by his associates The Wolf of Wall Street! While usually no more than a conservative, large scale player, ever so often, like a periodical drinker, he had to go on a rampage of wild and daring stock gambling. At least five times in his long career had he knocked the bottom out of the market or lifted the roof off, and each time to the tune of a personal gain of millions. He never went on a small rampage, and he never went too often.

He would let years of quiescence slip by, until suspicion of him was lulled asleep and his world deemed that the Wolf was at least grown old and peaceable. And then, like a thunderbolt, he would strike at the

"Hearts of Three"

By JACK LONDON

Author of the "Valley of the Moon," and other stories.

men and interests he wished to destroy. But, though the blow always fell like a thunderbolt, not like a thunderbolt was it in its inception. Long months, and even years, were spent in deviously preparing the day and painstakingly maturing the plans and conditions for the battle.

Thus had it been in the outlining and working up of the impending Waterloo for Francis Morgan. Revenge lay back of it, but it was revenge against a dead man. Not Francis, but Francis' father, was the one he struck against, although he struck through the living into the heart of the grave to accomplish it. Eight years had he waited and sought his chance ere old R. H. M.—Richard Henry Morgan—had died. But no change had he found. He was, truly, the Wolf of Wall Street, but never by any luck had he found an opportunity against the Lion—for to his death R. H. M. had been known as the Lion of Wall Street.

So, from father to son, always under a show of fair appearance, Regan had carried the feud over. Yet Regan's very foundation on which he built for revenge was meretricious and wrongly conceived. True, eight years before R. H. M.'s death, he had tried to double cross him and failed; but he never dreamed that R. H. M. had guessed. Yet R. H. M. had not only guessed but had ascertained beyond the shadow of a doubt, and had promptly and cleverly double-crossed his treacherous associate. Thus, had Regan known that R. H. M. knew of his perfidy, Regan would have taken his medicine without thought of revenge. As it was, believing that R. H. M., out of meanness as mean as his own, without provocation or suspicion, had done this foul thing to him, he saw no way to balance the account save by ruining him, or in lieu of him, by ruining his son.

And Regan had taken his time. At first Francis had left the financial game alone, content with letting his money remain safely in the safe investments into which it had been put by his father. Not until Francis had become for the first time active in undertaking Tampico Petroleum to the tune of millions of investment with an assured many millions of ultimate returns, had Regan had the ghost of a chance to destroy him. But, the chance given, Regan had not wasted time, though his slow and thorough campaign had required many months to develop. Ere he was done, he came very close to knowing every share of whatever stock Francis carried on margin or owned outright.

It had really taken two years and more for Regan to prepare. In some of the corporations in which Francis owned heavily, Regan was himself a director and not inconsiderable arbiter of destiny. In Frisco Consolidated he was president. In New York, Vermont and Connecticut he was vice president. From controlling one director in Northwestern Electric, he had played kitchen politics until he controlled the two-thirds majority. And so with all the rest, either directly, or indirectly through corporation and banking ramifications, he had his hand in the secret springs and levers of the financial and business mechanism which gave strength to Francis' fortune.

Yet no one of these was more than a bagatelle compared with the biggest thing of all—Tampico Petroleum. In this, beyond a paltry twenty thousand shares bought on the open market, Regan owned nothing, controlled nothing, though the time was growing ripe for him to sell and deal and juggle in inordinate quantities. Tampico Petroleum was practically Francis' private preserve. A number of his friends were, for them, deeply involved, Mrs. Carruthers even gravely so. She worried him, and was not even above pestering him over the telephone. There were others, like Johnny Pathmore, who never bothered him at all, and

who, when they met, talked carelessly and optimistically about the condition of the market and financial things in general. All of which was harder to bear than Mrs. Carruthers perpetual nervousness.

Northwestern Electric, thanks to Regan's machinations, had actually dropped thirty points and remained there. Those on the outside who thought they knew, regarded it as positively shaky. Then there was the little, old, solid-as-the-rock-of-Gibraltar Frisco Consolidated. The nastiest of rumors were afloat, and the talk of a receivership was growing emphatic. Montana Lode was still sickly under Mulhaney's unflattering and unmodified report, and Weston, the great expert sent out by the English investors, had failed to report anything reassuring. For six months, Imperial Tungsten, earning nothing, had been put to disastrous expense in the great strike which seemed only just begun. Nor did anybody, save the several labor leaders who knew dream that it was Regan's gold that was at the bottom of the affair.

The secrecy and deadliness of the attack was what unnerved Bascom. All properties in which Francis was interested were being pressed down as if by a slow moving glacier. There was nothing spectacular about the movement, merely a steady persistent decline that made Francis' large fortune shrink horribly. And, along with what he owned outright, what he held on margin suffered even greater shrinkage.

Then had come rumors of war. Ambassadors were receiving their passports right and left, and half the world seemed mobilizing. This was the moment, with the market shaken and panicky, and with the world powers delaying in declaring moratoriums, that Regan selected to strike. The time was ripe for a bear raid, and with him were associated half a dozen other big bears who tacitly accepted his leadership. But even they did not know the full extent of his plans, nor guess at the specific direction of them. They were in the raid for what they could make, and thought he was in it for the same reason, in their simple directness of pecuniary vision catching no glimpse of Francis Morgan nor of his ghostly father at whom the big blow was being struck.

Regan's rumor factory began working overtime and the first to drop and the fastest to drop in the dropping market were the stocks of Francis, which had already done considerable dropping ere the bear market began. Yet Regan was careful to bring no pressure on Tampico Petroleum. Proudly it held up its head in the midst of the general slump, and eagerly Regan waited for the moment of desperation when Francis would be forced to dump it on the market to cover his shrunken margins in other lines.

"Lord! Lord!"

Bascom held the side of his face in the palm of one hand and grimaced as if he had a jumping toothache.

"Lord! Lord!" he reiterated. "The market's gone to smash and Tampico Pet along with it. How she slumped! Who'd have dreamed it!"

Francis, puffing steadily away at a cigarette and quite oblivious that it was unlighted, sat with Bascom in the latter's private office.

"It looks like a fire sale," he said. "That won't last much longer than this time tomorrow morning—then you'll be sold out, and me with you," his broker simplified, with a swift glance at the cock.

It marked twelve, as Francis' swiftly automatic glance verified.

"Dump in the rest of Tampico Pet," he said wearily. "That ought to hold back until tomorrow."

"Then what tomorrow?" his broker demanded, "with the bottom out and everybody including the office boys selling short."

Francis shrugged his shoulders. "You know I've mortgaged the house, Dreamworld, and the Adirondack Camp to the limit."

"Have you any friends?"

"At such a time!" Francis countered bitterly.

"Well, it's the very time," Bascom retorted. "Look here, Morgan. I know the set you ran with at college. There's Johnny Pathmore—"

"And he's up to his eyes already. When I smash he smashes. And Dave Donaldson will have to readjust his life to about one hundred and sixty a month. And as for Chris Woodhouse, he'll have to take to the movies for a livelihood. He always was good at theatricals, and I happen to know he's got the ideal 'film' face."

"There's Charley Tippery," Bascom suggested, though it was patent that he was hopeless about it.

"Yes," Francis agreed with equal hopelessness. "There's only one thing the matter with him—his father still lives."

"The old cuss never took a flyer in his life," Bascom supplemented. "There's never a time he can't put his hand on millions. And he still lives, worse luck."

"Charley could get him to do it, and would, except that one thing that's the matter with me."

"No securities left?" his broker queried.

Francis nodded.

"Catch the old man parting with a dollar without due security."

Nevertheless a few minutes later, hoping to find Charley Tippery in his office during the noon hour, Francis was sending in his card. Of all jewelers and gem merchants in New York, the Tippery establishment was the greatest. Not only that. It was esteemed the greatest in the world. More of the elder Tippery's money was invested in the great Diamond Corner, than even those in the know of most things knew of this particular thing.

The interview was as Francis had forecast. The old man still held tight reins on practically everything, and the son had little hope of winning his assistance.

"I know him," he told Francis. "And though I'm going to wrestle with him, don't pin an iota of faith on the outcome. I'll go to the mat with him, but that will be about all. The worst of it is that he has the ready cash to say nothing of oodles and oodles of safe securities and United States bonds. But you see, Grandfather Tippery when he was young and struggling and founding the business, once loaned a friend a thousand. He never got it back, and he never got over it. Nor did Father Tippery ever get over it either. The experience scared both of them. Why, father wouldn't lend a penny on the North Pole unless he got the Pole for security after having had it expertly appraised. And you haven't any security, you see. But I'll tell you what. I'll wrestle with the old man tonight after dinner. That's his most amiable mood of the day. And I'll hustle around on my own and see what I can do. Oh, I know a few hundred thousand won't mean anything, and I'll do my darndest for something big. Whatever happens, I'll be at your house at nine tomorrow—"

"Which will be my busy day," Francis smiled wanly, as they shook hands. "I'll be out of the house by eight."

"And I'll be there by eight then," Charley Tippery responded, again wringing his hand heartily. "And in the meantime I'll get busy. There are ideas already beginning to sprout . . ."

Another interview Francis had that afternoon. Arrived back at his broker's office, Bascom told him that Regan had called up and wanted to see Francis, saying that he had some interesting information for him.

"I'll run around right away," Francis said, reaching for his hat, while his ace lighted up with hope. "He was an old friend of father's, and if anybody could pull me thru he could."

"Don't be too sure," Bascom replied, and passed reluctantly a moment before making confession. "I called him up just before you returned from Panama. I was very frank. I told him of your absence and of your perilous situation here, and—oh, yes, flatly and flat out—asked him if I could rely on him in case of need. And he baffled. You know anybody can baffle when asked

favor. That was all right. But I thought I sensed more . . . no, I won't dare to say enmity; but I will say that I was impressed . . . how shall I say—well, that he struck me as being particularly and peculiarly cold-blooded and non-committal."

"Nonsense," Francis laughed. "He was too good a friend of my father's."

"Ever hear of the Cosmopolitan Railways Merger?" Bascom queried with significant irrelevance.

Francis nodded promptly, then said:

"But that was before my time. I merely have heard of it, that's all. Shoot. Tell me about it. Give me the weight of your mind."

"Too long a story, but take this one word of advice. If you see Regan, don't put your cards on the table. Let him pay first, and, if he offers let him offer without solicitation from you. Of course, I may be all wrong, but it won't damage you to hold up your hand and get his play first."

At the end of another half hour, Francis was closeted with Regan, and the stress of his peril was such that he controlled his natural impulses, remembering Bascom's instructions and was quite fairly nonchalant about the state of his affairs. He even baffled.

"In pretty deep, eh?" was Regan's beginning.

"Oh, not so deep that my back-teeth are awash yet," Francis replied airily. "I can still breathe, and it will be a long time before I begin swallowing."

Regan did not immediately reply. Instead, pregnantly, he ran over the last few yards of the ticker tape.

"You're dumping Tampico Pet pretty heavily, just the same."

"And they're snapping it up," Francis came back, and for the first time, in a maze of wonderment, he considered the possibility of Bascom's intuition being right. "Sure, I've got them swallowing."

"Just the same you'll note that Tampico Pet is tumbling at the same time it's being snapped up, which is a very curious phenomenon," Regan urged.

"In a bear market all sorts of curious phenomena occur," Francis bluffed with a mature show of wisdom. "And when they've swallowed enough of my dumpings they'll be ripe to roll on a barrel. Somebody will pay something to get my dumpings out of their system. I fancy they'll pay through the nose before I'm done with them."

"But you're all in boy. I've been watching your fight, even before your return. Tampico Pet is your last."

Francis shook his head.

"I'd scarcely say that," he lied. "I've got assets my market enemies never dream of. I'm luring them on, that's all, just luring them on. Of course, Regan, I'm telling you this in confidence. You were my father's friend. Mine is going to be some clean up, and, if you'll take my tip, in this short market you start buying. You'll be sure to settle with the sellers long in the end."

"What are your other assets?" Francis shrugged his shoulders.

"That's what they're going to find out when they're full up with my stuff."

"It's a bluff!" Regan admired explosively. "You've got the old man's nerve all right. But you've got to show me it isn't bluff."

Regan waited, and Francis was suddenly inspired.

"It is," he muttered. "You've named it. I'm drowning over my back teeth now, and they're the highest out of the wash. But I won't drown if you will help me. All you have got to do is to remember my father and put out your hand to save his son. If you'll back me up, we'll make them all sick . . ."

And right here the Wolf of Wall Street showed his teeth. He pointed to Richard Henry Morgan's picture.

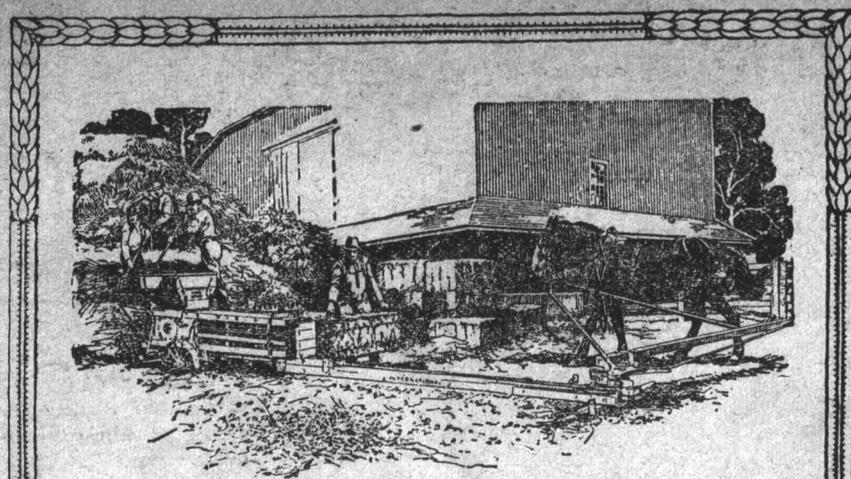
"Why do you think I kept that hanging on the wall all these years?" he demanded.

Francis nodded as if the one accepted explanation was their tried and ancient friendship.

"Guess again," Regan sneered grimly.

Francis shook his head in perplexity.

(Continued next week)



The High Hay Market

THE high hay market is not your local market where hay is plentiful and consumed only in limited quantities. The high market is in the cities where 3,000,000 horses still compete with the automobile and motor truck — and eat hay. The city horse has no pasture or roughage to fall back on—he must eat feed and hay — 15,000,000 tons of hay yearly or one-fifth of the nation's total hay crop!

As a rule the demand for hay in the cities is greater than the supply and consequently the prices are high. Also, the city horse owner wants good hay and is willing to pay for it.

You can reach the high market with your surplus hay if you own an INTERNATIONAL HAY PRESS. International-baled hay is easy to handle — and the bales are neat, snug, and tight, and of uniform weight. They handle well for long distance transportation and successfully withstand rough re-handling in the city markets—solid, well-made bales that do not break easily.

You will be interested in the points of mechanical excellence that distinguish INTERNATIONAL HAY PRESSES—horse and power presses—from all others. There are economy reasons, too. Let us send you a descriptive catalog. Perhaps we can help you increase your hay profits.

INTERNATIONAL HARVESTER COMPANY
OF AMERICA
CHICAGO INCORPORATED U.S.A.

Saws 25 to 40 Cords a Day

At a Cost of 1 1/2 c Per Cord! **Send Today for Big Special Offer and Low Direct Price on the OTTAWA, The One Man Saw, the first made and sold direct from**

OTTAWA LOG SAW

Saws Down Trees, Saws Logs, Saws Limbs and Poles

Factory to user Greatest labor saver and money-maker ever invented Saws any size log at the rate of a foot a minute Does the work of ten men As easily moved from log to log or cut to cut as any wheelbarrow.

4-Cycle Frost Proof Engine—pulls over 3 H-P Hopper cooled Oscillating Magneto, no batteries ever needed Easy to start in any weather Automatic Governor regulates speed Uses fuel only as needed Cheap to operate Saw blade easily removed When not sawing, engine runs pumps feed mills and other machinery Pulley furnished

Cash or Easy Payments—30 Days Trial Shipped direct from factory. No waiting—no delay Let the OTTAWA saw your logs and pay for itself as you use it. **10 YEAR GUARANTEE.** See the OTTAWA at work on your farm once and you will never give it up. Thousands in use every year a booster. Out-saw any other on the market. Does sawing no other saw will. Send today.

Used by U.S. Govt. Schools

FREE Write at once for Special Offer and Low Factory Direct Price. Get our offer.

OTTAWA MFG. CO., 4455 Nood Street, Ottawa, Kans.

Only \$2 DOWN ONE YEAR TO PAY

\$44 Buys the New Butterfly Jr. No. 2 1/2. Light running, easy cleaning, close skimming, durable.

NEW BUTTERFLY Separators are guaranteed a life-time against defects in material and workmanship. Made also in four larger sizes all sold on **30 Days FREE TRIAL** and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save cost.

Albough-Dover Co. 2260 Marshall St. Chicago

SICK ANIMALS

BOOK about Sick Horses, Cattle, Sheep, Dogs and Poultry, mailed free. Address Dr. Humphreys' Veterinary Medicines, 156 William St., New York

Read the Classified Ads —IN— M. B. F.'s BUSINESS FARMER'S EXCHANGE

TOWER'S FISH BRAND

In wet weather you can hold fast to your job if you wear a **Fish Brand Slicker**

DEALERS EVERYWHERE

A.J. TOWER COMPANY
ESTABLISHED 1836
BOSTON MASS

The Michigan BUSINESS FARMER

An Independent Farmer's Weekly Owned and Edited in Michigan

SATURDAY, SEPTEMBER 18, 1920

Published every Saturday by the
RURAL PUBLISHING COMPANY, Inc.
Mt. Clemens, Michigan

Members Agricultural Publishers Association
Represented in New York, Chicago, St. Louis and Minneapolis by
the Associated Farm Papers, Incorporated

GEORGE M. SLOCUM PUBLISHER
FORREST LORD EDITOR

ASSOCIATES

Frank R. Schalk Assistant Business Manager
Milon Grinnell Associate Editor
H. H. Mack Market and Live Stock Editor
M. D. Lamb Auditor
Frank M. Weber Plant Superintendent
Mrs. Clare Norris Women's Department
William E. Brown Legal Department
W. Austin Ewalt Veterinary Department

ONE YEAR, 52 ISSUES, ONE DOLLAR

Three years, 156 Issues \$2.00
Five years, 260 Issues \$3.00
The address label on each paper is the subscriber's receipt and shows to what date his subscription is paid. When renewals are

Advertising Rates: Forty-five cents per agate line. 14 lines to sent it usually requires 3 weeks time before the label is changed. the column inch, 768 lines to page.

Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us for them.



OUR GUARANTEED ADVERTISERS

We respectfully ask our readers to favor our advertisers when possible. Their catalogs and prices are cheerfully sent free, and we guarantee you against loss providing you say when writing or ordering from them, "I saw your ad. in my Michigan Business Farmer."

Entered as second-class matter, at post-office, Mt. Clemens, Mich.

Out Damned Spot

FOR a number of years the laws of Michigan forbade prize-fighting. The pugilists and their roughneck followers were obliged to go elsewhere to stage their bloody bouts. But the 1919 legislature, traditionally kind to anything that savored of commissions, salaries and jobs, passed an innocent-looking law to place all boxing exhibitions under the supervision of a state physical director. This was not done for the purpose of legalizing prize-fighting. Oh, no, certainly not. It was merely to arouse greater interest in matters athletic. It is even said that the ring sports who sponsored the bill induced a well-meaning member of the clergy to go to Lansing and lobby in favor of the measure. How the reverend gentleman must shrink in holy horror when he reads such accounts as follows which the boxing bill made possible. It is a description of the fight between Jack Dempsey and Billy Miske recently staged at Benton Harbor, in easy distance of Chicago, because they don't allow such things as prize fights in that city:

"Before a crowd that jammed Floyd Fitzsimmons' arena to the very stockades, the man who felled Jess Willard in Toledo a little more than a year ago smashed Billy Miske into submission. Given a golden opportunity to win a championship, a distinction that few men achieve, Billy Miske fell a quivering mass of beaten humanity in his own corner at the feet of Dempsey in less than a minute after the third round had started.

"Two crashing punches to the jaw, the first a wicked left that dropped the St. Paul boy like a log for the count of nine and the other, a measured right from which Miske did not recover for fully five minutes, closed yesterday's chapter" in the history of pugilism.

"Just as Dempsey inserted the wedge against Willard that cost the latter his title, so did he open the road to ruin for Miske. Jack played constantly for the head of his opponent for half of the round, then suddenly shifting his attack to the body, drove his right hand squarely against the region of Miske's heart.

"Down went Miske as limp as a damp towel, a look of terror on his countenance. Men with less courage than Miske possesses would have stayed down. But the damaged gladiator, bearing the tell-tale marks of the blow where it struck, struggled to his feet and fell blindly into a clinch. On the spot where Dempsey's fist landed were little red spots like blood blisters in convention.

"In spite of the hot fire that he took from Dempsey in other parts of the body and on the jaw Miske was far from whipped until the champion, with the eagerness of a lion to bring down his prey, drove that right hand punch against his victim's heart with so murderous effect.

"Thereafter, though, Miske was a different man. Life seemed to have almost fled; he seemed in pain as he moved, and he groped about for some sort of a defense for the bruised left side. Billy went to the round's conclusion and ambled up for the third with distress written on his face.

"Dempsey required nothing more than the setting the punch on the heart created. Jack merely swabbed his gloved hands against the body of his opponent and tricked Miske into lowering his defense. Stricken by the fear that Dempsey would assault the injured spot again, Miske dropped his right hand and Dempsey, like a flash, swung his left on the jaw.

"Miske went back on his haunches, then prostrated on the floor. At the count of four he assumed a

position with one knee on the floor while Jimmy Dougherty counted nine. Then he stood erect. In his condition Miske presented a shining mark for Dempsey's right hand that crashed on the other's jaw and Miske fell with his 187 pounds of dead weight in his own corner."

They call this sport. They legalize this thing to attract the youth of the state to the manly art of boxing. They even "supervise" it to see that it is done properly. And then, in the hopes of taking off the curse, the great state of Michigan accepts a large fee from the promoters to spend in athletic equipment for high schools.

Who goes to a prize fight because they are interested in the technique of boxing? Who cares a ram's horn whether Dempsey has a better guard than Miske or Miske a longer reach than Dempsey? A crowd of ring habits would soon grow weary of a long-drawn-out boxing exhibition with heavy-weight gloves, even though the highest skill were displayed. No, the reason men pay \$10 to \$50 for box seats at a prize fight is in the hopes of seeing two men pummel each other into unconsciousness. If blood is drawn so much the better. A broken nose, lips slashed to ribbons, streams of blood pouring down the naked bodies of the fighters,—all add zest to the occasion and make the spectators feel that they have not spent their money in vain. And the crowd has no use for the loser who, faint from the loss of blood and repeated blows upon his heart, does not stand wobbly upon his feet and take the terrific knock-out blow which often sends him either to the hospital or the grave.

Prize fighting is a damnable spot upon Michigan's bright escutcheon. Out with it.

Pooling Wheat

THE NATIONAL Board of Farm Organizations will have nothing to do with the suggestion that the farmers effect a gigantic wheat pool thru their national organizations and control the movement and prices of the nation's wheat crop. The argument of this farmers organization is that such a proposal even if it could be carried out which is doubted would be in effect if not in purpose a violation of the anti-trust laws.

This may be true, but if it is true, the laws will have to be amended to permit of this progressive marketing step being taken. The farmer has no desire to so control the market on his products that he can fix the selling price without regard to the cost of production. That power would be dangerous to the public no matter in whose hands it were placed. But the farmer does want a better system of marketing farm products. He does want to prevent over-production, speculation, flooded markets and price fluctuations so far as possible. If the adoption of a plan to eliminate these evils brings to him power that might be employed adversely to the interests of the public, the plan would have to be carefully supervised by the government.

When unorganized and un instructed farmers flood the market with a crop, confusion immediately reigns. Elevators, railway systems and terminals are overwhelmed with the flood and it takes day and some times weeks to restore the marketing mediums to normal condition. Prices go down, way below cost, and those who have not sold on the crest of the market, lose. But the farmer's loss in this case is not usually the consumer's gain, for speculators gather up the cheap crop, hoard it, and when the market has returned to normal, sell it at higher prices.

When the farmers become sufficiently organized there ought to be a way provided for the pooling of their non-perishable crops, by states. These crops would not have to be actually moved to a common storage place, but could be kept in storage on the farms or in farmer-owned elevators. According to a plan based upon a number of average year's experience, a certain proportion of this crop would be marketed each week or month, the object being to market the crop regularly and in an orderly way throughout the entire year, taking into consideration the condition of the market, price, etc. It is patent that when prices are low there is more of the crop than can be readily be consumed, and vice versa.

The object of such a plan would be to stabilize the market and prices by placing the crops on the market in as near the right proportion as they are needed. In this manner large losses due to sudden price fluctuations would be overcome and everyone concerned, with the possible exception of the speculators who profit by the unsystematic marketing methods of the present day, would be benefited.

Apples

NOTHING reveals more clearly the weak spots in the farming business than the present and prospective condition of the apple market. The production this year is far in excess of last year's. The local demand has already been supplied. The foreign demand is potentially large but the farmer has not learned how to develop it. So tens of thousands of bushels of marketable apples will be left on the trees because it is cheaper to let them rot than it is to harvest them and let them go begging for a market. The same trees that last year yielded the farmer anywhere from \$25 to \$50 will yield nothing this year except a little hog food and cider.

This is not a problem of production. There is no way as in the case of grain and vegetables to reduce the production by cutting the acreage. But there are any number of ways in which the farmers can if properly organized utilize their apple crop, year in and year out, with profit.

Literally millions of people who like apples and would buy apples for winter consumption will go without them this year even though they are left to rot in the orchards. The greatest enemy that the apple industry has is the cut-throat commission merchant who puts locally grown apples on a price par with imported apples from Washington and Oregon. He seems to have the notion that the only way in which people will buy apples is from a fruit stand at five cents apiece. No effort is made to cultivate a bushel or barrel demand, and the poor consumer shrinks with horror at the thought of laying down a barrel of apples at five cents per apple.

There ought never to be an over-production of apples in a great apple-eating country like this. The apple growers should be so organized that they could far in advance of any harvest develop a market for every apple to be grown. It is not even necessary to talk about utilizing the apple for its by-products, for when the public learns that a way is provided whereby they can secure good apples at a reasonable price, no one will think of spoiling a big, luscious apple by drying it or making cider out of its juices.

Where Were the Women?

WE ARE disappointed. We expected that the women of Michigan would use their right of franchise in the primary election. But they didn't. Reports showed that only about one woman to every ten men voted.

We are not going to criticize although we know full well that the farm women had it in their power to decide every political contest in the primary. They had it in their power to prevent the defeat of several legislative candidates who lost by a handful of votes because the machine in the towns and cities went solidly against them. They could easily have named the next Governor of Michigan.

The ballot has been given to woman after a long and strenuous fight. The most persistent argument against it was that the women didn't want to vote. Do events prove that this was a good argument and that woman will not avail herself of her right of franchise? Have we labored so long to give her something she does not want or appreciate? Or is her failure to vote merely a natural timidity which must be gradually overcome? We prefer to believe the latter, and therefore, we have no regrets for the part we have played in placing woman on an equal footing with man. As time goes on and the wives and mothers reach a fuller understanding of their responsibilities as citizens, we expect to see them taking a potent part in politics and striving through the ballot for better and cleaner government.



What the Neighbors Say



MILO CAMPBELL'S FINAL WORD ON STATE NEEDS

THE MICHIGAN BUSINESS FARMER: I believe that a statement is due to the farmers of the state for the splendid support that accorded me in the late primary. It was disappointing that so few of them voted, but there was perhaps a reasonable excuse for most of the absent ones. Scarcity of help and distance to travel were the chief causes. The late closing of polls in the cities, giving voters the privilege of voting after working hours aided the Detroit and mining districts in this respect.

I believe that fully seven out of eight farm votes cast were for me. I am very grateful for this expression of confidence. The chief cause of my defeat was the lies put in circulation during the last week of the campaign and that found way into every paper in the state of any wide circulation.

That I had promised Governor Sleeper appointment as United States senator should a vacancy occur, that I had become entangled in some way with the Sleeper administration, that Mark McKee was supporting me with a grip on the administration if I became Governor, that Col. Fred Green of Ionia was also supporting me and that this spelled danger. These were lies of the deepest kind, and sprung out an hour when they could not be refuted in time to recover.

Governor Sleeper's appointees were almost entirely for other candidates, and especially those who had an army of deputies to use in the field. I am told that Governor Sleeper personally favored me, but neither he nor any one else ever intimated that he expected any recognition for the same, nor did I ever promise or hint the same. The same doctrine would eliminate Senator Harding from the race today.

So far as I know every ex-Governor was at least my friend if not my supporter. Indeed I am very proud of the class of support I received in the state and the character of the men.

Mark McKee, if he supported me, did so without the slightest promise or intimation of a promise of any kind either direct or indirect. I have probably fought Mark McKee harder in the field of insurance than any man in the state, and I am unchanged in my opinions about the injustice being done the patrons and the people of Michigan by these combinations. They supported another candidate. They sent letters broadcast to their forty thousand agents in the state to support another man for Governor than myself.

Col. Fred Green of Ionia did support me and I am pleased to acknowledge the loyalty of that support. We have been personal friends since we served together in the Pingree administration. He never suggested that his support was for any ulterior purpose, that he wanted anything, and I am convinced that he did not. There never was a candidate for any office on earth more free from promises than was I. But the dirty work did its business and effectively. I deem it a duty, however, to tell my friends who gave their support that my campaign was conducted honorably and according to the best of political ethics, without abuse or intrigue.

There is work ahead for all of us who want to see things done for Michigan. Men don't count so much as accomplishment. Insurance ought to be reformed in the state and save to the insured about eight millions of dollars that now find lodgment annually in the pockets of middlemen and profiteers. I know full well that this will not be done, the cards are already stacked.

There should be a concentration of Boards and commissions that would save millions to the taxpayers. This will not be done. There are too many jobs that would be cancelled. Instead of half a dozen men cavorting over the state visiting the same town the same day for a few minutes work each, one man with an

eighth grade school education, should be attending to all of it.

Our present state system applied to any industry in Michigan would bankrupt it in two years.

Public printing should be cut down to one fifth its present volume and gotten out soon enough to be worth something to the public. Thus saving half a million dollars in printing and clerk hire.

The anti-trust laws of Michigan, that were adopted to curb corporations, are now being used only to threaten and menace farmers. They are threatened with prosecution if they undertake to co-operate. Senator Harding has sounded the keynote that should call for the amendment of that law and make it possible for farmers to co-operatively sell their own produce without corporate organization.

There are scores of things to be done for Michigan and some day they will find expression.

I am grateful for all the support that came to me, for there was not a vote, not a word of praise, not an influence that had back of it, the slightest encouragement from me that it would be repaid with preference. That is the kind of help that makes me satisfied with the result.—Milo D. Campbell, Coldwater, Mich.

We think the rural vote showed clearly that none of the farmers took any stock in the last hour attacks upon Mr. Campbell. It takes no shrewd political observer to discover the motives back of the support alleged to have been given Mr. Campbell by Sleeper, McKee, et. al. It was known some weeks before the primary that the race lay between Campbell and Groesbeck. The latter had been a constant thorn in the side of the Sleeper administration, and obviously the Sleeper crowd could not support him. At the same time they did not care to back a probable loser, and it was perfectly natural that they should turn to Mr. Campbell.

Milo Campbell does not have to tell us that he made no promises to the Sleeper crowd or anyone else in exchange for their support. We already know it. Nevertheless we are pleased to present Mr. Campbell public disavowal of the charges, as well as his pointed discussion of the important issues confronting the people. Michigan has lost a great opportunity in her failure to put Mr. Campbell in a position where he could carry out his progressive views.—Editor.

JAILING MEN FOR TELLING THE TRUTH

Would you please allow me a word or two in regard to P. P. Miner, Saginaw County, Mich. I am a Debs man myself. I think any man has a right to vote for whom he likes, although some say, "If you vote for Debs, you vote for dividing up." I

would like to ask if we haven't been dividing up for years and we want to stop that dividing up, vote and incorporate a system that pays the laborer according to what he produces. If he produces \$5 or \$10 per day let him get that and not let the high cost of living consume more than his wages will stand. Stop this profiteering and stop some of the press lying about the situation of things. Make a law so strict and binding that they will have to tell the truth and then when a man tells the truth don't jail him for it. The constitution demands free speech, free press and the right of peaceable assemblage, which we don't get today. A few of our head officials ignore the constitution and accomplish things to suit their own graft and greed. What do they care for the people. Its "big I" they are looking after; not "you." We want men that will work for the interest of the people not for their own pockets. A few men like "Lincoln."—S. H. Stagle, Wexford County.

That's an ambitious program, friend Stagle. But it's all right. I have always thought that the solution to most of our governmental ills was not so much in a radically different system than we now have as in the election of men who will serve the people without fear or favor. But they're hard to find.—Editor.

SOCIALISM AND CHRISTIANITY

I do not wish to enter the discussion concerning parochial schools, but I do wish to criticize William Bennett for his article which appeared in the August 28th issue of the M. B. F.

He says: "We can understand this in Anarchists, Bolsheviks, Socialists and the like, for they hate anything that is a strong bulwark and support to our established form of government, but we fail to understand it in any class of Christian people." And again: "Of course if you are a Socialist, nothing more need be said. We can understand your venom."

Now just what does Mr. Bennett mean? It certainly appears that he does not class the Socialists as a Christian people. If such be the case, nothing could be farther from the fact. As a class, the Socialists are just as religious as any other class. Let me quote from the Encyclopedia Britannica: "The ethics of Socialism are identical with the ethics of Christianity." Obviously then, Mr. Bennett's remarks are the result of either ignorance or a desire to slander a class that is offering a real remedy for the ills of our society.—C. L. Halfka, Midland Co.

PAROCHIAL STUDENTS TAUGHT LOVE OF GOD AND COUNTRY

I am a girl fourteen years old and a reader of the M. B. F. I have seen a good deal in your paper about the parochial schools and I would like to say something too. I would say to that boy from Grand Blanc that he knows very little about parochial schools or Catholic church either. Catholic children are taught in their school the love of God, the love of country, and to love their fellowmen. There are no scandalous stories told us about any Christian church because we have no time for anything like that I do think that boys who talk like and think like that boy were taught Christianity and educated would be ashamed to be talking like they do. I suppose if that boy had lived at the time of the Revolutionary War he would have called our glorious George Washington and his little band of patriots Bolsheviks or worse as he was calling the Irish. We Americans know how to sympathize with any country wishing freedom. I also can speak very highly of our foreigners he rated so low. During the period of the War those boys enlisted in great numbers and did not wait for the draft. They also bought Liberty Bonds beyond their means as did other Catholics I know of. I would say to that young man that he better wake up and step around and find out thing before he writes about them and I would also say that he better get acquainted with some Catholic people who are living a great deal better life than he is for if he has read the bible he knows what it says about scandal-mongers. I don't believe F. H. Carpenter knows what he is talking about.—Inez I., Bay City, Michigan.

BACK TO THE FARM

I am one of several thousand who was recently laid off at the Overland plant until Nov. 1, but it is the end of city life for my family if we can locate on a farm. I tried to make myself believe we were prospering but actually we were becoming poorer day after day. Now we want to return to the farm. Tell us how to get there. I should like an interview with some good Michigan stockman or fruit grower. If you can place me in communication with the above I will certainly will appreciate it. I shall consider it a personal favor if you can find it convenient to place me in touch with any stockman or fruit shipper within your circle of friends who may be looking for an honest, trustworthy man. I shall be pleased to furnish you with any further particulars you may desire.—L. C. W., Toledo, Ohio.

Knowing that many of our readers are short of farm help we are glad to help both them and yourself out by publishing your letter. I think you have made a wise decision. The name and address of our correspondent will be supplied upon request.—Editor.

A STANDARD WAGE

Your "unemployment" editorial shows that your thinking on the subject has progressed far beyond that of most editors who consider themselves progressive. The next question is how to fix such standard conditions as you suggest and maintain the guarantee of a steady employment under them. Several questions bob up right here. So long as the price of any commodity is fixed by speculators in open market without regard to production costs, how can the industry that produces it guarantee steady employment to its workers at any standard wage? On the other hand, if prices of food, clothing, etc., are to be fixed by capitalists who own mills and factories on a basis of "all the traffic can bear" of what use is it to fix any standard wage? In short what does a guarantee of steady employment at standard wages amount to unless accompanied by a guarantee of some fair and definite relation between wages and prices?—Stacy Brown, Ionia Co., Mich.

I well recognize the obstacles that stand in the way of a standard wage. As you have pointed out it is futile to fix any kind of a wage that is to be eaten up by simultaneous increases in the prices of the commodities which the wage must purchase. We are a long way yet from discovering and maintaining a balance between costs of production, wages, and selling prices.—Editor.

The Week's Editorial

IS THERE AN OVER-PRODUCTION OF WOOL?

The average sheep in the United States shears about 5.5 pounds of wool. The average person in the United States has been using every year for the past twenty years an average of 5.5 to 6 pounds of wool. In order to produce all our wool at home, we ought to have in the United States about one sheep for every person. In other words, we ought to have in the United States today about 110,000,000 sheep instead of slightly less than 50,000,000. As our population has increased in the United States, there has been a constant tendency toward fewer and fewer sheep. Twenty years ago we had 60,000,000 sheep and 75,000,000 people, but today we have less than 50,000,000 sheep and more than 100,000,000 people. Twenty years ago we had to import on the average every year about 150,000,000 pounds of wool. Today our people have so increased and our sheep have so decreased that it is necessary to import nearly three times as much as we did twenty years ago. For the year 1920, our home sheep produced a total of about 360,000,000 pounds of wool and we imported a little over 400,000,000 pounds of wool.

We are dwelling so extensively on

these rather dry figures in order to illustrate the fundamentally weak position of farmers' wool pools. We heartily believe in the pooling of farm products, but because of the fact that we produce only 40 per cent of our wool at home it will be necessary for the men who handle farmers' wool pools to exercise an unusual degree of intelligence in determining just what price to accept. Even though the farmers of the United States had their wool in one big pool amounting to 150,000,000 pounds it would still be impossible to have an absolutely dominating influence on the wool prices. The wool from Argentina and Australia dominates the international wool trade. From the standpoint of controlling farm product prices by pools it would seem that there is a much greater chance of success with wheat or corn or hogs than with wool. The only advantage which wool has from a pooled standpoint is the fact that it can be stored so easily. We hope that the farmers of the United States will not come to any definite conclusion as to the desirability of pooling farm products merely from their experience with wool pooling. The wool situation in the United States is altogether different from the situation which exists with any other farm product.—Wallace's Farmer.



The Farm Home

A Department for the Women



A MESSAGE TO FARM WIVES

By Mary Queensbury

AS WE scan the columns of newspapers and magazines we not infrequently meet a lot of stuff that we are tempted to call "hot air;" things that are unreal, impractical, or able to benefit only a few, if, in fact, any at all. Things that the writer could scarcely have believed in himself, or if he did, so much more's the pity for him.

I recall reading a war-time cake recipe written by an individual who evidently deluded herself into thinking she was saying something to benefit humanity. She told of a fearful strait she once found herself in when, with no cake for tea and the egg basket nearly empty, unexpected guests arrived. She racked her brain and concocted a recipe that called for only three eggs. Poor thing! If only she might have known that more cakes are made with less than three eggs than with more, she would never have made herself ridiculous by publishing that absurd recipe with its absurd explanations and excuses. Whatever error I fall into, I trust that I may never utter words that ring of insincerity, or chatter and babble, and let fall from my pen a lot of froth and bubbles.

I make these explanations least the message I have for you dear sisters, may sound sentimental, or "booky" and stagey. But I know what I am talking. However, lest someone may, in some slight measure, misinterpret my words, let me say at the outset that I am not opposed to higher education. One of the finest, noblest, most inspiring things of this earthy realm is the pursuit of knowledge. But there are other things worth while.

Listen while I tell you a bit of biography, a brief outline of a woman's life, and when you have read it perhaps some of you who are downcast and discontented with your lot will be better able to see those blessings that are now surrounding you. I am not writing fiction, but facts, hard and pitiless.

This woman of whom I am speaking was born and brought up in the rural districts. When only a child, away back in the district school, it was noticed that she had an unusually strong intellect and every requisite for a fine student. But born of poor parents, her chances for education looked dark, and about all that friends and relatives could do was to express regrets that she could not go through school. But while these friends and relatives were talking thus, our little lassie was busy making plans of her own, which later she carried out to a letter. It would require a large number of weighty volumes to tell the story of hardship and struggle. Suffice it to say that upon a certain beautiful evening in June, amid music and flowers and congratulations, she received her High School diploma. In the fall she entered college with just money enough to defray railroad expenses, buy her books and pay for a fortnight's board. More volumes would be required to tell the story of her college days. Joyous ones, to be sure, but clouded by too much work and too little money. Here is one incident of her life, an index to the whole. While passing a restaurant where once she had slaved to earn her existence, she told her companion of a cistern in the rear, and of how she used to stoop down to dip out the water and wish that she might lose her hold and fall in. She would welcome anything or any place that would give her rest but never for one moment entertained the thought that she could stop. Urged on by her one great ambition, encouraged by friends, praised by well meaning professors, she went the mad pace, working when other students were studying, and studying when others were sleeping. Many

The Uncultured Husband

IT LOOKS as if not many of our readers are troubled with the problem of an "uncultured" husband, or else they prefer to give up their own social likes to reforming their husbands. We are going to hold this contest open one more week and then it will close. So you farm women who have succeeded in transforming your husband from an animated, sit-by-the-fire, stick of wood to a human being who goes with you to sociables, picnics, the movies, and who endures company and other social pleasures for his own enjoyment as well as yours,—get busy at once and tell us how you did it. Or, if you are still at the job, let us know what hopes you have of succeeding.

Other Good Suggestions to Come

We have some other dandy suggestions for prize contests which will be announced in due season. We are not going to even suggest them now. But we do want you to know about the big Home Improvement number which we are planning to issue this fall. We are telling you about this because we need your help to make it interesting and helpful to our readers. In that issue we will talk about the many inexpensive conveniences which make housework easier and the home more comfortable. We want letters telling your actual experience with such conveniences as the electric or gas lights, washing machine, improved churn, carpet sweeper or vacuum cleaner, running water, fireless cooker, steam cooker, electric iron, electric cooking utensils, furnace, etc. Any modern appliance, whether purchased or home-made, which you have used to advantage, will, I am sure interest other readers. Tell us about it. For the best letters on this subject we offer the following prizes: 1st prize, \$5; 2nd prize, \$3; 3rd prize, \$2 and \$1 for each letter published which does not secure one of the first three prizes. These letters may be mailed any time before Oct. 15th.—Editor.

were the times when she awoke in the wee small hours of the morning and lifted her head from a copy of Greek or Latin or higher mathematics, when the poor tired brain had gone on strike and refused to do her bidding. But her mad passion for knowledge was as intense as the drunkard's craze for strong drink. On and on she struggled, until upon another fair evening in June, amid more music and flowers and congratulations, she grasped her degree of Bachelor of Arts. Then followed teaching and more study; courses at the State Normal and various State Universities with sometimes hard physical labor intervening. But one day, without any flowers or music or congratulations, the crash came, and she left the halls of learning a wreck with little to show for her years of persistent labor save her shattered nerves and her worn out brain.

In concluding this little narrative I've this message to leave with you, my dear sisters, plodding away on the old farm: You who married those boyhood sweethearts back in the old country school, who pulled you out of snowdrifts and carried you over mud puddles, don't go around sobbing because you did not chase off to the city to seek your fame and fortune, or climb the steep ladder of higher education. Be more content with what you have, and place a higher value upon that true-hearted, hard-working husband even if he does greet you morning, noon and night in blue jeans instead of in strictly

tailored garments. The woman of my story had her boy sweethearts also, for she was as fair in form and feature as she was strong in intellect; but nothing so ordinary or commonplace as marriage appealed to her. She sacrificed all things on the one altar of learning. Occasionally she meets some of those old sweethearts; fine men, with homes, families and bank accounts, and many another evidence that with them life wages well.

Count your blessings, you women and mothers of the rural districts. Good-bye, until I come again.

CREAM PUFF RECIPE

Put half-pint hot water and two-thirds cupful butter over the fire; when boiling stir in one and one-half cupfuls flour, and continue stirring until smooth and the mixture leaves the sides of the sauce pan; remove from fire, cool, and beat

thoroughly into 5 well-beaten eggs. Drop into 5 warm greased tins (or dripping pan) a tablespoonful in a place. Brush over with the white of an egg and bake 10 or 15 minutes in a quick oven. When cold, slice off the top fill space with cream and replace top. Cream for inside: Take one pint milk, place one-half into a tin pan and set in boiling water; reserve from the other half two tablespoonfuls to mix with eggs, and into the rest while cold mix one cupful flour until it is smooth; when milk is hot pour in the flour and stir until it is thicker than boiled custard; then beat well together the 2 tablespoonfuls milk, two eggs, one cupful of granulated sugar, a level tablespoonful of butter and a teaspoonful vanilla or lemon, add gradually and continue stirring briskly until so thick that when cold it will drop, not pour, from the spoon. The puffs may be kept on hand. Then make the cream fresh, let it cool, and fill as many as are wanted.

Home Love

THERE'S something here in the atmosphere

*Of this old home place, you know,
By golly, that swells round the heart
and tells*

*The dreams as they come and go!
And so I say that whichever way
The farthest pathway calls,
I'd rather be right here, you see,
Where the hearth light fades and
falls.*

The evening's blent with a sweet content

*And lit with a rosy hue
Of happiness that is, I guess,
Sufficient for me and you.*

And under the light of the lamp at night

*Old stories are lived again,
From pages torn and thumbed and worn,
Of iron hearted men.*

*We rim the earth in a voyage of mirth
With some old raconteur*

*Or turn the page that some poet sage
Has lit with a strange allure,
And then ja're back by the beaten track*

*That home love lights, you know,
To joke and jest our heartiest*

By the hearth light's changing glow.

That's why that here there's an atmosphere

*That's filled with something quite
As deep and rare as the storied air
Of islands of delight;*

A something blent with a sweet content,

*And lit with a rosy hue
Of happiness that is, I guess,
Sufficient for me and you.*

—Jay B. Iden.

HELPFUL HINTS IN PUTTING UP THE SCHOOL LUNCH

The school lunch problem is one that deserves very careful thought and planning. With the short noon periods or perhaps the distance from home, a large number of children find it necessary to carry lunches. This is one of the most important meals for the child and comes at a time when he needs considerable nourishment. There are usually from four to five hours between breakfast and the noon meal and during this time there is more or less mental strain. Fatigue follows unless plenty of nourishing food is taken. This is the time to form good food habits and everything possible should be done to encourage the child to select and eat the necessary kind and the amount of food. "Every child has a right to be as healthy as present knowledge can make him. Proper feeding is one of the chief factors in health."

A hot lunch at noon is best, or at least one hot dish. For the benefit of those who carry lunches, it might be possible to provide the school with a gas plate, tables, cupboard and the necessary dishes and utensils. In this way a hot dish such as soup, cocoa, hot milk or hot malted milk could be prepared and sold for a small sum and would add much to the lunch brought from home. The older children can be taught to prepare and serve these simple hot dishes and thoroughly enjoy having a part in it. A noonday lunch conducted in this manner adds much to the social life of the school a part too often neglected. This scheme has been carried out very successfully in a number of city and rural schools and more than repays for the additional work in better health and increased efficiency.

The following may offer suggestions as to the kind and variety of foods for the lunch-box: sandwiches made of whole wheat, brown, nut, rye, bran or white bread, muffins, plain or cinnamon toast. These may be varied by the use of eggs, cottage cheese, cream cheese, jelly, marmalade, peanut butter, fruit butter, sliced or chopped meat, with egg or lettuce makes most tasty sandwiches. Other foods such as baked beans, cooked eggs, deviled eggs, potato or cottage salad, fresh fruit, stewed fruits, custard, plain or sponge cake, gingerbread cookies, graham or oat meal, coarse food and fruit. Bread or muffins should always be included in the lunch. Too much cannot be said regarding the use of milk and milk dishes. A child should have at least a pint of milk a day and a quart is better. A bottle may be provided for carrying milk if it cannot be purchased at school. Sandwiches, cake, cookies, etc., will keep from drying and be more appetizing if wrapped in oil paper. With just a little thought and care the lunch box may be made very attractive. Enough time should be allowed at noon, that the lunch period need not be hurried and for a short relaxation out of doors. A few sample lunches are given below.

- Cream Tomato Soup Crackers
- Lettuce Sandwiches
- Graham, chopped meat sandwiches
- Potato Salad
- Apple or Orange Cocoa
- Baked Beans Brown or bran bread
- Stewed or canned fruit
- Hot Milk
- Egg or Cottage Cheese Sandwich
- Milk or Malted Milk
- Banana Cookie or Cup Cake
- Plain or Cinnamon Toast (cold)
- Deviled eggs Stewed prunes
- Milk or Cocoa
- Graham cracker and peanut butter sandwich
- Jelly sandwiches Apple Milk

ANOTHER THRESHING LETTER THAT IS WORTH READING

Dear Readers:—The idea that threshing day could be made easy for the "busy housewife" had not occurred to me until a few days ago, when Uncle Sam's rural mail carrier left the August 17th number of M. B. F. at our door.

I merely glanced over the pages of each of the papers of that day's mail until I came to the Woman's page of M. B. F. when there I found in black and white the very problem which at that time was confronting me. I looked its remaining pages over very carefully, but found that for the solution I must wait until the next number, which, alas, would be too late for this year.

However, it started me to thinking and the more I thought about it the more certain I became that it could be done with much less strenuousness than I had been accustomed to.

Mr. Thresher and gang were due here on Tuesday evening so it was up to us to furnish them with breakfast and dinner the following day. So on Tuesday morning I began my preparations early.

I baked bread, cookies, doughnuts, crusts (or shells) for lemon pies, and a pudding made of boiled rice, eggs, sugar, raisins and creamy milk, which is very nice to serve cold.

I prepared and cooked until tender a large kettle of string beans. These could then be very easily and quickly warmed and seasoned for each meal as I needed them. Apple sauce and pickles too were prepared the same day and in the evening I pared enough potatoes for both meals, arranged the table, put meat and rolled oats into the cooking dishes all ready to put onto the stove for breakfast.

After the breakfast dishes were washed, they were re-arranged on the table for the noon meal. I then made the lemon filling for my pies, baked a sponge cake, and prepared the meat, a thickly cut steak, which I had ordered over the telephone to be sent me by parcel post. Into this I pounded salt, pepper and a heavy sprinkling of flour, after which I placed it into a very hot frying pan with a liberal amount of lard and butter, allowed it to sear to a good rich brown, then covered it with boiling water and left it simmering until time to serve at noon.

I now found that I had quite a little time left to rest before it would be necessary to begin further preparations for dinner.

Thus my twelve year old daughter and I, quite easily served the following breakfast: Potatoes, sausage, gravy, rolled oats, string beans, cookies, doughnuts, coffee, pickles, bread and butter. For dinner: Potatoes, beef steak, gravy, beans, cold slaw, rice pudding, apple sauce, pickles, lemon pies, cookies, cake, doughnuts, coffee, bread and butter. I believe Mr. Thresher and gang enjoyed these meals as much as though everything had been prepared the same day and am sure I did a great deal more.—Mrs. W. S. Bronson, Michigan.

PUT YOUR WORK ON BUSINESS BASIS

If the farm woman is to put her threshing day work on a business basis the problems she has to consider is this: How, with the minimum amount of labor and expense, can I prepare a thoroughly nourishing meal for laboring men?

In order to do this she must take stock of material in cellar and garden and of the equipment with which she has to work. For instance, the woman who has a fireless cooker or oil stove might have hot baked beans while the woman who had to use a wood or coal stove would choose something that would require less heat at meal time. She must plan carefully every step in preparation and serving of the meal if she is to save labor and nerve strain.

I use oilcloth instead of linen for my table; plan the meal so there are no side dishes, thus eliminating both dishes and labor of serving; prepare as much food as possible the day before; use a teawagon or tray in taking all food and dishes to and from the table.

This is my last year's menu: Roast beef, brown gravy, mashed potatoes, sliced cucumbers, buttered beets, bread and butter orange con-

serve, chocolate pie, cookies, iced tea, coffee.

The cookies and pie shell are made the day before. The night before the cucumbers and beets are brought from the garden, the potatoes are scraped and allowed to stand in cold water.

Threshing day, as soon in the morning work is done I make the cold tea and pie filling and lay the table, putting a cover over it until meal time.

About half an hour before meal time I slice the cucumbers into vinegar, cut the bread and put in bread box while the men are washing. I mash the potatoes and place all food with the exception of tea, coffee and pie on the table, these I serve from a side table.

After dinner I carefully scrape and stack the dishes, wash in hot soapy water. As each dish is washed I dip it into hot water and set up to dry. If the day is very hot I dip the dishes in cold instead of hot water.—A. G., Greenville, Mich.

PLANNING MEALS FOR THE DAY

For breakfast have hamburger steak, warmed up potatoes, bread and butter, coffee and breakfast food if desired.

For dinner, if I know they are coming a day ahead, I make sure to have plenty of good bread on hand and butter that has been packed a week or two, because it goes so much farther. Always have plenty of pickles, pare your potatoes the night before and put them in water and change it in the morning. Have in mind sometime ahead what meat you are going to have and select it the day before and partially cook it. Make your cookies or fried cakes the day before and then all you have to

do the day you thresh is to bake your pies for dinner. You could have all the conserves and jelly you wish and baked apples go very good. Cabbage, vegetables and baked beans go very good too. Be sure and have all your bake dishes washed before dinner.

After dinner the first thing to do is to put away the victuals and make sure to put to soak all dishes that are dry. Take a dry piece of bread and clean all the others off and stack them, put your smaller dishes where you can wash them first. Be sure to have plenty of hot water and soap. Rinse well with boiling water and dry with clean dish towels. Gather all silverware and glass and wash and dry as usual.

For supper I usually have some good pork or apple sauce cake and cookies. Use your left over meat and cut in small pieces. Make a gravy to cover and put in a pan. Make biscuits rolled thin and place over top and bake. If you have plenty of potatoes they can be made into a salad if desired to do so.—Mrs. L. O. C., Litchfield, Mich.

SOME APPETIZING MENUS

Following are some menus I have served for threshers with a minimum of labor on the days the meals are served.

Menu I

Green corn on cob. Boiled potatoes
Roast beef or pork Gravy
Sliced cucumbers with salad dressing
Pumpkin or custard pie
Sliced ripe tomatoes
Coffee Bread String beans, fried
The corn, beans, tomatoes and potatoes could be gathered the evening before, while the crust for the pie could be rolled and placed in tins, the pumpkin cooked and sifted, and

dressing for salad prepared the day before. Carrots may be substituted for pumpkin.

In the morning the pies could be baked and the beans boiled ready to fry in butter while cooking the dinner.

When the dinner is started in the meat can be roasted in the oven, and the top of the stoves is left for the vegetables and coffee.

Menu II.

Baked Beans Boiled potatoes
Creamed Cabbage Pickled beets
Fried Chicken Gravy
Lemon or Cream pie or Rice Pudding
Coffee Bread Cottage Cheese

For this menu the beans could be soaked, the beets prepared, the pie shells baked, and the chicken cleaned the day before.

Menu III.

Creamed carrots Mashed potatoes
Escalloped Salmon
Cabbage salad, cream dressing
Corn Fritters Cookies
Ripe Fruit Bread
Coffee Cottage cheese

The last menu requires less work but most of it comes on the day the meal is served. It would do for a supper menu.

In preparing all the above menus I have assumed that bread, butter, cookies, etc., would be ready a day or two before the day one expects the men. In them all side dishes have been eliminated thus saving time, table space and dishwashing.

Of course the items could be re-arranged according to the vegetables and fruit the housewife has on hand. Personally I do not favor fruit pies for unless they are baked fresh they are apt to be soggy.

Hoping this may help some puzzled housewife, I am yours to help.—B. N., Moddersville Michigan.

THE SIGN OF  QUALITY

Best Wheat—Perfect Milling That Make a Perfect Flour

There is a greater difference in flour than even women of experience in home baking realize.

The difference in quality always comes out in the baking. You could not induce thousands of women in Michigan to use any other flour than

Lily White

"The Flour the Best Cooks Use"

Look for the ROWENA trade-mark on the sack

They stick to this flour year after year because it makes for them deliciously flavored, white, tender bread, rolls, biscuits, and flaky, melt-in-the-mouth pastry. It is an all-around flour. There are definite reasons why LILY WHITE is so good.

In the first place the finest wheat is used—a grain of just the right balance, neither too hard nor too soft. It has strength and nutrition to build health and make a 100% food. As we mill this wheat, it is cleaned four times, scoured three times and then washed before going on the rolls for the first break. Only the hearts of the grain are used—the very best part. The most careful, scientific and sanitary milling converts the wheat into finished flour of wonderful texture, uniformity of granulation and color. Flour could not possibly be made better.

Prove our claims for LILY WHITE by giving it a trial. It is guaranteed to give you absolute satisfaction. Ask for it at your dealer's.

VALLEY CITY MILLING CO.
GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years"

The Children's Hour

LET'S HEAR FROM THE BOYS

I USED TO ask Aunt Clare why more of the boys did not write to her, but she didn't know the reason. I suspect that it was because most of the stories printed on this page have been for the girls and the boys weren't interested in them. But I intend to give the boys a chance to say a word, and I will try to divide up our page from now on so that about half of it will interest girls and the other half boys. As a starter we are printing this week plans by Frank Solar for making a wheel-barrow. Where is there a boy who has not at some time wanted to make a wheelbarrow? Well, here's your chance. Mr. Solar tells you just how to do it.

We have in store for both our boys and girls some thrilling and fascinating stories. We haven't room this week to tell you much about them but keep your eyes open and watch for them.

Well, I suppose school has started for most of you. Don't I wish I was going to school again in the little red school house in the woods. You may think that's funny but most people when they grow up have the same wish. And you will too. When school starts there's plenty to write about, and I expect to hear from hundreds of my boys and girls this fall and winter.—UNCLE NED.

CHILD'S TOY WHEEL-BARROW

By Frank T. Zolar
Instructor, Dept. Manual Training,
Detroit Public Schools

WHILE you are working about your garden, little brother or sister will want to help, but, of course, they cannot be of much assistance to you unless it is to carry away the stones, pieces of sod and other things you do not care to have in the garden.

With a little red wheelbarrow the little folks can have great fun and will enjoy working with you.

It is not necessary to make the wheelbarrow the same size as the drawing, because if it is thought too small the dimensions can be doubled making a good-sized wheelbarrow.

Start work by making the handles, they are 3-4 inch square and 28 inches long. About six inches from the ends round or chamfer the corners making a good hand hold.

Next make the bottom board. It is squared up 3-8 inch thick, 8 inches long and 7 inches wide. The next operation is to taper the ends making one end 6 inches and the other 8 inches. The bottom is braded or nailed to the handles 3 1-2 inches from the ends.

The two sides are made of 3-8 in. stock, and like the bottom are first squared up 3 1-4 in. x 9 in. and later formed by cutting off the ends as shown in the drawing. They are cut to a line drawn from one corner to a point located 7-8 in. from the opposite corner. The upper corners on the back end of the side pieces are rounded to a 3-4 in. radius.

Brad the sides to the handles and the bottom board, after this make the front, it is 3-8 in. by 3 in. by 6 in., and must be fitted between the sides and planed to fit the bottom board without a crack. The upper corners of the front piece are rounded to a 1-2 in. radius.

Make the legs and fasten them with long brads to the handles and sides. The brads if long enough, might be clinched, with the

When Eels Walk

(By Francis Rolt-Wheeler)

NOW, don't squirm, but—have you a pet eel? Odd sort of pet, you think? Perhaps. But the eel is one of the queerest creatures in the world, and despite his snake-like appearance, he is responsive to affection and makes a good pet. Of course, that isn't the most important thing. What is really important about the eel is that he is a good deal of a puzzle. Naturalists, all the world over, are trying to find out about the eel, and information from anywhere is welcome.

Early in spring, in most parts of the country, young eels about two inches long and about as thick as the lead of a lead pencil go swarming up the rivers from the sea. They seek ponds or still reaches of rivers and stay there for about eight years, becoming a yard long. Then the sea calls them and they make their way back to the ocean, sometimes crossing long stretches of land, and traveling on dewy mornings. This is the famous eel-walk or eel-fare.

But what is puzzling about the eel is that no one has ever been able to

find a really truly baby eel. Young eels are known, yes! They look like thin slips of glass with a silvery eye. They are quite transparent. Until quite recently, this transparent creature was thought to be a kind of fish. But it has been seen changing into an eel, just as a tadpole changes into a frog.



The babyhood of the eel is still a mystery. It is probable that the eggs of eels are hatched in the deep sea, being too light to sink to the bottom and too heavy to float to the top and that the baby eel is born in complete darkness. We don't know. We do know,

though, that if the eels which have lived in the rivers don't go back to the sea, there are no baby eels at all.

Nature study done merely to amuse ourselves is a good thing, nature study done to teach ourselves, is better, but nature study which will help others is best of all. It would be a real help to science if a boy or girl would report where, and on what day, the eels had been swimming up the rivers, and when the big ones had been seen on the walk back.

wood against the head of an axe or iron.

The wheel is 3-4 in. thick and 4 in. in diameter and should be cut as round as possible to assure its rolling well. Drill a 1-2 in. hole at the center for the axle.

Now drill the holes at the ends of the handles for the axle, great care should be exercised in boring straight. This is difficult, as the bit is held at an angle to the side of the handle. The location of this hole can be found on the drawing.

The axle should be made of hardwood and is held in place by brads driven through the handles into the axle. To keep the wheel from wobbling, place large washers each side of it on the axle and drive brads along side of the washers through the axle. Before assembling the wheel and axle try the wheel to see that it turns easily on the axle, it may be necessary to sand the axle

a little so it will fit the hole in the wheel.

Sandpaper all parts well and finish with two coats of bright red paint. It would be much easier to paint the wheel, axle and front of the box before assembling finally, but do not allow paint to run in the hole in the wheel or on the axle at the center as this will keep the wheel from turning well.

OUR BOYS AND GIRLS

Dear Uncle Ned— Will try and write you a letter as I have never written before. We have been taking the M. B. F. for some time as a gift from a friend of ours. I think it is a splendid paper and like it fine. I have written a number of stories and am sending you one to put in "The Children's Hour" for them to read if you like it. I am a boy and am interested in "The Children's Hour." Raymond McConnell, VVermontville, Mich., R 2.

Thanks for your story Raymond, write us another one.

Crickets' Night on the Hearth

The fire shone brightly on the hearth in the farmhouse away out in the country. Beside the fire sat an old gray cat whose name was Cricket. Now Cricket was not a lazy cat for she caught many mice and rats, who chanced to run her way. She liked to go into the fields and hunt mice in the summer time, but now it was winter. The wind was howling about the house and the rafters creaked and moaned while the snow fell thick and fast. Cricket hunted mice in the barn during the daytime, but at night she loved to set by the fireside and watch the flames as they leapt up the chimney in high glee. Now tonight she was thinking about a nice fat rat she had caught during the day in the barn, she thought of summer and what nice times she would have catching mice in the clover when her mistress picked her up in her lap and gently stroked her fur until she fell fast asleep. When she awoke she was still lying by the hearth on her nice soft pillow, the flames were still leaping up the chimney and filling the room with their cheerful glow, when all of a sudden she heard a gnawing over in a nearby corner and a little gray mouse soon scampered by her. She felt ashamed for not catching him, but to her surprise back he ran again, she pounced upon him and had a fine meal to end all her troubles for the night.—R. McConnell.

Dear Uncle Ned—I wrote to you once before but did not see my letter in print. So will try again. I am a girl 9 years old and weigh about 67 pounds. I have two sisters and one brother. Their names and ages are, Ethel, 22, Harold, 19, and Agnes, 17. We take the M. B. F. and I like to read "The Children's Page." Papa and Mama like to read everything. We live on a farm of 120 acres, four miles from Harbor Springs. We have 6 cows, 6 calves, 4 pigs, 3 horses and about 60 chickens. I have a pet dog named Buster. As my letter is getting long I will close.—Della Grauel, Harbor Springs, Michigan.

Dear Uncle Ned—This is the first time I have written to you. I am a girl 15 years old and passed the 8th grade last year. I live on a 280 acre farm. We have 19 horses, 45 cattle, 75 chickens, 5 pigs and a pair of guineas I have one brother home and one brother in Detroit. They are both older than my self. We own a Dodge car and I know how to drive it. I planted some potatoes this spring and they are looking fine. As my letter is getting long I will close hoping to see my letter in print, and that some of the boys and girls will write to me.—Mildred Collinson, Fayette, Mich R.1 Box 60.

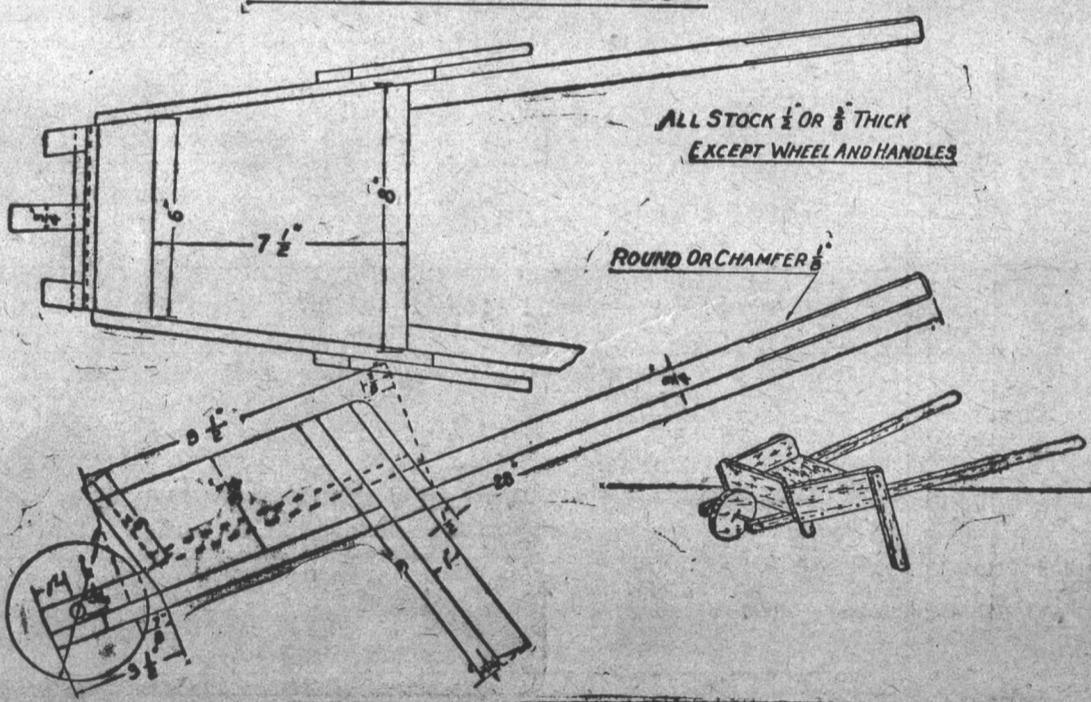
Dear Uncle Ned—This is the first I have written to you. My father takes the M. B. F. I am a girl 10 years old and am in the 6th grade. I am in the Canning Club, this is my first year. I am supposed to can 30 jars but have 42 canned now, besides canning fruit and vegetables we canned beef, chicken, and fish. Mrs. Beaver is the leader of our club. We have other clubs besides the canning club, we have the sewing and handicraft clubs, this work is taken up in the Hemlock High School. I attend the Hemlock High School.—Bernesteen Watson, Hemlock Mich., R1.

Dear Uncle Ned— This is the first time I have ever written to you. I am a girl 11 years of age, I like to read "The Children's Hour." My parents have taken the M. B. F. ever since it started. For a pet I have a little white Eskimo dog. His name is Beauty. I have a big brother and sister and my brother is 21 years old and my sister is 18. I am in the sixth grade. We have a new teacher in our school for the first time in over 12 years. We have a car and we drive to Durand, three miles away, quite often. Hoping to see my letter in print.—Addie G. Grennay, Durand, Mich.

Dear Uncle Ned: — I am a little girl 8 years old and in the third grade at school. This is the first time I have ever written to you. My teacher's name is Miss Della Day. My sister has had a letter in print so I will try my luck. I have two sisters. We live on a 120-acre farm. Well, I will close for this time. — Mae Watson, Hemlock, Mich.

Dear Uncle Ned—This is the first I have written. I am a girl 8 years old and in the fourth grade at school. My father takes the M. B. F. and likes it very much. I have two brothers. We have 2 cows, 2 horses and one calf. For pets I have 3 cats and one dog. I will close hoping to see my letter in print.—Mava Grove, Hesperia, Mich.

CHILD'S TOY WHEELBARROW



HOW COMMITTEE OF SEVENTEEN CAN HELP FARMER

(Continued from page 3)

modically than he now does. The grain stored at the central markets, even though stored in his own elevators, would have the same bearish effect on the farmers' market as if it were stored in any other elevators. The fact that grain is stored in the central markets and known to be there is the reason for its bearish influence on the market.

An entire crop of grain can not be consumed at once of course. The major part of it must be stored as grain until the market needs it. But, for the farmer, the best place to store it is right on the farm. If the market goes low it will not go so low with the grain on the farm as it will go if it is in the terminal elevator. If it goes high it will go higher with the grain on the farm than it will if the grain is in the terminal elevator. Vastly more storage on the farm for grain is needed far worse than more terminal elevators.

The farmer charges that others manipulate the price of his grain. It may be that they do, but the farmer is the one who makes that easy to do. If he did not market his grain until it is needed, manipulation would be difficult indeed. Nothing will do more to destroy manipulation of the price of grain than intelligent, gradual marketing from the farm. Such a practice is the only thing that will prevent the severe congestions that we now have in the movement of grain and for which the farmer always pays heavily in the end. For many reasons the farmer ought to market his grain for more regularly than he now does and anything the American Farm Bureau Federation can do to induce and enable him to do it the Committee of Seventeen should recommend that it do. It should not lose sight of the splendid opportunity it here has to render a real service.

The farmer also complains that crop statistics and market information are manipulated to his disadvantage. When that happens it happens because the man who uses the information has it and studies it and the farmer who sells does so without knowing the facts behind the market. Some farmers say that such information should not be given out at

all. That is equivalent to the farmer's saying that he does not want anyone else to know anything about his business and he does not want to know anything about it himself. The farmer can never get too much information about the supply and demand for the crops he has to sell and what the market conditions are from day to day. Rather than have less information on crops and markets, the farmer needs vastly more at his finger's ends and the American Farm Bureau Federation is in splendid position to give it to him.

So, the American Farm Bureau Federation has an ample field for useful and profitable endeavor in which its activities may always be determined by economy and efficiency, the two great basic rocks on which business advancement is founded. The outstanding opportunity is the opportunity to enable the farmer to act intelligently in producing and marketing his grain, leaving with him the responsibility for the proper use of that intelligence. The outstanding things, in connection with marketing the farmers' grain, that are now awaiting the action of some farmers' organization are:

1. To place at the disposal of the farmer all information that may be of value to him, on grain production and demand, and on market conditions.
2. To encourage and make possible a gradual marketing of grain from the farm.
3. To encourage storage of grain on the farm until it is needed for consumption.
4. To discourage the erection of more terminal elevators, either by the farmers or with state funds.

BANK ENCOURAGES JOINT OWNERSHIP OF SIRE

With the publication of a 4-page farm news leaflet, a bank at Fond du Lac, Wis., is encouraging its patrons to improve their livestock. The editor of the sheet has the unique title of "bank agriculturist," and his activities are devoted largely to financing farmers who wish to acquire well-bred animals or to become joint owners in valuable sires.



"Father, the Babies Have Been Free From Colds Ever Since We Put in the Furnace"

That is a common experience with families that install the Cozy Perfect Pipeless Furnace. Its uniformity, its balmy air, its freedom from dust, give the youngsters a chance to grow strong. Healthfulness is one of the greatest features of this time tested and approved furnace.



makes home more comfortable and more healthful. Its absolute reliability, its wonderful economy and its great convenience appeal to every man and woman who loves the home.

There is no need to suffer the discomforts of winter. Thousands have overcome them. Let us show you how it was done by sending our book, "The Last Word in Economical Heating." Free on request.

THE SCHILL BROS. COMPANY, Crestline, Ohio

MORLEY BROS., Saginaw, Mich., Distributors

LET'S ALL GO IN FOR THE SECOND GOLD CONTEST!

Mason, Mich., Sept. 8, 1920
Manager Michigan Business Farmer of Gold Contest:

Received your check for \$50 as first prize in the \$100 Gold Contest. Thanking you very kindly for check also for the fair and honorable way in which you conducted the contest.

Wishing you good luck and success, I remain, ever at your service,
D. L. ROLFE.

If Mr. Rolfe were the winner in our new contest, which closes October 30th, at midnight, he would receive a Hundred Dollars in Gold, because we have just doubled the total prizes in the second contest—\$200 in gold to split among the winners!

The readers of M. B. F. have always been anxious to help this weekly and its great circulation in every county in Michigan today, and its rapid spread into northern Ohio and Indiana, is largely due to friends among our readers who have used every means of boosting it.

You, our friends, have helped, without any promise or prize or return heretofore, and we know you are willing to continue, but just to

add a zest and make a play-game of the work, we are putting up these gold prizes.

Grand Prize \$100 in Gold

- Grand Prize, \$100 in Gold
- Second Prize, \$50 in Gold
- Third Prize, \$25 in Gold
- Fourth Prize, \$10 in Gold
- Three consolation prizes of a five dollar gold piece each.

In this contest, all kinds of new or renewal subscriptions to THE BUSINESS FARMER count in points for the contest as follows:

- One 25c Trial 6 months subscription counts (1).
- One \$1 One Year renewal subscription counts (1).
- One \$1 One Year NEW subscription counts (2).
- One \$2 Three Year renewal subscription counts (2).
- One \$3 Five Year renewal subscription counts (2).

Get Started Right Away by Mailing This Coupon

All you have to do to get in line for the \$100 Grand Prize or any part of the total \$200 in Gold to be given away October 30th, is to mail in this coupon with your name and address—we'll then send you everything necessary and full information. Let someone in every family enter this friendly contest.

MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

Entry Second Gold Contest

I want to joint in the Second Gold Contest, which closes October 30th, 1920. It is not to cost me a penny and I am to have as good a chance as anyone to win the \$200 in Gold Prizes. Send me a receipt book, samples, etc.

Name R. F. D. No.
P. O. State

Opfer Got \$160 for 48 Hours Work

In every locality there's plenty to do. You'll be busy 7 to 10 months in the year. The income is from \$15 to \$20 a day, the expense little. Mr. Opfer is only one of many of our friends who are making that much and more with a

"A Perfect Trench at One Cut"
BUCKEYE Traction Ditcher

With one helper you can dig more ditches each day than can fifteen men by hand. You make a perfect ditch at one cut. Farmers want traction ditching—it's better, can be done quicker and at less cost. When they know you have one, you'll be kept busy; you won't have to look for work, it will come to you. Many Buckeye owners have six to twelve months' work ahead. \$15 to \$20 daily is the net average earnings of hundreds of Buckeye owners. Here is a proposition that will give you a standing and make you a big profit each year.

Send for Free Book

A book of solid facts, tells how others are coining money, how they get the work, how much it costs to do it and all the details of operating.

Our service department is at your call to get you started and keep you going, to tell you the prices to charge and how to make big money with a BUCKEYE. Send now for this book, you can make big money too.

THE BUCKEYE TRACTION DITCHER CO.
547 Crystal Avenue Findlay, Ohio

READ THIS LETTER.
I excavated a trench 16,000 feet long, average depth 25 inches. I received 10 per lineal foot or \$160 for the job, and operated the machine just 48 hours. The manager of that company had which he said would hold me down for the day. I just laughed at him. I tightened the governor to gain speed and in 2 1/2 hours had the 2,200 feet finished. Average of 300 feet per hour for the two and three-fourths hours at 10 per foot is \$8.00 per hour.
JOHN G. OPPER, Sandusky, O.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE BUSINESS FARMER. IT WILL HELP YOU TO HELP US.

It's a man's job to keep up with Michigan

In the passing of a decade, almost, Michigan, by a phenomenal growth, has leaped from comparative industrial obscurity to a commanding place among the commercial centers of the nation.

Hand in hand with this expansion, has grown the demand for telephone service in Michigan. Some idea of the problems confronting the Michigan State Telephone Company as the result of this advance in industry and population may be gained from consideration of these facts:

In 1910 the state had a population of 2,810,000, served by 143,300 of our telephones, or one for every 19½ persons.

In 1920, it is estimated from the available census returns, the population is 3,210,000; a growth of approximately 400,000, and is served by 292,851 of our telephones, meanings one for each 11 persons.

Therefore, while the population has grown 14.2 per cent, the number of telephones has grown 104.3 per cent. The company has, in the face of war conditions, material and labor shortage and skyrocketing costs, more than kept pace with Michigan's growth.

It has been necessary, in order to meet the myriad problems confronting the telephone service, for the company to make surveys and estimates, years in advance, of the volume and direction of population and industrial growth in order to intelligently build to meet it. All this company's resources and efforts have been used to meet Michigan's requirements, as indicated in these surveys.

Had the 14.2 per cent increase in population been evenly distributed the problem would have been simplified, but the growth has been greater at some points than at others. There have been times, therefore, when the surveys did not compare with requirements and times when the engineer's estimates could not be met.

But the telephone people, facing these and many other obstacles, carried on and are still carrying on, determined that their future efforts shall exceed even those of the past.

They are anxious to have the people they serve know what they are doing to solve these problems and that despite all difficulties they are determined to make Michigan's telephone service the best obtainable anywhere.

MICHIGAN STATE TELEPHONE COMPANY



Our Ambition:--"IDEAL TELEPHONE SERVICE FOR MICHIGAN"

Will You Introduce a Friend or Neighbor?

HERE'S AN INTRODUCTORY COUPON—Tear it out and hand it to a friend or neighbor who is not a subscriber. It is worth just 25c to him, because we will send The Business Farmer on trial to any new name for six months, for this coupon and a quarter (25c) in coin or stamps.

25c This Coupon is worth twenty-five cents to any NEW subscriber introduced by an old subscriber.

The Michigan Business Farmer, Mt. Clemens, Mich. Friends:

I want to introduce a NEW subscriber and for a quarter (25c) enclosed in coin or stamps you are to send our weekly every week for six months.

To

Address

Introduced by your reader:

M

Address

BREEDERS ATTENTION!

If you are planning on a sale this year, write us now and CLAIM THE DATE!
This service is free to the live stock industry in Michigan to avoid conflicting sale dates
LET "THE BUSINESS FARMER" CLAIM YOUR DATE!

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

Our Service Department

THE BUSINESS FARMER was one of the first farm papers in the United States to establish a service department through which its readers might secure free of charge advice and information on almost any conceivable question. Since then other publications have sought to emulate this service; but many of them not having the heart interest or confidence of its readers, have been obliged to fake inquiries in order to fill up their department. During the past two years The Business Farmer has received and answered literally thousands of bona fide inquiries on hundreds of different subjects. No matter what your problem may be, rest assured that The Business Farmer stands ready to help you without charge.—Editor.

WHO FEEDS STOCK?

Party of the first part is to leave seven cows on the place and tools that are now on the place and to furnish one half of all seed and second party is to furnish half and each is to have half of all crops and fruit and everything that is raised thereon and party of the first part is to leave one brood sow and twenty-five chickens on the place and second party is to furnish one cow and a two year old heifer and each is to have half of all increase of all stock the title and ownership to remain with the party who furnished the stock. All stock is to be fed on the undivided crops and everything sold is to be drawn to the nearest market and proceeds divided equally. Each is to pay half of all veterinary bills. Second party is to draw out all manure and do all work on said farm in season and in a good workman-like manner. Each is to furnish half of the binder twine and all phosphate used and except labor. Second party is to have the right at the expiration of this lease to remove as much coarse fodder from the farm as he now brings on the farm, all surplus is to remain thereon at the expiration of this lease. First party is to leave all coarse fodder now on farm and furnish and help put up 80 rods of fence thereon. Now the rest of this contract is as all other contracts. There was 12 1-4 acres of wheat sowed on the farm last fall in September. B helped A drag the ground once and B did all the drilling of the wheat and pays half the bill of threshing also all labor. Now A paid \$26.00 and some cents for phosphate to sow with wheat, and this spring there was \$36.00 and some cents worth of phosphate used on oats and corn which A refuses to help pay. Also A does not want to sell all surplus which is not needed to supply each party. A wants each to save 50 bu. and B can sell his share of the rest while A holds his half for higher prices, will that give each the same or can B make a sale at the same time? The contract starts Nov. 1 while the wheat was sowed in September. — Mrs. O. M. S. Vassar, Michigan.

I am of the opinion that each must pay half of the expense of feeding the stock at whatever time it is fed and if feed is bought that each must pay half. I am of the opinion that A is liable for one half of the phosphate used after the lease began and can not collect for phosphate sown before the lease commenced. I am of the opinion that A may hold his half of the crops to such time as he desires to sell and that B may sell when he thinks the market is advantageous for his share of the crops. The surplus may be sold as provided in the lease. I think B would not have authority to compel B to sell his half at the same time B sells. There being no provision in the lease giving either authority to make sales without the consent of the other neither would have authority to sell the others share without his consent. — W. E. Brown, legal editor.

TIME TO SOW SWEET CLOVER

Would like to know which is the best time to sow sweet clover seed on sandy land. I have some land that I want to put into rye and would like to seed it. Would it come up too big in the rye if I seed it this fall? Does it burn out as easy as June clover? How much should be sown per acre? — R. L. B. Mason, Co.

As a rule best results are secured by seeding sweet clover in the early spring. When seeded with rye it should be seeded early before the rye makes a rank growth. From 12 to 12 pounds of scarified seed per acre is sufficient. If the unscarified seed is used from 16 to 18 pounds will be necessary.

Sweet clover is quite sensitive to soil acidity and on soils that are too acid for June clover, poor results are usually secured. The seed should be inoculated and the seed bed should be quite firm when the seed is sown.

Material for inoculation may be secured from the Department of Bacteriology, East Lansing, Mich. The price is 25c per bottle and one

bottle contains sufficient material to inoculate a bushel of seed.—C. E. Megee, Ass't Prof. of Farm Crops, M. A. C.

DAMAGING ROADS WITH TRUCKS

Will you kindly inform me through your paper whose duty it is to keep four miles of highway in repair over which heavy loaded trucks travel going to and from the gravel pit to the road which a party is building. Two miles of this road is on the county line between Sanilac St. Clair Co. and the other two miles is known as the Wild Cat road, the main traveled road to the city of Ft. Huron. This road has always been a good road but since these trucks have been traveling on it it has been cut up fierce and is hardly fit to travel on. It don't seem right that a private party can use this road and spoil it in order to build four miles of gravel road that he gets money for building. Now should the road districts in the two townships bear the extreme expense of keeping this road in repair or the man who sells the gravel or the truck man who gets good pay for drawing it or the man who is building the good road?—Subscriber, Jeddo, Mich.

Practically all travel upon the highway is by "private parties." Highways are constructed for use by private parties so that all parts of the country may become accessible. Private parties may use highway for travel with any size load not prohibited by law or regulations, and the repairs to the highway caused by such use shall be borne by the public the same as any repair to the highways. However, should private parties injure a highway in a way prohibited by law or regulations then they are liable for the damage. The drawing of gravel upon a highway is a legitimate use of the highway.—W. E. Brown, legal editor.

STORING DUCHESS APPLES

Would you please tell me how to store Duchess apples so they will keep for a long time?—F. B., Grand Traverse Co.

Duchess apples are not usually stored for later use insofar as one of the principal advantages of this variety is due to the fact that it comes earlier on the market when other varieties are not available. Of course, it could be kept in storage the same as any other variety, holding it at a temperature of from 32 to 35 degrees F. in a room where the air is fresh and sweet and of a moderate degree of humidity. Commercially we could not recommend the storage of Duchess apples as the cost of storage would have to be added on the price of the fruit and it would be necessary to place them on the market sometime in the fall when other winter varieties would be placed on the market much cheaper.—C. P. Halligan, Professor of Horticulture, M. A. C.

UNRECORDED DEED

My mother bought 40 acres of land, but was not put on record. A few months afterwards she died. My father bought land adjoining, and had my mother's 40 acres added to his land and recorded in his name. Father married again but died some months ago. Can the children claim their mother's 40 acres, and what is a widow's rights. If children sign off on mother's 40 acres with the understanding that he is going to sell and does not, can they claim it? Does a child living with legal parents, lose all claim to its mother's property?—A Subscriber of several years, Oscoda, Mich.

If the deed of the land purchased by the mother was delivered to her but was not put on record, the title went to her the same as if it had been put on record. The property would be the estate of the mother even though the father afterward obtained another deed to himself and recorded the same, providing the in-

terests of no innocent purchaser, etc., is affected. If the deed has been destroyed, but can be proven, the court may restore it on the record upon proper application. From the facts stated the children can claim their mother's "40." A man leaving a widow and more than one child his real estate descends one third to the widow and the balance to his children in equal shares. His personal, after the payment of debts, funeral expenses and allowances will be divided one third to the widow and two thirds to the children. The allowance depends upon the facts of each case and are determined partly by the statute and partly by the judge of probate.

If the children sign off on their mother's property they can not claim it on the ground stated unless there are additional circumstances showing that the execution of the deed was procured by fraud. A child living with its parents loses no rights of inheritance from either parent.—*W. E. Brown, legal editor.*

DRAIN ALONG HIGHWAY

A year ago last spring the county started to build a gravel road in front of my place and they put a creek on my side, which was across the road. There is another farmer on the same side of the road and the county promised at the time they dug the creek to give the both of us a bridge and now they are trying to just put one bridge in for us by buying a right of way of me, which I do not want. We have been without a bridge for over a year, with only a temporary one and a dangerous one at that. Now they do not want to build a bridge until another year. What I want to know is can they do that or can we make them give the both of us one. There is no way of getting a threshing machine in here and we are in need of one badly.—*J. W., Standish, Mich.*

The highway law provides: "When a drain passes along a highway there

shall be constructed at least one bridge or passage way across such drain connecting the highway with each enclosed field and with each farm entrance, which bridge or passage way shall be charged in the first instance as a part of the construction of such drain, after which such bridge or passage way shall be maintained by the owner of the land." You can compel compliance with this law and the officer who neglects his duty in this regard may make himself personally liable for damages.—*W. E. Brown, legal editor.*

NOTICE TO REMOVE PROPERTY

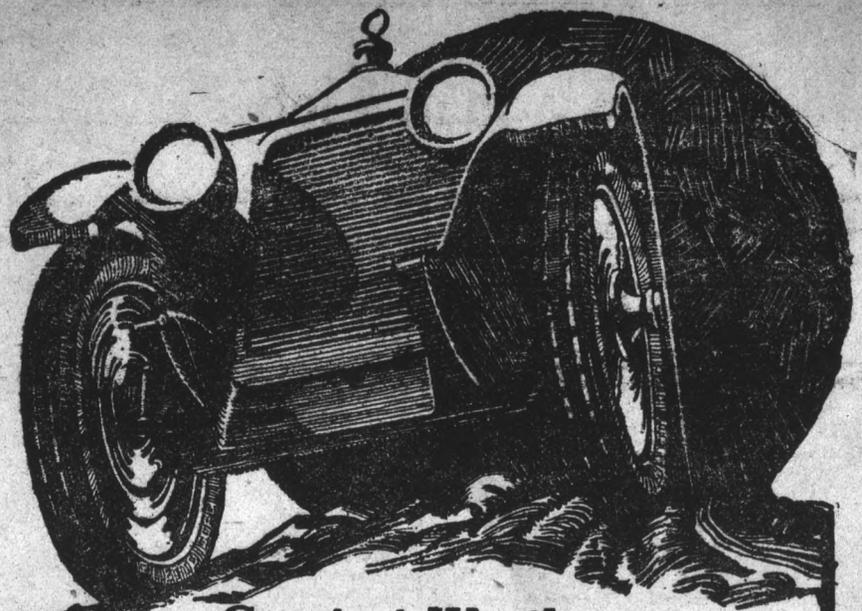
November last A bought farm of B taking possession in December. B sold to C ensilage in silo on farm bought by A. C hasn't removed ensilage to date. A wants to fill silo September 1st or soon after. Who should A notify, B or C who would be holding for damage if it isn't moved by filling time?—*A. E. F., Litchfield, Mich.*

I would notify both B and C to move the silage and fix a reasonable date. I would be of the opinion that if there was a clear and undisputed sale by B to C then it is C's property and he is causing the annoyance and damage. If there is anything by which the sale of B to C is not a legal sale then it would be B who is causing the delay. I would notify both so there could be no loop for both or either to avoid their duty.—*W. E. Brown, legal editor.*

CROSSING MAN'S PROPERTY

I would like to know whether a person has a right to cross another man's property to get to a lake, or whether he may be compelled to wade the stream to get to the lake?—*H. N., Arenac County.*

You cannot cross private property to get to the lake. One may use a navigable stream to get to public waters.—*W. E. Brown, legal editor.*



**Greatest Worth—
Proved by Greatest Growth**

THE second year sale of Gillette Tires was greater than the second year sale of any other tire ever placed on the market. They render more service—give greatest mileage at least cost. That is the reason.

This greatest of mileage value is gained through might derived from the perfected Gillette Chilled Rubber Process, which toughens Rubber as iron is toughened when changed to steel, prevents tread and fabric separation—reduces sand blisters and blowouts—increases resistance—multiplies endurance—makes rubber heat-proof and cold-proof, resulting in the most serviceable tire for any motoring service on any machine. Cord and non-skid. Put one or a full set on your car. Lower tire costs. Get rid of tire cares. If there is no Gillette dealer in your town write our General Sales Office.

Gillette Rubber Company, Factory, Eau Claire, Wisconsin
General Sales Office, 1834 Broadway, New York

Gillette
TIRES A BEAR FOR WEAR **TUBES**

The Collection Box

Who are Honest?

WE PREFER to believe that the great majority of people and corporations are honest. In our correspondence with firms against whom complaint has been made as a result of an unsatisfactory transaction we find the trouble to have been caused in the majority of instances by the following factors: misunderstanding, delay in the mails, loss of articles in transit and inefficiency of company employees. Rarely do we find a case where a firm deliberately seeks to rob its patron. Many firms are having difficulty nowadays in getting the goods to fill their orders, and some of them make the mistake of retaining their customer's money for an indefinite period, hoping to be able to fill the order before the patron loses his or her patience and demands a return of the money. It would unjustly appear from some of the complaints published in this department that some firms were trying to defraud their customers and that our intervention was all that prevented them from getting away with it. We caution our readers against a too ready acceptance of this belief, for in the majority of cases it is not merited. Whenever we come across a firm whom we believe to be dishonest we will not hesitate to say so.—*The Collector.*

AUTO SUPPLY COMPANY SETTLES CLAIM OF \$4.45

I sent to the National Auto Supply Co., Chicago, Ill., for an order of goods but they proved unsatisfactory so I returned them. The company said I could have my money back or the amount applied on some other order. I made out a new order and sent it to them at the same time that I returned the goods, which was in March. So far I have not received my money or the new order.—*S. R., Auburn, Mich., July 19th.*

We wrote this company and they advised us that they could not locate all the papers pertaining to the transaction but in order to adjust matters they were sending Mr. S. R. a check amounting to \$4.45.

I was really very much surprised when I got the check for \$4.45 from the National Auto Supply Company. I certainly appreciate what you did to secure this settlement for me. Mr. S. R., Auburn, Michigan, August 18th.

MISUNDERSTANDING

On November 7th, 1919 I sent an order of \$7.40 to the Bedell Co. 17th to 18th St. near Fifth Ave., New York City, for two sweaters, and have never got but one letter from them. They said they had received my order, that they did not have the sweater but if I could wait a short time they would fill my order. I waited a long time then wrote them and wrote and wrote them. I know I have written them at least five times and have got no reply.—*Mrs. L. W., Charlotte, Mich., May 23rd.*

We wrote the Bedell Company asking them to investigate regarding our subscriber's complaint. It appears that there was a misunderstanding.

We wish to thank you for the help you gave us in getting our money from the Bedell Company. We received the check a few days ago and they said it was through a misunderstanding that

they had not sent it before. If it is time for our subscription to run out please notify us as we wish to continue receiving your paper.—*Mrs. L. W., Charlotte, Michigan.*

SUIT SENT

On May 3 I returned to Montgomery Ward & Co., a suit which was unsatisfactory. I had the parcel insured and have written to them three or four times but have received no reply whatsoever. The No. is 39E1006, navy blue, \$28.95. If you can collect this for me it will be a great accommodation.—*A. S., Rhodes, Mich., June 21st.*

Upon referring this complaint to Montgomery Ward and Company we received a reply from them in which they stated they had already forwarded a new suit in exchange before receiving our letter.

I received your letter in regard to the suit I returned to Montgomery Ward & Company. They did not lose any time in getting the suit here. I thank you very much for the favor.—*A. S., Rhodes, Mich., July 12.*

CHECK RECEIVED

Last fall we sent for two dresses for our little girl to Bellas Hess & Co. When the order came there was only one dress and I wrote them about it but haven't been able to get any reply. The amount due me is \$2.49.—*Mr. D. H. K., Wheeler, Michigan, August 1st*

We advised the Bellas Hess & Co., about the above complaint and they wrote us that they were taking the matter up with our subscriber. Shortly after we received the following from D. H. K.:

In regard to claim No. 67 which I wrote you about some time ago will say that we received a letter from them today with check for \$2.49.—*Mrs. D. H. K., Wheeler, Mich., August 28th*

In choosing a Truck



THE form of rear axle used on a truck largely determines the performance of the truck, because the rear axle combines four important functions in one unit—load carrier, transmission, speed reduction and differential.

The Walker Balanced Double Reduction Gear meets every condition of the ideal final drive for trucks. It combines the advantages of the chain and sprocket, the worm drive and the internal gear without the disadvantages of those types. Its high road clearance and its ability to secure traction for one wheel when the other is slipping, makes it particularly advantageous in road and farm service.

The demonstrated success of the Walker drive for several years has made necessary increased production facilities, which will soon be available in a new factory at 87th and State streets, Chicago.

In choosing a truck—insist on the famous Walker axle.

**Walker Axle Company
Chicago**

BUSINESS FARMERS' EXCHANGE
 FIVE CENTS PER WORD, PER ISSUE.
 20 words or less, \$1 per issue, cash with order, or 7c per word when charged. Count as one word each initial and each group of figures, both in body of ad. and in address. Copy must be in our hands Saturday for issue dated following week. The Business Farmer, Adv. Dept., Mt. Clemens, Mich.

FARMS & LANDS

JUST OUT—STROUT'S FALL CATALOG— Fully Equipped Farms. Everything included with practically every one of the money-making farms in best farming sections 33 states and three Canadian provinces described in big illustrated 100-page book. Chance of your life to get the farm you want with horses, cows, hogs, poultry, wagons, implements, tools, hay and grain for stock, vegetables and fruit for your family, household furniture and fitted wood; big winter income from valuable woodlots; low prices for quick settlement estates, etc. See page 26, 303-acre farm with horses, 17 cattle, crops, equipment, fine buildings, close to world's greatest markets, for \$8,400 with only \$3,000 cash required; wonderful bargain page 6 of 150 acres with cows, produce, 450 fruit trees, good buildings, all for \$1,800, only \$500 cash; or page 34, cozy equipped near-village farm for \$800. Hundreds others, all sizes, all prices, almost anywhere. More than a million farm buyers will read this big new catalog. Get yours now and have first choice. Call or write today for your free copy of this book of wonderful bargains. STROUT FARM AGENCY, 814 BE, Ford Bldg., Detroit, Mich.

FOR SALE—2,000 ACRES IN TRACTS TO suit. Presque Isle County. Heavy clay loam soil in lime stone belt. Nothing better. Surrounded by prosperous settlers. First class markets. Price \$15 an acre on easy terms. JOHN G. KRAUTH, Millersburg, Mich.

120, 176 OR 131 ACRES; EXCELLENT improvement, easy terms, immediate possession, stock, tool if desired. GLEN PINCH, aton Rapids, Mich.

IF YOU ARE LOOKING FOR A FARM home do not fail to send for our list of farm bargains, and then come and see our wonderful country, and our growing crops will convince you that Cassola County cannot be beat. Three small fruit farms at a special low price. CALLAGHAN & CARROW LAND CO., Reed City, Michigan.

FOR SALE—A NO 1 FARM, WITH BEST of buildings and orchard. 120 acres, one mile from Dixie Highway, station, church and school. R. W. ANDERSON, Clarkston, Mich.

100 ACRES EXCELLENT FARM, \$12,500. Must sell, sickness and old age. Write GEORGE BAKER, Shepherd, Mich, R1, Box 72.

FOR SALE—84 A. ABOUT 40 A. CLEARED. No. 1 soil, No. 1 basement barn, good house, wood henhouse, good granary, young orchard, good well and trout stream. 1 mile from East Michigan Pike, 3 miles from good live town. Price \$75 an acre. PAUL SIEGRIST, Whittemore, Mich., Isoco County.

WANTED TO RENT WITH PRIVILEGE OF buying, small farm near market for poultry, potato and truck growing. N. DEAN, Summer-town, Tenn.

FARM OF 85 ACRES, GOOD EIGHT ROOM house, two barns, root cellar, some fruit, two wells, sandy and clay loam soil, four and one-half miles to Greenville, Mich. Poor health, must sell. A bargain at \$1,500; \$1,000 cash. C. C. BALLINGER, Owner, Manistee, Mich.

FOR SALE—159 ACRES SAND LOAM CLAY subsoil, house, barn, other improvements, timber. CLARE ERNST, Prescott, Route 2, Mich.

120 ACRES, GOOD BEET AND BEAN SOIL in Tuscola Co. Good buildings, flowing well. GEO. PEARSON, Saginaw, Mich., 435 Howard St.

FOR SALE—35 ACRES SUITABLE FOR small fruits or poultry, 2 miles from shipping point. W. D. REISH, Memphis, Mich.

FARM FOR SALE—108 1/2 ACRES, BEST OF land, brook through pasture, fine barns, 14-room house, oak finish, electric lights, steam heat, complete bath, 1 1/4 mile from high school, fine location. Box 44, Route 1, Metamora, Mich.

MISCELLANEOUS

BUY FENCE POSTS DIRECT FROM FOR-est. All kinds. Delivered prices. Address "M. M." care Michigan Business Farming, Mt. Clemens, Mich.

FOR SALE—RED ROCK WHEAT, CERTI-fied by state class one. Also only Rosen Rye in Oakland County, number 20162 and Timothy seed. R. W. ANDERSON, Clarkston, Mich.

FOR SALE—ONE 12 H. P. ADVANCE steam engine in good running order, at a bargain price. Address JOHN SKINNER, Greenville, Mich., R. 8.

FOR SALE—WATERLOO TRACTOR WITH three bottom plow. International silo filler, B-K two unit milker, forty Star Cow Stalls with steel mangers and water bowls. LORENZ BROS., East Lansing, Mich.

FOR SALE—WINTER SAND VETCH, TEST amount 98. 25 per lb. JOHN OGREN, R. 2, Box 123, Manistee, Mich.

FOR SALE—12-24 WATERLOO BOY TRACT-or. Good condition. L. C. SALOU, Northville, Mich., R. 2, Box 77.

CORN HARVESTER, ONE MAN, ONE horse, one row, self gathering. Equals corn binder. Sold direct to farmers for twenty-three years. Only \$28. with fodder binder. Shipped by express to every state. Free catalog showing pictures of harvester. PROCESS CORN HARVESTER CO., Salina, Kansas.

EXPERIENCED GENERAL FARMER AND wife desire position on stock or dairy farm. Own and operate tractor. FRED FREELAND, Mayville, Mich.

WANTED—TO BUY FROM PRODUCER only, 1 to 5 carloads of No. 1 mixed hay. State price in first letter. Address: FRUITPORT AG-RI-CULTURAL ASS'N, Inc., Fruitport, Mich., Gerald L. Colburn, Sec'y-Treas



COW TESTING PAYS

"THE dairyman who practices good business methods and continually weeds out poor cows is sure to increase his profits," says E. M. Harmon of the University of Missouri College of Agriculture at Columbia. "This point is very well illustrated by the following results from a recent summary of the herds for the first and second years work in the Webster County Cow Testing Association.

	Av. milk	Av. fat	Av. pf't
	per cow	per cow	per cow
First year	.5543	253.7	\$109.95
Second year	.5730	279.7	121.87
Increase	.193	26.0	11.92

The records on these cows have very materially increased their sale value. In addition to that the owners have an accurate index on which cows to save and which heifer calves to raise. But even disregarding the above considerations, the increase of \$11.92 per cow is much more than the cost of the testing, showing clearly that the cow testing association is a profitable proposition.

These men are gradually building their herds up to a point of real profit. They are doing it through their cow testing association. It isn't the man who makes one phenomenal record and then quits who establishes himself as a breeder. It is rather the man who can start in and gradually increase his production and profit year by year.

WHITE DIARRHOEA

Recent investigations prove that white diarrhoea in young chicks is caused by a germ known as Bacterium Pullorum. Conclusive evidence points to the fact that it is only during the first few days of its life that a chick is liable to infection with this disease. It has been shown by experiments that the most critical period of infection is the first 48 hours but infection can take place up to 96 hours. It has been fairly proven that female chickens recovering from white diarrhoea becomes a carrier of the disease. In such birds these bacteria are found particularly in the ovary. In this organ they cause many of the developing ova (yolks) to become abnormal and undergo degeneration. Many of the yolks which do not degenerate contain these bacteria. These infect the chick which hatches from the egg. These chicks then serve to infect others in the incubator or in the brooder. Incubator chicks suffer more from this disease than hen hatched ones.

The treatment of white diarrhoea is one of prevention rather than cure. No cure has yet been discovered. Breed from only hens free from the disease. The College at East Lansing is in position to test the hens in a flock to determine their fitness to be used as breeders. Feed the young chicks on sour milk or buttermilk. The acid found in milk will destroy the germs of the disease. Experiments prove that the mortality rate of buttermilk fed chicks will lower the mortality rate from 36 per cent to less than 9 per cent.

IS OLEO CLEAN?

Much has been said by the oleo-cleanliness of their product. It is the leading statement in many of their advertisements. Just how clean is it? Does the advertisement of the sales room tell the tale?

Last spring the Board of Health of a certain city in Michigan where an oleo factory is located, spotted a car of fat that had been shipped in for use in the factory. There was something about the car that attracted suspicion.

Upon investigation it was found that the car had been shipped about through three states. The mystery deepened. Finally the place of first shipment was located and it proved to be a rendering plant where the fat from dead horses and cattle had been tried out.

We have always been suspicious of the cleanliness of oleomargarine. We

never could persuade ourselves to try even a sample of it. Suspicion is always aroused by the man who is always boasting about his honesty. Look out. His honesty is liable to be of the rendering plant variety.

Oleo is a fraud, a moonshine product. Born in a rendering plant, steeped dishonestly and reared in deception. Camouflaged with cow's milk and placed before the public in attractive form accompanied by a pill of yellow coloring matter to hide its nativity. We believe in the true yellow of gold and butter. All other yellow is looked upon with contempt.—Oregon League Dairyman.

STALLION FIGURES

According to a compilation for 14 states having stallion registration laws, following is the relative proportion of purebred, grade, crossbred, and mongrel stallions:

Purebred stallions	27,694
Grade stallions	12,734
Crossbred stallions	9
Non-standard bred stallions	71
Mongrel stallions	2,915

Total 43,423

The states represented by these figures are California, Idaho, Iowa, Indiana, Kansas, Minnesota, Montana, New York, North Dakota, Oregon, Pennsylvania, South Dakota, Utah and Wisconsin.

OLD BONY SCRUB

Goodbye, old brindle, bony scrub, The time demands a better breed. You eat enough, but there's the rub You never pay for half your feed. So after all these years we part, But pray remember as you go, If this should break your bovine heart

You broke my purse, long, long ago. —Virginia Extension News.

BLOAT

"We have a cow nine years old who came in October 27, 1919, and gave milk until August 1, 1920 and is due to freshen December 11, 1920, but she is extra large and seems to be bloated ad has been so for about two weeks. She has been getting the same food as the rest of the herd. What is the cause of this? D. B., Bellaire, Michigan.

If the bloated condition, as you have termed it, is caused by the formation of gas, which can be determined by tapping over the region of the flank, the condition is no doubt due to either indigestion or tuberculosis. I would advise you to give a purge consisting of Magnesium Sulphate lbs. two, powdered Ginger and Gentian equal parts 1 ounce, powdered capsicum one dram and powdered Nux Vomica two drams, dissolve the entire contents in two quarts of hot water, let cool and give slowly at one dose. Should the bloat return have her tested for tuberculosis. If the enlarged condition appears to be in the uterus, then it is caused by the formation of an abnormal quantity of fluid, a condition known as dropsy of the womb. In the majority of cases this does no serious damage and is righted at time of calving.—W. A. Ewalt, veterinary editor.

Enclosed find \$2.00 for 3 years. I do certainly enjoy reading your paper and would not like to be without it. I have been away from home, that is why I have been slow with my money. I find so many things in the M. B. F. that is a help to me. I thank you much for sending me the paper.—D. S. Johannesburg, Michigan.

I wish to express my appreciation of the best farm paper in Michigan, the M. B. F. Your editorial in regard to the school question, proved beyond doubt your fairness in that and other matters of grave concern. Sincerely wishing you much success, I remain.—J. S., Mancelona, Michigan.

Yours is the only real farm paper. I prefer it to a daily.—R. Z., Mt. Pleasant, Michigan.

FREE BOOKLETS ON FARM SANITATION

The following booklets tell how to prevent disease among livestock and poultry and give directions for using

Kreso Dip No. 1

(STANDARDIZED)

PARASITICIDE AND DISINFECTANT

which is specially adapted for use on all

Livestock and Poultry

BOOKLETS

- No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.
- No. 157—DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.
- No. 160—HOG BOOKLET. Covers the common hog diseases.
- No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.
- No. 163—POULTRY. How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is sold in original packages at all drug stores.

ANIMAL INDUSTRY DEPARTMENT OF

PARKE, DAVIS & CO.

DETROIT, MICH.

99 SHOE BARGAINS

Here is one of ninety-nine real bargains shown in the new Rambler Catalog. A good durable comfort shoe \$4.35

Locally they would cost not less than \$7, perhaps more. Even in our chain stores the selling costs brings price to \$6. Buying by mail does away with these expensive selling forces, high rents and all other unnecessary overhead. You get the benefit.



ONLY \$4.35
 Solid leather from top to bottom. All genuine chrome; resists barnyard acids. Heavy soles of oak tanned leather—wear like iron. Space, comfort—well—wear them all the first day and you won't notice them. Brown only. You take no risk, simply send the coupon. Shoes are shipped, pay the postman \$4.35 on arrival. If you like them keep them, if not return them and we will refund money, including postage. Your word is enough. Don't delay. Mail coupon today. Send for catalog. Sales last year over \$1,000,000.

RAMBLER SHOE CO., Dept. G36, New York City
 Send my pair of RAMBLER worth while work shoes. I will pay postman \$4.35 on arrival. If shoes are not satisfactory I can return them and you will return money, including postage.
 Name Size
 Address State

The Show Window of Michigan

\$35,000 Premiums \$35,000
 400 Special Awards 400
 For the best agricultural exhibits at the



GRAND RAPIDS, MICH.

Michigan's Largest Agricultural Exposition
 432 STELLAR ATTRACTIONS 432
 Including
 Ethel Dare, World's Greatest Avatrix
 Open Evenings
 Pre-War Admission
 50c 7 A. M. to 5 P. M. 50c
 25c 5 P. M. to 11 P. M. 25c



BREEDERS DIRECTORY



(SPECIAL ADVERTISING RATES under this heading to honest breeders of live stock and poultry will be sent on request. Better still, write out what you have to offer, let us put it in type, show you a proof and tell you what it will cost for 13, 28 or 52 times. You can change size of ad. or copy as often as you wish. Copy or changes must be received one week before date of issue. Breeders' Auction Sales advertised here at special low rates; ask for them. Write today!)

BREEDERS' DIRECTORY, THE MICHIGAN BUSINESS FARMER, Mt. Clemens, Michigan.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens.

- Oct. 4, Belgian and Percheron Horses. Lawrence P. Ott, Charlotte, Mich.
- Oct. 19, Holsteins. Michigan Holstein-Friesian Ass'n, Jackson, Mich.
- Oct. 26, Poland Chinas. Wesley Hill, Ionia, Mich.
- Oct. 27, Poland Chinas. Boone-Hill Co., Blanchard, Mich.
- Oct. 28, Poland Chinas. Clyde Fisher and E. R. Leonard, St. Louis, Mich.
- Oct. 29, Poland Chinas. Chas. Wetzel & Sons, Ithaca, Mich.
- Oct. 30, Poland Chinas. Brewbaker & Sons, Elsie, Mich.
- Feb. 1, Poland Chinas. Witt Bros., Jasper, Mich.

LIVE STOCK AUCTIONEERS
Porter Colestock, Eaton Rapids, Mich.
J. E. Ruppert, Perry, Mich.
Harry Robinson, Plymouth, Mich.

CATTLE

HOLSTEIN-FRIESIAN

INCREASE THE EFFICIENCY of your DAIRY HERD by using a REGISTERED HOLSTEIN SIRE

We have bulls of all ages listed at reasonable prices.

Also grade and purebred cows and heifers

MICHIGAN HOLSTEIN FRIESIAN ASSOCIATION

Old State Building Lansing, Mich.

VERY HANDSOME AND STRAIGHT SON of a 21.60 lb. 2 yr. old daughter of Johan Hengerveld Lad, whose daughters are noted for individuality and performance. Born March 25, 1920. Sired by a grandson of Bertiusa Pauline 3d. 34.50 lbs. butter and 585.80 lbs. milk in 7 days. Price \$175. delivered to your station. For extended pedigree address, **L. C. KETZLER**, Flint, Mich.

BABY BULLS

Grow your own next herd sire. We have three beautiful youngsters—straight as a line, big-boned rugged fellows. They are all by our 38 lb. senior sire, **KING KORNDYKE ORISKANY PONTIAC** from splendid individual dams of A. R. backing and the best of blood lines.

Write for our sale list.

BOARDMAN FARMS
JACKSON, MICH.
Holstein Breeders Since 1906

BAKKE KRAT LINDENWOOD CHAMPION
Bull born March 13, 1919. Sire is a 27.33 lb. son of a 30.61 lb. bull, whose sire is Johanna Concordia Champion (30 A. R. O. daughters 2 above 30 lbs.). Dam is an 18.93 lb. 2 year old daughter of Johanna Concordia Champion (see above) whose sire, Colantha Johanna Champion, has 61 A. R. O. daughters, 6 above 30 lbs. He is a big growthy fellow, ready for heavy service between 2-3 and 3-4 white and nicely marked. Guaranteed a sure breeder, and especially priced at \$200 if taken at once. Write for pedigree.

EDWARD B. BENSON & SONS
Hill Crest Farms, Munson, Mich.

MR MILK PRODUCER

Your problem is more MILK, more BUTTER, more PROFIT, per cow.

A son of Maplecrest Application Pontiac—182652—from our heavy-yearly-milking-good-butter-record dam will solve it.

Maplecrest Application Pontiac's dam made 85.103 lbs. butter in 7 days; 1344.3 lbs. butter and 23421.2 lbs. milk in 365 days.

He is one of the greatest long distance sires. His daughters and sons will prove it.

Write us for pedigree and prices on his sons. Prices right and not too high for the average dairy farmer.

Pedigree and prices on application.

R. Bruce McPherson, Howell, Mich.

FOR SALE REGISTERED HOLSTEIN BULLS
nearly ready for service from good A. R. O. dams, also bull calves. Wm. Griffin, Howell, Mich.

WOLVERINE STOCK FARM REPORTS GOOD sales from their herd. We are well pleased with the calves from our Junior Herd Sire "King Pontiac Lundie Korndyke Segis" who is a son of "King of the Pontiacs" from a daughter of Pontiac Clothilde De Kol 2nd. A few bull calves for sale. T. W. Sprague, R 2, Battle Creek, Mich.

MUSOLFF BROS.' HOLSTEIN'S

We are now booking orders for young bulls from King Pieter Segis Lyons 170506. All from A. R. O. dams with credible records. We test annually for tuberculosis. Write for prices and further information.

Musolff Bros., South Lyons, Michigan

AN INTRODUCTION

Mr. Dairy Farmer, Mr. Holstein Breeder meet King Flint

ALL THREE are working to a common purpose—to increase the production of Michigan Dairy herds.

We believe all three should work together.

We feel sure that no Michigan bull has ever been better equipped for the work.

We have it on high authority that there are none better individually.

His three nearest dams each averaged to produce 100 lbs. butter and 2,100 lbs. milk per month for a full lactation period with an average of 3.8% fat.

His dam is one of Michigan's greatest family—three full sisters that have produced over 30 lbs. butter in seven days, two of them producing over 700 lbs. milk, and two of them producing more than 1,000 lbs. butter and 21,000 lbs. milk in ten months.

His sire is the direct descendant of three generations of 30 lb. cows and two generations of 1,200 lb. yearly record cows.

His first three sisters to enter yearly test will each produce more than 800 lbs. butter and 17,000 lbs. milk as heifers.

Let KING FLINT Help You Improve Your Herd Through one of His Sons

A son of this great young sire suited to head any herd in Michigan, grade or purebred, can be secured in Genesee County and we want them all to stay in Michigan.

Write us about your herd, tell us what you need and what you feel you can afford to pay and let us help you find just what you want in Genesee County, the center of Michigan's long distance dairy cattle.

GENRIDA FARM
Walter T. Hill,
Davison, Mich.

ELMCREST STOCK FARM
G. L. Spillane & Son Co.
Olio, Mich.

36 pound son of KING OF THE PONTIAC'S Heads our Herd

Several 30 pound cows all under Federal Supervision, good bull calves and a few bred heifers for sale.

HILL CREST FARM, Ortonville, Mich.
or write
John P. Hehl, 181 Griswold St., Detroit, Mich.

SOLD AGAIN

Bull calf last advertised sold but have 2 more that are mostly white. They are nice straight fellows, sired by a son of King Ona. One is from a 17 lb. 2 yr. old dam and the other is from a 20 lb. Jr. 3 yr. old dam, she is by a son of Friend Hengerveld De Kol Butter Boy, one of the great bulls.

JAMES HOPSON JR., Owosso, Mich., R. 2.

BIG ROCK HOLSTEINS

Herd Headed by Johan Pauline De Kol Lad 236554

a son of Flint Hengerveld Lad and Johan Pauline DeKol twice 30 lb. cow and dam of Pauline DeNijlander (Mich. Champion two years old.)

Bull calves from dams up to 28 pounds.

Roy E. Fickies, Chesaning, Mich.

A GRANDSON OF KING OF THE PONTIACS

that will be ready for service in September whose own Sister has just made over 22 lbs. of butter as a Jr. 3 year old and whose Dam has made over 20 lbs. and we own both of them and they are due to freshen again in January and will be tested. This young bull is well grown and a top line that could not be beat, his Dam's 1-2 sister has just made over 30 lbs.

His price is only \$150.00.
From a fully accredited Herd.

BAZLEY STOCK FARM, Ypsilanti, Mich.
Address all correspondence to
JOHN BAZLEY
319 Atkinson Ave.
DETROIT, MICHIGAN

LIVE STOCK FIELD MEN

E. N. BALL, Cattle and Sheep
FELIX WITT Horses and Swine

One or the other of the above well-known experts will visit all live-stock sales of importance in Michigan, northern Ohio and Indiana, as the exclusive Field Men of The Michigan Business Farmer.

They are both honest and competent men of standing in their lines in Michigan and they will represent any reader of this weekly at any sale, making bids and purchases. Write them in care of this paper. Their service is free to you. They will also help you arrange your sale, etc. They work exclusively in the interests of Michigan's OWN live-stock weekly!

SHORTHORNS FROM AN ACCREDITED HERD
Grandsons and granddaughters of Avondale Maxwellton Jupiter 754193 heads our herd.
JOHN SCHMIDT & SON, Reed City, Mich.

WHAT DO YOU WANT? I represent 41 SHORTHORN breeders. Can put you in touch with best milk or beef strains. Bulls all ages. Some females. C. W. Crum, President Central Michigan Shorthorn Association, McBrides, Michigan.

Shorthorns at Farmers' Prices
FOUR SCOTCH TOPPED BULL CALVES under one year old. These are all roans and choice individuals.

FAIRVIEW FARM
F. E. Boyd Alma, Michigan

SHORTHORNS
5 bulls, 4 to 8 mos. old, all roans, pall fed. Dams good milkers, the farmers' kind, at farmers' prices.
F. M. PIGGOTT & SON, Fowler, Mich.

REGISTERED AND GRADE SHORTHORN cows and heifers for sale, \$75 to \$200.
MEIER BROS., Byron, Mich.

THE VAN BUREN CO. SHORTHORN BREEDERS' Association have stock for sale, both milk and beef breeding.
Write the secretary,
FRANK BAILEY, Hartford, Mich.

SHORTHORNS ONLY A FEW LEFT AT OLD PRICE.
Wm. J. BELL, Rose City, Mich.

FOR SALE Clay Bred Shorthorn bull calf from a heavy producing dam.
W. S. HUBER, Gladwin, Mich.

Maple Ridge Herd of Bates Shorthorns offers for sale a roan bull calf 9 mos. old. Also 2 younger ones. J. E. TANSWELL, Mason, Mich.

For Sale, Milking Shorthorn Bulls from two to 16 mo. old. Dams giving 40 and 50 lbs. per day. Yearly records kept. Herd tuberculin tested.
JAS. H. EWER, R 10, Battle Creek, Mich.

KENT COUNTY SHORTHORN BREEDERS' Ass'n are offering bulls and heifers for sale, all ages. Sell the scrub and buy a purebred.
A. E. RAAB, Sec'y, Caledonia, Mich.

FOR SALE—POLLED DURHAM BULLS AND Oxford Down Rams.
J. A. DeGARMO, Mulr, Mich.

HEREFORDS

REGISTERED HEREFORD CATTLE
King Repeater No. 713941 heads our herd. A grandson of the Undefeated Grand Champion Repeater 7th No. 38905. We have some fine bulls for sale and also some heifers bred to Repeater. Tony B. Fox, Proprietor.
THE MARION STOCK FARM, Marion, Mich.

MEADOW BROOK HEREFORDS
Bob Fairfax 495027 at head of herd. Registered stock, either sex, polled or horned, mostly any age. Come and look them over.
EARL C. McCARTY, Bad Axe, Michigan.

120 HEREFORD STEERS, ALSO know of 10 or 15 loads fancy quality Shorthorn and Angus steers 5 to 1000 lbs. Owners anxious to sell. Will help buy 50c commission. C. F. Ball, Fairfield, Iowa.

HEREFORDS
Cows with calves at side, open or bred heifers of popular breeding for sale.
Also bulls not related.
ALLEN BROTHERS
PAW PAW, MICH.

Hardy Northern Bred Herefords
BERNARD FAIRFAX 624819 HEAD OF HERD 20 this year's calves for sale. 10 bulls and 10 heifers.
JOHN MacGREGOR, Harrisville, Mich.

ANGUS

BARTLETTS' PURE BRED ABERDEEN-ANGUS CATTLE AND O.G. Swine are right and are priced right. Correspondence solicited and inspection invited.
CARL BARTLETT, Lawton, Mich.

The Most Profitable Kind

of farming, a car load of grade dairy heifers from LENAWEE COUNTY'S heartiest milk producers to include a pure bred ANGUS bull of the most extreme beef type for combination beef and dairy farming.

Car lot shipments assembled at GLENWOOD FARM for prompt shipment.

Methods explained in SMITH'S PROFITABLE STOCK FEEDING. 400 pages illustrated.
GEO. B. SMITH, Addison, Mich.

every breeder

Can use M. B. F.'s Breeders' Directory to good advantage
What have YOU to offer?

GUERNSEYS

GUERNSEYS FOR SALE. 1 BULL, ST. AUGUSTINE Sultan, sire Longwater Prince Charmant (18714) 4 A. R. daughters, 416 lb. fat at 2 1-2 years old. Dam, Dagna of Hillhurst (35069) A. R. 548 lb. fat at 2 1-2 yrs. old. 1 bull calf, 6 mos. old of similar breeding. Also a few fine heifers of the above bull. It will pay you to investigate. Prices and pedigree on application. MORGAN BROS., R 1, Allegan, Mich.

REGISTERED GUERNSEYS

ORDER YOUR BULL CALF NOW for later shipment. Let me send you a real pedigree of better breeding. J. M. WILLIAMS, North Adams, Mich.

JERSEYS

Senior Herd Sire Junlor Herd Sire Noble Sensational Lad You'll Do's Duchess 118536 Oxford 158393

PURE BRED JERSEYS

Let us know your wants. HIGHLAND FARM, Shelby, Mich. Samuel Odell, Owner. Adolph Heeg, Mgr.

FOR SALE—REGISTERED JERSEY CATTLE, both sex. Register of merit testing done. J. L. CARTER, R 4, Lake Odessa, Mich.

IMPROVE YOUR JERSEY HERD WITH ONE of our Majesty bulls. FRANK P. NORMINGTON, Ionia, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows. FINDLAY BROS., R 5, Vassar, Mich.

SWINE

POLAND CHINA

Poland-China Sale Circuit

- Oct. 26, Wesley Hill, Ionia, Mich.
Oct. 27, Boone-Hill Co., Blanchard.
Oct. 28, Leonard & Fisher, St. Louis.
Oct. 29, Chas. Wetzel & Sons, Ithaca.
Oct. 30, W. Brewbaker & Sons, Elsie.

These firms, members of the Central Michigan Poland China Breeders' Ass'n, will offer to the public an offering of such Poland China hogs, as have never been offered in the State before. At these sales, held at the above named places, the farmer will find Poland China Hogs that will fit his exact needs, to produce more pork for the same amount of feed consumed. This is an opportunity at which time, these firms will sell to the highest bidder sows and boars of such class as are certain to make breeding stock of the highest merit. Col. Harry A. Eckhardt, Dallas City, Ill., and Col. Ed. Bowers of Ind. will do the selling. These men are the real articles as live stock salesmen, and it will do the breeder and farmer of our good state and untold amount of good to be at these sales, if for nothing more than educational standpoint and to get acquainted. Mich. is recognized, as never before, as a state that produces as good hogs as any state in the union. It is up to the farmer to produce hogs of better and more quality. Quality brings the top price on the open market.

Write for catalogs to the above firms or the Sec'y of the Association. Mr. A. D. Gregory, Ionia, Mich., will represent Michigan Business Farmer as fieldman, and will take care of all mail bids which readers of this paper place with him. Be at the sales in person, if possible.

Central Michigan Poland China Breeders' Ass'n.

E. R. LEONARD, Pres., St. Louis. C. A. BOONE, Sec.-Treas., Blanchard

(Poland China Breeders are urged to join this association. Write the Secretary.)

WONDERLAND HERD

LARGE TYPE P. C. A few choice bred gilts for sale. Also fall gilts and boars, some very good prospects of excellent breeding. Gilts bred to ORPHAN'S SUPERIOR by BIG ORPHAN'S EQUAL by BIG BONE ORPHAN by the BIG ORPHAN. Dam, BEAUTY'S CHOICE by ORANGE BUD, by BIG ORANGE A. Free delivery to visitors. Wm. J. CLARKE, Eaton Rapids, Mich.

O. I. C. SOWS FOR SALE

ONE OF THE BEST HERDS IN MICHIGAN

Young sow due to farrow in September. Spring boar ready for shipment. Choice individuals of BIG TYPE breeding. I ship C. O. D., pay express and register in buyer's name.

J. CARL JEWETT,

R. 5, Mason, Michigan

BIG BOB MASTODON

Sire was champion of the world, his Dam's sire was grand champion at Iowa State Fair. Get a grand champion while the getting is good. Booking orders now. Bred gilts are all sold, but have 10 choice fall pigs sired by a Grandson of Dish-er's Giant, 3 boars and 7 sows. Will sell open or bred for Sept. farrow, to BIG BOB. C. E. GARNANT, Eaton Rapids, Mich.

BIG TYPE POLAND CHINAS WITH QUALITY Nine fall gilts out of litters of eleven and thirteen, for sale. J. E. MYGRANTS, St. Johns, Mich.

BIG TYPE POLAND CHINAS

Nothing to offer at present. MOSE BROS., St. Charles, Mich.

"Lindhurst" Poland Chinas

A few choice spring boars at \$40 each if taken by Sept. 20. W. H. LIND, Alto, Mich.

HERE'S SOMETHING GOOD

THE LARGEST BIG TYPE P. C. IN MICH. Get a bigger and better bred boar pig from my herd, at a reasonable price. Come and see them. Expenses paid if not as represented. These boars in service: L's Big Orange, Lord Chasman, Orange Yank, and L's Long Prospect. W. E. LIVINGSTON, Parma, Mich.

L. T. P. C.

I have a fine lot of spring pigs sired by Hart's Black Price, a good son of Black Price, grand champion of the world in 1918. Also have a litter of 7 pigs, 5 sows and 2 boars, sired by Prospect Yank, a son of the \$40,000 Yankee, that are sure Humdingers. F. T. HART, St. Louis, Mich.

BIG TYPE P. C. SOWS OF CHOICE BREED- ing, bred to Big Bone Bone Boulder No. 726, 672 for Sept. farrow. Spring pigs either sex. Healthy and growthy. Prices reasonable. L. W. BARNES & SON, Byron, Mich.

BIG TYPE POLAND CHINA BRED GILTS, one fall boar, spring pigs both sex, and tried sows while they last. HOWLEY BROS., Merrill, Mich.

BOARS ALSO SOWS AND PIGS. ANYTHING you want. Poland Chinas of the biggest type. We have bred them big for more than 25 years; over 100 head on hand. Also registered Percherons, Holsteins, and Oxford. Everything sold at a reasonable price, and a square deal. JOHN C. BUTLER, Portland, Mich.

WALNUT ALLEY BIG TYPE P. C. Boars now ready for new homes. Get your order in on fall pigs for I am going to price them right. A. D. GREGORY, Ionia, Mich.

BIG TYPE POLANDS

In introducing our herd we offer choice pigs by W's Sallor Bob and out of dams by Buster Boy, Long Superba, Smooth Wonder 3rd, and Orange DesMoines. Priced to sell. W. CALDWELL & SON, Springport, Mich.

FARWELL LAKE FARM

B. T. P. C. boars and gilts by Clansman's Image 2nd, the Outpost Orphan Superior and King Giant. Also 3 fall boars by Clansman's Image. A few tried sows all with breeding privilege. Boars in service: Clansman's Image 2nd, Smooth Wonder, King Giant and W. B.'s Outpost. Visitors welcome. W. B. RAMSDELL, Hanover, Mich.

L S P C FOUR CHOICE SPRING AND FALL boars left. A few extra nice gilts left bred for April farrow. H. O. SWARTZ, Schoolcraft, Mich.

6TH ANNUAL P. C. BRED SOW SALE, March 13, 1920. For particulars write W. J. HAGELSHAW, Augusta, Mich.

I Am Offering Large Type Poland China Sows, bred to F's Orange at reasonable prices. Also fall pigs. Write or call. CLYDE FISHER, RS, St. Louis, Mich.

B. T. P. C. SPRING BOARS, Sired by WIL- ey's King Bob, out of Grand Daughters of Dish-er's Giant. All immuned with double treat-ment. John D. Wiley, Schoolcraft, Mich.

Leonard's B. T. P. C. See my Exhibit at Mich. State Fair. All stock double immune. Public sale Oct. 28. Get your name on mailing list. E. R. LEONARD, R 3, St. Louis, Mich.

THE BEST BRED POLAND CHINA PIGS Sired by Big Bob Mastodon at the lowest price. DeWITT C. PIER, Evart, Mich.

DUROCS



Spring pigs by Walt's Orion, First Sr. Yearling Detroit, Jackson, Gd. Rapids and Saginaw, 1919 Phillips Bros, Riga, Mich

DUROO JERSEYS, FALL BOARS, WEIGHT 200 lbs. each. Sired by a 800 lb. boar. Priced reasonable. C. E. DAVIS & SON, Ashley, Mich.

Duroo sows and gilts bred to Walt's King 82949 who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroo boar. Newton Barnhart, St. Johns, Mich.

MEADOWVIEW FARM REG. DUROO JERSEY hogs. Spring pigs for sale. J. E. MORRIS, Farmington, Mich.

PEACH HILL FARM

Classy spring boars sired by Peach Hill Orion King, a splendid grandson of Orion Cherry King. Write, or better still, come and select your own. Priced reasonable. Inwood Bros., Romeo, Mich.

MAPLE LAWN FARM REG. DUROO JERSEY swine. Sows bred to Model Cherry King 10th for Aug. and Sept. farrow. Write me your wants. VERN N. TOWNS, R 6, Eaton Rapids, Mich.

DUROO BOAR PIGS A FEW GOOD ONES you one on approval. left. Let me send E. E. CALKINS, R 6, Ann Arbor, Mich.

Durocs. Hill Crest Farms. Bred and open sows and gilts. Boars and spring pigs. 100 head. Farm 4 miles straight S. of Middleton, Mich., Gratiot Co. Newton & Blank, Perrinton, Mich.

DUROCS Spring bred sows all sold. Have good Sept. pigs, both sex, sired by Liberty Defender 3rd, from Col. bred dams. Gilts will be bred to an Orion boar for Sept. farrow. H. G. KEESLER, Cassopolis, Mich.

DUROO BOARS FROM PRIZE WINNING STOCK ready for service. Geo. B. Smith, Addison, Mich.

AM OFFERING SOME HIGH CLASS SPRING DUROO BOARS

at reasonable prices. A few gilts bred for Sep-tember farrow at bargain prices. W. C. TAYLOR, Milan, Mich.

REG. DUROO BOARS AND GILTS \$25 TO \$50 each. Satisfaction guaranteed. Visitors welcome. AUSTIN STOCK FARM, Bloomington, Mich.

DUROCS OF BREEDING SIZE AND QUALITY. C. L. POWER, Jerome, Mich.

REG DUROO JERSEY SPRING PIGS EITHER SEX Can furnish stock not akin. Also year-ling sows. Will breed for early fall litters. Sat- isfaction guaranteed. F. HEIMS & SON, Davison, Mich.

OAKLANDS PREMIER CHIEF

Herd Boar—Reference only—No. 129219

1919 Chicago International 4th Prize Jr. Yearling

BOOKING ORDERS FALL PIGS AT \$25 BLANK & POTTER Potterville, Mich.

FOR SALE: ONE DUROO BOAR FROM Brookwater breeding stock. Choice spring pigs. JOHN CROENWETT, Capleton, Mich.

Duroo Jersey Sows and Gilts bred for Aug. and Sept. farrow. 1,000 lb. herd boar. JOS. SCHUELLER, Weidman, Mich.

DUROO Boars and Gilts for sale at \$25 to \$50 each. Crated and registered in buyer's name. Satisfaction guaranteed. These are big brothy shots. Visitors welcome. MICHIGANA FARM LTD., Pavilion, Mich.

For Sale: Duroo Spring Boars, Sows and Gilts of all ages. Write us your wants. JESSE BLISS & SON, Henderson, Mich.

WE OFFER A FEW WELL-BRED SELECT- ed spring Duroo Boars, also bred sows and Gilts in season. Call or write McNAUGHTON & FORDYCE, St. Louis, Mich.

FIELDMAN SERVICE

Any breeder who expects to hold a sale this season of any variety of pure-bred live stock, may secure the services of a Michigan Business Farmer fieldman who is prepared to visit their herds with a view to writing them up and rendering any help that a fieldman can to make the sale a success.

IF YOU ARE PLANNING ON A SALE

a letter addressed to Felix Witt, fieldman, care of Michigan Business Farmer, Mt. Clemens, will receive prompt attention.

HIGH CLASS Poland China Hog Sale Sept. 29, 1920

J. C. MYGRANTS AND L.C. POPE & SON

will offer at public auction at the farm of J. E. Mygrant's 2 1-2 miles west and 3 1-2 miles north of St. Johns

42 Head as Follows:

13 Spring Boars, 19 Spring Gilts and 10 Fall Yearling Gilts. These are the tops of 2 herds as good as you will find anywhere. Every hog double immuned and should be safe from cholera.

Write for catalog to

J. E. MYGRANTS or L. C. POPE & SON

St. Johns, Mich.

Send mail bids to A. D. Gregory, Ionia, Mich.

Dinner at Noon.

Will meet parties at train until 11:30 sale day.

BERKSHIRES

LARGE ENGLISH RECORDED BERKSHIRES. Bred gilts and spring pigs for sale. PRIMEVAL FARM, Osseo, Mich.

GREGORY FARM BERKSHIRES FOR profit. Choice stock for sale. Write your wants. W. S. Corsa, White Hall, Ill.

BERKSHIRES ARE QUALITY HOGS. Weaned pigs of the very best blood lines of the breed is our specialty. We guarantee to please or nothing string. ARZA A. WEAVER, Chesaning, Mich.

CHESTER WHITES

CHESTER WHITES Spring Pigs in Pairs or trios from A-1 mature stock at reasonable prices. Also a few bred Gilts for May farrow. F. W. Alexander, Vassar, Mich.

Some Fine Chester Whites farrowed July 14, 1920. Will ship C. O. D. when 2 mos. old for \$13.50 reg. Try one, Ralph Cosens, Levering, Mich

REGISTERED CHESTER WHITE SWINE, either sex. Boars ready for service. Prices right. LYLE V. JONES, Flint, Mich., R. F. D. No. 5

HAMPSHIRE

BOARS READY FOR SERVICE

Also 1 Bred Sow W. A. EASTWOOD, Chesaning, Mich.

HAMPSHIRE OF QUALITY. SPRING BOAR pigs only for sale now. JOHN W. SNYDER, St. Johns, Mich., R 4

HAMPSHIRE OF QUALITY

Some exceptionally fine young spring boars. They are extreme individuals, with best backs, feet, belts and breeding. They carry the Exalted Approval and Mose Messenger strains, at a sacrifice price. Call or write GUS THOMAS, New Lothrop, Mich.

O. I. C.

O. I. C. & CHESTER WHITE SWINE. BOOK- ing orders for Aug. and Sept., pigs to be shipped when 8-10 wk. old. Sired by three of the best boars of the breed. CLARE V. DORMAN, Snover, Mich.

O I C GILTS

BRED FOR SEPTEMBER FARROW Everyone guaranteed safe in dam also a few choice spring pigs, either sex.

F C BURGESS

Mason, Mich., R 3

MUD-WAY-AUSH-KA FARM

offers O. I. C. spring pigs, also special summer prices on breeding stock in White Wyandottes, Barred Rocks, White Chinese Geese and White Runner Ducks. No more eggs this season. DIKE C. MILLER, Dryden, Mich.

O. I. C.'s—8 Choice young boars, March and April pigs at weaning time. CLOVER LEAF STOCK FARM, Monroe, Mich.

O. I. C. SWINE—MY HERD CONTAINS the blood lines of the most noted herd. Can furnish you stock at "live and let live" prices. A. J. GORDEN, Dorr, Mich., R 3.

How You Can Get More for Milk

A GREAT many farmers, yes we are safe in saying the majority of farmers of Wisconsin and Minnesota live and have their being from dairy cows. Take the cow out of these two states and they would in a few years be as barren as the Sahara Desert and as profitless to the farmer. How to get more for the milk that is produced is with these people, therefore, a vital question. Milk at present really passes as food through three main channels. The first raw milk, as furnished in its original form for daily consumption, the second, cheese, and the third, butter. Such milk as finds its way into condensaries, milk powder factories and other lines will not be considered in this article as little or none of it should really go through these channels if the general welfare of the farmer is to be considered.

The extra money must then come from the distributed milk, cheese and butter. The first, milk, can only be made to yield more to the producer if the method of distribution is changed. We have harped on this so often that we will not spend much time on it now, suffice it to again call your attention to the fact that out of the price the consumer pays for the milk at his door the distributor gets from 55 to 60 cents and the farmer or producer only from 40 to 45 per cent of the total.

The other two lines, cheese and butter, in the manufacture of which most of the milk is used then, in order to furnish more money to the farmer, be sold for more money to the consumer. Naturally, you ask, how is this to be done, and the answer is, by education. This education must be two sided. In the first place, the cheese and butter makers must be taught to manufacture quality goods. Poor butter and poor cheese are a drug on the market at any price and were in normal times always sold at a loss. Before the war a great deal of the poor cheese found an outlet over the free lunch counter of the saloons, being sold to the saloon keepers at 4 and 5 cents

below the market but now that this outlet has gone it goes begging at 12 to 15 cents below the market and if we had our say, would not be sold at all and the makers fined, instead, for making it. You farmers who are the owners of the cows as well as of the cheese factories and creameries, therefore, must see to it that nothing but quality goods are manufactured at your plants. You must insist upon it and see to it that your rules are lived up to the same way that the grading rules in the Western Fruit Growers' Association are lived up to by the members. After you have your machinery so adjusted that the factories will not dare to produce anything but the best, then sell it, under a label and a guarantee through your own selling agency and then get busy on the big task, the advertising line.

As stated first you must produce quality goods, then you must get your own selling agency, so as to save the middleman's profits for yourselves and then you must educate the consumer to use more butter and cheese than he is now doing.

When next you go to the cities, just watch out for a sign that reads, "Say it With Flowers." Those words with a picture of carnations or roses that it all, but it has made millions for the florists of the nation. Where formerly they could not get 50 cents a dozen for carnations, nor a dollar for roses, they are now selling over 20 times as many at \$2 for carnations and from \$5 up for roses and the public is yelling for more.

The public must be educated to the food value of butter and cheese and be taught that at the present price it is the best and cheapest food.

A big educational campaign could be carried on if every cheese factory and creamery would deduct one per cent from the checks issued to patrons and this money then be used for propaganda work. That one per cent would give the farmer 10 to 20 per cent and even more before the first year was up.—Organized Farmer.

Special Market Season for Horses

A LEADING commission dealer in horses at the Union Stock yards, Chicago, tells how farmers can get their horse power for nothing. He says it means careful selection and knowledge of the marketing seasons.

"The demand for horses is seasonal. The best market of the whole year for all classes, comes from March to June first. Horses are wanted for the spring work on farms—most of the farms in the east do not raise enough horses for their own use—and draft horses are wanted in cities by the ice men, the building contractors, and other lines of business especially active in the open months of the year.

"There is a strong demand again in the fall, when logging camps must be supplied with horses, and coal companies, trucking concerns and dealers take on extra horses to carry on their work in the winter. Drafters sell readily at these two seasons. The farm chunk sells well in the spring season, as well as the expressers and wagon horses, and there is more or less demand for single animals throughout the year. The buyers who create the real demand, however, by purchasing horses at large lots of one to ten hundred horses, are present in the spring from March to June, and again, but in lesser degree, in the fall. The heavy draft types find good demand in the fall, say from the middle of August through November. In July, and again in December, January February, the market is lowest for all classes. Driving and saddle horses find best outlet in the spring.

"The farmer who wants to get his work done for nothing will do well not to wait until the heavy spring demand begins, but buy a couple of weeks in advance,—say the latter part of February. He will save

more than the cost of horse feed in the difference in purchase price. Then, after the spring work is over, if he has taken care of his horse, he can sell him in June for fully as much, if not more, than he paid for him in February. This applies to drafters and the heavier farm animals. Farmers will get better power, and, by right buying and seasonal selling, get it for practically nothing, if they invest in first class animals which will resell readily at the various seasons, instead of looking for the cheapest.

"Another thing to remember—the time given a horse for rest and fattening after a hard season's work, is added dollars on his value. Ninety per cent of our buyers will choose a fat horse and be willing to pay more for him. It is just as important in horses as it is in other classes of live stock brought to market. In the fall, the farmer can figure the number of horses he will keep busy during the winter, and sell off all he has above the minimum. If rested and fed up a bit, they will bring a much better price in November than their purchase price in February.

"Seventy-five per cent of our corn belt farmers who could take advantage of this selling plan, don't turn over their horse stock each year or even every five years, for that matter. The farmer who has pasture enough to raise his own draft animals, if he breeds carefully, can not only get his work done free, but realize a big profit on his surplus horses. There is no reason whatever for his ever having to write off anything for depreciation, for it is the mature, hardened work horses, of seven and eight years old, which are most saleable to city users. With an understanding of the marketing situation, corn belt farmers can get their work done for nothing and, in many cases, make a profit on the feed and care their horses have required."

SHEEP

HAMPSHIRE SHEEP

A few good yearling rams and some ram lambs left to offer. 25 ewes all ages for sale for fall delivery. Everything guaranteed as represented.

CLARKE U. HAIRE, West Branch, Mich.

AM OFFERING FOR FALL DELIVERY HIGH class registered Shropshire yearling ewes and rams. Flock established 1890.

C. LEMEN, Dexter, Mich.

IT PAYS TO BUY PURE BRED SHEEP OF PARSONS

I sell and ship everywhere and pay express charges. Write for club offer and price list. Oxford, Shropshires and Felled-Delaines.

PARSONS, Grand Lodge, Mich. R-9

Put your faith in

BETTER BREEDING STOCK

For the best in Shropshire and Hampshire rams write or visit

KOPE-KON FARMS, S. L. Wing, Prop. Coldwater, Mich.

See our exhibit at the Ohio and Michigan State Fairs.

DELAINES

Hill Crest Farms

Black Tops and American Merinos. Fifty rams for stud or farm trade. Farm 4 ml. straight south of Middleton, Gratiot Co.

Newton & Blank, Perrinton Mich.

DELAINES RAMS, GOOD SIZE, WOOLY FELLOWS. Priced to move quick. Write wants to

JOHN BROWN, R 1, Blanchard, Mich.

DELAINES SHEEP LARGE, REGISTERED, B & C type, both sexes, for sale

F. H. CONLEY & SON, Maple Rapids, Mich.



Scotch Collie Puppies

Sired by EWALT'S SIR HECTOR

Natural heel-drivers, bred from farm-trained stock that have plenty of grit. Have a few for this week's delivery. I also buy thoroughbred Collie Puppies for training, either males or females. Breed your female collies to "SIR HECTOR" and I will buy the puppies.

Dr. EWALT'S COLLIE FARMS, Mt. Clemens, Michigan

EWALT'S SIR HECTOR
A. K. C. No. 244685

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30 cents per line, per issue. Special rates for 13 times or longer. Write out what you have to offer and send it in, we will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

POULTRY

FOR SALE MAMMOTH BRONZE TURKEYS. Toulouse Geese, White Pekin ducks, either sex, \$4 each at once. Old ducks weigh 10 pounds.

CHASE STOCK FARM, Marlette, Mich.

R. C. BROWN LEGHORN COCKERELS, \$1 each. White Pekin Ducks, \$2 each.

MRS. CLAUDIA BETTS, Hillsdale, Mich.

ORPINGTONS AND LEGHORNS

Two great breeds for profit. Write today for free catalogue of hatching eggs, baby chicks and breeding stock.

CYCLE HATCHER COMPANY, 149 Philo Bldg. Elmira, N. Y.

Cockerels & Hens, Leghorns, Minorcas, Campines, Reds, Rocks, Orpingtons, Wyandottes, Brahmans. Tyrone Poultry Farm, Fenton, Mich.

LEGHORNS

SINGLE COMB BUFF LEGHORNS, EARLY hatched Cockerels. Farm range from excellent laying stock.

J. W. WEBSTER, Bath, Mich.

GRABOWSKIE'S S. C. WHITE LEGHORNS. Young and old stock for sale.

LEO GRABOWSKIE, Merrill, Mich., R 4.

S. C. White Leghorn Pullets

Will sell from ten to two hundred while they last at \$1.50 each. May hatched well bred, and from good producers, average weight about one and one-half pounds each.

VALLEY RIDGE POULTRY FARM
Bloomington, Michigan

WYANDOTTE

Silver, Golden and White Wyandottes. Bargains in surplus yearling stock to make room for growing birds. Clarence Browning, R2, Portland.

FOR SALE IMPROVED BLACK TOP DELAINE Merino Rams.

FRANK ROHRBACHER, Laingsburg, Michigan

WANT A SHEEP? Let American Hampshire Sheep Association send you a dandy booklet with list of breeders. Write COMFORT A. TYLER, Sec'y, 10 Woodland Ave., Detroit, Mich.

FOR SALE—REGISTERED HAMPSHIRE yearling and lamb rams

HARRY E. PAYNE, Perry, Mich

FOR SHROPSHIRE YEARLING RAMS that have size and type write or call on

ARMSTRONG BROS., R 3, Fowlerville, Mich.

FOR SALE—NEARLY FULL BLOODED Shropshire breeding ewes.

Wm. LUCE, Reed City, Mich., R5

FOR SALE—SMALL FLOCK CHOICE REG. Hampshire. 7 two year old ewes; 6 ewe lambs and 3 ram lambs. JOE KELLEY, Elsie, Mich., Clinton Co.

FOR SALE: REG. IMPROVED BLACK TOP Delaine yearling rams. The profitable kind.

T. H. LOVE, R 3, Howell, Mich.

REGISTERED HAMPSHIRE RAMS

Lambs, Yearlings and two year olds

LONE CEDAR FARM, Pontiac, Mich.

GOATS

FOR SALE—GOATS Bucks and Does.

LONE CEDAR FARM, Pontiac, Mich.

PET STOCK

FOR SALE: FLEMISH GIANT RABBITS THAT are pedigreed and are well and healthy stock, male and females.

HOWARD SNYDER, R 2, Marjon, Mich.

FOR SALE, FLEMISH GIANT RABBITS, DOES, breeding age, \$6. Three months old pair, \$5. Registered does \$12 each. Stock pedigreed. Quality guaranteed.

E. HIMEBAUGH, Coldwater, Mich.

For Sale: Pedigreed Flemish Giant Rabbits, does and steel trays. Five and six mos. old.

RUSSELL J. COLLINS, R 1, Wolverine, Mich.

Scotch Collie Puppies

Sired by EWALT'S SIR HECTOR

Natural heel-drivers, bred from farm-trained stock that have plenty of grit. Have a few for this week's delivery. I also buy thoroughbred Collie Puppies for training, either males or females. Breed your female collies to "SIR HECTOR" and I will buy the puppies.

Dr. EWALT'S COLLIE FARMS, Mt. Clemens, Michigan

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30 cents per line, per issue. Special rates for 13 times or longer. Write out what you have to offer and send it in, we will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

WHITE WYANDOTTES, COCKERELS FROM 200 egg hens or better. May and June hatch. \$5 to \$8. Eggs \$2 per 15.

FRANK DELONG, R 3, Three Rivers, Mich.

RHODE ISLAND REDS

SINGLE COMB RHODE ISLAND REDS Early hatched, free range cockerels from standard-bred heavy winter layers. Liberal discount on orders booked now for fall delivery.

VALLEY VIEW POULTRY FARM
Mt. Pleasant, Mich., R 6

WHITTAKER'S RED COCKERELS

Both combs. Special discount on early orders. Write for price list.

INTERLAKES FARM
Box 4 Lawrence, Mich.

PLYMOUTH ROCKS

BARRED ROCKS, PARKS 200-EGG STRAIN Cockerels which will produce fine layers next year \$3 each.

R. G. KIRBY, R 1, East Lansing, Mich.

LANGSHAN

BLACK LANGSHANS OF QUALITY Bred for type and color since 1912. Started from pen headed by Black Bob. First prize cock at International show at Buffalo, Jan. 1912. Eggs \$3.50 per setting of 15. Winter laying strain.

DR. CHAS. W. SIMPSON, Webberville, Mich.

HATCHING EGGS

FOR SALE HATCHING EGGS FROM A HEAVY LAYING strain of S. C. R. I. Reds at \$2.00 per setting of 15 eggs, \$10.00 per 100. Stock of excellent type and quality at all times. Satisfaction guaranteed.

F. HEIMS & SON, Davison, Mich.

ROSE COMB BROWN LEGHORN EGGS FOR sale. One fifty per fifteen eggs. Flemish Giant rabbits that are giants. Quality guaranteed.

E. HIMEBAUGH, Coldwater, Mich.

Little Live Stock Ads in M. B. F. Do the Trick!



Write—

for This Big Free Book on "Corn Saver" Cribs

We want every farmer in this state to have a copy of our valuable new Corn Crib book—the biggest and finest book ever published on Metal Corn Cribs and Grain Bins. This book tells how millions of dollars worth of corn and grain are destroyed every year by rats, mice, fire and mould, on farms where ordinary wooden cribs and bins or rail pens are used for storage. It shows how MARTIN Steel "Corn Saver" Cribs will absolutely stop this enormous, costly and unnecessary loss and waste on your farm.

Write for your copy of this free book that explains how Martin Steel Cribs will pay for themselves on your farm in a year's time, by saving every bushel of your corn and bringing you the top notch market prices for it.

This book describes Martin Steel Cribs from A to Z—tells how their patented ventilating system keeps out snow and rain, yet cures every ear of your corn in perfect shape—far better than any wood crib you ever saw.

Martin Cribs

Disease carrying rats, mice and other vermin that destroy your corn, cannot live on farms where Martin Cribs are used. They shut off their food supply and starve them out. With your corn stored in Martin Cribs you stop your losses. Birds can't get in. Thieves can't steal it. Lightning or fire cannot damage it. Mould cannot spoil it. Hundreds of Martin owners say that the perforated sides plus the ventilating shaft in the Martin Crib has cured soft corn when the same corn in wood cribs rotted and spoiled.

Built of heavy corrugated galvanized steel, Martin "Corn Saver" Cribs will last a lifetime. Absolutely rust-proof, they never need repairs. They come in sections and are easily erected in a few hours' time—no special tools required. Once erected on your farm they are there to stay—no more bother—no more trouble for years to come. Martin Steel Cribs are built in circular style, oblong style (like illustration) and in shed styles. They are made in all sizes and styles to fit the needs of any farm from 100 to 10,000 bushels capacity.

Get This Big Free Book Today—Use the Coupon

Every keen, wide awake farmer in this state will want a copy of this valuable book. It explains how MARTIN STEEL CRIBS are saving money and making money for thousands of other progressive farmers throughout the country. It gives facts and figures on how much they will save you on your farm. If you want to stop the corn losses on your farm and make more money from your crops, then write for this big free book today. It costs only a postage stamp to get it. Fill out the coupon and mail it to us at once. We will send the book by return mail. Send coupon now.

(5)

Martin Steel Products Co.
Dept. 2605
Mansfield, Ohio

FREE BOOK COUPON

MARTIN STEEL PRODUCTS CO.
Dept. 2605 Mansfield, Ohio

Gentlemen: Please send me your big free book on Martin Steel "Corn Saver" Cribs and Bins. This does not obligate me in any way.

Name

Town

State R. F. D.

I am interested in a corn crib holding about bushels.
I am interested in a grain bin holding about bushels.

