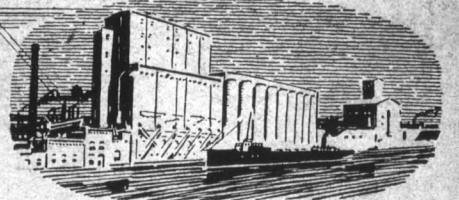


The Michigan BUSINESS FARMER



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MT. CLEMENS, SATURDAY, APRIL 23, 1921

\$1 PER YEAR.



"Be Sure to Cut 'em Two Eyes to the Piece."

COUNTY ABSTRACTS

ONE OF the real contests of the present session was staged in the senate this week over the bill presented by Senator Smith of Detroit deferring the means by which counties might get away from the monopoly in abstracting of which some of them appear to have just reason for complaint. The bill provided that the board of supervisors might order abstracting facilities installed in the office of the Register of Deeds and that abstracts might be made and sold under county authority. This was criticized as being a rather loose method and it was pointed out that a board of supervisors might through hasty and inconsiderate action place a tax burden of \$50,000 to \$500,000 on the people of a county without affecting corresponding benefits and it was agreed that the bill should be amended to provide that no county should go into the abstract business until the matter had been submitted to the people and approved by a majority vote thereof and Senator Phillips of Bay City presented an amendment in accordance with this idea providing that the matter might be submitted by the board of supervisors and that a majority vote should determine it. Then came our distinguished friend from Jackson Senator Brower, who insists that he is the real "Friend of the People" and that no others should be permit-

ted to enter without her approval, with an amendment providing that the proposition should be submitted only on a petition signed by twenty-five per cent of the voters and that it should not be carried unless seventy-five per cent of the vote was favorable and calmly announced that the bill would not be permitted to pass unless this amendment were adopted.

A heated discussion followed by Senators Brown, MacArthur and Baker in which motion of senators and their fitness to sit as senators was discussed with considerable frankness and the final result was that the amendment of Senator Brower was modified to provide for a ten per cent petition and a sixty per cent vote and then passed by the following vote:

YEAS—19. Amon, Baker, Brower, Eldred, Engel, Hamilton, Henry, Hicks, Lemire, McRae, Penney, Phillips, Riopelle, Ross, Sink, Smith (2nd Dist.), Vandembloom, Wilcox, Wood.

NAYS—9. Bryant, Clark, Condon, Davis, Forrester, McArthur, McNaughton, Smith (11th Dist.), Tufts.

It is needless to state that the abstractors affected were fully represented and apparently deeply in-

Lifting the Lid at Lansing



BY SENATOR
HERBERT F. BAKER

terested in the Brower amendment though the latter, strenuously denied that it was presented at their suggestion or that he had

discussed the matter with any of them or anyone representing them, which statement the writer is bound to accept as bona fide and in accordance with the established rules of "senatorial courtesy," he could not permit himself to entertain a single doubt as to its correctness.

AUTO LICENSE

THE DISCUSSION on this page of Lanky Sandy MacDonald's Auto License Bill in which its purposes were explained and in which the reason why it is being held up were pointed out together with the year and nay vote on it in the house, has produced marked results as several members who voted against it and whose constituents read M. B. F. have received petitions strongly favoring the measure and sharp letters from irate members of their constituency scoring them for their action have been received. Several of the aforesaid members have evidently seen a new light and have

concluded that it is safer to follow the wishes of their constituents than those of the State Highway Department, and we may reasonably expect some changes in the vote when next it comes before the house and now your Uncle Lanky is confidently predicting its passage before the end of the session. In this connection it might not be amiss to mention that Representative Evans of Lenawee, chairman of the house committee on Highways, who has been "sitting" on the MacDonald proposition has had introduced in the house a bill providing a tax of one cent a gallon on gasoline for road purposes and Sandy, who now has his Scotch blood thoroughly riled up may find some way to explode the gasoline in the Evans' proposition unless Evans lets the house get to a vote on the Auto License proposition and friends of his measure say "Go to it Sandy. More power to you!"

LEGISLATIVE NEWS

(State Farm Bureau Service)

RESTRICTION of truck loads traveling on the public highways to the rated capacity of the truck, with an extreme maximum of 14 tons, is provided by a bill which has just been passed by both branches of the legislature and is now awaiting the executive signature. An exception is made in the case of trucks of two tons or less rated capacity when equipped with pneumatic tires.

For the first time in Michigan's history, a bill requiring lights on animal drawn vehicles using the public highways after night-fall has passed both branches of the legislature. This bill has been greatly modified and rendered considerably less drastic by restricting its provisions to carriages, buggies, and wagons when traveling on village or city streets and trunk line highways. This bill passed the senate 27 to 0 and also awaits the governor's signature.

Senator Smith's bill to prohibit the placing of advertising signs within the limits of any public highway or on the private property of another without the owner's explicit consent also passed the senate 27 to 0 and was sent to the house for the concurrence of that body.

Lately appropriation bills have been given right of way in the legislature. The finance and appropriations committee of the senate and the ways and means committee of the house have worked night and day cutting to the very minimum the appropriation requests for the various state institutions and departments. In most cases their recommendations were agreed to without question, but there were exceptions.

Five insurgents from the hundred per cent support which has heretofore been accorded to all administrative measures were discovered when Governor Groesbeck's proposal to create a State Department of Public Safety came up for final passage in the senate. It is proposed that this new department shall take over the work of the State Fire Marshal's Department, the State Oil Inspector's Department and the Department of the Michigan State Police and be specifically charged with the enforcement of the prohibition law in Michigan. Without any debate, but with no apologies or excuses, Senators Baker, Bolt, Bryant, Riopelle and Smith of Wayne voted nay on the Governor's measure. Twenty-three standpatters answered yea.

The house, however, voted unanimously for the creation of the proposed State Welfare Department to centralize and co-ordinate the control of the several penal, reformatory and charitable institutions of the state. Boards having a total membership of 67 would be abolished and their duties placed under five boards all under the direct supervision of the Director of Public Welfare. This

(Continued on page 19)

2% Quarterly to You

Right reserved to redeem at 5 per cent above par value of \$10 at any dividend period commencing March 15, 1924, and previous to March 15, 1931, when entire issue is due and payable.

\$200,000 8% Cumulative Preferred

This stock, backed by \$500,000 common stock which has paid dividends steadily for 15 years, is marketed to provide funds for a new ice manufacturing plant to be built by the Consumers Ice Company of Grand Rapids, Michigan, to supplement the output of a previous plant which has been in successful operation for several years. The company has no debts—this stock issue is merely to provide funds for the new plant.

This stock is a good investment for Michigan citizens because:

(1) It pays 2 per cent quarterly—free from present city, state and county taxes, and the dividends free from federal normal income taxes.

(2) It is preferred both as to dividends and assets; the \$500,000 common stock back of it can receive no dividends until the full dividends on the preferred stock have been paid.

(3) The stock is due and payable March 15, 1931; but if the company exercises its rights

to redeem this stock at any dividend period commencing March 15, 1924 and before March 15, 1931, it must pay a premium of 5 per cent above par value of \$10 a share.

(4) The stock is being sold direct and there are no promotion charges; this method of marketing being possible because of the demand for the stock. Holders of Consumers Ice Company common stock already have taken a substantial portion of this preferred stock issue.

(5) The company is being managed by the following well known business men of Grand Rapids:

President, A. B. Knowlson of A. B. Knowlson Co., Coal Dealers.
Vice President, A. S. Ainsworth, owner of Bennett Fuel & Ice Co.
Secretary, C. C. Fellmer, Lumberman.
Treasurer, N. Fred Avery, Real Estate.
Director, Frank M. Clark, President, Grand Rapids Ice & Coal Co.
Director, Curtis M. Wylie, Lumberman.
Manager, Joseph Harner, 26 years with this Company.

Invest all you can spare in this company which has for 26 years been continually successful. For your convenience you may pay for the stock in cash with application or 25 per cent with application, 25 per cent May 15, 25 per cent June 15 and 25 per cent July 15, 1921. Interim receipts will be given drawing 3 per cent interest from date of payment to September 15, 1921, when the stock certificate will be issued. In case of oversubscription the company reserves the right to pre-rate same; also to withdraw any portion of the subscription before it is sold.

Mail the Coupon---Protect Your Interests Now!

Consumers Ice Company HAS NO DEBTS

Own Consumers Ice Company stock. Send your check with this coupon—and do it today.

CONSUMERS ICE COMPANY

GRAND RAPIDS, MICHIGAN

Gentlemen: Enclosed find check for \$..... as (payment in part) (payment in full) for shares Consumers Ice Company 3 per cent Cumulative Preferred Stock at \$10.00 per share par value.

Name

Address

City

Farm Leaders Investigate National Issues

Leading Statesmen Discuss Economic Problems Before Big Gathering of Farm

REPRESENTATIVES of a score or more farm organizations met in the city of Washington last week to take a first-hand look into some of the important national problems now pending before Congress. By far the largest representation was from the American Farm Federation which had delegates from thirty states. The Farm Bureau gathering was in the nature of a conference, and this organization invited delegates from other farm organizations to participate. Simultaneously an important convention was held by the People's Reconstruction League which has a number of ultra-progressive planks in its platform, not the least of which is government ownership of the railroads.

The railroad question was the principal topic of discussion at the Farm Bureau gathering, but no definite conclusions were arrived at. After listening to Secretary Hoover of the Department of Commerce and Chairman Clark of the Interstate Commerce Commission upon the railroad situation the Farm Bureau delegates decided to leave any recommendations that might be made to the legislative committee which expects to hold forth in Washington for some time during the present session of Congress. The Farm Bureau finds itself in a more or less embarrassing position. It was one of the few farm organizations which went sled-length for the return of the railroads to the private owners under the Cummins-Esch bill. At its earlier conventions its resolutions invariably contained an anti-government ownership plank. Prior to the last increase in freight rates which, figuratively speaking, was the straw that broke the camel's back, the Farm Bureau has been consistently, actively, aggressively opposed to further control of the railroads by the government. But since the last increase in freight rates which has virtually confiscated what little profit there might have been left for the farmers after the bears got through with the markets, the Farm Bureau is confronted with the choice of reversing its former position or bearing the brunt of the blame for the present situation. It dislikes to change its front, but since many of the best minds of the country have reluctantly admitted that the only solution of the rail problem is unified operation under government ownership, the Farm Bureau may be forced to take the same position.

Farmer and Freight Rates

The views expressed by Chairman Clark of the Interstate Commerce Commission were for the most part unimportant. The chairman seldom committed himself to a definite statement of opinion, apparently holding the position that being a government official his opinions belonged to the government rather than himself. The farmer delegates kept up a rapid fire of questions in the hopes of getting at the true facts of the rail situation. Mr. Clark thought that possibly unified control of the lines might effect some economies. Possibly lower freight and passenger rates might bring the roads enough more business to make up for their losses. Was it true that the railroads were purposely increasing costs of operation in order to increase their profits? (The Cummins-Esch bill is really a cost-plus agreement. The higher the costs, the higher the profits.) Mr. Clark could not say as to that but he had investigated some repair bills charged by the Baldwin Locomotive works. In some cases he found the

Organization Representatives

charges were reasonable. In other cases he found they were "outrageously high."

The effect of high freight rates on the farmer was discussed at some length. Mr. Clark admitted that lemons brought from Sicily could be sold cheaper in New York than those produced in California. A similar situation exists with reference to many other fruits and vegetables. The farmer's price has been cut to less than half, but freight rates have nearly doubled.

LaFollette Speaks

Senator LaFollette, of Wisconsin, appeared before the People's Reconstruction League and gave an illuminating talk upon the railroad situation. He first made clear the duty which the railroads owe the people of the country in exchange for public grants and other privileges which have been given them. He said that the railroads were duty bound to give good service, at reasonable rates, without discrimination. He ridiculed the idea

M. A. C. Improves Course

ADJUSTMENTS and changes in the agricultural course at the Michigan College, made to meet new and altered conditions in the agriculture of the country, have just been announced by Dean R. S. Shaw of M. A. C. A wider range of selection in class work for the student, and a general strengthening of the course are claimed for the altered curriculum.

None of the work previously given has been dropped from the course, additional subjects being added as options for the upper class elective work. As a result, a student will be able in the future to make a wider selection of studies, getting work along particular lines in which he is most interested. Only very minor changes are announced for the first two years of elementary study in the course, the schedule of the past being considered adequate at the present time.

Among courses added to the list of agricultural subjects is work adapted to practical dairy farming, including dairy barn management, market milk production, and dairy farm management. Another dairy course will train students in judging of dairy cattle and prepare a team to represent the college and state at the annual national dairy show.

Training in the selection of farm animals will be given in a new live stock judging course. This course also will aim to prepare a student team to enter the judging contest at the International Live Stock Show, at Chicago.

Other new courses include farm management work, under the recently established Department of Farm Management; additional farm mechanics subjects; a course in farm crops, giving work in potatoes, sugar beets, and minor root crops; a course in muck soils; and a general course in genetics, offered by the botany department and fundamental to all similar work in other departments of the division.

that the solution to the rail problem lay in the reduction of wages. He produced figures to show that prior to 1917 railroad wages were barely sufficient to enable the workers to live. He pointed out that the present average wage for engineers, firemen and conductors is less than \$2,500 per year and for all other trainmen less than \$1,500, which considering the

present high cost of living, is little enough. He held that the present method of operation was wasteful and extravagant, and that the only solution lay in outright government ownership.

Raps Reserve Board

John Skelton Williams, former comptroller of the currency, who made some spectacular charges against New York banks several months ago, gave some startling information concerning the operation of the Federal Reserve Act. He said the Federal Reserve Board had no fixed rate of interest; that it loaned money to certain New York bankers at $4\frac{1}{2}$ per cent which was in turn loaned to harrassed manufacturers, speculators, etc., at rates of interest running from 18 to 36 per cent. Asked if this was an individual case, Mr. Williams replied: "I do not refer to one case, but to many." Mr. Williams produced copies of his letters to the Federal Reserve Board asking them to fix a standard rate of interest to apply to all transactions. In some of these letters he questioned the policy of the Board in withdrawing credits from country districts, and claimed that the industrial centers were surfeited with federal reserve funds at the expense of country bankers.

Among Michigan delegates in attendance at the conferences were Grant Slocum, president of the National Gleaner Federation, and Milo D. Campbell, president of the National Milk Producers' Federation. Mr. Slocum spoke before the People's Reconstruction League, on "The Plight of the Farmer." Other speakers were Dr. E. F. Ladd, North Dakota Senator; and Sen. Wm. E. Borah, who spoke on "disarmament."

Bureau Sells Trainload Wool

THIRTY carloads of wool from the Michigan State Farm Bureau wool pool were sold to a great eastern clothing mill during the week of April 11, says an announcement from the farm bureau wool department. The shipment, nearly a trainload, represents half a million pounds of wool and was sold at several cents above what growers could have gotten through other channels, according to the department.

Sold direct from the producer to the mill and free from any profits accruing to several in-between agencies, the wool brought the farmer the following prices: Three-eighths blood, 27 cents; quarter-blood, 26 cents, and short clothing wools, 21 cents.

About 6,000 checks have gone out to date to growers having wool in the 1920 pool. The checks were payments on the sale of the cheaper grades of wool and make a partial payment of ten cents per pound. Checks are still going out. Sales are now being made on medium and Delaine wools. Grading of the remainder of the 1920 pool of 3,500,000 pounds will be complete May 1. New wool is coming into the central warehouse in Lansing. Reports from wool department men in the field indicate that the 1921 pool may exceed the big 1920 pool by perhaps a million pounds, according to the department.

The wool department is now arranging for the manufacture of a portion of the wool in the pool into a line of hard woven woolens and worsteds, in addition to the woolens already put out, says Mr. A. J. Hankins, in charge of the pool. The new line will be a part of suitings manufacturing project which the farm bureau has under way.

Halladay Named Commissioner of Agriculture

Governor Appoints Well-Known Farmer and Official to Head New Department

GOV. GROESBECK has appointed H. H. Halladay to head his new Department of Agriculture which was recently created by the legislature. Mr. Halladay is a well-known farmer and livestock owner. He enjoys the distinction of having held the office of State Commissioner of Animal Industry under four successive governors, having been appointed to that position by Gov. Osborn, a position in which he has distinguished himself by valuable service to the livestock industry and the people of the state in general.

Mr. Halladay assumes charge of the powers and duties hitherto vested in the Department of Animal Industry, the State Food and Drug Commissioner, the State Veterinary Board, the Immigration Commission, the Commissioner of Immigration, and the Market Director. In addition he will be required to act as chairman of the Board of Managers of State Fairs, which is created by the new law, and which will take over and operate the Michigan State Fair.

A Plain Farmer

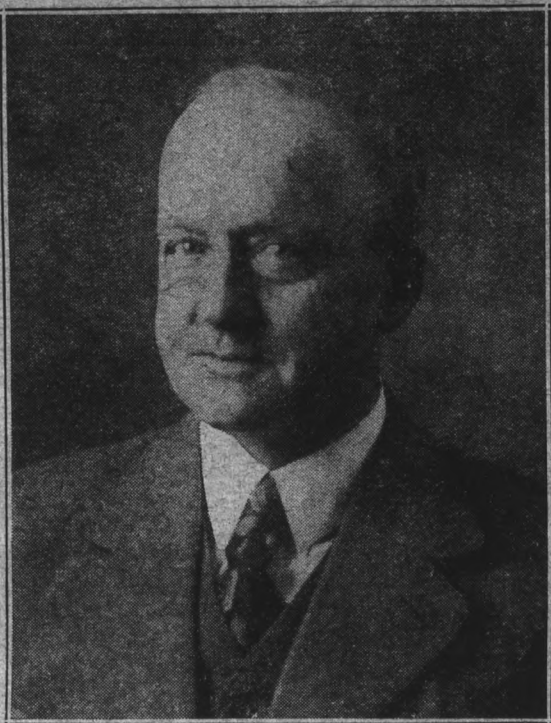
Mr. Halladay was born on a farm just outside the village of Clinton, Lenawee county, fifty-two years ago, coming from a long line of successful farmers. He still owns the farm which was his father's and until a year and a half ago made it his home. When his official duties become so tiresome that he needs a rest he slips down to the old farm which is now managed by his eldest daughter and her husband and becomes a real dirt farmer again for a day or two.

Mr. Halladay has always taken a keen interest in agricultural and live stock problems and was peculiarly well fitted to undertake the duties of the State Department of Animal Industry. When he first began to serve in this position the work was little understood by the farmers of the state, but under his constructive and progressive management the work of his department has become very extensive and useful.

His first prominent work on the commission came during the epidemic of foot and mouth disease in Michigan in 1914. The eradication of this scourge, ordered by the federal government in co-operation with the state proved his worth, as to him fell the task of planning and supervising the state's part in the ordeal. Much credit and appreciation was, at that time, expressed regarding his efficient management and kindly, yet firm, attitude toward all interests concerned.

After the successful handling of this task, he suggested to his associate commissioners, that hog cholera and tuberculosis could be cleaned up just as easily, if the same determination and methods were applied. Since that time, his efforts have been directed along this line, and hog cholera has been pretty generally eradicated, and now the problem of tuberculosis among cattle is receiving intensive work through co-operation between the federal government and the state. His attitude, that people should wake up to this menace; not only because of economic losses to farmers, but as a health measure, is one of his earnest ideas at the present time.

His interest and desires for the agriculture of Michigan, are very broad and include many



H. H. HALLADAY
State Commissioner of Agriculture

lines and plans for assistance. As Commissioner of Agriculture, he realizes that he is treading an uncharted course and plans to take plenty of time to study the problems and

Agricultural Fair Commission

Appointments to the Board of Managers of the Michigan State Fair have been made by Gov. Groesbeck as follows: John S. Haggerty, Detroit; C. T. Prescott, Tawas City; A. E. Stevenson, Pt. Huron; Jacob DeGeus, Alicia; Frank Coward, Bronson; H. S. Newton, Hart; H. W. Norton, Jr., East Lansing; Fred M. Warner, Farmington; Edward Hines, Detroit; Oscar A. Webber, Detroit; Robert Wallace, Saginaw; Andrew J. Crawford, Detroit; Clark Brody, Three Rivers; Forrest Lord, Mount Clemens; Perry F. Powers, Cadillac. The first eight men named were directors of the Fair last year, Haggarty being president.

A Central Michigan Pioneer

FIFTY-THREE years ago this spring an ambitious young man by the name of J. T. Daniells, settled upon an "80" in section one, Essex township, Clinton County. He still lives there. The log cabin in which the Daniells family lived happily for eighteen years was displaced in 1885 by the frame house shown in the accompanying picture. A lover of nature Mr. Daniells early planted a row of maple trees thirty feet apart along the highway running past his farm. From these trees the farm gets its name, "Maple Row Farm."

Maple Row Farm is located four miles east of Maple Rapids on the state reward gravelled road between Maple Rapids and St. Johns. Those who live within a radius of twenty-five miles or even more of Maple Row Farm are well acquainted with the farm and its owner, both of which successfully conceal the number of summers which they have seen.

Mr. Daniells is a well-read farmer, subscribing to a number of leading farm journals and other magazines, and is a frequent contributor to the Business Farmer. His ideals are high and he clings to them as persistently as when he was a youth. He is the founder of "Memory Day." In 1903 his wife died and in honor of her memory he secured a legislative act making September 30th, "Memory Day" to be devoted to beautifying the cemeteries and the graves of the dead. Mr. Daniells married again in 1916 taking to wife the widow of his only brother. In the shadow of the great maples they live in peaceful contentment, enjoying the love and respect of their neighbors and the heritage of more than a half century of service to man and God.

to proceed in a conservative way to gradually build a useful, economic department. He aims to make appointments for positions in the department only to the men and women fully qualified to serve, and who will give honest, efficient effort to their work. In these days of necessary economy, he wishes the people to pay only for efficient workmen and honest service.

Mr. Halladay will be the farmers' official representative in Lansing, and it should be their aim to make use of the services which his department is prepared to offer and to accord him their co-operation.

Methods of Transferring Bees

Am writing to ask for information on how to re-hive bees, or change them from one hive to another.—Clarence Bristol, Newaygo County, Michigan.

IN THIS article I will refer only to transferring bees from boxes or gums into modern hives. If the weather is nice and there is considerable fruit in the vicinity bees may be transferred during the fruit blooming period. Usually, however, transferring is done just at the beginning of clover bloom. If the combs themselves or several of them are transferred the work may be done any time during the spring or summer but if the combs are not transferred then the work must be done at a time when the bees can secure food from the flowers.

I shall give only two of the usual methods as I consider these the best, the first of which is the direct.

A standard hive with frames should be prepared and at least half of the frames wired and filled with full sheets of comb foundation. The other half may be left empty in order that the combs from the box may be tied into these frames. Set the box to one side and place the newly prepared hive in its place. Turn the box up side down if there is no bottom in it and with a wrecking bar or similar tool pry off the two sides of the box to which the smallest number of combs are attached then with a knife remove the combs one at a time and brush the bees from them in front of the new hive. The best combs containing the largest amount of worker brood may be tied into the empty frames using wool twine to secure them in place until the bees can fasten them up. By doing this a considerable part of the brood is saved and there is very little danger of the colony deserting its new home. After as many of the combs are tied into the frames as desired brush the bees from the rest of the combs in front of the hive and carry away all remains of the old hive and burn it. Some honey can be saved from the old hive if there is no disease present.

The above method is only successful when there is no disease in the hive. If disease is present then none of the old combs dare be used in the new hive. Otherwise the method of transferring is the same.

The slow method can be used only when there is no disease in the colony. If the colony to be transferred is in a bottomless box then turn it up side down so that the open side will be upward. Set a standard hive body with full sheets of foundation (Cont. on pg. 17)



A well-known farm house in Clinton county. The home of J. T. Daniells, a pioneer of over half a century.



The Daniells farm-very neat as a pin and Farmer Daniells takes a good deal of enjoyment sitting on the lawn seat reading the M. B. F., which he says is one of his favorite farm papers.

N. Y. Dairymen Market Milk Through Own Plant

\$450,000 Milk Plant Proves Profitable Investment to Producers in Onondaga County

By PHILIP S. ROSE

Reprinted from March 19th issue Country Gentleman by permission

WHILE most of the dairy territory is in a ferment trying to arrive at a solution of the problems which now beset the industry, the dairymen of Onondaga County, New York, are feeling quite comfortable. They believe they have met their problems and solved them. Moreover, they are congratulating themselves on having had the foresight and the courage to look ahead and take action before serious difficulties arose.

Briefly, what they have done is to form a local co-operative association, erect a plant equipped to take care of all the milk produced in their territory and begin operations. This is not by any means a new or a novel idea, but there are conditions surrounding the venture that are worth telling. To begin with, they are ideally situated to engage in this sort of co-operative undertaking. Syracuse has a population as indicated by the last census of 171,717 situated almost in the center of Onondaga County. There are a number of other towns and villages which, with the country population, give the county just about 200,000 population.

The city of Syracuse and its suburbs consume approximately 50,000 quarts of fluid milk daily, besides large quantities of butter, cheese and other dairy products, including a large quantity of ice cream. The local market is good and, with proper stimulation, might easily become much better. They have, therefore, a big all-the-year-round market right at their very doors which must depend mainly upon the immediately surrounding country for what it consumes. It was this big market right at hand that decided the dairymen of Onondaga County to put up their own plant.

"Had we been obliged to go out and develop a market," one of the members told me, "the project would probably never have been attempted."

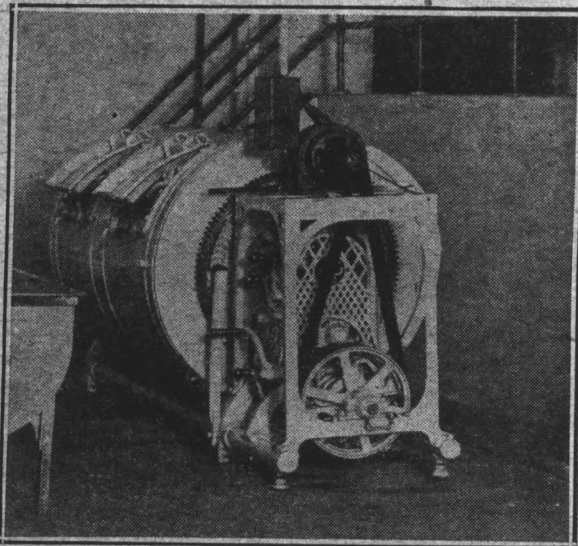
Why They Made the Plunge

Up to last October, when the dairymen opened their plant, the city was served by a number of independent companies. Some of them



A Model of Efficiency is the Plant of the Onondaga Milk Producers' Co-operative Association Located in the Heart of Syracuse.

were fairly well equipped; others were not. In consequence, the city did not receive milk of the highest quality and the farmers did not feel they were operating on a satisfactory basis. They had a number of grievances, but the chief one was the inflexibility of the mar-



A View in the Butter-Making Room, with One of the Big Churns.

ket. It could not expand when the flow of milk was heavy, and the result every summer was an over-supply and consequent loss to the producers.

The problem of waste is one that has confronted the dairy farmer in every section of the country for years and one that existing marketing agencies have not been able to cope with successfully.

Previous to the era of good roads, motor trucks and electric interurban transportation Onondaga County was liberally sprinkled with creameries and cheese factories. These constituted the farm market for milk. The creameries made butter and the farmers fed the skim milk to pigs and calves. The cheese factories utilized the whole milk and the farmers carried back whey to the farms. Under the old conditions the market was fairly satisfactory. It had its

drawbacks and prices were low; nevertheless the market consumed all the milk delivered to it and it was flexible.

Then came a set of new conditions. Quick, easy transportation opened up markets for fluid milk at somewhat higher prices. Daily milk trains were run to supply New York, Albany and other large cities. Receiving stations for fluid milk took the places of the old creameries and cheese factories, and the milk industry was placed on an entirely different basis. At first this seemed a profitable change, but as time went on the farmers discovered unfavorable features. One of these was that they had placed themselves voluntarily in the power of the large distributors.

For several years the dairy farmers of Onondaga County discussed the situation whenever a few of them gathered together and agreed that some means should be found to take care of peak-time production and eliminate the losses. Finally, a few of them evolved a plan of a co-operative milk plant that would not only handle fluid milk in the city trade but all other products formerly made in their little local creameries. They decided to combine the old methods with the new and thus provide themselves

(Continued on page 18)

Crop Reporting Service of United States Department of Agriculture

An Army of Two Hundred Thousand Men Gather Crop Statistics From the Far Corners of the Country

NOT LONG ago a prosperous farmer, on his first visit to the National Capital, sauntered into the main building of the Department of Agriculture. He looked around, then started leisurely down the hall toward a small group of men who stood in a doorway evidently interested in what was going on within the room. As he peered over their shoulders he saw several men around a table, each with one hand on it holding a large sheet of paper, and in the position of a runner about to start in a race.

The farmer became curious and drew nearer, but as he did so the clock struck and the men snatched the papers from the table and ran from it as if a bomb was about to explode in their midst. "What sort of a game is this," he thought, "and why are government employees permitted to indulge in such pastimes?"

Rush Crop Reports to Telegraph and Telephone Wires

When the runners, with papers waving, had disappeared he asked a bystander if he had gotten into an insane asylum. Then came a big surprise! "No," he was told, "they are newspaper reporters just receiving the crop reports released by the Bureau of Crop Estimates." He had often read the crop reports

published daily every in the U. ter seeing ness with men got mation and they em- getting it news p a- realized first time import- producers, buyers all country.

est led him to Leon M. Estabrook, chief of the bureau, the leader of statisticians, who is responsible for building up the greatest crop reporting service in the world. From him he got an insight into the efficient organization that collects and compiles the records of Uncle Sam's \$80,000,000 industry.

When Mr. Estabrook became chief of the bureau, in 1913, he introduced several changes to improve the service. Among the most important was placing a trained statistician as field agent in each state or group of similar states, who supervises the work of gathering



LEON M. ESTABROOK
Chief of the Greatest Crop
Reporting Service in
the World

in practic- newspaper S., but af- the eager- which the the infor- the speed ployed in to their pers, he for the its great ance to sellers and over the His inter-

statistics in the territories under his charge. In addition, there are crop specialists who collect data on one crop, as cotton, tobacco, rice, vegetables or fruits, in the area in which the crop is grown regardless of state lines. But the big staff of gatherers of statistics is made up of voluntary crop reports, of which there are approximately 220,000 located in all parts of the United States.

The Bureau of Crop Estimates serves as the statistical clearing house of the U. S. Department of Agriculture and for agriculture as an industry. It was organized as a division of statistics in the Patent Office in 1840, was transferred to the newly organized Department of Agriculture in 1863 and became the nucleus of that Department; was re-organized as the Bureau of Statistics in 1903, and as the Bureau of Crop Estimates in 1914.

The Bureau of Crop Estimates prepares and issues the monthly government crop reports, the Monthly Crop Reporter, the Statistical Appendix to the Yearbook of the Department of Agriculture, the Weekly Truck News Service (discontinued in 1920), Weekly Crop Notes of Field Agents, and Semi-Monthly Foreign Crop Notes, and issues summaries of crop reports on crop reporting days to the Associated Press and (Continued on page 17)

Well Prepared Seed Beds Mean Bigger Yields

Fields Must be Carefully Pulverized and Firmly Packed for Best Results

By O. R. FROST

MORE than two hundred years ago an Englishman coined the phrase, "Tillage is manure." It is just as true today as it was then, but in the light of later research we apply its meaning in a different way. When the phrase was coined, farmers believed that a growing plant fed on particles of soil much as a man would eat bread, and that the soil particles must be pulverized to a high degree of fineness before the plant roots could take them up. Long ago we learned that before plant food can be taken up by the tender roots it must be dissolved in water, the solution then being taken up by the roots in the same way that a lamp wick takes up salt when dipped into a salt water bath. We also know that the finer the soil is pulverized the greater is the surface exposed to the soil water, resulting in more plant food being dissolved and made available for the plant roots.

Most of our deep rooting crops require a deep, fine, compact seed bed, but some of our cereals, such as wheat and oats, do better when the seed bed is not so deep and is firmed down until it is very compact.

In addition to pulverizing the seed bed, tillage implements are used to stir and mix the soil, to compact it, to destroy weeds, to conserve moisture, and to facilitate the planting of seed. The importance of good tillage can not be emphasized too strongly.

While the modern plow has been one of the greatest labor and time-saving implements ever invented for the farmer, its improper use results in almost untold annual losses in yield. This is due to the fact that tender plant roots can not grow rapidly when

air spaces remain in the seed bed, nor can they penetrate the clods.

Most clods result from plowing when the ground is too wet. The pressure of the mold packs the wet soil, especially clayey soil, so that it puddles, forming clods so hard that surface tillage tools cannot pulverize them. On the other hand, soil plowed too dry breaks up into hard lumps that require most of the season to moulder down.

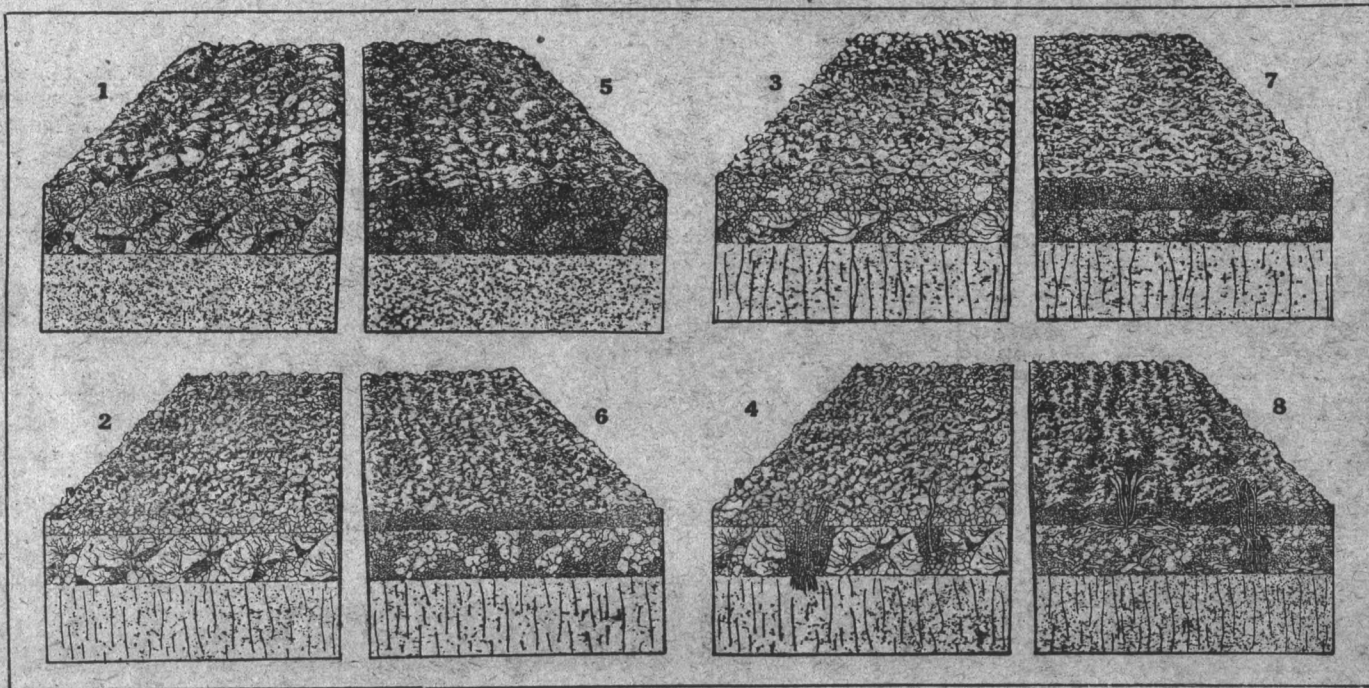
Part of the air spaces referred to are due to the presence of the clods, but most of them lie at the bottom of the furrow and are formed by the turned furrows piling upon each other, leaving an air space extending along the edge and length of the furrow slice. The evil lies in the fact that these air spaces and most of the clods are invisible after harrowing. The clods should be broken up and the air spaces firmed out, or many of the plant roots will be handicapped throughout the growing season. In addition to restricting the feeding area of the roots, clods and air spaces prevent the rise of sub-soil moisture—the one element absolutely essential to rapid, maximum growth.

No. 1 in the illustration represents a plowed stubble field. Observe that the ground is turned up in lumps and that air spaces at the bottom prevent a close contact of the freshly-

turned soil with the sub-soil beneath. In No. 2 this same field has been worked down with a peg-tooth harrow to what, on the surface, appears to be a good seed bed, but the air spaces are still at the bottom and the clods are buried in the soil. In No. 3 this field was both disked and harrowed. It left a deeper seed bed but it did not eliminate all of the clods and air spaces below. No. 4 shows this field planted to wheat and corn. The runners broke through some of the clods, depositing the seed deeper than intended. Perhaps the next hill is too shallow, or is dropped alongside a clod, or into one of the air spaces. This kind of seed bed accounts very largely for the difference in yield between adjoining farms, between different fields on the same farm, and between different parts of the same field.

Now look at No. 5. Same field at No. 1 but disked before it was plowed. As the furrow slice was being turned, the disked soil filled the open space at the bottom of the furrow. A peg-tooth harrow will put this field in comparatively good shape as seen in No. 6, but the use of the disk harrow, spring-tooth harrow and culti-packer, as soil and weather conditions require, would have made it the perfect seed bed shown in No. 7—deep, compact, free from clods and air spaces. With this kind of seed bed the planting depth is absolutely under control and every seed will be deposited under equally ideal surroundings. There will be no break in the upward flow of soil moisture. Every tiny, tender root will be imbedded in finely pulverized soil and do its full share in feeding the plant above.

—Courtesy of Tractor Farming.



Signed Contracts Pour Into Office of Beet Growers' Association

Receipts on Closing Days of Campaign Indicates Growers Throughout State Sign Association's Contract

SIGNED SUGAR beet growers' contracts, drawn up and presented by the Michigan Sugar Beet Growers' Association to 12,000 beet growers of the state, were reported coming in bunches into the state office at Durand during the closing days of the campaign, which ended April 16. Campaign figures were not available at that time and will probably not be published until the close of a state farm bureau beet growers' association meeting at Lansing during the week of April 18, says the state farm bureau.

All preliminary reports, however, indicate that beet growers throughout the state signed the beet association's contract in preference to the factory paper, particularly as the association contract is said to represent a considerable increase to the grower over the factories' contract, based on the same price of sugar. Eighty per cent of the growers in Allegan county signed growers' contracts, according to Alfred Bentall, county agent. About 100,000 acres had been signed up early in April, says T. C. Price, an association official.

At the close of the farm bureau beet grow-

ers' board meeting, definite statement is expected to be made on what the beet growers' association can accomplish for the growers. "The growers' association is not making guarantees as yet," says C. E. Ackerman, general manager of the Michigan Sugar Beet Growers' Association, but if the growers sign the contracts made by their association and stand behind it, we will have control of our crop and be able to say something about the price of it."

The growers' contract is based on the contract made by Utah and Idaho sugar beet growers with their factories. That contract is said to have netted the growers an additional \$2,000,000 return on a crop far less in tonnage and sugar content than the average Michigan crop. It provides for \$6.45 a ton for beets when the wholesale price of sugar is \$5.00 a hundred. For every \$1.00 increase in the New York seaboard wholesale price of sugar, the contract adds \$1.29 per ton.

The Holland-St. Louis Sugar Company is declared by H. W. Day, associate farm adviser of the Cook county farm bureau, to have signed some Illinois growers at \$7 beets for

\$6 sugar. The Michigan Sugar Beet Growers contract stipulates \$7.74 beets for \$6 sugar and \$1.29 per ton addition for each \$1 increase in the wholesale price of sugar as against \$1 additional offered by the company. The Holland-St. Louis Company is said to have improved its price when placed in competition with the Charles Pope Sugar Company.

Smaller companies in Michigan are said to be near negotiations with the growers, and beet growers committees are visiting all of them, according to Mr. Ackerman.

The sugar beet growers' association is sorting all the contracts on hand, according to the different factories in the state. These contracts will be offered to the factories. In case they are refused as they are now written and a reasonable offer is made in the way of a change, it will promptly be referred back to the individual grower for his acceptance or his rejection. The association officials are urging their growers to stand fast if they would win their point. The association contract makes the association the representative of the grower before the sugar manufacturers.



The Organized Farmer

FARM BUREAU—FARMERS' CLUBS—FARMERS' UNIONS—GLEANERS—GRANGE



FRUIT MARKETING CONFERENCE

IT TAKES a carload of apples to buy a suit and overcoat in Washington," said Gray Silver, Washington representative of the A. F. B. F. at the recent fruit marketing conference in Washington. "A tailor asked \$300 for the suit and overcoat, and in those two articles there were twenty pounds of wool, which the grower could sell for only 20 cents a pound. Last summer in the eastern part of New Jersey, Maryland, and the Shenandoah Valley of Virginia tomatoes were rotting in the fields; those sold brought only 50 cents a bushel. When I got back to the national capital tomatoes were selling at the central market for 10 cents each.

"Apples were selling at 1 cent a pound down in Virginia, only two hours away, while in Washington retail dealers were selling them at 10 cents a pound and I paid 50 cents apiece for baked apples or at the rate of \$175 a barrel. But I found out that the commission men only got \$60 a barrel when he sold them to the hotel."

There were similar stories from Virginia, Illinois, Missouri, and Kansas. Others told how local or district co-operative marketing associations had helped solve a part of their market troubles. Judging from the remarks of various speakers, their local and district associations, like those of Michigan, Colorado and Arkansas, have helped considerably and all well worth while, but are not considered adequate to meet all situations except where more or less complete commodity control is secured. In that respect the California and Oregon associations seem to have a distinct advantage.

James R. Howard, president of the American Farm Bureau Federation pointed out what he regarded as three fundamental things in improving fruit growers' conditions—transportation, tariff and co-operative marketing.

Four propositions were set forth in the resolution, aside from the plan of creating the committee of twenty-one. They are as follows:

1. Authorizing and asking the American Farm Bureau Federation to set up a fruit marketing department with competent men in charge.
2. Urging that all state fruit marketing specialists get together and work out standardized grades for all states.

3. Asking the American Farm Bureau Federation legislative department to work for a protective tariff on lemons and some other fruits, as these industries face destruction from foreign grown products.

4. Warning fruit growers against signing up long time contracts to deliver their fruit crops. It was reported that companies claiming to be co-operatives were trying to sign up growers for three to five years, which would defeat the fruit growers' national marketing plans.

THE ELEVATOR EXCHANGE

WHEAT AND rye marketed thru the farm bureau elevator exchange by farm bureau members during the month of February paid an average premium of 3 1-2 cents per bushel over and above the daily bids of five large grain jobbers of the country, says the elevator exchange in comparing its actual daily sales figures to jobbers' bids.

These figures do not mean, says L. E. Osmer, manager of the exchange, that every sale made thru the farm bureau elevator exchange is going to mean such a saving, but it does mean that during that period every bushel sold on an average of 3 1-2 cents above competitors' prices. Elevator exchange prices are said to compare very favorably with the best prices offered by jobbers and often are higher.

Seventy-nine co-operative elevator associations are now affiliated with the elevator exchange. They are joining up at the rate of one or two a week. Elevators affiliated with the exchange market all their grain through the state exchange. Many of them have bean and hay agreements. The Tri-County Marketing Association at Brunswick joined with the exchange during the week of April 11.

BUREAU HANDLES MICHIGAN'S ALLOTMENT OF PHOSPHATE

BUT 50,000 tons of the normal Michigan spring purchases of 125,000 tons of acid phosphate have found their way into the state because of the almost prohibitive freight rates says the traffic department of the state farm bureau, quoting figures from the U. S. Department of Agriculture. Freight rates on ordinary 16 per cent acid phosphate from Tennessee, the nearest source, range from \$7 to \$8 a ton, adds the department. This high rate coupled to the high price of com-

mercial fertilizers has cut 75,000 tons off the normal amount of acid phosphate fertilizer shipped into the state.

The state farm bureau, recognizing the situation for some time past has been assisting its members to solve the problem. The farm bureau method included the taking over for Michigan of the state's allotment of a western made treble superphosphate—45 1-2 per cent available phosphoric acid as against the 16 per cent available phosphoric acid carried by ordinary phosphate—and disposing of it through its purchasing department at prices the farmers are said to consider right. Freight rates on carlots are prepaid and half the freight rates on less than carlots is prepaid, through an arrangement with the manufacturer of the phosphate, says the farm bureau.

The farm bureau further points out that with the treble superphosphate about three times as strong as the ordinary 16 per cent phosphate, the farmer saves two thirds of the ordinary haulage and labor charges.

THE TRUTH ABOUT FARM BUREAU SALARIES

THE MORE or less sensational charges made by Rep. H. J. Coleman concerning the salaries paid to Farm Bureau officials brought a flood of letters to the M. B. F. offices from members of the organization, inquiry as to the truth of the statements. Examination of the Bureau's financial statement for the fiscal year ending January 30, 1921, does not show any such salaries paid as claimed by Mr. Coleman. This statement is available if he desires to examine it. The M. B. F. asked Mr. Jas. Nicol, president of the Farm Bureau, to tell us the facts about the salaries paid and the details of the wool pool, which he has done in the following letter:

"Thanking you for your interest shown toward our problems in your letter of the 11th. Would state in regard to statement said to have been made by Mr. Coleman.

"That the largest salary paid in wool department is \$3,500 and is paid to the grader. The sales ser-

(Continued on page 19)

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MARKET FLASHES



TRADE AND MARKET REVIEW

MANY IMPORTANT developments, during the past week, tend to the permanent advancement of business and a gradual return to normal industrial conditions. In response to the call of the President, congress has convened and gone promptly to work. The emergency tariff and anti-dumping bill was passed, last Friday, by a vote of 269 to 112; the wholesome, salutary effect of this measure, upon certain lines of business, can already be discerned. The abolition of the war railway pact by the United States Railway Labor Board has the general appearance of a wise measure; in making the announcement referred to, the board directed that employers and laborers get together and formulate a new code of working rules and by-laws so that they can be put in force by July 1 or very soon after. It is an open secret that the national labor agreements have resulted in a tremendous expense to the railway systems. The Pennsylvania Railway Co. claims that living up to these agreements cost that system more than \$300,000,000 per year. The 18 labor unions affected by this decision seem to be as well pleased with the order as the employers are for they believe that a new agreement can now be formulated which will be much more satisfactory to all concerned than were the terms of the agreements which have just been abrogated. That the railway companies affected by this decision have been relieved of a tremendous embarrassment was evidenced by a strong upward movement in the stock issues of many of these companies.

In view of the many important measures that are still pending in the Michigan legislature, the close of the session, which is set for April 29, is looked forward to with considerable anxiety by the residents of many large and important districts that are being served by electric interurban railways; some of the pending legislation seeks to abrogate the terms of existing franchises making it possible to raise passenger rates of fare on these lines to three cents per mile. This is of vast importance to the people who are obliged to travel frequently over the lines of the companies that are trying to sidestep franchise regulations. Members of the legislature find themselves in a delicate position because of the conflicting interests referred to above and many of them seem to be undecided as to what course they should take.

One of the most important and far-reaching announcements made this spring comes from the United States Steel Corporation in the form of a sweeping reduction in selling prices of its various products; in this connection, nothing has been said, as yet, concerning reduction in the wages being paid to steel workers but it is generally understood that the cut in quotations will mean lower wages for the workers in this industry. The Detroit, United Railway has just announced a 20 per cent cut in wages and it is taken for granted that the new working agreement, between the steam railroad companies and their employees, will provide for a much lower wage scale.

The automobile industry seems to be progressing, rapidly, toward normal conditions, the announcement that the Ford Motor Company has already accumulated 104,000 unfilled orders, proves how absolutely indispensable, to the average American, is the modern horseless wagon. Many of the makers of the more expensive cars are also increasing their working forces, a fact that indicates that they, too, are increasing their list of orders for immediate delivery. Manufacturers in many other lines report similar experiences to those which the motor makers have had

Edited by H. H. MACK

GENERAL MARKET SUMMARY

DETROIT—Wheat weak in face of bullish news; other grains dull. Potatoes and beans inactive. Cattle active.

CHICAGO—Corn and oats steady. Wheat dull. Potatoes weak. Hogs active. Sheep higher.

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

and the result is a steady decrease in the number of the unemployed.

The only element in the present situation, which has an ominous look is the manufacturer, who must sell his products to the farmer, is the tremendous decrease in the purchasing power of the aforesaid farmer, resulting from recent declines in the market value of all agricultural products; there is, however, a well-defined opinion, prevailing among the men best qualified to judge of future market prospects, that the present scale of values is in no sense permanent. The general trend of markets in other years has made it plain that selling prices do not remain for any great length of time very far below the cost of production.

The market for foreign exchange is showing a tendency to harden and if it were not for the British labor troubles and the reparations dispute with Germany, we would be carrying forward an export trade with European countries that would be on a par with pre-war conditions.

WHEAT

WHEAT PRICES PER BU., APR. 19, 1921				
Grade	Det.	Chi.	N. Y.	
No. 2 Red	1.34	1.34	1.50	
No. 2 White	1.32			
No. 2 Mixed	1.32		1.47	
PRICES ONE YEAR AGO				
No. 2 Red	2.82	2.80	2.80	

British labor troubles demoralized the wheat market throughout the entire country last week. The Detroit market lost a total of 15 cents. In many sections country bankers assisted the downward trend of the market by showing an anxiety to have farm loans liquidated which forced farmers to rush their grain upon the falling market to meet their obligations. Domestic buying was poor but export buyers snapped up all offerings rapidly allowing no surplus of volume to accumulate at any of the large marketing centers. The flour and feed business was dull all the week. Passage of the tariff bill by Congress last Friday made for a bullish market on Saturday and wheat made small advances. Then came news from the west of heavy snow and cold weather. This was the first real crop scare the market has had this spring and prices jumped upward, the Detroit market closing 3 cents higher, on Saturday night. Monday morning of the current week

wheat opened 1 1-2 cents higher at Detroit owing to fear of crop damage but with rapidly growing opinion that the damage would prove to be only minor and buying that lacked volume the price again sagged.

CORN

CORN PRICES PER BU., APRIL 19, 1921				
Grade	Det.	Chi.	N. Y.	
No. 2 Yellow	.62	.58	.70%	
No. 3 Yellow	.62			
No. 4 Yellow	.59			
PRICES ONE YEAR AGO				
No. 2 Yellow	1.77	1.72		

Corn followed the trend of wheat as usual, working lower last week up until Saturday and then turning for the better. Saturday's close found prices at Detroit on the level of those quoted the opening days of the week. On Monday, April 18, prices advanced early in the day but dropped before the close.

Some improvement in the shipping trade was noted last week and sales for the week at Chicago amounted to 800,000 bushels. Receipts at that point were 578 cars, compared with 175 a year ago.

OATS

OAT PRICES PER BU., APRIL 19, 1921				
Grade	Det.	Chi.	N. Y.	
No. 2 White	.41 1/2	.38 1/2	.48	
No. 3 White	.40	.38		
No. 4 White	.37			
PRICES ONE YEAR AGO				
No. 2 White	1.13	1.12	1.11	

Unless something unusual happens in the oat or corn market they are hard grains to write about because, on the average, these grains follow the trend of wheat and what is said regarding the latter grain applies to all three. Owing to the comparatively low prices oats did not decline as sharply as other grains last week and selling was not pressed. Chicago receipts totaled 319 cars, against 191 a year ago, and shipping sales amounted to about the same as corn.

BEANS

BEAN PRICES PER CWT., APR. 19, 1921				
Grade	Det.	Chi.	N. Y.	
O. H. P.	8.15	4.25	4.50	
Red Kidney	9.00			
PRICES ONE YEAR AGO				
O. H. P.	7.50			

After declining 10 cents at Detroit during the past week, beans are

steady. Other large markets declined from 5 to 10 cents. The demand is rather lacking at present and the market is inactive.

RYE

Catching the fever that infected other grains rye slid down to \$1.35 for No. 2 at Detroit. Buying of any nature does not show much activity in this market at present. Export buying supplies the main demand in this grain and when this lacking the market rules dull.

POTATOES

SPUDS PER CWT., APRIL 19, 1921		
	Sacked	Bulk
Det.	1.00	
Chi.	.90	
N. Y.	1.20	
Pitt.	1.00	
PRICES ONE YEAR AGO		
Det.	5.00	

Old king spud is having troubles of his own when it comes to prices going lower. Dealers are as anxious to buy old potatoes as they are to catch the measles and farmers are having a hard time to unload. Some idea of the stocks of potatoes still remaining in the hands of producers is given in the crop report for the state of Wisconsin, as of April 1st. On that date there were 6,970 cars of potatoes in growers' hands as compared to 1,300 cars on the same date a year ago. The present holdings represent 26.9 per cent of the crop. In acreage of 93.4 per cent of the 1920 acreage is indicated for the present year.

HAY

HAY PRICES PER TON, APR. 19, 1921				
No. 1 Tim.	Stan. Tim.	No. 2 Tim.	No. 1 Clover	No. 2 Clover
Det.	20.00 @ 21.00	20.00 @ 21.00	18.00 @ 19.00	16.00 @ 17.00
Chi.	24.00 @ 25.00	23.00 @ 24.00	21.00 @ 22.00	19.00 @ 20.00
N. Y.	30.00 @ 31.00	28.00 @ 29.00	26.00 @ 27.00	24.00 @ 25.00
Pitt.	24.00 @ 25.00	23.00 @ 24.00	21.00 @ 22.00	19.00 @ 20.00
HAY PRICES A YEAR AGO				
No. 1 Tim.	35.50 @ 36.50	35.50 @ 36.50	33.50 @ 34.50	31.50 @ 32.50
Det.	34.50 @ 35.50	33.50 @ 34.50	31.50 @ 32.50	29.50 @ 30.50

Prices on some markets advanced during the past week while on others went lower. Receipts are growing smaller and the market is inclined to firm up.

WOOL

Fair business was done in the wool market last week, it is reported, but as a whole activity is rather less pronounced. Prices are inclined to hold steady on an erratic market. Woolen mills are increasing their activities but the market is heavily stocked and competition among dealers holds prices down. The passage of the tariff bill may help prices some but not much, it is thought, as clipping has begun all over the west and the new supply with the stocks of last year's clip unmarketed will counteract the strength given by the tariff bill. Reports come from the west that dealers are willing to advance only 5 to 10 cents for fair to good clips and rarely more than 12 cents for the choicest.

DETROIT PRODUCE MARKET

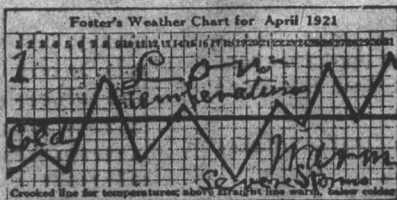
There is a quiet and easy tone in nearly all lines in the Detroit produce market. Apples are showing very little activity. Demand for eggs is good and both consumer and packer are in the market. Fresh receipts of eggs are 26 to 26 1-2 cents a dozen. Fresh creamery butter at 44 1-2 cents is in demand and steady. Poultry is also in demand and receipts are not large. There is little activity in the dressed hog market and dressed calves are only meeting with a fair demand.

LIVESTOCK MARKETS

For the first time since the heart-breaking experiences which followed the close of Lent, all grades of live stock begin to show an improvement in demand and prices tending toward

THE WEATHER FOR THE WEEK

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



WASHINGTON, D. C., April 23, 1921.—High temperatures have been expected to spread over the middle Pacific slope and middle Rockies near April 22, immediately northwest of which a great cool wave will push its nose into the warm wave in front of it. This condition will result in, not dangerous, but severe, storms. These will move eastward, reaching the Atlantic coast near April 26. Near May 1 another high, or low temperature wave, will come out of

the extreme northwest, beginning with moderate temperature, but the week centering on May 4 will average much cooler than usual, causing rather unfavorable crop weather for the week. Not much rain, not very stormy weather, not very disagreeable, but poor growing weather.

May will be about an average crop weather month; warmer than usual during the fifteen days centering on May 19, and cooler than usual during the eleven days centering on May 6. Unusually severe storms during the weeks centering on 19 and 31. I particularly give warning that the last mentioned will be a very dangerous storm, or set of storms of various kinds. Life and property may be saved from loss through caution.

W. T. Foster

higher levels; the exceptions to the rule are heavy steers and heavy lambs which nearly always go slow at this season of the year. Compared to other years, the cattle trade is running true to form as to the kinds for which there is the most active demand. During the last half of April and the entire month of May, it is the light steers and the handy butchers cattle that have the call and this year will be no exception to the rule.

The Chicago cattle market made a fairly good showing last week, the gain in the steer department being from 25 to 50 cents per cwt. No great improvement in the demand was noted but the quality averaged extra good and the receipts for the week were 2,500 less than for the week before. Eastern order buyers were not especially active last week, although higher prices for dressed beef were quoted at several eastern points. One of the most encouraging features of the current cattle trade is the increase in export demand. The big packers are handling the export deal and they bought 1,650 cattle last week, shipping nearly all of them to Great Britain.

The top price paid for cattle last week in Chicago was \$9.50 for a band of extra fine yearlings; the top for mature steers was \$9.40. The Chicago demand for butchers cattle exceeded anything that has been pulled off there this year, prices gaining a little every market day after Monday and the demand just nicely taking care of the arrivals.

Chicago got 99,000 sheep and lambs, last week, 34,000 coming direct to the packers from western markets; the "directs" showed a gain over the week before of nearly 24,000. Twenty markets got 296,000 last week, a gain of 9,000 over the showing of the week before. The Chicago sheep market was a three-cornered game, last week, shippers, exporters and packers competing with each other for the moderate offerings that came to hand. More than 2,000 sheep and lambs, nearly all of them heavy weights, were shipped abroad, last week. Exporters are taking lambs that weigh above 100 pounds. The best grades of fat lambs did not show much gain, last week, but the in-between kind were unevenly from 25 to 50 cents per cwt. higher than the week before. Shorn Colorado and Michigan ewes sold for \$6.00 with the wool on, this kind brought \$6.50. Nearly all of the yearling wethers that came to hand had been shorn and they sold for \$6.50 to \$7 per cwt. Shorn two year old wethers brought \$6.50 and older wethers going at \$5.75 to \$6.50 according to weight and average quality; the heavier the wether the less he brings per cwt. The top for lambs, last week, was \$10 for woolled stock. Packers paid \$9.25 to \$9.35 for extra quality shorn lambs. The average price for lambs last week, in the Chicago stock yards was \$9.30, being 15 cents higher than the week before. A small band of feeding lambs sold during the week in the Chicago market for \$7.50 per cwt. The demand for breeding ewes has been very quiet of late.

The chief point of interest just now in connection with the live hog and commodity situation is the speculative options in provisions. The May deal is on the last lap and the general opinion seems to be that when liquidation in the long option is over, values will gradually harden in order to let the packers out with their big supplies of meat and lard. Last week's hog receipts in 20 markets were 597,000 hogs being 78,000 more than for the preceding week. On Monday and Tuesday of last week, comparatively large runs of hogs in the Chicago market took the pep out of the trade and caused prices to drop lower than on any preceding date since 1916. The top price for hogs in Chicago last week was \$9.60, on Monday. The spread between light and heavy hogs has been growing narrower of late; real heavy lard hogs are dull and good fat mediums are taking the lead.

Smaller hog receipts are looked for during the next 60 days and present indications favor somewhat higher prices, between now and tax-

paying time, next fall. Shipments of lard to the outskirts of our own country and to Europe have been very heavy of late. On Friday, of last week, the July option in lard touched the low point for the present season at \$9.92 1-2 per cwt.; on the same date, one year ago, the same option made \$21.10 per cwt.

Light steers with a fair "kill" on them have been selling well in the Detroit market, of late and the same may be said of handy butchering cattle; cattle of the latter class are very scarce in all markets and the number is sure to grow less during the next 60 days. Calves and lambs have been selling well in Detroit but hogs have been badly out of line nearly every day.

NEW YORK SUGAR MARKET

On Monday of this week raw and refined sugar opened quiet but later in the day advanced on covering and trade buying. Raw Cubas is quoted at 4 3-4 cents. Refined is worth \$7.65 to \$8 for fine granulated.

CUTTING THE COST OF LUMBER

Apparently lumber is one of the few items which has kept pace with the downward trend of farm crop prices. Those who know tell us that the buying power of a bushel of grain or a pound of live stock, is today greater when used to purchase lumber, than any one other farm necessity.

Now comes the McClure Company of Saginaw, well and favorably known as the manufacturers on a very large scale of silos and industrial houses with an announcement which appears for the first time on the back cover of this issue of the BUSINESS FARMER which means a still further cut in the cost of building in Michigan this season.

Their plan, we understand, includes not only the sale of the lumber all ready cut up and with plans furnished for easy assembly, but also furnishing the full lumber requirements for any style of new house, barn or other building or any alterations to an old building.

They have a complete architectural service which they have offered to place at the disposal of any reader of the BUSINESS FARMER, to help plan any new building or alteration which you have in mind and by applying the factory method of cutting up the lumber to save every scrap of waste, they not only save the builder time in erection but the buyer many dollars in unnecessary material.

We hope that every reader of the BUSINESS FARMER who has in mind even the possible use of a small or large amount of lumber for either building or alteration will use the coupon from the back cover to bring without any obligation, the McClure folks plan. We are proud to be able to introduce and endorse this money saving plan to our thousands of readers within easy shipping distance from their main plant at Saginaw.

AN EXPLANATION

IN THE February 19th issue of the BUSINESS FARMER there was an item relating to the organization of co-operative store at Ithaca by Mr. T. W. Michael. Mr. Michael alleges that certain statements contained therein were false and misleading and has asked us to make the following statement which, he says, is a true account of his activities along that line:

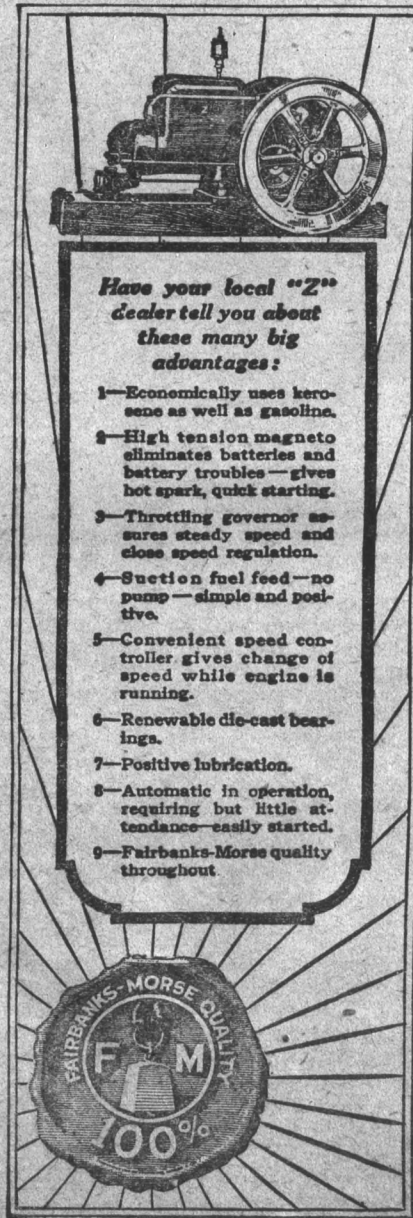
In January, 1920, Mr. Michael, formerly a deputy of the Michigan State Grange, entered the employ of the National Consumers Co-operative Association of 342 River Street, Chicago, Ill., as a salesman for the said Association at a salary of \$35.00 per week and expenses, and was granted his license by the Michigan Securities Commission. The National Consumers Co-operative Association were establishing Co-operative stores in the United States, known as the chain store system with a central organization in Chicago. When a person joined this organization they became part owners of all the stores owned and operated by the said National Consumers Co-operative Association and also the wholesale house which they owned and operated at 342 River Street, Chicago. When Mr. Michael entered their employ the shares of stock were \$10.00 and a life membership of \$3.00. The share money was to be used for purchasing goods for the stores. The \$3.00 mem-

bership was to be used for organizing. Each store was represented at the central organization by two delegates. By a majority vote of the delegates at a meeting in June the share money was raised to \$50.00 and the membership to \$10.00, beginning July 1st. Both membership and share money was to be collected from the members at time of joining. The Securities Commission asked Mr. Michael to designate the bank in Michigan where he would deposit the money to the credit of the National Consumers Co-operative Association, and he designated the Clare County Savings Bank, at Clare, Mich. The Association furnished him with a weekly salesman's report sheet. The share money was to be deposited in the Clare County Savings Bank and the membership money sent to headquarters in Chicago, all of which Mr. Michael did. He kept a copy. When the Ithaca store, branch 13, opened the central organization sent up a manager from Chicago. Mr. Michael then left Ithaca to organize more stores. In about ten days he received a message to come to Ithaca, and was informed by Warren Mellinger, president of the Ithaca store, that the manager could not get along with the help. Mr. Mellinger called a meeting of the board of directors and had Mr. Michael fire the manager. Mr. Mellinger recommended a local manager for the store in the person of Ed. Clark, of Marlon, a particular friend of his, but Mr. Clark could not come until fall, so the board of directors asked Mr. Michael to manage the store until that time. Mr. Michael was called to Chicago before the central organization and asked why he had fired the manager from Chicago. Mr. Michael advised the central organization to allow the local store their own manager, which the Central Organization did, and Mr. Michael was transferred from the salesman's pay roll to the pay roll of manager, which place he retained until relieved by Mr. Clark. While manager of the store Mr. Michael discovered that the Central Organization was not paying the bills of the

store, and also discovered that they had withdrawn the money from the Clare County Savings Bank for the Michigan store. Mr. Michael went at once to Lansing and reported the matter to the Securities Commission and notified the Commission he was not a salesman for the National Consumers Co-operative Association, and has not been in their employ since. Mr. Michael also notified the Board of Directors of the Ithaca store that the said organization was crooked, and advised the members to break with the National and form a new organization. At a meeting of the Ithaca store the members voted to break, and Mr. Michael was sent to Chicago to settle with the National. Mr. Michael could not settle satisfactorily and the President of the National Consumers Co-operative Association came back with Mr. Michael and talked to the stockholders and they voted to remain with the National, live or die. While in Chicago on one trip Mr. Michael secured the lease of the building held by the National, and at the request of Mr. Warren Mellinger had the National transfer the lease to him (Mellinger), and Mellinger has since purchased the building, and now Mellinger, and his friend, the manager, Mr. Clark, own the business which the stockholders have lost, but we understand they have given the stockholders 60 days to make good.

Mr. Michael, having learned that the system of the National Consumers Co-operative Association was not right, is now engaged in organizing cooperative stores on a plan whereby each store handles its own money, runs its own business, and when fifteen stores are formed each store will take so much money from its capital stock and establish a wholesale house owned by these fifteen stores. Each member joining one of these independent stores pays a membership fee of \$10. This money is used for organizing to bring across the wholesale. A financial statement is furnished every month to each store showing how the money is being spent, and for what purpose.

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WHAT HAVE YOU TO OFFER?



Current Agricultural News



FARM LABOR SITUATION EASIER

The farm labor situation in the United States is decidedly easier than it has been in the past three years. This fact is shown by the following figures, being averages of estimates of normal supply and demand, made by reporters to the Bureau of Crop Estimates, United States Department of Agriculture, April 1, each year.

Percentage of normal supply of and demand for hired farm labor—to be read as index numbers:

	Rel. supply	Rel. demand	Ratio of supply to demand
1921	95.2	87.5	198.8
1920	72.4	105.3	68.8
1919	84.4	101.8	82.9
1918	72.9	101.4	71.9

In Michigan the supply is described as "plentiful and demand light; farmers unwilling to pay wages asked."

CANADA JOINS U. S. IN GRASS-HOPPER FIGHT

A meeting to discuss the co-operation of western Canadian provinces and northwestern states of United States in fighting grasshoppers was held at Regina, Saskatchewan, Canada, April 12th. Delegates from Montana, North Dakota and Minnesota were among those attending.

AMERICAN TRACTORS FOR FRANCE

At a tractor show held during the month of February in Paris, France, there were 19 American tractors exhibited, 18 of French design, 1 Italian, 1 English and 2 Czechoslovak. While the demand for tractors does not appear very active in that country, representatives of American tractors express themselves as confident there is a future in the French market for American machines. The prices charged for American tractor are from 20,000 to 25,000 francs, or, in American money, about \$1,400 to \$1,750. One large American company has sold 3,000 tractors in France during the past five years. Less than half of these were purchased by the French government.

MICHIGAN BOY GOES WITH A. F. B. F.

Edwy B. Reid, prominent agricultural editor from Michigan, until recently western editor of Farm and Home, has accepted an appointment from the American Farm Bureau Federation to its Washington office, according to the state farm bureau. Mr. Reid spent five years in the office of information of the U. S. Department of Agriculture, going there in 1915 and retiring in 1920 as Director of Information for the department. Previously he had been promoted from chief editor of the department to chief of the Division of Publication. At one time he was an associate editor of the five Orange Judd Farm weeklies. He is a graduate of the Michigan Agricultural College and spent some time abroad studying phases of European agriculture. Mr. Reid was born and reared in Berrien county, Michigan and started his journalistic career on a county paper.

BUTTER IMPORTS INCREASE

In 1918, 1,655,467 pounds of butter were imported to the United States. In 1920 this had increased to the enormous quantity of 37,454,172 pounds, valued at over 18 million dollars. The emergency tariff will not shut out this butter but it will increase the price of domestic butter.

BIG ORCHARD SPRAY DEMONSTRATION

A large number of farm orchardists from several counties gathered at Midland, April 1st, under the direction of the County Farm Bureau Manager. The afternoon was spent inspecting the insecticide and fungicide factories of the Dow Chemical Company. H. H. Dow conducted

the farmers through the works. It is not generally known that the Dow Chemical Company is the largest manufacturer in America of fungicides and insecticides for fruit and vegetables. The entire group of farmers were furnished dinner at the Dow Cafeteria by the special invitation of Mr. Dow. At 1:30 the farmers re-assembled at Mr. Dow's beautiful country estate just out of Midland. On this farm more experimental work is being carried on for the benefit of the orchard industry than by any other private party in the United States.

NORTHERN EUROPEAN GRAIN MARKETS

A recent survey of the grain markets of northern Europe showed increased offerings and purchases from the smaller producing countries as distinct from great producers like the United States, Canada and Argentina. Of these small nations it is expected Rumania will become a prominent factor before the end of 1921.

Imports of rye have been diminishing, the trade affecting the United States more than any other country. Barley and oat importations also show a marked falling off. American grown corn is in demand in all markets, excepting Germany.

DUTCH DAIRY INDUSTRY REGULATED

Holland is threatened with a shortage of milk and milk products due to excessive sales to Germany. The government has inaugurated a strict control over the entire industry and dictates the percentage that may be exported.

The Collection Box

DAIRY COMPANY WITHHOLDS PAYMENT

We have been selling our milk to the Boulevard Dairy Company of Detroit, ever since April, 1920, and we have received checks for milk promptly up to September, 1920. Since then they have been very irregular until now they are six weeks behind and owe us for all of November and the first half month of December, 1920. Now I would like to know if this company is reliable as we are still selling our milk to them.—A Subscriber, Carleton, Michigan.

This letter was one of several upon the same subject which were received from subscribers during the month of January and we have only recently been able to secure any worth-while information. We wrote the Boulevard Dairy Company for an explanation and got the following:

"We do not know of any of our producers who are not familiar with existing conditions. We have endeavored to call several meetings to explain to them thoroughly and I think they all understand that we have taken their product and put it in storage until such time as we can move it, which means delayed checks. We have also told them that if there is any who do not desire to sell milk to us on this basis they can hold it or find another market without hurting our feelings. Our checks are going out regularly to producers, and it is probable, no doubt, the people who have written you have received some payments since they wrote. However, if you will give us their names we will be very glad to take the matter up with them and explain the situation thoroughly so that we will be sure we have not overlooked anybody."

The attention of Mr. R. C. Reed, secretary of the Michigan Milk Producers' Ass'n, was also called to the matter. He made an investigation and reported as follows under date of April 4th:

"We have a committee from our Board or Directors whose business it is to investigate complaints concerning the inability of the buyer to pay for milk which he purchases. To this committee has been assigned each one of the buyers who have been slow in any way in the payment for the milk purchased."

"When the Boulevard Dairy Company were not able to meet promptly all their obligations, this committee visited them and made investigation, taking into account R. G. Dun's report, the company's own statement, and the fact that the company has been reducing its indebtedness each month up to the present time and with the assurance that thirty days more would enable them to reduce the stocks on hand which had been the cause of their inability to pay. It, therefore, appeared to this committee that

(Continued on page 19)

ENGLAND PAYS FARMERS \$2.68 FOR WHEAT

The U. S. Consul General at London reports that the British government has fixed the price which millers must pay farmers for their 1921 crop of wheat at 95 shillings per 504 pounds, or figured at normal exchange, \$2.68 per bushel. This means that the English farmer will not have to accept the current market prices. This price will, however, be regulated by the cost of imports delivered at British ports. This announcement reminds us that the Farmers' National Council tried to get Congress to legalize the buying of surplus crops by a federal commission at a price equal to the cost of production plus a profit. The Council thought that if Congress was willing to guarantee the railroads a profit it ought to be as kind to the farmers. But the scheme fell through.

GERMAN SUGAR PRODUCTION FALLS

The German federal statistical department estimates the total German sugar crop for 1920-21 at about 700,000 tons which is over 100,000 tons less than produced the previous year.

FIGHT THE CANKER WORM

In 1920 many of the apple orchards in southern Michigan had the appearance of being burned with fire during the months of May and June. This in most cases was the work of the canker worm, although in some orchards the injury was done by the Tussock moth and leaf-rollers. Whatever the insect may have been, the treatment will be the same.

The canker worm is a greenish black insect about one inch in length which eats away the soft, green portions of the leaves; the leaf-stalks and ribs only remaining. It has no legs under the middle of its body and loops its way along, which gives it also the names of the inch worm and measuring worm. The eggs hatch shortly after the leaves develop, and soon after the fruit has set the worms complete the stripping of the trees. While most common on the apple, they also feed on the elm and other shade trees.

They are likely to reappear this season in all orchards which were attacked last year, as well as in the neighboring orchards, and steps should at once be taken to fight them even before they appear. The treatment is to spray the trees, using two pounds of dry arsenate of lead, or 1 1-2 pounds of arsenate of lime, in 50 gallons of water, adding two or three pounds of hydrated lime. The trees should be very thoroughly sprayed just before the blossoms open; and again as soon as the petals have fallen from the flowers. Unless the early spray was thoroughly applied it may be necessary to make a third application at the end of ten days. No spraying should be done while the trees are in bloom.

The addition of 1 1-4 gallons of lime-sulphur solution to 50 gallons of the arsenical spray at each of the above applications will guard the fruit and foliage from the attack of apple scab and other fungous diseases, and will give excellent returns for the time and material.

If the spraying of infested orchards is neglected, the loss of the leaves will prevent the development of the fruit crop, and if continued for two or three years will kill the trees themselves.

Persons who have this insect in their orchards and fail to take the proper measures to control it are subject to prosecution and the township inspectors are authorized to do the work and assess the cost against the property. Any one knowing of infested orchards in their vicinity should report the same to L. R. Taft, State Inspector of Orchards, East Lansing, Michigan.

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 requested.)

COLLECTING TAXES

Would like to know if the township treasurer is compelled to call for taxes before he returns them to the county and what can be done if they do return them without calling for them? Also we understand that notices have to be published before a piece of land can be transferred from one township to another. If so, how long?—C. C., Chipewa County, Michigan.

Sec. 4042 of the C. L., 1915 provides: "For the purpose of collecting the taxes remaining unpaid on the 10th day of January, the said treasurer shall, thereafter during that month, call personally upon each person liable to pay such taxes if a resident of such township, or at his usual place of residence or business therein, and demand payment of the taxes charged against him." If any damage is caused by a treasurer's failure to perform his duty he is liable. It was decided by the supreme court: "A public officer is liable to private individuals for injuries resulting to the latter from his failure to perform ministerial duties in which the latter have a special and direct interest. He is also liable for a failure to perform the duties of a judicial nature if he neglects them maliciously." This was in a tax case upon failure of treasurer to collect. Public Acts of 1917, page 775, provides that the board of supervisors to vacate, divide or alter the boundaries of a township and notice must be posted four weeks and published one in each week for four successive weeks immediately preceding the meeting of the board.—W. E. Brown, legal editor.

MAUMEE VALLEY SUGAR CO.

Do you know anything about The Maumee Valley Sugar Co.? They are selling stock in Saginaw, Bay City and other places. Could you recommend them to a person as an investment? They want to build a new factory near Toledo, Ohio.—A. O., Rhodes, Michigan.

The Maumee Valley Sugar Company made an application before this commission last summer for the approval of \$2,000,000 worth of preferred stock for sale. The company only had \$500 in cash and the commission did not feel constrained to approve the issue until something definite was known regarding the abilities of the promoters of the company, insofar as that ability applied to the manufacture of sugar. They were asked to make a showing as to their ability and return for a hearing by the commission. We received a number of letters subsequent to that suggestion from people who knew the promoters, vouching for their ability and sincerity, but no move has been made on the part of the company and the stock has never been approved. The capital stock of the company as authorized was \$2,000,000 worth of preferred stock and 20,000 shares of common stock, of no par value.—Michigan Securities Commission.

PAYMENT FOR PRODUCE

If I sold produce to the co-operatives at a stated price and they order car and notify me to load the car and I do the same as they order, will they have to pay the price stated or will I have to take what they get for produce when they sold it?—Reader of M. B. F., Detroit, Mich.

If you sold crops without representation as to quality or any representation then you are to get the agreed price; but if you made certain representations and they did not meet the representations you could not recover the full price. The proofs and conduct of the parties as to acceptance and notice and release and waiver are all conditions that might affect what price you were to receive even upon such sale.—W. E. Brown, legal editor.

KESSLER MOTOR COMPANY

What is the rating of the Kessler Motor Co.? They have sold stock to farmers taking Liberty Bonds at par.—A. Reader, Capac, Mich.

The Kessler Motor Company of Detroit was approved by this Commission.

mission on January 9, 1920, and permission given for the sale of \$50,000 worth of its unissued common stock. At the time application was filed an examination was made by a representative of this Commission and found the company to have assets and liabilities totaling \$573,495.10.—Michigan Securities Commission.

POOR MAIL SERVICE

We live on a star mail route and the mail is supposed to drive on this road but lately he has used a cut off road about twenty rods east of the house, leaving us without mail service and not letting us know he intended to do so. We do not think there is any use in complaining to the Fourth Ass't Postmaster General as he would only write to the postmaster here, who does not run the office as strict as he should, so would side with the carrier. The other postmaster at Merritt is the carrier's cousin so of course no help there. Can he refuse to use the designated route when the road is broken and in fine shape?—Mrs. J. T. R., Lake City, Mich.

The Star Routes are under the control of the Federal government and you must take up your complaint with the post office or the post office department. If you get no

redress take up the matter with your congressman and give him full particulars of your own difficulty and the names and difficulties of your neighbors as to service and ask his assistance in the matter.—W. E. Brown, legal editor.

GREAT WESTERN OIL CO.

Is the Great Western Oil Company a reliable concern and is the stock a good investment?—R. D., Ubly, Michigan.

Upon writing the Michigan Securities Commission we find this company has not been authorized to sell its stock in the state of Michigan. Better go careful. There are too many oil companies selling stock throughout the state. "Sure things" are not being offered to everyone. It is only the "long chances" that the poor man has an opportunity to buy stock in.—Managing Editor.

MOVING CAR OF COAL FROM STATION TO STATION

I have been dealing a little in the coal business. Would you please tell me if there is any legal charges for moving a car of coal from one station to another? I had a car of coal moved from one station to another, a distance of 7 miles. It contained 53 tons of coal and they charged me \$53.—H. P., Michigan.

You should write to the Michigan Public Utility Commission, Lansing, Mich., with a full statement of the facts.—W. E. Brown, legal editor.

INSPECTORS OF ELECTION

What are the laws concerning election board? We used to have an instructor for each of the leading ballots to go in the booth with the voter who couldn't mark his ballot, but the last 3 years we have one, a Republican, who could vote as many times as there were voters who forgot their specks or couldn't mark their ballots, also a Republican board and a Republican count.—R. B. S., Ewart, Mich.

The law does provide for casting a ballot as the voter wants it and having it lawfully counted. A severe penalty is also provided for any violation. There is no reason that a man because he is a Republican or a Democrat is dishonest. The inspectors of election are responsible to the people of the township for the conduct of the election. If a man or woman takes the proper oath therefore he or she is entitled to have the assistance of the inspector designated for that purpose who must explain how to mark the ticket or himself mark it as the voter wishes, in the presence of all the challengers and other persons outside of the booth. The inspector shall not mark it from a written slip that may be handed to him nor shall the inspector suggest how the voter should vote, nor in any way attempt to influence him. No fairer way could be devised and those who would complain of such an arrangement for marking do not want a fair marking.—W. E. Brown, legal editor.



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For yourself, be the true American optimist. Defend your faith in the success of the year and in the future of America—and help your fields to yield to the limit of their powers. From that foundation, only, can Agriculture and Industry be brought to that peak of health which kindles good fortune in town and country alike.

Be one who looks ahead. Plan your labors wisely; govern well your land, your crops, your machines, your help; exercise a broad-gauge economy so that deserved profit may result. Then the summer of 1921 will see the sun shining on great seas of grain and the granaries of autumn will be overflowing.

INTERNATIONAL HARVESTER COMPANY

CHICAGO

OF AMERICA
(INCORPORATED)

USA

92 BRANCH HOUSES AND 15,000 DEALERS IN THE UNITED STATES

The Michigan BUSINESS FARMER



An Independent
Farmer's Weekly Owned and
Edited in Michigan

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The President's Message

AS IF weary of the ceaseless criticism directed at President Wilson before, during and since the war, the independent press of the country unite in approval of the Harding policies as outlined in his message to Congress. This attitude may be taken as evincing a desire to be fair with the new President and give him a chance rather than a settled conviction that his views are one hundred per cent correct. The big business interests, harrassed as they have been by war-time regulations and burdensome taxes, hail the Harding message as their emancipation proclamation. Says the Wall Street Journal, "Harding message pleases Wall Street."

In certain respects the Harding message is positive and startlingly frank. In others it is not so clear. Mr. Harding leaves us in no doubt as to what he thinks of the League of Nations. He is still laboring under the impression that the tremendous vote given the Republican party last fall was a vote against the League, and insists that the "mandate of the people be respected." Some day he will find out that he is mistaken. He still speaks of a nebulous "association of nations," but keeps is entirely in the dark as to the particulars in which it will differ from the present League. "But that is for the future," he says. He is right. A proposal to the other nations at this time to scrap the League of Nations and build a new one would be met with scorn and ridicule. Of necessity, indeed, the Harding "association of nations," must await the kindly developments of time. The country at large will heartily endorse Mr. Harding's suggestion of a separate peace with Germany. Since the administration cannot sign the Versailles treaty linked as it is with League covenant, it is well to end the farce of "technical war" with Germany so that we may resume diplomatic and trade relations with her.

Mr. Harding is strongly in favor of immediate tariff legislation to protect American industry and agriculture from foreign competition. A well-known economist scoffs at the idea of a prosperous United States needing "protection" from the impoverished nations of Europe, and exclaims, "It is not usually necessary to protect the strong from the weak." Nevertheless, certain domestic agricultural and manufactured articles are threatened by imports and the nation at large will approve of a moderate increase in existing tariff rates.

"We must abolish the excess profits tax," says Mr. Harding, and Big Business rubs its hands in glee. No one will object to removing tax burdens from the shoulders of the corporations if they are not foisted upon the backs of others less able to bear them. By what other means the loss of revenue is to be made up, Mr. Harding did not explain. To have suggested a sales tax would hardly have

been politic. Yet Sen. Smoot, an administration leader, has already introduced a sales tax bill, and it is well known that administration forces look upon it as the one hope of securing a part of the revenue needed to run the government the next two years.

Unqualified endorsement is given of Mr. Harding's economy pledge. "We promised less government in business and more business in government, and we must now make good on our pledges and practice rigid economy in every department of government." That's fine, but it would have sounded better had Mr. Harding pledged his administration to a reduction in the naval program which bids fair to cost the taxpayers close to a half billion dollars during the present calendar year. The subject of disarmament Mr. Harding discussed in a rather desultory way. He is in sympathy with the proposal to reduce armaments but he wants some other nation to take the lead.

Perhaps these slight criticisms are not justified. Perhaps Mr. Harding has not yet found his feet and is still feeling his way. Perhaps it is well for him to proceed slowly with suggestions that may appear to be of an ultra-progressive nature. That wasn't the Roosevelt way nor the Wilson way, but perhaps the Harding way may be the wise way in the face of the difficulties which now confront the nation and the world. Time alone will tell.

The State Commissioner of Agriculture

WHEN GOV. Groesbeck appointed Herman Halladay to head the new department of agriculture he made a wise choice. Although Mr. Halladay has been in the service of the state for nearly a dozen years, he has managed and lived upon his farm in St. Joseph County nearly all that period, and is still just a plain farmer. So many men who leave the farm and are appointed to political office soon lose their interest in other farmers, but not so with Mr. Halladay. He still has the same sympathetic point of view and the same appreciation of the problems of agriculture as he had when he was first appointed to office. Mr. Halladay is not likely to inaugurate any brilliant reforms in the departments over which he now has charge, but he will, you may rest assured, give every ounce of his energy and every iota of his ability to making his department an instrument of real service to the farmers of Michigan.

Farm Bureau Salaries

SOME COMPLAINT has been heard from farmers over the size of the salaries which it is reported the Bureau is paying to some of its executive heads. In the first place, the Bureau is not spending as much money for salaries as has been reported in the press. In the second place, even if it was, it can probably show that it is getting value received. It wouldn't be surprising if the Farm Bureau has squandered some money during the first year of organization. "Easy come, easy go," is an old and true saying. And nothing in the world ever came easier than the money from memberships in the State Bureau. The Bureau has had some pretty high-salaried men. Some of them were good, and some no good. The good ones it needed and the poor ones it has got rid of. Those who have been retained are probably worth their salary and could earn as much elsewhere. Farmers must learn that men with executive ability who can manage a new business and make it show a profit will not sell their services for a song. They don't have to. Other people are willing to pay them good salaries and the farmers will have to if they want to keep them. The reason so many co-operative enterprises fail or lose money is because the amount of salary which is offered for a manager is not large enough to attract men of ability. The Farm Bureau has endeavored to avoid this mistake by getting good men and paying them what they are worth. This is good business, and should be recognized as such by the members of all farm organizations.

The Spring of '21

IMAGINE a spring about thirty years hence. A young farmer comes in from the field tired and irritable. He tosses his hat in a corner and says: "Gee, pa, I've got a notion to chuck this farming business. It's all work and no profit, with prices going down the way they are." Then grandpa takes his pipe out of his mouth long enough to say, "Think it's discouragin', eh? Well, sonny, you ought to have been farming back in '21. Farming today is like Sunday to blue Monday compared to what it was that year."

The story is told of a painter who worked five long years on what he hoped might be his masterpiece. With infinite patience he brought his painting step by step to completion. A few more days and it would be ready for the eyes of the public. But one night a vandal entered the studio and the next morning the painter discovered his nearly finished canvas a ruin. Five years of hard work and sacrifice gone! Could the masterpiece ever be duplicated? For a time he was lost in despair. Then in a little while, his old-time persistency re-asserting itself, he brought out a clean canvas, took up his palette and started anew.

The farmer, like the painter, finds his work of the last few years virtually destroyed. The market catastrophe has wiped out his profits and blasted his hopes. No wonder his heart is heavy and his feet like lead as he follows the plow in the furrow. But like the true son of the soil that he is, he takes a firmer grasp of the plow handles, squares his jaw, and says, "I won't be downed. I'll stick and win." Yes, it takes courage to go at the job again this year, and the man who can be cheerful and happy through it all deserves a lot of credit. But hope—the elixir of life—will give him strength and determination to survive his present discouragements and go confidently forward.

Thank God for the Women!

THE WIRES were still ringing with the President's message to Congress blasting the people's hope for a program of disarmament and world peace, when a gray-haired woman arose before the National League of Women Voters at Cleveland and in an impassioned plea implored the women of the United States to bring an end to war. The woman was Mrs. Carrie Chapman Catt, one of the earliest advocates of woman suffrage. She had been scheduled to give a speech on political economy, but moved to the depths by a terrible word picture which Irvin S. Cobb had drawn of the horrors of war, she discarded her set speech and threw her heart and soul into a stirring appeal for peace. As she spoke many women wept and others became hysterical. The next day the convention unanimously adopted resolutions addressed to Congress and the President asking that immediate steps be taken to co-operate with other nations in world-wide disarmament.

The junkers and militarists will put all this down as the "silly sentiment of women," just as the liquor interests dubbed the early agitation for prohibition, "the hysteria of a few preachers and females." But the appeal of these women has already found a lodging place far beyond the four walls of the convention hall in the hearts of millions of men and women who hate war and long for the day when it shall be no more. Thank God for the women! May they be given the courage and the strength to lead a weary and sordid world in a victorious fight against humanity's greatest curse!

Now that they're trying to pass a bill in the legislature to stop the sale of Henry Ford's paper, the Dearborn Independent, on the streets of Michigan cities, Henry has probably had to double the force in his circulation department to take care of the new subscriptions. Publicity is a great booster.

A fellow down at Monroe, Michigan, has invented a periscope for autos so the driver can see what is going on back of his car. It'll be a great help to the reckless drivers. They can tell whether they kill their victims outright or just wing 'em.



What the Neighbors Say



CAPITAL PUNISHMENT

I HAVE just been reading an article on capital punishment by one of your subscribers who signs his letter G. C., and seems to think his boys might do wrong and be hanged. It does seem strange to hear of anyone, who, in view of the crime wave sweeping the nation at the present time, thinks our present laws are alright. They are proven failures. Our laws encourage crime through the lax way the offenders are handled. Indeed it is hard to convict a man of the terrible crime of murder because of the many chances he has to escape conviction in our courts, and as a result of our lax laws many men are at large today who should be behind the bars or prison walls.

Why fear capital punishment for murderers? I say, if my boy commits murder let him hang for it. If they have the fear of the hangman's noose in their heart they will not take the life of another.

Your correspondent quotes scriptures to support his position. Let me refer him to some scripture in the Law of Moses. It was imposed on him to die who took the life of another. If a man was hung for murder society would be rid of him forever, and he would not be pardoned only to come back and do the same thing again. Now I don't think that capital punishment would prevent murder. There always has been murder and there always will be, but he who hangs will never trouble anyone again. It is claimed that innocent men are hanged, but he who is honestly inclined never gets into trouble. In conclusion let's have anything in the place of our present system which is a farce as a restriction for murder.—H. A. Galloway, Michigan.

You yourself have stated the most effective argument against capital punishment, to wit, that capital punishment will not prevent murder. Why substitute one system for another, which legalizes the taking of human life, when experience has proven that such a system is no improvement over the other. What connection is there between the kind of punishment that is meted out to a convicted man and the enforcement of the law? It is as easy and sensible to provide by legislation for the more rigid enforcement of the law and for the prevention of the indiscriminate pardoning of desperate criminals, as it is to adopt capital punishment. Why urge capital punishment, why even think of this, until all efforts have been exhausted to bring about a better enforcement of the law and the full time serving of sentences.

The above was written before the legislature took final action on the bill. It was noted that the arguments which killed the bill were virtually the same as have been presented through these columns. We think the people of Michigan feel cleaner and more upright because of the defeat of the capital punishment bill than they would had it become a law.—Editor

ECONOMY IN STATE AFFAIRS

EVER SINCE the legislature has been in session I have tried to keep in touch with matters pertaining to agriculture and have of course watched the appropriations. We as farmers have been asked to raise more and to be economical, and we have listened, but when will our state institutions take heed and do likewise? I see there has been a good deal said about the state troopers. For one I think it is too heavy a burden to place on the taxpayers who are already so heavily burdened that they are ready to yield up the ghost. But if we must have them will some member of the legislature introduce a bill to do away with our fish and game wardens, also our sheriffs, deputies and constables and simply have a turnkey at the jails.

And if the legislature wants to economize introduce a bill to do away with the township treasurer and let us pay our taxes direct to the county treasurer who is on a yearly pay roll, and it will save millions to the taxpayer.

I am not in favor of giving Detroit twice the number of representatives it now has. It looks to me as if Wayne county would like to rule the state. I have always been a

taxpayer and have always been opposed to one-man power, in reference to supervisors having all power in the county to hire county agents, without consent of the majority of voters in the county.—S. C. McClelland, Benzie County, Mich.

I want you to note that the present governor is a strict disciple of economy and that appropriations for state institutions have, under his direction, been slashed to the bone. Did you also note that Chas. DeLand, Secretary of State had voluntarily reduced the budget of his department one half, firing employees by the wholesale, and cutting the expense of his department by several hundred thousand dollars. That deserves applause. The state police issue has not yet been settled, but some of the consolidations and abolishments you speak of will be made. There's going to be a mighty scrap when Wayne county seeks to double its representation in the legislature on the basis of the new census figures. If this is done, however, the rural sections must be protected by increasing the number of representatives, allowing as some other states now do, one representative to every county regardless of population and more as the population warrants. Now about the county agents. It's a question that's soon to be solved by the farmers themselves. The Farm Bureau, if it survives should and undoubtedly will, hire and pay the county agent as its active officer. As long as federal, state and county taxes are used to support the county agent, there will be trouble. Let him be hired by the farmers themselves.—Editor.

PLUMB DISGUSTED

IN YOUR Lansing news, by Baker, you ask, under heading "Auto Licenses," "What do you think about it?" Here's what I think, and I don't have to think much, either. If all our bright, smart farmers have gone to the city (and mind you, I don't admit they have) can you blame them?

Next, I believe that better than 90 per cent of our farmers are feeling as though there wasn't, isn't and never will be any use of making any fuss to get something for their benefit. Can you blame them?

I don't mean to insinuate that Mr. Baker nor Rep. Ferris are not trying their best to hold up our end at Lansing. I honestly believe THEY are doing their very best, but what's the use? Does it mean anything?

Can you remember as far back as Mr. Newberry's case? Most of us farmers will never forget it. Such things exist in American politics today, and as long as they do, I for one, don't care whether I take any part in politics or not.

And last answer this please. Why are better than 50 per cent of our farmers (the smartest, too) disgusted with the Farm Bureau?—H. L. Briley, Otsego County, Mich.

Get a dollar that it was raining the day you wrote this letter. And it was raining when I started to write this, too. Old Man Gloom was sitting in a chair right across my desk. "What's the use of struggling any longer," he said, "the world is going to the dogs. There's no hope for the farmers. They might as well yield to the inevitable." "Mebbe you're right," sez I, "mebbe you're right." Then the old fighting spirit began to stir my blood. I looked Old Man Gloom in the face and said,

"You're a liar, and the truth is not in you. The world is NOT going to the dogs. There IS hope for the farmers, and we'll keep on fighting along this line till doomsday." Then I felt better, and Old Man Gloom gathered up his skirts and floated out of the window. The storm clouds took to their heels at his appearance and the sun is beginning to shine. But answering some of the questions you have raised, I don't blame the farmers who are plumb discouraged and disgusted and everything else with the way things have been going lately. I do blame the farmers for their lack of faith in organization. I think they ought to be a little more patient. Once upon a time the Business Farmer was accused of being an enemy of the Farm Bureau because we wanted to see it go straight. It is going straight, and we're going to stand by the Farm Bureau as long as it goes straight until the bitter or happy end, whichever it may be. Let's give 'em a chance and die fighting. What say you, friend Briley?—Editor.

GOLD IN ALCONA COUNTY?

ALCONA COUNTY may be the richest county in the state. Some time ago a well-known farmer by the name of Fleming was digging a well and discovered some kind of mineral in the earth that he took from the well. He sent a sample of the mineral away and had it analyzed and was found to be a percentage of gold. He then made a more thorough investigation with the help of a mining expert and found that the mineral tested 42 per cent or \$42 of gold dust to the ton of earth. This was proof that Mr. Fleming had a very profitable mine. He at once established an office in the city of Harrisville and advertised and sold claims that the gold mine would be operated and controlled by Alcona county stockholders. However, Mr. Fleming did not start operation on the mine. It was rumored that he did not sell stock enough to start operations. This happened some two years ago and every thing was left as it was until the present when another farmer living some six miles from Mr. Fleming's mine was digging post holes and he also discovered some sort of mineral in the ground and had it analyzed and found to be gold mineral.

Two outside mining men from the state of Delaware at once bought the land from Mr. Fettes and has also purchased the claim from Mr. Fleming and will at once commence operation. These two mining men are experts at the mining business and are backed in this Alcona gold mines by H. Forder. They have already ordered machinery to operate the mine with.—Wallace Barker, Alcona County, Michigan.

Go softly. It may not be impossible that there is gold in paying quantities in Alcona county. But the odds are against it. Countless thousands of farmers have discovered "strange minerals" beneath the sod on their farms. Many have gone to the expense of having it analyzed only to find that "all is not gold that glitters." Don't take a private metallurgist's word for this. Send a sample to the State Geologist at Lansing. In the meantime defer paying any fancy prices for leases on Alcona county "gold" farms.—Editor.

FARMERS SHOULD STICK TOGETHER

JUST A line to tell you I like your paper better than any I have ever read.

I wish I could put my thoughts in writing as some do in your columns. My education is limited but I can always make out your editorials and practically all the rest as it is plain, no going around the bush about it. Keep it up!

I wish I could get my opinions and what I want to our representatives but I can't see how to do it, and I think there are a good many in my boat, that would like to make themselves heard. But I think it is impossible to try individually, therefore the Farm Bureau and Grange and the different associations are good things to assist us farmers to get some of the things we want.

I was in the beet deal last year. I was surprised to see so many lay down after I heard them talk at meetings. Some blamed the officers for losing. I don't. I blame the farmers themselves; I mean those that got weak-kneed and planted beets. They are out again but I cannot help this year, as I have been laid up for eight months with sciatica and I can't get out yet. Therefore I will content myself with reading your good paper.—Henry Leloney, Tuscola County, Mich.

Good gracious, man, I don't see anything wrong with your education. You're too bashful, that's all. A man who has the capacity for thinking and knows the English alphabet surely has the capacity for putting his thoughts in words. You do well. Write again. Glad you are for organization and the M. B. F. It's a combination that's bound to win in the end if the farmers stick.—Editor.

THE BITTER WITH THE SWEET

WAY BACK in 1900, folks, you well remember that prices were very low and eggs were down to twelve cents and you have all heard the old adage "History always repeats itself." Well, the facts of the matter are it is getting true right now, isn't it? For the period of years prosperity has blown to all quarters of this great earth and everyone who wanted to could prosper and most all over-reached, and then when this crash came, woe, behold, a great storm came, you might say in one night, causing a gloom to cast over the whole universe that has not as yet lifted and our great men say it will be a whole year before it will be lifted.

With the millions of our men out of work matters kept growing gradually worse until it looked as tho things would happen but our great men said "Listen." The nation did and now it is gradually coming back. But remember, not to such high prices as heretofore, but on a safer basis and unflated prices.

During the past few weeks wheat, oats, beans, etc., have reached levels that the pre-war and even lower. But all classes will have to take the bitter with the sweet and we Michiganders will have to sing "Michigan, my Michigan," to turn the tide and await developments.

Up here in Arenac the farmers are getting busy already for a big campaign and we feel justly proud too of our country as she has responded doubly to all calls from most every source. Our banks have worked with the farmers to tide them over as much as possible and are now aiding them in starting out the year with a rush for more and better crops.

The lumber dealers hollered considerable about cutting prices but they also are swallowing the bitter stuff as well as the rest and the only men we have not heard say much are our newspaper men as they seem used to hard times. But thank our good Lord that we are blessed with a grand Michigan with grand people behind it. Here is hoping that we may hear from others in this line.—M. R., Subscriber from Arenac County.

Musings of a Plain Farmer

BEAUTIFUL April morning. A soft balmy breeze is stirring. All nature is awake.

The milk man is driving a mule now. He informs me that milk has raised 40c per hundred this month.

I swooned and fell prone to the ground. It was a distinct shock to me.

This mold board brightened the first round. The ground is in proper condition for tillage.

There is action around these corners now. Teams are out, tractors are humming. Production has the floor.

There has been considerable spirit shown around here all winter about marketing our crop.

I hope it didn't go out with the frost.

These horses ease into the work

quiet like. They know I am a dreamer and never carry a whip.

The wheat is looking green and thrifty.

The old boys on the grain exchange will rub their hands together this year.

An itchy palm is a sign you are going to have money. Don't yer know.

The cows are looking over the barnyard fence wistful like. I suppose the grass looks a foot high to them.

It's evening, I will unhitch.

I find fresh bedding in the stalls and hay in the mangers. My two industrious daughters.

I'll be stuck up for a movie Saturday night. Weather permitting I guess we will go.—Arthur P. Ballard, Uby, Michigan.



The Farm Home

A Department for the Women.



THOSE VITAMINES AGAIN

IN MUCH that we read today we come across the word "vitamines," and yet many dictionaries and encyclopedias have no speaking acquaintance with the word.

Perhaps it has come to stay and in any event we cannot afford to remain in ignorance of any subject so much discussed and evidently so important.

The vitamins, so called for lack of a better term, and not because it is scientifically descriptive, are an element found in certain foods and absolutely necessary to our growth and health, so small that they defy and puzzle the workers in laboratories but so important that a lack of them causes such diseases as scurvy, rickets, pellagra and nervous disorders. This however need give us no worry as the vitamins are easily procurable and cheap, being found in fresh fruits and green vegetables, the thin skin of the potato and most largely in milk, therefore in cottage cheese, cream, butter and hard cheese, provided that it has been made of whole milk. The fats in the yolks of eggs, in liver, kidneys and sweet breads also possess them. All green leaves from spinach to lettuce. The thin leaves possessing more than the thick ones, such as cabbage and endive.

They are found in small quantities in all whole grains but milling eliminates them and they are absent in white flour, white rice, fine hominy and in sugar, molasses, olive oil and tapioca. These are dead foods and should be combined with live foods.

Eat milk or cream with breakfast cereals, butter with white bread and put milk and eggs in rice and tapioca pudding.

From this we may gather that our own natural instincts and tastes have in some measure at least lead us aright in the selection and arrangement of foods. And although the nature of vitamins is unknown we know where to find them. We know that they are necessary to life growth and health and that their absence causes shortening of life.

CLEAN MILK

AS MICHIGAN is in the front rank as a dairying state, the following article published by the U. S. Dept. of Agriculture should be interesting. More explicit information will be published if requested:

Definition of Clean Milk

"While a rigid application of the definition of the word 'clean' would exclude milk which contains foreign matter or any bacteria whatever, for ordinary purposes we may understand that clean milk is milk of good flavor from healthy cows, that is free from dirt and contains only a small number of bacteria, none of which are harmful.

Importance of Clean Milk to the Consumer

"The consumer is interested in clean milk primarily because no one cares to use a food which is not produced and handled under sanitary conditions. He has a more direct interest, however, because of the danger of contracting disease which may be communicated by the use of infected milk. Serious epidemics of typhoid fever, septic sore throat, and other diseases have been spread through milk which was not carefully produced or properly pasteurized. The weight of scientific evidence at present indicates that tuberculosis may be transmitted from animals to human beings, chiefly young children, by the consumption of raw milk containing tubercle bacilli. Raw milk is milk that has not been pasteurized.

"Cleanliness is not an absolute safeguard against disease, but it is

a great factor in preventing contamination. From a health point of view, there is danger not only from milk that contains the specific disease producing bacteria previously mentioned but also from milk that contains large numbers of miscellaneous bacteria, which may cause serious digestive troubles, especially in invalids and infants whose diet consists chiefly of milk. A minor consideration is the loss to the consumer from milk souring or other-

proper methods of care and management of the herd and the study of these things leads to greater care in managing the business."

RIGHT THINKING

MIND IS so strong a force that when used in the right direction may accomplish what almost seems impossible. It is the foundation of all material things and the servant of the spiritual forces.

Recently I found these few sug-

The Dairy Cow

By F. G. Bennett, Missouri Dairy Commissioner

I AM the Dairy Cow!
Find me a home on your farm to-day,
Give me good feed and I'll pay my way,
With a profit to you if you have a good barn
That I can go into and keep myself warm,
When the weather is cold, and a snowstorm is here;
Then I'll fill your pail with milk, never fear—
For I'm the Dairy Cow!

I've fostered the lives of children for lo! these many years;
I've paid the mortgage off the farm, the thot of which brought tears;
I've kept the wheels of commerce going with a busy whirl.
I've done my part toward making this a grand old world.
And if you feed and care for me, I'll do my best for you—
I'll buy you that piano and an automobile too—
For I'm the Dairy Cow!

I'll build good roads and build good schools and help the church along;
I'll make your farm grow bigger crops, your bank account grow strong;
When drouths and floods, and wind, and hail
Destroy your crops or make them fail,
I'll take what's left and make for you
The choicest food man ever know—
For I'm the Dairy Cow!

Don't feed me straw and cornstalks that stand out in the field,
And nubbins from a run-down farm, and call that a square meal.
Remember me, I'll serve you the same as you serve me;
You can't ask more, I'm sure; that's as fair as fair can be;
So give me a home with pastures green,
And I'll pay you with a golden stream—
For I'm the Dairy Queen.

wise spoiling before it can be used. The cleaner the milk the longer it will keep good and sweet.

Importance of Clean Milk to the Producer

"Clean milk benefits not only the consumer but the milk producer as well. Most producers of market milk have experienced the chagrin of having a shipment of milk refused or returned because it reached the market sour, tainted or otherwise in poor condition. Although the milk may be used for feeding pigs, it usually is a complete loss to the producer, since the cost of transportation back to the farm usually exceeds the value of the milk. Frequently, also, the producer depends on a certain market as an outlet for his milk and has no means of utilizing small quantities at uncertain intervals, even if he had it at the farm. Another important consideration is the unpleasant effect which the receipt of sour, tainted or otherwise unsalable milk has upon the purchaser. Delivering milk of that kind usually results in the loss of the confidence of the dealer, or, if it is delivered directly to the consumer, the loss of customers. Clean milk means fewer complaints, a better class of patrons, and a steady market for the product.

"To safeguard the purity of the milk is, in several ways, a protection to health on the farm: First, the health of the members of the farmer's family, who use a portion of the milk; and, second, the health of the calves, which live largely on milk. Healthy cows to breed from and pure milk to feed from are two important factors in rearing thrifty calves and in the development and maintenance of a healthy and profitable herd. Aside from these immediate and definite benefits there is another consideration, not immediately measurable but of much influence. No one can learn to produce good, clean milk without learning

gestions for right thinking which means right living and will pass them on.

Promise Yourself

To be so strong that nothing can disturb your peace of mind.
To talk Health, Happiness and Prosperity to every person you meet.
To make all your friends feel there is something in them.

To look on the sunny side of everything and make your optimism come true.

To think only of the best, to work only for the best and to expect only the best.

To be just as enthusiastic about the success of others as you are about your own.

To forget the mistakes of the past and press on to the greater achievements of the future.

To give so much time to the improvement of yourself that you have no time to criticize others.

To wear a cheerful countenance at all times and give every living creature you meet a smile.

To be too large for worry, too noble for anger, too strong for fear and too happy to permit the presence of trouble.

—C. M. Cramer.

TO CLEAN BATHTUBS

This solution is used by plumbers and disinfects as well as cleans.

Put two tablespoons of chloride of lime in one quart of water, apply with a cloth and rub hard.

This solution may be left in bowl or lavatory over night and scrubbed out in the morning.

Asbestos is a proper lining for dories on which hot dishes are to be set.

To make the beaten egg in which croquettes are to be dipped go farther, use three tablespoons of hot water to one egg beating all together.

EVERYONE CONTRIBUTE

IN TURNING to the department for Women in the BUSINESS FARMER

I was somewhat disappointed to find that only one half of the page was filled. And I wondered if the women readers had become so busy thinking about their spring sewing and housecleaning to write for our little page. It seems to me that in our daily life and its various duties we might think of something of interest to write about. I always turn to the women's department the first thing to see what new subject has been offered. I was much interested in the questions submitted some time ago on "The Uncultured Husband" and the training of children. Let us have more of such to bring out our viewpoints. Surely the women readers should contribute enough material to fill up one page. Let us shake the cobwebs out of our brains and get busy.—A Reader, Penfield, Mich.

It was not exactly for lack of material that our page was cut in two but rather because the paper was very full; neither Uncle Ned nor I liked the operation very well but we had to look good-natured and hope not to have it happen often.

Our reader is quite right; a little time spared from spring cleaning and serving and perhaps gardening and spent in discussing interesting subjects is quite desirable.

What shall we discuss? Suppose you put on your thinking caps and send in lists consisting of three or four good subjects, we will talk them over in our editorial office and decide on several and ask for your opinions. I believe we shall then have some lively debates for our subscribers. Write clearly and well and often open up new views.

Is the phrase, "The Uncultured Husband," a happy choice? Perhaps we can word it differently, at least, it occurs to your editor that it would seem like vivisection with the victim looking on. While for those of us who have lost our husbands, only happy and pleasant memories should be recalled. The training of children is always a live issue. What we shall read, and anything concerning the home, the question as to the desirability of a league of women voters, farm life as against city life, are some topics which may be suggested.

However I leave it all to you and hope and believe you will be interested enough to make some suggestions. I always look in my mail box just as a child looks in his stocking on Christmas morning and the first of the month being well over I expect some pleasant things. Who will be the first?

HANDBOOKS OF INFORMATION

We have on hand some good, reliable information on, home laundering, home made fireless cookers, making a convenient work shop of the farm kitchen and house, cleaning made easier. Questions will be answered or information sent on request. Also how to make unfermented grape juice and the production of clean milk; in fact, we will attempt to answer any and all inquiries.

RECIPES TRIED AND TRUE

Rhubarb Sauce

TRIM AND wash the stalks but do not peel. Cut into 3-4 inch pieces. For every 3 level cups of rhubarb take 1 cup of sugar. Put the sugar into a sauce pan, moisten with 1-4 cup of water, let this dissolve and come to a boil, then add the rhubarb. Let all parts reach the boiling point then take the kettle from the fire immediately. It will keep on cooking for quite a few minutes in the hot syrup. Rhubarb sauce will taste and look quite different cooked in this manner. It can also be canned and keeps splendidly. Long cooking absolutely spoils the rhubarb and probably has been one cause of its unpopularity.

A Good Soft Gingerbread

Melt 1-2 cup of shortening in 1 cup of boiling water. Add 1 cup of molasses and 1-2 cup of sugar. Sift 1-2 teaspoon of salt, 1 of soda, 1-2 of ginger and 1-2 of cloves with 2 1-2 cups of flour. Add 1 well beaten egg and bake.

Cooking Smoked Tongue

Smoked tongue should be fresh-

ASPIRIN

Name "Bayer" on Genuine



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ened in cold water before being cooked. One may change the water twice with good effect just as it begins to boil. Fresh tongue may be put directly into boiling water. Always cook a tongue slowly. It should be cooled in the water in which it is boiled. A fine flavor is obtained by adding to the water in which a tongue is cooked a bouquet of sweet herbs and a few cloves and pepper corns. Tongue may be served while hot with a white sauce or cooled and served cut in thin slices for parties or luncheons.

A Delicious Fruit Salad

Place on a leaf of lettuce a slice of pineapple the half of a pear, canned, a few white cherries which can be procured at your grocers. Cut them in two and remove the pits or where possible white malagra grapes can be used, break a few marsh mallows in about 3 pieces, then cover nicely with a whipped cream salad dressing. Many other combinations can be used in place of the one suggested.

Dressing for Fruit Salad

Boil together 2-3 cup of vinegar, butter size of a walnut, 1 tablespoon

sugar, 1 teaspoon salt. Beat yolk of 4 eggs add 1-2 teaspoon mustard, a little white pepper. Pour boiling vinegar on egg mixture, slowly beating well. Place in double boiler beating while it thickens. When ready to make your salad use 1 part of dressing to 3 parts of whipped cream. This is one of my favorite recipes which I have used many years.—Editor.

MAGIC MITT

Did you ever use the Magic Mitt for cleaning cooking utensils whose contents stick or for cleaning potatoes which are to be baked or boiled with the skins on? The cost is so small (10c) and they are indispensable when once you own one.

CORRESPONDENTS' COLUMN

SOME TIME ago we received a letter from one of our subscribers telling of some linen sheets she wished to sell and last week there came a request for some of these same sheets.

We expect both ladies will be pleased and benefitted when the transaction is completed. Moral: Having some commodity to sell or exchange use our department.



Telling Farmers' Wives

A farmer's wife in Trumbull County, Ohio, wrote to ask,

"Why don't you tell us farmers' wives as much about Jell-O as you do the city women, and why not give us the same chance to get Jell-O when we want it?"

That was some time ago, and since then Jell-O has been placed on sale in practically every general store in America, including the one at the Corners and the Cross Roads, where it can be obtained as easily as at the groceries in the big towns.

The Jell-O Book is free to every woman everywhere. It is full of recipes for the desserts and salads that are most popular just now, not only because they are cheaper than almost anything else that is worth serving, but are really better than any made at much greater expense. And most of them can be made in a minute.

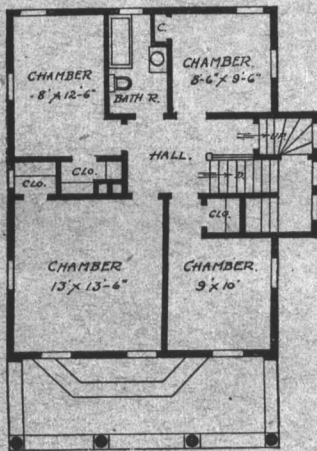
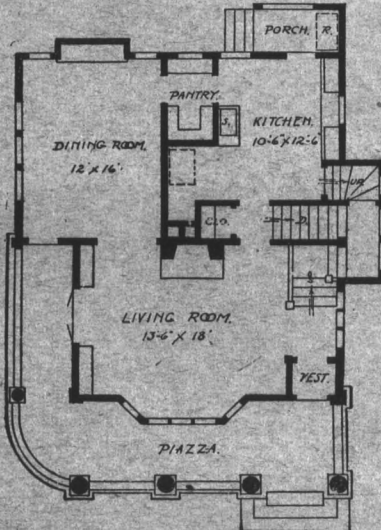
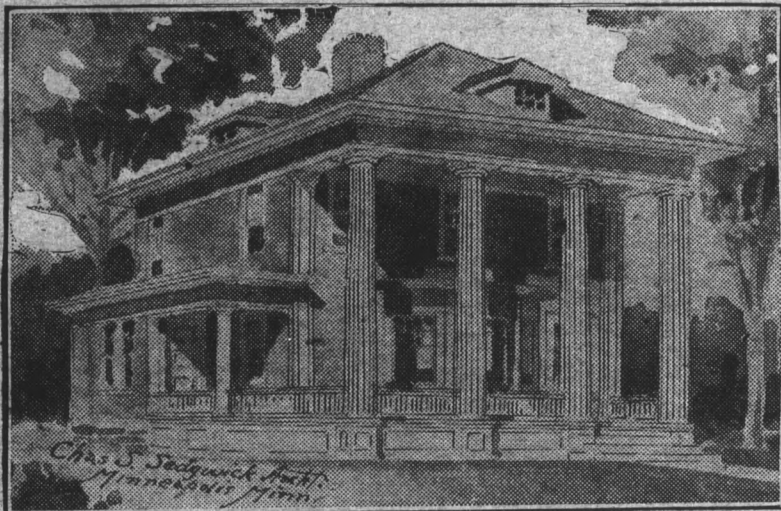
The Jell-O Book will be sent to you if you will write and ask for it.

Jell-O is put up in six pure fruit flavors: Strawberry, Raspberry, Lemon, Orange, Cherry, Chocolate, and is sold by all grocers and general stores, 2 packages for 25 cents.

THE GENESEE PURE FOOD COMPANY Le Roy, N. Y., and Bridgeburg, Ont.

A Georgian Colonial House

Designed by Charles S. Sedgwick



ONE OF THE handsomest designs for a home is this Georgian Colonial house which is shown this week. With tall columns gracing the front of this house, an air of spaciousness and quiet dignity is attained. As shown here, this house is of substantial frame construction with wide siding and large fluted columns of pine. However, it could be built of stucco on metal lath or of brick with columns of stone or cement. A house of this design should not be squeezed up close to other houses, but it should have ample grounds around it and be set back a little way from the roadway or street.

Simplicity marks the floor plans as a study of these will show. Entrance is through the columned piazza into a vestibule which opens directly into the large living room with its stone fire place, bay window overlooking the piazza, and open stairway which has an artistically lighted landing. A small passage

way leads from the living room into the kitchen which is connected to the dining room by a butler's pantry. A service porch is in the rear with room on it for the refrigerator. Four charming bed rooms and bath room comprise the second story, which is eight feet, six inches high. It is intended that this house shall have a concrete foundation with stone face of wall above the grading. There is also a full and complete basement which is eight feet high. The first story is nine feet high. The roof is covered with slate, thus rendering it fire-proof from flying sparks or nearby conflagrations. The interior is finished throughout with birch and white enamel and the floors are of oak and birch.

As shown here, this house, it is estimated, would cost between \$8,000 and \$10,000, exclusive of heating and plumbing. The width of the main part is 25 feet, with side extension of 29 feet.

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The Children's Hour

DEAR CHILDREN: I have something sad I wish to tell you about this week. It is regarding one of my little nephews whom I wrote about in our December 25th issue of M. B. F. A boy nine years old living at Ewart, Michigan, who wrote me that he had no brothers or sisters and wished to know if I knew of any little boy who would like to come and live with him. Do you remember? His name was Levi P. Gugel.

In my letter to you I asked that some of you write him and I often wondered if any of you did when one day I received a letter from Irene Kohle of Adrian in which she told me she had read in the paper of the death of Levi Gugel. Then a few days later Levi's mother wrote me all about it. "You little know how much good your page does," she wrote. "Our little Levi is no more. You printed his first letter to you in the issue of the M. B. F. that came out on Christmas day. He received three letters that he read and enjoyed. There were four more which came after he had departed from this earth and we were very glad to read them."

Little did the writers of those letters know they were giving pleasure to a boy who would never live



LEVI GUGEL

to answer their letters. Unknowingly they did a wonderful thing and the thoughts of how they made the last days of little Levi's life pleasanter and brighter should remain with them all their lives. Two of my nieces, Meriem Wiley and Irene Kohle, as soon as they learned of his death wrote letters of consolation to his mother. It is just such girls as these two that when grown to womanhood, keep the word "mother" so sacred. They have hearts of gold.

Mrs. Gugel enclosed Levi's last letter to me, which was written on Christmas Day, and, completing her letter I then read his. In it he told me how glad he was to see his letter in print and that he had received a letter that day from a little boy. He was very anxious to answer the letter as soon as he was well enough. Then came a list of the presents he had received on Christmas and how they drew names at school and he had received a cup and saucer. "I have been sick a long time," he wrote. "If you could see me you would think I was all bones and no meat left on me." There the letter ended, not even his name signed. Apparently he became tired at that point and layed it to one side to finish when he was rest-

ed. Far from his mind was the fact that he would never finish his little letter to Uncle Ned, mail it or see it published with the other children's letters in "The Children's Hour."

Such is life. One moment we are well and happy and the next moment the breath may depart from our bodies and our souls soar heavenward. We should do a kind deed whenever it is possible for us to do so, so that if we should suddenly be called to appear before God we could do so believing we had lived our life upon this earth to the best advantage.

Believing you all would like to see a picture of little Levi, I asked his mother to send me one to publish on our page. She did and I am printing it this week. This picture was taken a year ago the 26th of next May, on Levi's ninth birthday. He was a bright loveable boy, very fond of out door life, and much loved by all who knew him. He loved to attend Sunday school and prayer meeting and I am certain his departure from this earth leaves an empty place in that home that will never be filled.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—I am a girl twelve years of age and in the 8th grade at school. I live on a farm of eighty acres. I have two brothers. For pets I have a cat and a dog. My cat weighs fourteen pounds. I wish some of the girls would write to me. I would write back to them.—Ellen Nelson, Bannister, Mich.

Dear Uncle Ned:—I would like to join your merry circle. I am a farmer girl,

12 years of age. Have one sister and her name is, Pauline. I am in the 6th grade. We take the M. B. F. and we like it real well. I like to read "The Children's Hour." We live on a 120 acre farm. We have four cows and four horses. For pets I have four banties, one cat and one dog. We have a car and I enjoy riding in it in the summer time.—Nina Grace Randall, R 2, Corunna, Mich.

Dear Uncle Ned:—I am a boy 10 years old. I am in the fourth grade. We have 3 horses, some cows and calves, some hens, ducks and geese. We live on an 80 acre farm. It is three-quarters of a mile from school. We are four miles from town. The Cass river runs through our farm. We have a row boat in summer. We have lots of fun with it. In winter we skate. Your friend,—George Graves, R. 1, Snover, Michigan.

Dear Uncle Ned:—I am a girl thirteen years old. My folks take the M. B. F. and I like to read it. I have a sister, Florence, fifteen years old and a brother Herbert. I intend to raise a small garden this year. I am going to plant lettuce, onions, radishes, tomatoes, cabbages and carrots. I like to read the boys' and girls' letters. Your niece.—Ruth Brown, R. 1, Henderson, Mich.

Dear Uncle Ned:—My sister takes the M. B. F. and I always look for it on Saturday. We have three horses and a colt. Their names are Roany, Sam, Rose, and the colt's name is Beauty, as she looks like Black Beauty. We also have seven cows, four calves, two hogs, and about sixty chickens. We have about six ducks and a drake. For pets we have two cats, a dog and a homing pigeon. I am 15 years old and about 5 feet, 6 inches tall. I weigh 125 pounds and can split wood just like any boy. I love animals of any kind. My brother's horse, Roany, is a nice horse to ride horseback. I often, when I am here, take him and go after the cows. I wish some of the boys and girls would write to me. Your loving niece.—Martha Tyack, Rochester, Mich., R. F. D. 7.



Syndicated by BRITISH & COLONIAL PRESS Ltd

ROLY AND POLY are out to beat each other this week. They each have their favorite kind of racing boat. All the rest of the Doo Dads except the crews of the two boats are out to watch the race and to cheer the boatmen. Roly appears to have a good start but that little fellow on the branch of the tree was fishing, instead of catching a fish got

his line caught in Roly's clothes, is going to upset something—either himself or Roly. I wonder which will be the one to take the tumble. Percy Haw Haw is a good helmsman and is doing all he can, by keeping the boat on a straight course, to help

The Dooville Regatta

Roly win the race. Poly is not so lucky, for Sleepy Sam as usual, went to sleep on the job. If he does not soon wake up Poly is going to run straight into Old Doc Sawbone's boat. Doc is acting as referee of the race and has along with him a camera so

that they will be able to keep pictures of the wonderful race. Old Man Grouch was fishing and is quite upset over the races scaring all the fish down the river. He is so taken up with telling the Doo Dads just what he thinks of them that he is not aware that the old cow is helping herself to his lunch. When he sees her

Dear Uncle Ned—I have written to you once before, but thought I would write again. I am a boy 7 years old and in the second grade at school. I weigh 67 pounds. I go to school every day when I am not sick. My father takes the M. B. F. and likes it real well. I like to read the letters and the Doo Dads. We have sold our farm and had a sale last week. We sold everything except two horses, two cows and some chickens. We have bought a farm near Yale and are going to move some time this month. We just sold a few things out of the house. I have two brothers and two sisters. They all go to school excepting my one little baby sister, Tom Bowen, R. 5, Brown City, Michigan.

Dear Uncle Ned—I am a girl ten years old and in the seventh grade at school. I have two brothers and two sisters. My oldest sister is in Utah. My other sister is in Wheaton, Illinois, at College. My oldest brother is in San Pedro, California. My youngest brother is in Decatur high school and my mother teaches school. My father takes the M. B. F. and likes it very much. For pets I have two kittens, an Ayrshire dog and a pony. From your niece—Emogene Paul, Decatur, Mich., R. F. D. 3.

CROP REPORTING SERVICE OF U. S. DEPT. OF AGRICULTURE

(Continued from page 5)

and telegraphs them to a field agent in each state who releases them to all state and local papers for immediate publication. The Bureau also transmits to the International Institute of Agriculture at Rome the crop estimates of the United States and receives from the Institute the crop estimates for all adhering countries of the world. The Bureau maintains the most complete collection of agricultural statistics in the world and answers the heavy and growing correspondence involving the statistics of every branch or phase of agriculture so far as available.

What Government Crop Reports Are

The government crop reports are estimates of the acreages planted to different crops, growing condition of crops, forecasts of crop production, estimates of yields per acre at harvest, total production, and farm prices for about 60 different crops; estimates of the number of each class of livestock on farms in January, number of brood sows, live stock losses from various causes and farm prices; wages of hired farm labor, hours of labor on farms, and prices farmers pay for machinery and supplies; special estimates of seed, labor and fertilizer requirements on farms, acreage and production of principal varieties of some of the staple crops and marketable surplus production of certain fruit and truck crops.

Many of the crop estimates are forecasts of production and future supply. Obviously, if such forecasts could be obtained in advance of their publication by any individual who knew how to use them for speculating purposes, the information would be extremely valuable. It is therefore necessary to surround the preparation of the crop reports with every possible safeguard to prevent advance information from being obtained or utilized by anyone.

Criminal statute prohibits any employee concerned in the preparation of the government crop reports from speculating in any product of the soil, from knowingly compiling or issuing any false statistics, or from furnishing information directly or indirectly in advance of the dates specified by the Secretary of Agriculture for the publication of the reports, under penalty of a fine of not to exceed \$10,000 or imprisonment for not to exceed 10 years, or both. The work in the Bureau itself is so systematized that no individual, neither the clerks who handle the returns nor the Secretary of Agriculture, has an opportunity of knowing what the United States totals or average for any crop will be until within a few minutes before the report is released.

The reports from the state field agents are separated from the regular mail in the city postoffice and delivered by special messenger directly to the Secretary of Agriculture or his assistant, by whom they are placed unopened in a locked receptacle to which he alone has the key. Such reports do not come into the possession of the Bureau of Crop Estimates until the morning of crop reporting day. The reports from the voluntary reporters come direct

to the Bureau and are separated by classes, by states and by districts within states. Each class is tabulated separately on large sheets which are cut up into sections and distributed among expert computers without any clue by which any sectional sheet can be identified with the particular state or crop, except a mere reference number to which only one man in the Bureau has the key.

On crop reporting days all telephones are disconnected, the entire Bureau is locked in with guards stationed at the outer doors, and the Crop Reporting Board is locked in an inner room, so that there can be no communication within or without the Bureau. Promptly at the hour and minute, set a year in advance by the Secretary of Agriculture, a summary of the report is released to representatives of the press associations by whom it is immediately flashed to all the metropolitan journals for publication the same or the following day. At the same time the summary is also telegraphed to each of the state field agents of the Bureau and a sufficient number of copies are run off by him to supply all the local papers in the state. Within a few hours the manuscript for the monthly crop report is sent to the public printer for printing.

Checking Speculation

Speculation thrives on the lack of public information, doubt and uncertainty. If all the essential facts were known to the public there would be very little room for speculation.

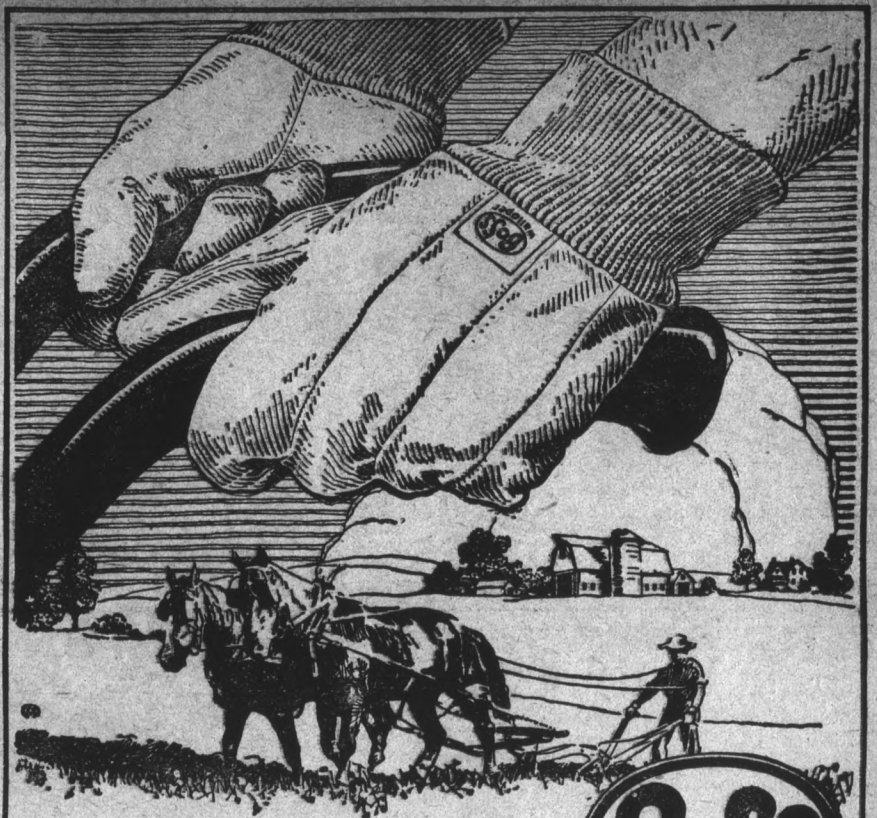
Crops are grown in the open and cannot be hid. Speculators have their own sources of information; they obtain it through salesmen, through buyers, through country merchants and local bankers, through private crop reporting agencies and through the employment of so-called crop experts. Nothing would please them so much as to have the government crop reports suppressed, so that the public would be in doubt and the speculators would be free to issue such information as would best serve their own selfish interests. The greatest protection which farmers and the consuming public can have against false and misleading reports and the operations of the unscrupulous speculators is full, complete, dependable, disinterested and authoritative government crop reports.

Belief of many farmers, amounting almost to a superstition is that the government crop reports have some mysterious connection with taxation. This belief is wholly without foundation in fact, because all individual reports are treated as strictly confidential and are not accessible to any tax assessor or other public official outside of the Bureau. Only totals and averages are published. It is said that this belief is constantly met with in practically every country in the world.

METHODS OF TRANSFERRING BEES

(Continued from page 4)

In all of the frames on top of box and fasten to the box in such a way that no bees can get in or out between them. Slip the cover back about a quarter of an inch so that the bees must enter and leave from the top of the new hive body. It is useless to attempt this method except with fairly strong colonies. As the honey flows comes on and the colony gets still stronger it will move up and occupy the new hive body, drawing the foundation out into combs. The queen will also come up and begin rearing brood in the upper story. The upper story should be examined from time to time and as soon as brood rearing is found to be going on there, then the hive body should be raised up and a queen excluder placed between it and the old hive. This will prevent the queen from going down. The brood which is still below will hatch out within the next several weeks and in a month or six weeks the old box can be removed and the new hive body placed on its own stand. The box and contents should then be destroyed.—B. F. Kindig, State Apiary Inspector.



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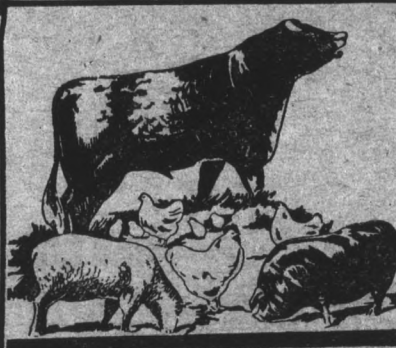
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LITTLE LIVESTOCK ADS.

IN M. B. F.
DO THE TRICK

N. Y. DAIRYMEN MARKET MILK THROUGH OWN PLANT

(Continued from page 5)

with a means of taking care of their entire production throughout the year.

Definite steps toward organization were first taken in January and February, 1919. E. K. Munro of Comillus and J. R. Teall, then county agent, were the leaders in the movement, ably seconded by the men who now constitute the board of directors. Probably one hundred meetings were held. Mr. Teall told me, before a sufficient number of dairymen would give their approval and effect the permanent organization. Most of these meetings were held in various communities over the county. Every Monday night, however, during the campaign, a mass meetings were held. Mr. Teall told me, office in the court house in Syracuse. At first the attendance was very small, but before the campaign ended there was a weekly attendance of about 250.

"We had no idea when we started," Mr. Teall said, "that it would require so much work. At first not more than a dozen men would turn out to our meetings, but we kept right on and before we were through we had packed houses everywhere. We put on a real campaign of education, and whenever we got a man to sign up he was sure to bring some of his neighbors to the next meeting."

"Were there objections to the plan?" I asked.

"No," Mr. Teall said: "everybody thought such an institution as was proposed would help to solve most of the dairymen's problems. They wanted a milk plant, but they were just good, careful business men, and they wanted to be sure that what was proposed was feasible. They wanted to know what it would cost, how it was to be financed, who was to manage the enterprise and how well he was qualified for the job. They wanted to know also about their individual liability and a thousand other things. They were not antagonistic to the idea; on the contrary, they felt the need of such a plant."

A Big Job Well Done

That is the way with farmers generally. When it comes to undertaking a different line of business from the one they are in they are, very sensibly, skeptical.

The association as finally developed was incorporated in February, 1919. The site of the plant was purchased in August and ground was broken for the foundation in November. Work progressed all through the winter of 1919-20, and the plant was opened for business in October of last year; eleven months after work was begun. Considering the hard, cold winter of 1919-20, the shortage of materials, congestion of transportation, the difficulties of financing and difficulties with labor, they made a record for rapid construction.

The plant is located in the heart of the city of Syracuse, at the corner of Burnet Avenue and Elm Street, with an electric line on one side and a steam railroad on the other. The plant is designed to admit a street car to the main unloading platform inside the building, and a franchise has been obtained to lay tracks for the switch. When this switch is completed a great deal of milk will be delivered directly by trolley, thus saving considerable expense in handling. This feature is only one of many interesting things about the plant. . . .

When the plant opened in October the association had approximately 550 members who were pledged under their contract to deliver all their milk to the co-operative milk plant, but only about 200 of them were free to do so, being under contract with independent companies until April first. After that date the plant will receive the entire output of all its members. . . .

Making Friends of the Peddlers

When the plant first began to take in milk the peddlers who had been getting their milk from the independents would have nothing to

do with the farmers. This was something unforeseen and a difficulty that had to be solved at once.

"The way we solved it," Mr. Teall said, "was to engage in the milk peddling business ourselves. We bought twenty wagons and twenty horses, and the first night every one of our directors was on hand to take out a wagon."

"Shortly after we got started with our own delivery the peddlers saw their trade getting away from them and began to come in and talk business. We still have a few wagons and will always keep a few to open up new territory and to take over the routes of those who drop out, but we have no taste for doing our own peddling."

"How do the peddlers feel toward the association now?" I asked.

"Ticked to death," Teall exclaimed. "They take out just what they think they can sell and are not tied up with a contract to take any given amount. They are handling a superior product, and their customers are satisfied. They are making more money and building up a better trade than they ever had before. They are all friends of ours now and will stick with us."

The Onondaga County Co-operative Creamery Association, Incorporated, is a non-profit, non-stock corporation, with each member having only one vote. The members pay \$300 to join and receive therefor a certificate of indebtedness. This certificate can be sold, but the vote does not go with it. If a member goes out of the dairy business he also loses his vote. Each member is paid a certain minimum at the end of each month and the profits are prorated on the patronage dividend basis at the end of the fiscal year. In case any member sells his milk thru another channel he forfeits his membership fee as liquidation of damages to the association.

Onondaga County is typical of hundreds of places near the great consuming centers. The evolution of cities, transportation and industry has worked to their advantage, and they simply had to change to meet the new conditions. Personally, I think they have done a good job. They are making provision to take care of their surplus in less perishable products than fluid milk.

Being a local institution the association has naturally attracted the favorable attention of the local banks. The matter of finances is easily taken care of, and ownership, management and finances are all combined within the one community.

The farmers of Onondaga County have sensed what many other farm leaders do not always give sufficient consideration—the dependence of their enterprise upon strong financial backing. One may carry on a farm and get along somehow with little or no capital, though that is not by any means desirable, but when it comes to a commercial enterprise where goods are piled on the shelves for months and are then sent out to the markets of the world, credit and financial backing are absolutely essential.

NORTHEASTERN MICHIGAN ADVERTISES FARMS

The Northeastern Michigan Development Bureau has incorporated a service which should be of real benefit to its district in that the Bureau is advertising specific farms and property for those in its territory desiring to sell.

This is somewhat of an innovation in that always in the past the policy has been for the Bureau to advertise in generalities of the possibilities and resources of the counties which they represented.

This service should also be of benefit for those who are looking for land in that it gives them a more definite idea of some of the property which is for sale.

Since Northeastern Michigan is a wonderful summer vacation playground, the Northeastern Michigan Development Bureau is devoting considerable effort along the line of drawing attention to this feature, the slogan being "See Michigan First."

THE TRUTH ABOUT FARM BUREAU SALARIES

(Continued from page 7)

vice and management of the wool pool is as follows:

"Hankins Brothers guarantee all sales and collections, advance on initial expense money and some advances on wool, which in all amounts to slightly over \$100,000. They are under ample bonds and were to receive one cent per pound if wool pool was under one million pounds, should wool pool be over one million pounds, they were to receive one-half cent per pound on all over one million pounds. Amount pooled will entitle them to three-fifths of a cent per pound on the total. A small amount of wool, probably less than fifty thousand pounds could have been sold at one time at about sixty cents but the farmers did not want to sell and the amount that could be sold was so small that it would have made so slight a difference on the total sale, as to have been unnoticed.

"As regards salaries paid, Mr. Coleman was reported to state the amount as \$72,000. I wonder if the general public is aware of the magnitude of our business. At present we have sixty-seven employees in our headquarters building at Lansing, exclusive of the wool department. In February, which business men generally concede the dullest month in the year, we did \$419,036.57 worth of business for our members. This month to date, March 15, we have done \$305,311.66 worth of business and you realize our departments are just at the starting period.

"Mr. Coleman is right, we will pay \$72,000 in salaries, but we will get value received and divided by sixty-seven employees it will not cover the bill. Our annual statement of receipts and expenditures is printed in book form and open to the public. We have 97,000 members in our organization and a salary list of \$72,000 would amount to 74 cents per annum to each member. It will be more than that as our business increases, but where on earth can a farmer get the magnitude of service for such a minimum cost.

"Mr. Hankins receives no salary and his services in handling the wool pool will certainly extend over eighteen months and possibly two years.—Michigan State Farm Bureau, Jas. Nicol, President.

MICHIGAN STATE FARM BUREAU NEWS LETTER

CONTRACTS have been closed with tailoring houses in Lansing and Detroit to make up ladies' and men's suiting at \$20 a suit, announces the farm bureau. Virgin wool tailor-made suits will not cost more than \$28 to \$30 each, according to farm bureau figures. All wool going into the suitings comes from the state pool. The grower stands in the role of a manufacturing producer and receives a splendid increase on the market valuation of his wool. Growers may purchase suits and charge the account against wool they have in the pool.

Michigan livestock shippers will soon be able to get cars for livestock four days after date of order instead of six. The farm bureau traffic department has succeeded in inducing the railroads to change the six day rule. The new rule reads, "Four days after next 7 a. m. after ordering car." Also in case a double deck car is ordered the carrier must either place the double deck ordered within the four day limit or else have place two single decks. This is a great concession, says the department, in that two days are saved and the fact that there is a guarantee that other cars will be there in lieu of a double deck and within the same time limit tariffs will be issued as soon as they can be published.

A demonstration or exhibit of apple barrel stock for the benefit of fruit men and managers of farm bureau locals who are interested in supplying barrels to members is being arranged by the farm bureau forestry department. All manufacturers of slack cooperage will be in-

vited to display their wares at a time and place to be announced later.

Three hundred cars of materials were purchased for farm bureau members during March according to the report of the state farm bureau purchasing department. Monroe county led the list with 51 cars. Fertilizer, insecticides, binder twine, coal, wire fence, tile, salt, pulverized limestone, paint, feeds, grain, flour, harness and other materials were included in the purchases made by counties.

DAIRY COMPANY WITHHOLDS PAYMENT

(Continued from page 10)

the best thing to do, under the circumstances, was not in any way to injure the market, but to do the same thing as all lines of business are required to do at the present time and give an extension. Consequently, the business has been continued and the Boulevard Dairy Company today, as far as we have been able to determine, is not carrying more than one-tenth of the burden of debt it carried six months ago, but it is still owing something to its patrons."

INSURANCE COMPANY REFUSES TO PAY

I am taking the liberty of mailing you some affidavits, also a letter from the Ocean Accident Company. (The affidavits showed that the writer's automobile, insured with the Ocean Accident & Guarantee Corporation, was damaged to the extent of \$350 in a collision with another machine.) I could have taken \$550 for the car a few days before the accident and as it is now the car is a dead loss to me. The insurance company ordered it repaired and when the bill was presented refused to settle. The repairman held the car for the repairs and the bill was so large I did not feel able to pay it. You will notice that I have waited on this insurance company over a year. Will you do what you can for me in getting my claim paid or else in exposing the methods of this company?—Geo. W. Surbrook, Huron County, Michigan.

The letter received by Mr. Surbrook from the company was as follows:

"We feel that there was no liability upon us in this case. We do not feel disposed to settle your claim, unless you should wish to accept \$100. We would be willing to pay you that amount, in order to get rid of the case. If I do not hear from you by Dec. 18th, 1920, I will take it for granted that you do not wish to accept this offer and I will withdraw it."

Note what a liberal company this is. It denies all responsibility for the claim and then offers to settle for \$100. The Collection Box advises you to sue this company for the full amount of your claim plus interest. The above letter should convict them in any court. Other readers to save themselves trouble and expense will, of course, think twice before insuring with the Ocean Accident & Guarantee Corporation.—Editor.

LEGISLATIVE NEWS

(Continued from page 2)

is another of the administrative reorganization measures.

Independent thinking marked consideration by the house of Governor Groesbeck's bill providing for a tax on corporations. There was no spirit in evidence of swallowing the proposal whole, and many amendments and prolonged discussions were the rule. An amendment to reduce the minimum tax from \$50 to \$5 and others to increase the maximum above \$1,000, as proposed, or to remove any maximum entirely, failed to pass by narrow margins. It was explained that this tax, in order to be held constitutional must be regarded as one on the privilege of doing business as a corporation, rather than as a tax on property. The bill passed as originally drafted, 82-12.

Enforcement of the present prohibition law will be rendered more complete by final passage of several measures now being considered favorably. The Senate passed the Hicks bill to require that all patent medicines be so compounded as to be "unfit for beverage purposes," only three Detroit senators opposing it. The so-called "search and seizure" amendment to the Wiley law is being rushed through the legislature to facilitate prohibition enforcement.

The "Mothers' Pension" bill, which for some time has lain on the table in the house, was taken up and after a lively fight was passed 78-8. Reps. Frick, Dafoe, Miles, Lord and Rowe led the fight for this measure.



A Home-made Blaster's Box Saves Time and Trouble

IN using explosives on the farm only a few simple tools are required, but it is a great convenience to carry all equipment in a "blaster's box" where nothing will be mislaid or lost.

Such a box can be easily made from a soap or starch box. Nail a one inch strap on each side for a handle. Screw a strip of wood on one end, slotted to hold cap crimper and knife. In the box can be carried fuse, cord to tie fuse to cartridge, and dynamite. *Don't carry caps and dynamite together in the blaster's box.*

The most important tool in the blaster's box is the cap crimper—caps should always be crimped on the fuse with the crimper and nothing else. A sharp knife is necessary for slitting cartridges and cutting fuse.

Most farmers use



RED CROSS DYNAMITE

because it can always be depended upon to give quick and effective results at minimum cost. You can get it—fuse, caps and crimpers, too—from your dealer.

Write us for "The Farmers' Handbook of Explosives." It describes the latest methods of land-clearing, ditching and tree-planting with explosives. It's free.

E. I. du Pont de Nemours & Co. Inc.

McCormick Building
Chicago, Ill.

Hartley Building
Duluth, Minn.

Going to hold an AUCTION SALE?

Don't depend on just the "home-folks", they are not the best buyers; place your advertisement in The Business Farmer, which reaches all worth-while farmers within a hundred miles of your sale.

SEND US COMPLETE DESCRIPTION

and remember your copy must reach us one week in advance of the date of issue. Address, Advertising Dept., The Michigan Business Farmer, Mt. Clemens

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

Business Farmers' Exchange

50 A WORD PER ISSUE—3 insertions for 10c per word. Farm for sale ads. not accepted for less than 3 times. Twenty words is the minimum accepted for any ad. in this department. Cash should accompany all orders. 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 before Saturday for issue dated following week. The Business Farmer Adv. Dept., Mt. Clemens, Mich.

HOW TO FIGURE ADS. UNDER THIS HEAD

Words	1 time	3 times	Words	1 time	3 times
20	1.00	3.00	36	1.80	5.40
21	1.05	3.15	37	1.85	5.55
22	1.10	3.30	38	1.90	5.70
23	1.15	3.45	39	1.95	5.85
24	1.20	3.60	40	2.00	6.00
25	1.25	3.75	41	2.05	6.15
26	1.30	3.90	42	2.10	6.30
27	1.35	4.05	43	2.15	6.45
28	1.40	4.20	44	2.20	6.60
29	1.45	4.35	45	2.25	6.75
30	1.50	4.50	46	2.30	6.90
31	1.55	4.65	47	2.35	7.05
32	1.60	4.80	48	2.40	7.20
33	1.65	4.95	49	2.45	7.35
34	1.70	5.10	50	2.50	7.50
35	1.75	5.25			

FARMS & LANDS

NORTHEASTERN MICHIGAN LANDS AND FARMS

No. 82 B—1,200 A. Ranch, good water and feed. School house on property, 3 miles woven wire fence. Stock loading pens of M. C. R. R. adjacent to property. \$12.00 per acre for quick sale.

No. 83 B—Large two story hotel. Good location.

No. 84 D—880 acres of sugar beet land. Can be subdivided into 40 or 80 acre farms. Situated near Twinning, Arenac Co. \$25.00 per acre.

No. 85 E—20 acres, 50 cleared. Rolling clay loam soil, 4 1-2 miles from station on proposed stone road. Groom house, barn, 30x40 large silo, granary, garage, woodshed, orchard. \$38.00 per acre. Terms.

No. 86 C—120 acre farm, stock tools, machinery, and spring work started. 4 good work horses, 8 milk cows, 2 brood sows with 10 pigs each. All new buildings, cement foundations and floors, silo. Very best of land, fenced and cross fenced with woven wire, and drainage is perfect. 5 acres wheat, 15 acres hay, 90 acres cleared, balance pasture, flowing well. Beautiful farm, four miles from county seat. Owner has other business, will sell this spring for \$12,000, part down, balance easy terms.

No. 87 A—58 A. 20 A. improved, balance brush; running stream, flowing well, house, barn, orchard, clay loam. Near school and church, telephone, mail route. Price \$1,200, terms to suit purchaser.

No. 88 A—200 A. clay loam, level, running stream. Will make good stock farm. Near school and trunk line highway. Mail route, telephone. In flowing well district. \$20.00 per acre, terms to suit.

No. 89 A—65 acres improved, 15 hardwood timber, clay loam, barn 54x24 and other buildings, good water. On Meridian trunk line highway, school at corner of land. Telephone and daily mail route. Orchard. Price \$50 per acre, 4 miles from railroad shipping point. This land will bear inspection.

No. 90 S—Barren to close an estate, 2 1/2 acres farm and ranch land on State Trunk Line Gravel Highway. 300 acres cleared, with house, barn, silo, farm machinery. Bearing orchard.

THE NORTHEASTERN MICHIGAN DEVELOPMENT BUREAU

Bay City, Michigan

FOR SALE—IMPROVED MICHIGAN FARM 480 acres, located in Presque Isle Co., Mich., one-quarter mile to school and three and one-half miles to town. There are 60 acres in cultivation, 420 in pasture. Soil is clay loam with clover and oats grown. Eight springs. Improvements consist of five room house, sheep barn, barn, granary, root cellar, shed, etc., all newly painted. Is fenced with woven wire. Nicely cross fenced. Price is \$16,000 for tract with possession at once. For further information write or see HARRY A. CODDIE, Onaway, Mich.

265-ACRE DAIRY FARM WITH 4 HORSES. 17 cows and heifers, 3 calves, machinery, vehicles, tools, hay loader, dairy utensils, equipment, etc.; convenient advantages; 150 acres tractor-worked; 30-cow spring-watered pasture; 300 cords 4 ft. wood 350,000 ft. timber; 12-room house, running spring water, 100-ft. barn, silo; woman owner to sell before planting. \$7,000 takes all about \$2,500 down, easy terms. For travelling directions see page 27. Spring Catalog 1,100 Bargains. FREE. STROUT FARM AGENCY, 814 B E. Ford Bldg., Detroit, Mich.

MAGIC VALLEY—60 ACRE DEMONSTRATION farm in heart of the lower Delta of the Rio Grande, Texas. All plowed, fenced and under irrigation. Wild land now selling at \$450 per acre. Raise 3 crops a year. Become independent. Can exchange this beautiful farm for Michigan property at \$24,000. Encumbrance \$8,000 at 6 per cent. BENJAMIN & SON, 531 1-2 So. Saginaw St., Flint, Mich.

FOR SALE—ONE OF THE BEST 80 ACRES in Mecosta Co., on state reward road, half mile from church and school, half way between Lakeview, Mecosta and Remus. Good markets. For terms, write LOUISE MONAGLE, Lakeview, Mich.

FOR SALE—GOOD FRUIT AND STOCK farm very cheap if taken soon. Will sell 80 120 or 160 acres under cultivation, 30 acres wood timber, good soil and buildings. Poor health reason for selling. For particulars write GEO. BEITNER, R 5, Traverse City, Mich.

FOR SALE—160 ACRES, 60 CLEAR, 16 acres in fall grain, well fenced, quite good buildings. Sell on time or cash. FRANK GLAWB, Oquoc, Mich.

FOR SALE—120 ACRES, NUMBER ONE land and best of buildings, fruit, timber. One mile to Dixie Highway, station, church and school, 30 miles from Detroit. R. W. ANDERSON, Clarkston, Mich.

520 ACRES CUT OVER LAND, CLARE CO., good grazing. Sell cheap or exchange for cattle. G. W. BARTOW, Marlon, Mich.

WALKER TOWNSHIP, CHEBOYGAN COUNTY cut-over lands, rich hardwood limestone soil. In great clover, potato and orchard belt, logged off, burnt off, waiting for the plow. Settled farming community, railroads, schools, telephones \$10 per acre, part cash, balance easy. Write CHAS. W. OSMUN, Tower, Mich.

80 ACRE FARM FOR SALE, COWS, TEAM and farming tools. Good buildings, good soil, two miles from RR town. Good schools and churches. Price \$4,000. HERMAN SPRINGSTEEN, Benoni, Mich.

FOR SALE—FINE 160 ACRE FARM black sandy loam, splendid buildings, 2 1-2 miles to market, near school and church, good roads. For particulars write A. C. DIAMOND, Vesta, Mich.

MISCELLANEOUS

BERRY PLANTS

SENATOR DUNLAPS AT \$3.50 PER 1,000. \$2.00 for 500; \$1.00 per 250. Guaranteed first-class plants or money refunded. C. H. STANLEY Flower View Farm, Paw Paw, Mich. R. R. No. 2.

SPECIAL OFFER! STRAWBERRY PLANTS. 200 Senator Dunlap, 150 Warfield, \$2.80 postpaid. HAMPTON & SON, Bangor, Michigan.

STRAWBERRIES, STRONG, VIGOROUS plants, late variety, large sweet berries, 50c per 100. \$3.00 per 1,000, postpaid. THELO GIFFORD, Winn, Mich.

L. J. FARMER'S NEW EVERBEARING strawberry, NEVER FAIL, at 1-2 catalog prices or \$5.00 per 100, J. L. FAULK, Byron, Mich.

FOR SALE—CUMBERLAND BLACK CAP and Eldorado Blackberry, \$3 per 100 or \$2.00 per 1,000. Columbia Purple grape, \$5 per 100 or \$35 per 1,000. J. W. CURTIS & SON, R 2, Box 7, Gladwin, Mich.

FENCE POSTS

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

SEED

FOR SALE—COW PEAS, MICHIGAN FAV. eritas. Will send sample and state prices on request. EZRA GERMAN, Centerville, Michigan.

FOR SALE—RED KIDNEY SEED BEANS \$12.50 per hundred pounds. Baga free, M. B. WATSON, Vanderbilt, Mich.

FOR SALE—EARLY IRISH COBBLER PO. tatoes. Grown from hill selected stock, price \$2.00 per cwt. Also reclaimed White Blossom Sweet Clover seed at \$7.50 per bu. C. W. JOHN, RON, Palma, Mich.

\$10.00 IN GOLD FREE TO THE PERSON sending the three best ears of corn to us, raised from our famous "SUPERIOR AUSTRALIAN HULLLESS" pop corn. Full particulars and package of seed 10c. SUPERIOR SEED & PLANT CO., Galesburg, Mich.

FOR SALE—HOLLYBROOK SOY BEAN seed, \$5.00 per bushel, bags included. HARVEY HEBBLEWHITE, Armada, Mich.

FOR SALE—EARLY BROWN SOYBEANS, \$4.50 per bu., and Michigan Favorite Cowpeas, \$2.75 per bu. ELMER TORIN, Three Rivers, Mich.

GENERAL

LIGHTNING RODS, EXCLUSIVE AGENCY and quick sales to Live Dealers selling "DID-DIE-BLITZEN RODS." Our copper tests \$9.96 per cent PURE. Write for Agency. Prices are right. L. M. Diddle Co., Marshallfield, Wis.

THE BEST BREEDERS

advertise in The Michigan Business Farmer. It will be worth your while to read the livestock advertisements in every issue to keep posted on what they have to offer.

Every Breeder

Can use M. B. F.'s Breeders' Directory to good advantage. Run your ad. and watch the returns come in.

WHAT HAVE YOU TO OFFER?

IS YOUR FARM FOR SALE

Write out a plain description and figure 10 cents for each word, initial or group of figures for three insertions. There is no cheaper or better way of selling a farm in Michigan and you deal direct with the buyer. No agents or commissions. If you want to sell or trade your farm, send in your ad. today. Don't just talk about it. our Business Farmers' Exchange gets results. Address The Michigan Business Farmer, Adv. Dept., Mt. Clemens, Mich.

Veterinary Department

Dr. W. Austin Ewalt, editor

CANKERED EARS

I am writing to you about some tame rabbits I have. They have some kind of a disease and I don't know what it is. It is in their ears. It is scaly and fills their ears up. Their ears drop down and they are not able to hold them up. I dug the dry scales out and put some sheep dip in their ears. Their ears will be all right for a while then they will get worse again.—M. H., Otisville, Mich.

Your rabbits are suffering from cankered ears. The ears should be thoroughly, but gently swabbed out with hydrogen peroxide and absorbent cotton swabs. It is necessary that the whole canal be cleared of every vestige of discharge, at the first treatment. The ear and canal should then be thoroughly dried and the canal filled with either of the following dusting powders: Chinosol, fifteen grains, or formadin of Aristol, or Busmuth Formic Iodid, any one of the three powders and boric acid or cleaning with peroxide, slightly warmed; all subsequent dressings should be in the powdered form. Washing the ear or passage of or the use of lotions or liquids of any description being only productive of pain. I would advise you pack the ear with the dusting powder morning and night.

LOSES USE OF HIND LEGS

What could I do with a pig that can't walk on her hind legs? One day I let my pigs out and two of them started to fight and the big sow got one of the pigs by the fence and before I got there she turned the smaller one over and did something to her hind legs. The right one seems to be getting a little better but she can't stand on it, or lift her rear parts. I don't think the leg is broken.—A Subscriber, Kinde, Mich.

The only thing to do in a case of this kind is to let nature take its course; your pig is no doubt injured in the nerves of the spine and recovery may be doubtful. He should be kept in warm, clean quarters, aside from this nature will do all that can be done.

GRUBS

Our cows' backs are full of grubs. What can we do for them? They are in good flesh and are doing well.—A Subscriber, Indian River, Michigan.

These grubs as you call them, are bots and represent the larval stages of the bot fly. When matured, the bots work their way out, fall from the cattle, burrow in the earth and remain there for about a month when the adult fly issues. Press out the grubs and destroy them and paint the opening with tincture of iodine.

LICE ON CATTLE

What is the best way to kill lice on young cattle? My cattle are covered with lice and can't get rid of them. I use lice powder and stock dip and they do not come off. Will you please write me what to do?—A. G. S., Bay City, Mich.

Clip your young cattle and apply Kresol Dip (Parke, Davis & Co.) according to the directions on the can and you will be able to get rid of the lice. The stables should be white-washed.

TWIN CALVES

We have a cow that came fresh the 15th of January. She had twin calves; a heifer and a bull. Have been told that the heifer would never breed. Please give us your opinion through your paper.—W. S., Lake City, Michigan.

In case of twin calves where one is a male and the other is a female, both may be fertile, however, frequently only the male is fertile.

SHEEP INFESTED WITH WORMS

Will you please tell me what ails my sheep? I have lost two and now there is another sick. When they first became sick they stand off by themselves and keep looking back at their hind parts, and the hind parts jerk. After a day or so they foam at the mouth. I have been feeding them corn stalks and some corn and oats and pea straw. Last fall the sheep used to get in the corn field and they were extra fat.—A. S., Comins, Michigan.

Your sheep are infested with worms. Keep all food away from the affected ones to be treated for a whole day, allowing plenty of wa-

ter. That evening give to each one one half ounce of gasoline and raw linseed oil, to which may be added four ounces of fresh cow's milk. Repeat this dosage for three evenings allowing food several hours after giving each does of medicine. Very weak lambs may be fed more often, and a little stimulant given. Ten days later give another course of the same treatment. Great care should be taken in drenching sheep, for there is great danger of pouring a portion of the drench into the lungs, thus setting up mechanical pneumonia. A two ounce dose syringe is the handiest article with which to give medicine. Do not open the mouth but insert the syringe or bottle between the lips at the side of the mouth.

FERTILITY OF EGGS

How soon after a male bird has been put with hens will the eggs be fertile, or will hatch? Also, how long after the male has been taken away from the hens will the eggs hatch?—Mrs. C. J. P. Coleman, Michigan.

It usually requires four to five days for the eggs to become fertile after the male is put with the female. Eggs will remain fertile fifteen to twenty days after the male is taken away.

MACK'S NOTES

Members of humane societies in the eastern part of this country have started an agitation which has for its object an important change in the methods used in killing animals intended for human consumption; the sponsors of this movement claim that an animal endures mental anguish when he sees another animal killed and the suggestion is that some arrangement be made by which animals can be slaughtered without their fellows witnessing the operation.

About the latest in modern swine husbandry is a device known as a farrowing crate which is designed to prevent sows from ever laying on or eating their newborn offspring. The crate is made like any other hog crate, except that back of the animal, the floor slopes down sharply out of danger. The crates are made to permit the newborn pig to drop so that the sow cannot turn around in them but wide enough so that she will rest easily. A small door is located in the rear end of the crate that permits the attendant to remove the pigs as soon as they come.

The legislature of the state of Minnesota, having established a precedent by passing a law making it obligatory, on the part of grain and live stock exchanges, to admit the producer and co-operative organizations of producers to membership, similar legislation in other states may be confidently looked for. It certainly seemed like the "irony of fate" that the man who is mainly responsible for the existence of the commodities, which make these trade exchanges necessary, should be denied membership in them.

Collection of agricultural statistics in Illinois for the second annual state agricultural census will be commenced soon. It is announced by the state department of agriculture. Assessors' schedules to be used in the collection of data have been sent to all county clerks in the state. The census is to be taken under authorization of an act of the legislature in 1919. This makes it obligatory on assessors to collect, when making their regular assessment rounds, such agricultural statistics and information as the state department of agriculture requires. State agricultural officials point out that information gathered in this manner has no relation to taxation and under the law cannot be used in any way to affect the assessment of property.



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, 26 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.

May 5—Shorthorns, Southern Mich. Polled Shorthorn Breeders' Ass'n, Branch Co. Farm, Coldwater, Mich.
May 10, Shorthorns, Central Mich. Shorthorn Breeders' Ass'n, Greenville Fair Grounds, Greenville, Mich.
May 18, Holsteins, Livingston Co. Holstein Ass'n, Howell, Mich.
May 21, Holsteins, Wm. Gottschalk, New Haven, Mich.
June 9, Angus, Michigan Aberdeen-Angus Ass'n, East Lansing, Mich.

LIVE STOCK AUCTIONEERS

Andy Adams, Litchfield, Mich.
Ed. Bowers, South Whitley, Ind.
Porter Colestock, Eaton Rapids, Mich.
John Hoffman, Hudson, Mich.
D. L. Perry, Columbus, Ohio.
J. L. Post, Hilldale, Mich.
J. E. Ruppert, Perry, Mich.
Harry Robinson, Plymouth, Mich.
Wm. Waffle, Coldwater, Mich.
John P. Hutton, Lansing, Mich.

CATTLE

HOLSTEIN-FRIESIAN

USE PURE BRED SIRE

Estimates furnished by the Dairy Division of the United States Department of Agriculture show that the dairy cows of the country average only 4,500 lbs. of milk per year.

A good Holstein bull will increase the production of the ordinary herd 50 per cent in the first generation.

Let us help you find a good one to use on your herd. You cannot make a better investment.

MICH. HOLSTEIN-FRIESIAN ASSOCIATION
Old State Block Lansing, Mich.

SHOW BULL

Sired by a Pontiac Aggie Korndyke-Hengerveld DeKol bull from a nearly 19 lb. show cow. First prize junior calf, Jackson Fair, 1920. Light in color and good individual. Seven months old. Price, \$125 to make room.
Herd under Federal Supervision.

BOARDMAN FARMS

JACKSON, MICH.
Holstein Breeders Since 1906

BULL CALF BORN MARCH 27, 1920. VERY nice, straight and well grown, sired by a son of Flint Hengerveld Lad whose two nearest dams average over 32 lbs. butter and 755 lbs. milk in 7 days. Dam is a 20.61 lb. Jr. 2 year old daughter of Johan Hengerveld Lad 68 A. R. O. daughters. Price \$150. F. O. B. Flint. Pedigree on application.
L. O. KETZLER, Flint, Mich.

WOLVERINE STOCK FARM REPORTS GOOD sales from their herd. We are well pleased with the calves from our Junior Herd Sire "King Pontiac Lande 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.

HOWBERT HERD

WHERE TYPE, CONSTITUTION AND PRODUCTIVE ABILITY IS ASSURED.
TWO grandsons of King of the Pontiacs from A. R. O. Dams of excellent breeding.

H. T. EVANS
Eau Claire, Mich.

\$100.00 WILL BUY HOLSTEIN-FRIESIAN bull calves, nearly ready for service, from sire whose six nearest dams average 33.34 lbs. butter in 7 days.
OSCAR WALLIN, Wisconsin Farm, Unionville, Mich.

Yearling Bull For Sale

Bull born Sept. 28, 1919, evenly marked and a fine individual. Sired by my 30 lb. bull and from a 20 lb. daughter of Johan Hengerveld Lad, full sister to a 32 lb. cow. Dam will start on yearly test Nov. 15.

ROY F. FICKIES
Chesaning, 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 Osa. One is from a 17 lb. 2 yr. old dam and the other is from a 20 lb. Jr. 2 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.

LAKEVIEW DAIRY FARM HOLSTEIN-FRIESIAN. Herd sire Paul Pieterie Wane Prince. Two nearest dams average 31.9 lbs. butter, 672 lbs. milk in 7 days. Dam milked 117 lbs. in one day. 3,218 lbs. in 30 days; 122.37 lbs. butter in 30 days. His bull calves for sale. One from a 22 lb. two-year-old. Good individuals. Prices reasonable. Age from 2 to 5 months.
E. E. BUTTERS, Coldwater, Mich.

FOR SALE—3 GOOD BULLS, LIGHT, MEDIUM and dark. Dams' records at 2 yr. 3 yrs. and 4 yrs. 18 pounds, 24 pounds and 26.40 ones. First two dams average 22,000 pounds milk and over 1,000 pounds butter in year. All good type. Also a few registered cows and heifers.
M. J. ROCHE, Pinckney, Mich.

HERD SIRE IN SERVICE

KING ZERMA ALCATRA PONTIAC NO. 13461 a son of the \$50,000 bull. **SIR ECHO CLYDE NO. 124367** a double grandson of MAY ECHO SYLVIA the champion cow of Canada. I am offering a yearling son of King from a cow with a 7 day A. R. O. of 18.43 butter 427.8 milk. Next dam 15.11 butter, 337.8 milk. Price \$150. Also some yearling grand daughters of KING Price \$150 each. Pedigrees sent on request.
H. E. BROWN, Greenville, Mich.
Breeder of Registered Stock Only

BRANDONHILL FARM

Ortonville, Michigan

Bull calves sired by 35 pound son of King of the Pontiacs—\$100.00—and upwards—good individuals—from a clean herd.

JOHN P. HEHL

1205 Griswold Street, Detroit, Michigan

FAIRLAWN HERD—HOLSTEINS
Herd Sire, Embellard Lillith Champion, 108073 His sire's dam, Colantha 4th's Johanna, world's first 35 lb. cow, and world's first 1,200 lb. cow. The only cow that ever held all world's butter records from one day to one year, and the world's yearly milk record at the same time. His dam Lillith Piebe De Kol, No. 93710, over 1,150 lbs. of butter from 29,599.4 pounds of milk in a year. World's 2nd highest milk record when made and Michigan state record for 6 years. Only one Michigan cow with higher milk record today. His two nearest dams average:
Butter one year 1,199.22
Milk 28,515.9
Champ's sons from choice A. R. O. dams will add prestige to your herd and money to your purse.

TWO BULL CALVES

Registered Holstein-Friesian, sired by \$9.57 lb. bull and from heavy producing young cows. These calves are very nice and will be priced cheap if sold soon.
HARRY T. TUBBS, Elwell, Mich.

HOLSTEINS FOR SALE—EITHER SEX. Bulls ready for heavy service from dams with A. R. O. records up to 31 lbs. Also bull calves with same breed. They are all fine individuals and nicely marked and priced to sell. Also a few well bred females.
D. H. HOOVER, Howell, Mich.

A PROVEN BLOOD LINE

KING SEGIS transmitted to his sons the power to transmit to their daughters the greatest of production over long periods. It is his offspring that has recently made the greatest yearly production ever dreamed of, 87,381.4 pounds of milk in a year.
We have for sale at moderate prices beautiful individuals of show type KING SEGIS bulls.
GRAND RIVER STOCK FARMS
111 E. Main, Corey J. Spencer, Owner, Jackson, Mich.
Under State and Federal Supervision

FOR SALE—2 REG. HOLSTEIN BULLS ready for service from 19 1-2 and 24 1-2 lb. dams. Price \$100 and \$125. Herd on accredited list.
Wm. GRIFFIN, Howell, Mich.

FOR SALE—HOLSTEIN COW, MERCENA DE Kol of Mapleside, No. 137129, due to freshen April 24. Price \$250.00.
R. J. BANFIELD, Wixom, Mich.

FOR SALE—TWO BULL CALVES, A HOL- teip and Durham about 3 months old. Both have heavy milking dams. Not registered. \$50 each if taken at once.
CHASE STOCK FARM, Marlette, Mich.

HEREFORDS

HEREFORD CATTLE AND HAMPSHIRE HOGS.

We can furnish registered bulls from 12 months and older, best of breeding and at a very low price, have also some extra good Herd headers. We have also a large line of registered Hampshire Hogs, Glits, Sows and Boars.
Write us, tell us what you want and get our prices.
La FAYETTE STOCK FARM, La Fayette, Ind.
J. C. Crouch & Son, Prop.

REGISTERED HEREFORD CATTLE—KING REPEATER 713941, and Beau Perfection 327899 head our herd. Bulls are sold; have some very fine heifers for sale, bred or opened, bred to our herd bulls. Come and see them; they will please you.
Tony B. Fox, Prop., Henry Gehrholtz, Herdsman, MARION STOCK FARM, Marion, Michigan

HEREFORDS FOR SALE

Fairfax and Disturber blood, 150 Reg. head in herd. \$35.00 reduction on all sires. Choice females for sale. Write me your needs.
EARL O. McCARTY, Bad Axe, Mich.

150 HEREFORD HEIFERS. ALSO KNOW of 10 or 15 loads fancy quality Shorthorns and Angus steers 5 to 1,000 lbs. Owners anxious to sell. Will help buy 50c commission.
C. F. BALL, Fairfield, Iowa

LAKEWOOD HEREFORDS GOOD TYPE. strong boned young bulls, 12 months old for sale. Also high class females any age. Inspection invited.
E. J. TAYLOR, Fremont, Mich.

RIVERVIEW HEREFORDS FOR SALE four bulls, one a grandson of the \$9,500 Bullion 4th. Also a few females.
Wm. C. DICKEN, Smyrna, Mich.

FOR SALE—SMALL HEAD OF REG. HERE- fords, Belvidere 569766, heads the herd.
RALPH S. SMITH, Kewadin, Mich.

SHORTHORN

CENTRAL MICHIGAN SHORTHORN BREED- ers' Association offer for sale 75 head; all ages, both milk and beef breeding. Send for new list.
M. E. MILLER, Sec'y, Greenville, Mich.

IF YOU WANT TO BUY OR SELL I MAY have just what you want. I handle from one animal up to the largest consignment sale in the country.
O. A. Resmussen Sale Co., Greenville, Mich.

Have You a Mortgage on Your Farm?

If so buy Shorthorns at the Feb. 25th sale at M. A. G. held at 1 P. M. We are listing four females and two show bulls that will lift your mortgage if they are cared for.
RICHLAND FARMS
C. H. Prescott & Sons, Tawas City, Mich.

Huron Co. Shorthorn Breeders' Ass'n offer for sale Scotch and Scotch topped males and females of all ages. 300 head to select from. For information address
Jas. R. Campbell, Secretary
Bad Axe, Michigan

MAPLEHURST FARM

Newton Loyalist 2nd in service, short horn bulls for sale.
G. H. PARKHURST, R. 2, Armada, Mich.

BUY SHORTHORNS NOW, 4TH ANNUAL herd test without a reactor. Some bargains in bulls.
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. Marquette, Michigan.

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

SHORTHORNS COWS, HEIFERS, BULLS offered at attractive prices before January first. Will trade for good land.
Wm. J. BELL, Rose City, Mich.

3 EXTRA GOOD BULL CALVES FOR SALE. From the Maple Ridge herd of Bates Shorthorns. Calved in September, 1920.
J. E. TANSWELL, Mason, Michigan.

SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.
J. A. DeGARMO, Muir, 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: ONE STRAIGHT SCOTCH SHOR- thorn bull five months old, sired by Village Detroit, the M. A. C. herd bull and out of a Missle Sultan cow. A good straight calf, price \$75.
S. H. HICKS & SONS, R. 7, Lansing, Mich.

FOR SALE—REGISTERED SHORTHORNS and Duroc Jersey spring pigs, either sex; two red bulls one 11 months and one 5 months old. Several heifers from 6 months to 2 years old. Scotch Top and Bates bred. Address
GEORGE W. ARNOLD or JARED ARNOLD
Williamsburg, R. 1, Michigan

JERSEYS

REG JERSEYS HEIFERS 1 YR. OLD— Young cows in milk sired by Majesty's Oxford Shyluck 158,692 also young bulls sired by Frolic's Master Pogs 177683, a grandson of Pogs 99th and Sophie 19th's Tormentor, two great bulls of the breed. Write for prices and pedigree.
GUY C. WILBUR, R. 1, Seiding, Mich.

DO YOU WANT PRODUCTION?

The grandson of Pogs 99th of Hood Farm and Sophie 19th's Tormentor, two of the greatest sires ever known heads our herd. No other strain is more noted for past and present production. Bull calves and bred heifers for sale at reasonable prices.
FRED HAYWARD, Scotts, Mich.

JERSEY YEARLING BULL (SIRE BY PEN- hurst Fern Sultan, R. M. Breeding.
J. E. MORRIS & SON, Farmington, Michigan.

HIGHLAND FARM JERSEYS FEDERAL ACCREDITED herd. High production, splendid type and breeding. Write us your wants.
Samuel Odell, Owner. Adolph Heeg, Mgr. Shelby, Michigan

YEARLING BULL
Sired by Majesty's Oxford Shyluck. Nothing better.
FRANK P. NORMINGTON, Ionia, Michigan

GUERNSEYS

GUERNSEY BULL CALVES

From tested and untested dams. Satisfaction guaranteed.
Write for prices and breeding to
MORGAN BROS., Allegan, Mich., R1

GUERNSEY BULL FOR SALE

Good individual six months old. Herd under state and federal supervision.
Write for particulars to
C. A. HENNESEY, Watervliet, Mich.

RED POLLED

REG. RED POLLED BULLS, ALL AGES. Bred heifers.
E. S. CARR, Homer, Mich.

DURHAM

FOR SALE TWO HIGH CLASS THOROUGH- bred, Shorthorn Durham bulls. Eleven and twelve months old.
HENRY J. LYNCH, Mayville, Mich.

ANGUS

REGISTERED ABERDEEN-ANGUS BULLS. Heifers and cows for sale.
Priced to move. Inspection invited.
RUSSELL BROS., Merrill, Michigan

The Most Profitable Kind

of farming, a car load of grade dairy heifers from LENAWEE COUNTY'S heaviest 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. S. SMITH, Addison, Mich.

7 BULLS--15 FEMALES

The Southern Michigan Polled Shorthorn Breeders' Ass'n, will hold a public sale of Polled Shorthorns at the Branch County Farm, Coldwater, Mich.,

MAY 5, 1921

The offering consists of 22 head of show and breeding cattle. Buy while cattle are on the conservative side.

No factor is destined to play such an important part in constructive breeding as good animals backed with choice breeding.

Those in pursuit will find animals that will make good in any herd at home or abroad.

We cordially invite all interested to attend this sale as it will be a grand opportunity to get foundation stock as well as to strengthen blood lines and individuality in the older herds.

Write for illustrated catalog Sale commences at 1:30 p. m.
Co. Agriculturist, C. L. Nash, Sec. Geo. E. Burdick, Pres.
Coldwater, Mich. Coldwater, Mich.



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 15, 25 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.

The Home of

Imp. Edgar of Dalmeny Probably The World's Greatest BREEDING BULL

Blue Bull, Supreme Champion at the Smithfield Show, 1919, and the Birmingham Show, 1920, is a daughter of Edgar of Dalmeny.

The Junior Champion Bull, Junior Champion Female, Champion Calf Herd and First Prize Junior Heifer Calf, Michigan State Fair, 1920, were also the get of Edgar of Dalmeny.

A very choice lot of young bulls—sired by Edgar of Dalmeny are, at this time, offered for sale.

Send for Illustrated Catalogue.

WILDWOOD FARMS
Orion, Mich.

W. E. Scripps, Prop., Sidney Smith, Supt.

**BARTLETT'S PURE BRED ABERDEEN-
SWINE** are right and are priced right. Correspondence solicited and inspection invited.
CARL BARTLETT, Lawton, Mich.

AYRSHIRES

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

BROWN SWISS

BROWN SWISS BULL FOR SALE WITH PEDIGREE; four years old. Price \$125 if taken soon.
J. H. SANBORN, Barton City, Mich.

SWINE

POLAND CHINA

BIG BOB MASTODON

Is sired by Caldwell Big Bob Champion of the world. His dam sire is A's Mastodon, Grand Champion at Iowa State Fair. Enough said. I have a fine September Boar Pig that will make a herd boar sired by Big Bob, and a fine lot of spring pigs when weaned. Book your order now.
**C. E. GARNANT,
Eaton Rapids, Michigan.**

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 Clausman, Orange Prince and L's Long Prospect.
W. E. LIVINGSTON, Parma, Mich.

BIG TYPE POLAND CHINAS

A few choice spring boars and gilts sired by "Half Ton Lad," a good son of "Smoothie Half Ton" Champion of Michigan in 1918. Gilts will be bred to Jumbo's Mastodon 2nd, son of Big Bob Mastodon for March and April farrow.
HOWLEY BROS., Merrill, Mich.

FARWELL LAKE FARM

L. T. P. C. boars all sold. A few spring boars and some gilts left. Will sell with breeding privilege. Boars in service: Clausman's Image 2nd, W. B.'s Outpost and Smooth Wonder. Visitors welcome.
**W. B. RAMSDALL,
Hanover, Mich.**

BIG TYPE POLAND CHINA BRED GILTS ALL sold, but have some fall gilts at reasonable price. Will be bred for fall litters.
DORUS HOVER, Akron, Mich.

GILTS Sired by BIG BOB MASTODON, BRED to Jumbo Lad. Price very reasonable.
DEWITT C. PIER, Ewart, Mich.

LSPG—4 BOARS BY CLANSMAN'S IMAGE and Big Defender, that are extra good. Bred gilts all sold.
H. O. SWARTZ, Schoolcraft, Michigan.

BIG TYPE POLANDS. AM OFFERING TWO good growing fall gilts, from best sow in our herd.
W. CALDWELL & SON, Springport, Mich.

BIG TYPE P. C. BRED SOWS ALL SOLD. Closing out a few choice boars at a bargain also some extra good fall pigs, either sex. From growing stock.
L. W. BARNES & SON, Byron, Mich.

BIG TYPE POLAND

China boar ready for service. \$25.00.
JOHN C. BUTLER, Portland, Mich.

B. T. P. C. A FEW TOP GILTS BRED TO Highland Giant, the \$500 boar. Others bred to Wiley's Perfection. Weight, 700 at 18 months.
JOHN D. WILEY, Schoolcraft, Mich.

L. T. P. C. DOES YOUR NERVE SAY BUY hogs? Vote yes and order a good one. Fall gilts \$30 to \$50; spring boars, \$15 to \$25. Two Prospect Yank gilts bred to Hart's Black Price March 24th at \$50 each.
F. T. HART, St. Louis, Mich.

LEONARD'S BIG TYPE P. C. SPRING boars, bred sows and the best litter of fall pigs in the state. Come and see or write.
E. R. LEONARD, R. 3, St. Louis, Mich.

I Am Offering Large Type Poland China Sows, bred to F's Orange at reasonable prices. Also fall pigs. Write or call.
OLYDE FISHER, R. 3, St. Louis, Mich.

BIG TYPE POLAND CHINA BRED GILTS sold. Some extra good fall pigs of both sex for sale. Write for breeding and price.
MOSE BROTHERS, St. Charles, Mich.

WALNUT ALLEY

herd has dams mated to sires that will make Poland China history for Michigan.
Nothing to offer at present.

A. D. GREGORY

Ironia, Mich.

DUROCS

FOR SALE—SEVERAL EXTRA GOOD SPRING Boars, ready for service. Our bred gilts are all sold, but we have some fine spring pigs coming on. Harley Foor & Son, Gladwin, Michigan

MEADOWVIEW FARM REG. JERSEY HOGS, Booking orders for spring pigs.
J. E. MORRIS & SON, Farmington, Mich.

DUROCS WITH QUALITY
Spring pigs by Walt's Orion, First Star Yearling
Detroit, Jackson, Gd. Rapids and Saginaw, 1919

Phillips Bros, Riga, Mich.

DUROC JERSEY BOARS. Boars of the large, heavy-boned type, at reasonable prices. Write, or better, come and see.
F. J. DRODT, R. 1, Monroe, Mich.

PEACH HILL FARM offers tried sows and gilts bred to or sired by Peach Hill Orion King 152489. Satisfaction guaranteed. Come look 'em over.
Also a few open gilts.
INWOOD BROS., Romeo, Mich.

AM OFFERING SOME HIGH CLASS
SPRING DUROC BOARS

at reasonable prices. A few gilts bred for September farrow at bargain prices.
**W. C. TAYLOR,
Milan, Mich.**

Duroc sows and gilts bred to Walt's King \$2949 who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroc boar. Newton Barnhart, St. Johns, Mich.

DUROC PIGS, READY TO SHIP MAY 1ST, Extra quality and breeding. The best purchases for Boys and Girls' Clubs of Washington Co. in 1919 were from my herd. One boy refused \$125 for male pig a few weeks after purchase. Price \$15 to \$20, registered and transferred. Satisfaction guaranteed.
B. E. KIES, R. 5, Hillsdale, 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
Pottsville, Mich.

DUROC JERSEY SOWS AND GILTS, BRED for April and May farrow. 1,000 lb. herd boar.
JOS. SCHUELLER, Weldman, Mich.

DUROCS—SOWS AND GILTS ALL SOLD. Have a few choice fall boars at reasonable price.
C. L. POWER, Jerome, Mich.

FOR SALE—DUROC FALL GILTS. WE ARE booking orders for choice spring pigs, \$15. 8 to 10 weeks old.
JESSE BLISS & SON, Henderson, Mich.

FOR SALE: ONE DUROC BOAR FROM Brookwater breeding stock. Choice spring pigs.
JOHN CRONENWETT, Carleton, Mich.

FOR SALE—REG. DUROC-JERSEY SPRING gilts bred to Rambler of Sangamo 1st. The boar that sired our winners at Michigan State Fair and National Swine Show.
**F. HEIMS & SON,
Davison, 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.
Gratcot Co. Newton & Blank, Perrinton, Mich.

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

BUY PIGS NOW

Registered Duroc Pigs, crated and delivered to express station for \$20 each. Either sex, or can furnish them unrelated to each other. These are late fall and winter pigs sired by State Fair winners and weighing over 100 pounds. Write for particulars.
MICHIGANA FARM LTD., Pavilion, Mich.

WE OFFER A FEW WELL-BRED SELECTED spring Duroc Boars, also bred sows and gilts in season. Call or write.
MCAUGHTON & FORDYCE, St. Louis, Mich.

DUROC-JERSEYS—PIGS FOR SALE. BUTTERNUT FARM
Lupton, Mich.

Reg. Durocs for sale. Brookwater stock. One bred sow wt. 475 lbs. to Brookwater Principle price \$85, due April 26. Two boars, 5 mos. old, wt. about 130 and 160 lbs. price \$20 and \$25. Two open gilts same litter wt. about 125 lbs. price \$22.50 each. Reg. free.
GEO. H. SHANKLIN, R. 3, Redford, Mich.

O. I. C.

Special Boar Sale For 10 Days

June boars, ready for service, weighing 190-225 pounds at \$30-\$35. Good straight fellows. Farmers, your opportunity to breed up your stock at a reasonable price. Recorded free in the O. I. C. or C. W. R.
CLARE V. DORMAN, Snover, Mich.

O. I. C. REGISTERED STOCK

We are offering in the next 30 days 3 boars weighing 300 lbs. at \$40; 10 bred gilts due June 1 at \$40—200 lbs.; 8 fall boars, 150 lbs. at \$25. All stock guaranteed. Papers furnished free.
J. R. VANETTEN, Clifford, Mich.

O. I. C.

GILTS BRED FOR SPRING FARROW and one Shorthorn bull calf eight months old. Milking strain, well fed.
F. C. BURGESS, Mason, R. 3, 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.

O. I. C.'s SERVICE BOARS, SPRING PIGS at Farmer's prices.
CLOVER LEAF STOCK FARM, Monroe, Mich.

SAGINAW VALLEY HERD OF PRIZE WIN ning O. I. C's Jan. and Feb. pigs ready priced reasonable. John Gibson, Foster, Mich.

BERKSHIRES

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

SPECIAL SALE

For a short time will sell Berkshire Pigs, registered, crated and delivered to station at \$20 each.
These are boars ready for service and gilts which we will breed if wanted. All choice stock weighing near 100 pounds. How many do you want?
C. H. WHITNEY, Merrill, Mich.

HAMPSHIRE

BOAR PIGS \$15.00

At 8 Weeks Old

W. A. EASTWOOD, Chesaning, Mich.

HAMPSHIRE BRED GILTS ALL SOLD. Spring and fall boar pigs at a bargain.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

An Opportunity To Buy Hampshires Right

We are offering some good sows and gilts, bred for March and April farrowing. Also a few choice fall pigs, either sex. Write or call.
GUS THOMAS, New Lothrop, Mich.

DO YOU CONSIDER THE HOG BUSINESS a game? I have very seldom lost money in the business and cannot blame his majesty the hog entirely when I did. Select the quickest grower, easiest keeper and best seller (the Hampshire) and be assured of success. Order early.
A. E. TREKICE, Bentley, Mich.

YORKSHIRES

FOR SALE—REGISTERED YORKSHIRE PIGS either sex \$12 each at weaning time.
RAY JONES, R. 1, Chesaning, Mich.

SHEEP

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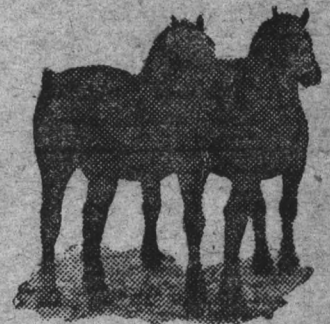
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See our exhibit at the Ohio and Michigan State Fairs.

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PRIZE WINNERS AT THE BIG SHOWS and the greatest of layers. Eggs for hatching and Baby Chicks from prize yards and heavy laying flocks.



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HIGH STANDARD QUALITY
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Shipped direct from our hatchery to your door. BIG, STRONG, FLUFFY fellows hatched from eggs of good laying strains, and under our own supervision. Nine leading varieties to select from.



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Our Trapnested, Bred-to-lay and Exhibition chicks will pay you. Try them and be convinced. Full count and safe delivery guaranteed. Broilers 13c; Leghorns, 15c; Rocks, Reds, Anconas, Minorcas, Wyandottes, 18c; Orpingtons, 20c. PREPAID. FREE CATALOG.



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Get the McClure Plan Before You Build
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Our plan provides the resources and manufacturing facilities of a big central lumber yard that handles millions of feet of lumber, many carloads of millwork and other building materials every year.

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You waited a long time for just this kind of a proposition. You've wanted to build your home with all the guess-work left out—to know just what you were going to get, to have a home architecturally correct—well proportioned, the kind of a place you'll be proud to look at and live in.

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Furthermore we have a complete supply of materials to choose from. Our wholesale savings enables us to give you better materials—better values than you would usually find. Every piece is carefully selected with an eye to where it fits—the best material in the best place. And remember that we've grown up in the lumber business and know it from A to Z.

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years we have been building Saginaw Silos. You can't go very far on a country road without seeing one. Probably you have one on your farm and you know the reputation of the McClure Company for Service.

Tell us what you are going to build—if you have your plans made send us your bill of materials and plans. Our architectural department may be able to give you some suggestions that will save you money—that will give you a better looking and more satisfactory home.

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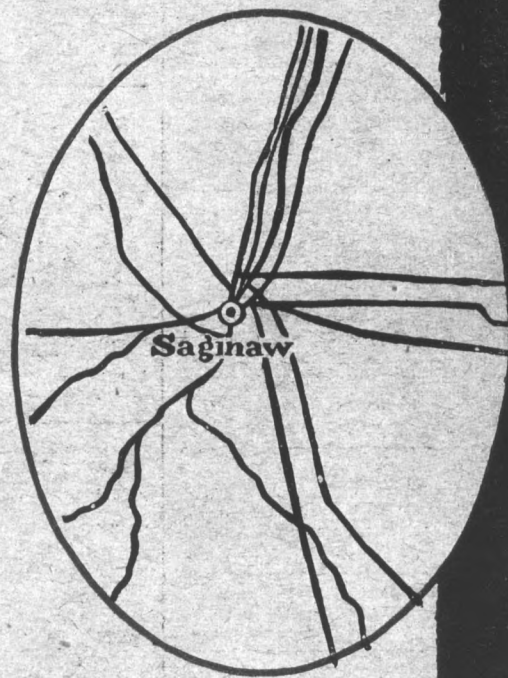
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Our large industrial house business and silo manufacturing enables us to buy in big quantities—all the materials that go into a house come to us at rock bottom prices. You pay but one profit—a small one based on tremendous volume. Everything is concentrated in our big plant here in Saginaw and shipped to you just as you want it.



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