

"—for all the Farmers of Michigan!"



MICHIGAN BUSINESS FARMING

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Why Farmers Should Approve Bond Issue

BUT A FEW days remain in which to discuss and consider the most important question ever placed before the farmers of Michigan. It is true that the farmers pay less than fifty per cent of the taxes, and that therefore all tax payers are vitally interested in the proposed amendment, yet it is equally true that greater benefit from a system of national trunk roads will accrue to agriculturists than to any other class.

Michigan Business Farming has considered the proposition from every angle; a very thorough investigation has been made; figures have been secured from the State Highway Department; plans adopted by other states have been considered, and as a final conclusion we not only advise, but urge every voter to cast his ballot FOR the good road amendment next Monday.

Michigan must be lifted out of the sand and mud. No state in the Union is in greater need of a trunk system of good roads leading to centers of distribution. Michigan is a state of diversified farming. Hauling from the farm continues throughout the year, and the greater tonnage at a season when roads are almost impassable. The grain growers dispose of nine-tenths of their crop immediately after harvest. Not so with the farmers of Michigan. They must reach the weighing station in the late fall with their immense tonnage of sugar beets; the condensary and creamery must be reached with their milk; the bean crop is moved in the late fall; potatoes are a bulky product and these must go forward during the uncertain weather and more certain bad roads of the late fall. Three-fourths of the hay crop is moved during the months of November, December and January—from September 1st to March 1st the farmers of Michigan are using the highways for heavy teaming daily.

Michigan started some years ago on a trunk system of highways. Hundreds of thousands of dollars have been expended.

Tax payers have contributed heavily wherever such roads have been built, and to what end? We have a patch of good roads here and there; no regular plan, no uniform specifications—a patchwork proposition is all that can be said for them. And these roads are not maintained. No official, agency or community or commonwealth assumes responsibility for up-keep after the money is expended and the tax payers enjoy one season of good roads gravel is thrown outside the roadbed, ruts and drainage neglected, and those who have paid the cost have reason to complain.

What Michigan needs and what the farmers must have is a trunk line of roads leading to distributing centers. Then the cross roads can be improved and where tonnage is light to the trunk lines this improvement will not be burdensome and the one great problem of distribution will be solved. Under present conditions Michigan farm products go to the market when the roads are good—and a glutted market is the result. Never will the farmers secure a steady market so long as there is but one season of the year when farm products can be satisfactorily and economically moved to the markets—a glut must follow; and the fellow who can store will surely get the profits when bad roads shut the farmer off from the markets.

And we can't have good roads and get them so that the present generation can have the benefits unless some plan is devised for immediate action. Under the plan of government aid, Michigan will be building government post roads; roads in which the United States has a financial interest. Through this plan a uniform system will be constructed. We will have a trunk line system built to stand what the traffic demands; built by government experts working in conjunction with our own state highway department; and what is of greater value than all else is the fact that the Government will aid in maintaining these trunk lines when once completed. (Continued on page 3)

Movement Launched for Farmer Governor

THE FARMERS of Michigan will have a candidate for governor in 1920. This was the unanimous decision of agricultural representatives who met in conference Monday evening at the Hotel Kerns, Lansing. Flushed with the victory won at the Republican state convention when they nominated their two candidates for the Board of Agriculture, the farm organizations and the farm press which took a part in that notable accomplishment have been quick to pursue the advantage thus gained and will throw their undivided strength behind the man who comes nearest to meeting the specifications laid down by the farmers.

Who the candidate will be is not yet known. The names of several men prominently identified with the farming interests have been suggested but it was the unanimous verdict that it was yet too early to pick the man.

The conference was preceded by a banquet and was attended by heads of the farmer organizations farmer members of the legislature and the farm press and bona fide farmers. C. H. Bramble, overseer of the State Grange, was chosen chairman, and Forrest Lord, editor of M. B. F., secretary. After an exhaustive round table discussion of the purposes of the meeting and the character of the man to be named, the following resolution was unanimously adopted:

"Resolved, That it is the sense of this informal conference representing the agricultural industry of the State, that the farmers of Michigan shall actively project themselves into the campaign of 1920 especially for the governorship. To this end we invite the suggestion of names as candidates for governor and pledge ourselves to the task of finally crystallizing these suggestions around the strongest man to be found in the state who will honor it by the high character of his administration, and who will give agriculture a square deal."

The conference was in no sense a secret caucus. Every man present had a say, and every man spoke heartily in favor of the objects of the meeting. The conference was absolutely devoid of such cautionings as "just between ourselves," "this is confidential," "the newspapers must not get hold of this." Whispers, innuendos, secret diplomacy were absolutely barred. On the contrary it was urged that the utmost publicity be given to the sentiment and the proceedings of the conference. This radical departure from the usual "back room caucus" must have been a disappointment to the reporter who had his ear screwed to the key-hole during the entire conference, in the fond belief that he was a hearer to something intended to be strictly confidential.

The conference decided that no attempt would be made to name candidates for positions other than the governorship, although undoubtedly farmer candidates for the legislature, state offices or vacancies in congress will receive the support of the farmers' organization. But all efforts will be centered upon the governorship, and other offices will receive secondary consideration.

The type of man to be presented brought forth many opinions. Some insisted that it was not necessary that he should be closely identified with agriculture in order to insure his giving agriculture a "square deal." If his past record showed him to be a man of broad sympathies and fair dealing, and absolutely free from unfriendly political entanglements, he might belong to some other class and still be trusted with the interests of farmers. This was not the popular attitude, however. The majority believed that if the farmers are to be asked to give their united support to a candidate that he (Continued on page 3)



WEEKLY AGRICULTURAL DIGEST



FOOD SURVEY OF MARCH 1, 1919 SHOWS

A LARGER THAN AVERAGE STOCK

Commercial stocks of wheat reported in a survey made by the Department of Agriculture for March 1, 1919, amounting to 197,277,688 bushels. These holdings, reported by 11,499 firms—elevators, warehouses, grain mills, and wholesale dealers—were more than three times as large as the stocks held by the same firms a year earlier, the actual percentage being 308.9 per cent. of the 1918 stocks. The figures refer to stocks actually reported, and do not represent the total commercial stocks of the country, nor do they include stocks on farms.

The commercial visible supply figures, as published by the Chicago Board of Trade for March 1, 1919, show 118,219,000 bushels of wheat, as against 9,739,000 bushels a year earlier. Corresponding Bradstreet figures show 127,207,000 bushels, as against 15,484,000 bushels for 1918. As compared with the same date of last year, these figures, as well as those obtained by the more extensive survey, show a very great relative increase in commercial stocks of wheat on March 1, 1919.

The commercial stocks of other cereals reported for March 1, 1919, according to the department statement, were as follows: Corn, 24,403,393 bushels; oats, 71,255,951 bushels; barley, 32,418,594 bushels; rye, 24,547,505 bushels. These stocks represent the following percentages of the corresponding stocks on March 1, 1918: Corn, 62.9 per cent. oats, 101.8 per cent.; barley, 154.8 per cent.; rye, 454.1 per cent.

The commercial stocks of flour and corn meal, as reported for the survey were: Wheat flour, white, 7,077,976 barrels; whole wheat and graham flour, 94,115 bbls.; barley flour, 128,420 bbls.; rye flour, 263,618 barrels; corn flour, 19,662,024 pounds; corn meal, 59,935,891 buckwheat flour, 23,713,521 pounds; mixed flour, 58,427,148 pounds. These stocks represent the following percentages of the stocks on hand a year ago: Wheat flour, white, 160.6 per cent.; whole wheat and graham flour, 100.4 per cent.; barley flour, 93.7 per cent.; rye flour, 117.2 per cent.; corn flour, 187.5 per cent. corn meal, 105.7 per cent.; buckwheat flour, 351.3 per cent.; mixed flour, 300.6 per cent.

Elevators, warehouses and wholesale dealers reported stocks of beans amounting to 3,305,897 bushels, while wholesale grocers and warehouses reported the following commodities in the quantities indicated: Rice, 126,460,982 pounds; rolled oats, 72,916,730 pounds; canned salmon, 137,415,599 pounds; canned tomatoes, 274,516,169 pounds; canned corn, 132,238,018 pounds; sugar, 200,320,552 pounds. These stocks represent the following percentages of the corresponding stocks on hand March 1, 1918: Beans, 146.9 per cent.; rice, 129.4 per cent.; rolled oats, 180.8 per cent.; canned salmon, 103.8 per cent.; canned tomatoes, 183 per cent.; canned corn, 167.8 per cent.; sugar, 187.9%.

Stocks of condensed and evaporated milk were reported by condensaries, cold storages, warehouses, and wholesale grocers, as follows: Condensed milk, 30,347,106 pounds, evaporated milk, 35,317,377 pounds. The holdings of condensed milk reported for March 1, 1919, represented 121.9 per cent. of the stocks held by the same firms a year earlier, while the holdings of evaporated milk represented 85.4 per cent. of the March, 1918, stocks.

FOURTEENTH AGRICULTURAL CEN-

SUS COMMENCES JANUARY 1, 1920

Uncle Sam has decided to take the fourteenth census on farms January 1, 1920, instead of collecting this data as of April 15, as was done in 1910. The date was changed because farmers ordinarily are very busy with the rush of spring work about the middle of April, also because the April 15 date comes during the midst of the breeding season when the number of young stock is not comparable between northern and southern regions, and finally because the returns on the crops obtained during the winter are more accurate than those obtained later and comparable with the December estimates of the Bureau of Crop Estimates.

The questions include information on the acreage and production of the crops, amount sold or to be sold, live stock classification both by sex and age, acreage of woodland, and the amount of land on farms drained and needing drainage. Special consideration will also be given to matters of land tenure, farm mortgages, land utilization, the

amount of land and acreage of crops irrigated, numbers of young live stock sold, purchased, slaughtered, and died on the farms, and quantity of dairy products and wool produced. Owing to the fundamental importance of these statistics, which provide basic information relative to farms and farming in the United States, it is hoped that farmers throughout the country will assist the census enumerators in every way possible in securing accurate, reliable, and complete information.

FIFTEEN MILLION LOANED TO THE FARMERS IN MONTH OF FEBRUARY

During the month of February, 1919, \$14,799,788 were loaned to 4,209 farmer of the United States by the Federal Land banks on long time first mortgages according to the monthly statement of the Farm Loan Board. The Federal Land bank of Omaha, leads in amount of loans closed, \$3,895,400, with the Federal Land bank of Saint Louis, running second in amount, \$2,055,955. The other banks closed loans in February as follows: Houston \$1,863,213; St. Paul, \$1,506,600; Spokane, \$1,251,720; Wichita, \$1,019,800; Louisville, \$757,300; New Orleans, \$735,800; Columbia, \$505,500; Berkeley, \$473,300; Baltimore, \$386,900; Springfield, \$347,000.

On March 1st the total amount of mortgage loans closed since the establishment of the Federal Land banks was \$182,897,964, numbering 75,384 borrowers. During February 5,990 applications were received asking for \$23,720,593. During the same period 4,879 loans were approved, amounting to \$20,137,009. Altogether 179,734 have applied for loans under this system, aggregating \$471,455,362.

The grand total of loans closed is distributed by Federal Land bank districts as follows:

Spokane, \$27,131,035; St. Paul, \$25,645,500; Omaha, \$21,817,540; Houston, \$19,236,434; Wichita, \$17,963,500; St. Louis, \$13,886,365; New Orleans, \$12,811,215; Louisville, \$11,621,300; Berkeley, \$10,487,000; Columbia, \$8,817,140; Baltimore, 6,904,850; Springfield, 6,573,095.

STATE AGRICULTURAL BRIEFS

Jackson—The Jackson County Federal Farm Loan Ass'n was recently formed here with the following officers: President, Fred P. Marshall, Jackson; vice-president, Wm. M. Hankerd, Munith; secretary and treasurer, Wm. E. Bullard, Central State Bank, Jackson. Directors—E. W. Hopkins, Spring Arbor; Thos. J. Falahee, Jackson; Joseph Taylor, Parma; W. M. Hankerd, Munith; Maynard May, Horton. Loan committee—Joseph Taylor, E. W. Hopkins and W. M. Hankerd.

St. Johns—A meeting of the Short Horn Breeders of Clinton recently the following were elected as officers of the Short Horn Breeders' association for the county of Clinton: President, W. G. Anderson; first vice-president, Frank Noble; second vice-president, J. F. Clemons; third vice-president, W. Winfield; secretary and treasurer, Ralph Botum. After the election of officers a complete constitution and by-laws were formulated and adopted by the association, and plans were discussed for the work in the future. Twenty-three charter members were taken in at this meeting.

Caro—At a meeting held in Caro Saturday, Mar. 15th, a Livestock Shipping association was organized for the purpose of shipping co-operatively stock and such other commodities as seems necessary. A board of five directors was chosen, consisting of W. F. Dowling, Sr., Akron; Floyd Turner, Caro; Henry Lane, Fairgrove; Preston Richardson, Ellington; Wm. Slack, Almer. The directors elected M. Dowling president, Mr. Turner as secretary-treasurer, Nate Patterson as manager.

Bessemer—The Farmer Elevator and Milling Company's flour and feed mill at Bessemer Michigan, is one of the best equipped of its kind and is a credit to the Upper Peninsula as well as to Gogebic county. It consists of a two story structure 52 feet long and 22 feet wide, with a basement.

Escanaba—C. B. McKinney, of Bluffton, Ind., is an Escanaba visitor looking over the possibilities of the sheep business here. He has a thousand head of ewes in Montana which he wishes to bring here this summer, if satisfactory arrangements can be made.

Dundee—An enthusiastic meeting of Holstein cattle breeders was held at Dundee recently, and an organization with the following officers was perfected: President, E. W. Morris, Monroe; vice-president, A. T. Bordine, Dundee; secretary and treasurer, Fred Nickel, Monroe.

STATE LIVE STOCK SHIPPING ASS'N

ORGANIZED AT LANSING RECENTLY

The Board of Directors met at East Lansing on the 27th of March and organized by electing C. L. Harrison of St. Joseph county, president; Mr. E. C. Beamer of Lenawee county, treasurer; Mr. L. E. Willet of Shiawassee county, secretary; and Mr. H. T. Gleezen of Cheboygan county, vice president.

Committees covering the following divisions were appointed: Membership, railroad rates claims and services; selling service in markets; accounting; insurance; shrinkage; marketing; grievances. No manager has, as yet, been selected, the board being of the opinion that it would be advisable to wait until some idea of the tonnage controlled by the association could be secured.

The organization is to be financed by a membership fee of \$10 for each local association and a charge of 50 cents per car for each carload of live stock shipped by local member-associations.

A salient feature of the by-laws adopted is a provision empowering the board of directors to make reciprocal arrangements with other federations and exchanges as to membership and services. The main intent of this provision is to coordinate and unite the efforts of all the large co-operative organizations in the state, as for instance: A live stock shipping association in Genesee or Branch county may, through a reciprocal arrangement between the Michigan Live Stock Exchange and the Michigan Potato Growers' Exchange, receive all the benefits of the Potato Growers' Exchange without expense except the actual selling charges.

A membership campaign is now being put on to line up all the live stock interests of the state behind this organization as it is realized that, in order to be effective and serve the live stock interests in the most efficient manner, it should represent the combined live stock organizations of the whole state. Every farmer interested in the production of live stock and all local live stock shipping associations are especially requested to assist in this membership campaign.

It is generally felt that the live stock industry is one of the largest, if not the largest, agricultural industry of Michigan, and it is the principle purpose of the Michigan Live Stock Exchange to unite this industry that it can bring the great prestige and financial power which the industry represents to bear in the solution of the many problems that are now confronting the live stock organizations.

It is the urgent request of the board of directors of the Michigan Live Stock Exchange that all local live stock shipping associations take up this matter at once and if any point should arise on which further information is desired, an effort will be made on the part of the exchange or some representative in the Markets Department to visit the organization and furnish any desired information.—Michigan Live Stock Exchange.

GOVERNMENT REPORTS BIGGEST

DROP IN WOOL CONSUMPTION

WASHINGTON, D. C.—Less wool was used by manufacturers in February of this year than in any month since monthly consumption reports have been issued by the Bureau of Markets, Department of Agriculture. February consumption was 27,500,000 pounds, grease equivalent, compared to 63,700,000 in February a year ago, a decrease of over 50 per cent.

Consumption of wool during February, 1919, in classes by pounds, was: Grease, 17,772,920; scoured, 3,467,457; and pulled, 1,846,441. Massachusetts used the most wool, followed in order by Rhode Island, Pennsylvania, New York, New Jersey, New Hampshire, Connecticut, Ohio and Maine.

Strikes and the inability of small manufacturers to secure wool because government auctions were on a cash basis, are two of the reasons given for the decline in consumption during February.

HARRISON CO-OPERATIVE ELEVATOR

CO. DECLARES 100 PER CENT DIVIDEND

At a meeting of the stockholders of the Harrison Co-operative Elevator Co., held recently, it was decided to declare a 100 per cent. dividend. During the past several weeks officials of the company have been investigating the desirability of establishing a creamery in connection with the elevator. While it is hardly likely that anything can be done this year, the prospects for a creamery there in another year are fairly good.

There are Many Reasons why Farmers should vote "Yes" on Road Bond Issue

UNLESS THE people of Michigan vote for the amendment to the Constitution permitting the issuing of bonds for a system of trunk line roads the legislature will have to raise the money by direct taxation. Unfortunately the state cannot use its credit at the present time for the purpose of securing internal improvements for the people. The constitution stands in the way. For example, suppose you have your farm all paid for, own the personal property and are out of debt. You want to build a barn; your farm needs tilling; you must make improvements, and to do this you must have money. But through some legal tangle you can neither mortgage your farm or secure money on your personal credit. You could not get very far under this handicap, neither can the State of Michigan.

The fact that the amendment passes does not make it necessary for the State of Michigan to issue bonds. In fact on the question of bonds, we shall have much to say further on in this article. But without giving the legislature the right to authorize bonds, in an emergency, the whole plan of government aid will be lost; and good roads will be delayed for a decade. Suppose, for instance, that for the first year the state tax rate is low, and it is decided to raise the necessary amount required for the good roads program by taxation, it can be done and there will be no interest on bond to pay. Suppose that next year taxes are high, and to continue the program bonds are sold maturing twenty years hence, the good roads program will go on uninterruptedly.

When you vote for good roads remember you are voting on a proposition in which the federal government matches your dollar. No matter what some may argue, the fact remains that if this state spends \$100,000 for good roads and the United States government hands over another \$100,000 we will have \$200,000 worth of good roads, with Uncle Sam to help boss the job, and aid in future maintenance.

We do not believe that it will ever be necessary to issue any bonds for road building purposes, except possibly for the very first year. But our readers will agree with us that they, thru their representatives, should have the power to sell bonds if the good roads program can be financed in no other way.

We object to the issuance of bonds when sufficient road building money can be secured by a direct tax at a rate no higher than the bond issue would require. We have already advised the legislature of our position on this matter, and four different plans, drawn up by the editor of this paper, have been submitted to every member of the legislature in an effort to convince him that tho the legislature may have the authority to issue bonds it will not be necessary to exercise that authority in the majority of years. Auditor General Fuller in an interview has stated that his conclusions are similar to

ours. A resolution has been prepared and will be presented to the legislature after the election in hopes of putting the legislature on record as against the issuance of bonds when the necessary funds can be raised in some other way. And we intend to make a fight along this line. We have talked this matter over with various farmer members of the legislature who agree with us, and when the matter of issuing bonds comes up, M. B. F., the farmer members of the legislature and the leaders of farm organizations will be prepared to fight for the method of financing road building that will mean the least burden upon the taxpayers, and the least amount of interest to pay.

This bonding issue has been a perplexing one to us. So many figures and opinions contributed by the legislature, the governor, the highway department and others were at variance that we have not known where we stood half the time. But an exhaustive study into the objections against and the arguments for the issue, and the compilation of figures that have been verified by the best authorities in the state convince us that the bonding issue will be no burden on the farmer. Were it otherwise, we could never advise our farmer friends to vote for the amendment. They know us well enough to believe that statement, and when after this careful study we give our unreserved opinion that the farmers and their wives should vote "Yes" on the bond-

ing amendment, we believe that a large majority of them will so vote.

MOVEMENT LAUNCHED FOR FARMER GOVERNOR OF MICHIGAN

(Continued from page 1) must be first of all either a bona fide farmer, or else so closely attached to their interests or having such a record of service to the farmers that there can be no question as to his understanding of or his sympathy with their problems.

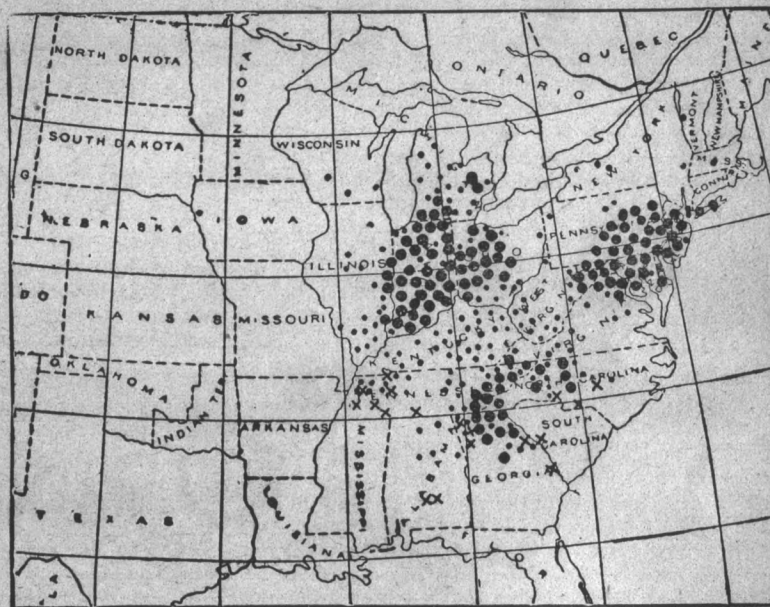
Another conference will be called before the present session of the legislature ends, the date to be determined upon by the committee consisting of A. B. Cook, Grant Slocum, John C. Ketcham, appointed for that purpose.

It is possible that the candidate may be named at that meeting. Possibly not. Anyway, the farmers of Michigan can be positively assured that a candidate will be named in due season, and that every man interested in Michigan agriculture will take off his coat and work for his nomination and election. So, M. B. F. readers, you are asked to make no pledges to any man, but wait for the announcement of the man who has been selected from the suggestions that it is hoped the farmers will make. Get busy. Sound out your neighbors. Take the matter up at

your meetings. Tell us whom YOU would like to see Governor of Michigan.

17-Year-Locusts are Due in Another Two Months

THE "17-Year-Locust" will appear in Michigan sometime between May 20th and June 1st. A complete story of this strange cicada was given in the Feb. 1st issue of M. B. F., the first Michigan publication to warn of its approach. The Department of Agriculture has published a map showing the sections which will be visited. Readers are again cautioned not to be alarmed, as the dangers said to attend the visit of these winged visitors are almost wholly imaginary. But some spring morning when you step out of doors and hear all the world throbbing as though a million partridges were beating the air with their wings, you will know that the 17-year locust has arrived for a summer's stay.



WHERE THE LOCUSTS WILL APPEAR

Map drawn by the United States Department of Agriculture.

Answers to Some Good Roads Questions you May have Asked

Ques. What will be the rate per thousand on farm property if \$50,000,000 worth of bonds are sold in ten years and retired in 25 years?

Ans. The rate as M. B. F. figures it is an average of \$0.679, or about two-thirds of one mill. This figure has been verified by the State Tax Commission and the State Highway Department. This rate pays both principal and interest.

* * *

Ques. My neighbor says if I vote for this issue and they build a road past my farm that the tax will be \$5 an acre. Is this true?

Ans. No, it's a lie. The author of such a statement is trying deliberately to mislead. If a trunk line road is built by your farm, the government will pay half the cost. The state will pay anywhere from 50 to 90 per cent of the balance and your county will pay the remainder. Now suppose the state should decide, with the approval of your board of supervisors, to build five miles of concrete trunk line road in your county (St. Clair) this summer, and the entire length of your farm bordered on that road. The total cost of that road would be about \$250,000. Of that amount the federal government would pay \$125,000. The state would pay \$62,500, and your county would pay \$62,500. The portion of the expense paid

by the federal government would cost you nothing. The share spent by the state would cost you \$0.679 per thousand of your valuation. If your farm is assessed at \$4,000, your TOTAL annual share of the State's expense would be \$2.72. St. Clair county is assessed at nearly \$50,000,000. The cost per thousand then of that \$62,500 that the county would have to pay would be \$1.25. On a total valuation of \$4,000, the TOTAL of your county cost to you would be \$5, making a TOTAL MAXIMUM charge against your farm for the FIRST year of \$7.72. If your county built five miles more of trunk line the next year the cost would be the SAME. But if it builds main market roads every year it will soon have its roads ALL built, and then your TOTAL share of the cost of construction will be merely the \$2.72 per year. Every farmer in the state can on this basis figure out approximately the cost to him of these roads according to his valuation. If the road is to be of gravel instead of concrete, the initial cost will be less, of course. But your small share of the state expense will continue until ALL the main roads are built. No county will probably spend under the above plan more than \$50,000 or \$75,000 on trunk line roads during a season, so the cost per year is really very nominal. Don't be misled.

* * *

Ques. But what about the maintenance of these roads? Won't that be a big item?

Ans. No! The best part of this plan is that the state pays half or more of the cost of maintenance. At present the state's total contribution toward the maintenance of trunk line roads is \$75 per mile. The county has to pay the rest. Under the new plan, the county pays only half or less of the maintenance. The state's share of the maintenance costs you nothing extra; that comes out of the auto license money or the bond money or a direct tax that will not exceed the rate above mentioned.

* * *

Ques. What will happen if the bond issue is defeated?

Ans. The legislature will still have the power to spread a direct tax. It may do so. It may not. If it does not, Michigan will lose over \$7,000,000 of federal money now available, and possibly many millions more that may be appropriated later. Road building will receive a set-back from which it will take years to recover. The roads will eventually have to be built. If the state and the federal government are not given a chance to HELP build these roads, the counties will have to bear the major share. The thinking farmer will vote for the bonding amendment, because it is good business for him to do so.

Dept. of Agriculture Announces Cost Plans

Services of Nation's Experts are Sought to Determine Cost of Producing Farm Crops

COST OF production studies are of value to the individual farmer and are helpful in ascertaining the economic status of farming as an industry says the report of committee appointed by the secretary of agriculture to consider a plan of organization for the Office of Farm Management, and outline the field of operation, and especially methods of procedure in making cost-of-production studies. The primary purpose of cost-of-production studies, says the report, are:

1. To record the details of the farm business for reference.

2. To give an insight into the elements and interrelations of the different farm activities.

3. To furnish information that may enable the farmer to reduce costs, or otherwise increase profits.

4. To make possible a comparison of the profitability of the different enterprises and combinations of enterprises.

From the standpoint of the public, cost-of-production studies provide the facts which give a basis for intelligent judgment upon the probable effects of any given legislation or other public activity upon the farmer as a producer and as a citizen. Cost-of-production studies are therefore one of the means of providing the basic facts needed by legislators and price commissions in comparing the profits of competing lines of production and estimating necessary price.

Men of ripe experience in various fields of agricultural research constituted the committee. They are: H. C. Taylor, Agricultural Economics, University of Wisconsin; Andrew Boss, Agronomy and Farm Management, University of Minnesota; J. A. Foord, Agriculture and Farm Management, Massachusetts Agricultural College; J. I. Falconer, Rural Economics, Ohio State University; R. L. Adams, Farm Management, University of California; G. I. Christie, Assistant Secretary of Agriculture; and representatives of the Bureau of Crop Estimates, the Bureau of Markets, and the Office of Farm Management of the Department of Agriculture.

Three Methods Recognized

The committee recognizes three ways of obtaining cost data—cost accounting, the survey method and the questionnaire sent by mail. The accounting method is based on complete records of all farm work and business transactions. Arrangements are made with farmers to keep detailed records of all operations and transactions in connection with the farm business. The work is supervised by personal visits to the farm. It is desirable, the committee says, that cost accounts be kept to obtain basic data, and cumulative results of such work become increasingly valuable.

By the survey method trained investigators obtain the necessary data, some from the farmer's books, some from the books of persons to whom the farmer sells and from whom he buys, some from his bin, silo and building capacities, and some from estimates made by the farmer. One of the advantages of this system is that records are obtained from all classes of farms after the close of the farm year, so that, when desired, areas more representative of normal conditions may be chosen.

Either method, the committee says, is useful and reliable when the work is carefully conducted but preferably both should be used. The detailed cost accounts serve as a check on the survey work, which in its turn shows the relationship of the farms on which cost accounts are kept to the average farm.

The specific items to be considered in cost-of-production studies, the report continues, will always depend upon the enterprise under consideration. When the survey method is used, it is essential that the list be complete enough so that no item will be omitted either by the farmer or the investigator. When the accounting method is used a classification is needed that is broad enough to include all charges, but the cost items will be developed in the working out of the records and will vary with the enterprise. The following grouping is suggested:—

Labor—Man labor (including labor of men, women and children); Animal labor; Mechanical labor (tractor and truck).

Materials—Crop materials: Seed, Fertilizer, twine, sprays; Stock materials: Feed, Bedding.

Cash—Selling, insurance, taxes, threshing, veterinary, breeding fees.

Investment—Depreciation of investment in live stock; interest on investment in live stock.

SECRETARY HOUSTON of the Department of Agriculture, has at last awakened from his lethargy, and is apparently making some very decisive steps to investigate and determine the cost of producing various farm crops. The accompanying article sets forth at some length the scope of these plans. The names of those who have been selected to supervise this work are all well-known "experts." The committee is uncontaminated by the presence of a single farmer so no embarrassing questions are likely to arise over the method of procedure that is to be followed. Read the secretary's plans. Tell us what you think of them.

Use of Mechanical Equipment—Labor, materials, cash and investment charges pertaining to mechanical equipment.

Special Charges—Manure, lime, breeding males, perennial crops.

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Cramton Says Farmers' Interests Demand Investigation

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Charges from such a source on matters of such importance cannot be ignored. The general public and in particular, the farming interests of this country will not be content until such charges are thoroughly investigated by an impartial committee, armed with full authority, and the charges found to be either false or well founded.

The matter is so serious that it appears to me that Secretary Houston should be the first one to demand such an investigation as I have proposed in House Resolution 611. At once on opening of the next session of Congress, I shall re-introduce that resolution and press for its adoption and I sincerely hope that in that matter I may have the support of Secretary Houston as well as Dr. Spillman and the Agricultural and farm organizations throughout the country.

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The efficiency and effectiveness of the work of the Department of Agriculture is at stake. What is needed is a thorough investigation at which Dr. Spillman, Secretary Houston, and every other official or individual that knows anything of the facts, shall be heard directly and under oath and the real truth ascertained impartially and relentlessly.—*Cong. Louis C. Cramton, Washington, D.C.*

Macomb County Milk Producers' Locals Organize

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This organization has for its purposes the unifying of the problems of the entire county and the dealing of the same from the standpoint of a county unit rather than from the individual local idea. It is an organization to render the greatest amount of efficient service to the 1,094 men involved and the efficient handling of the 25,630 gal. of milk shipped daily in the market of Detroit, also to make possible a closer contact with the state organization and its officers, Mr. N. P. Hull and Mr. R. C. Reed.

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One question, which created considerable interest, was the fact that Detroit, standing as one of the largest milk consuming centers of the United States, the section of Michigan which practically established the price for the rest of the state, sustaining a United States Bureau of Markets, minus a dairy division. The trouble with the present system of inspection on the Detroit market is the fact, that there is no careful analysis made of the situation. The time has arrived when the producer desires to follow his product through to the consumer, and the only way that it can be accomplished, is to have a careful daily analysis of the situation, and the producer kept posted by daily bulletin. If there is any one man, who should be conversant with the details of the Detroit Milk Market, it should be the producer and he should be just as conversant with the details as is the distributor or dealer.

The surplus question has occupied the attention

of every local in Macomb county for some time, and there has been a great deal of discussion as to ways and means of taking care of it. If such a surplus exists in the alarming quantity, which delegates have been led to believe, then surely the producer does not wish to grab Miss Detroit by the hair and drench her with milk. On the other hand, if no surplus exists certainly Macomb county or any other county does not wish to hold back one quart of milk that can be consumed by the citizens of Detroit, and the producer today questions seriously whether there is a surplus existing today or that it has ever existed. It was the opinion of the Macomb County Dairy Council that the proper point of attack for this analysis lays in the bureau of markets.

These and a multitude of like problems developed during the meeting and the gratifying feature was to see twelve separate and distinct sections of the county get their feet on common ground and set their shoulder to the wheel for the express purpose of getting out of the rut. The officers elected are competent men of long acquaintance with the milk question and the county is backing these men to the limit.

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Efficiency in production and distribution has become the watchword of the hour. The producer is ready and willing to go half way but from now on he feels that it should be part of his problem to familiarize himself with the business from a business man's standpoint.

We are in hopes that every county will follow up, and form like organizations. We believe that by properly unifying our problems and taking them up and dealing with them from an efficient standpoint, carefully choosing our representation and delegates, instructing them as to the stand to take on all matters, that infinite good will result to all parties concerned.—*H. V. Kittle, County Agricultural Agent.*

"Natural Aptitude to Fatten is Hereford's Characteristic," says Breeders' Association

By R. J. KINGER

Sec. Amer. Hereford Cattle Breeders' Ass'n

NATURAL aptitude to fatten is the predominant characteristic of Herefords. The animals upon which breed was founded were selected because they showed this easy-fattening trait, a characteristic that has never been lost sight of by Hereford breeders, that has been carefully developed and become fixed to the extent that it is transmitted from generation to generation.

Originally developed to meet the demand for a medium for converting the luxuriant grasses and abundance of forage of the west of England into high class beef, the Hereford is recognized today, as it was a century ago, as the premier grazing animal, attaining a higher finish and producing a better quality of beef, on grass alone, than any other beef animal. Practically without exception, the record prices at the market centers for grass cattle have been made by cattle showing a preponderance of Hereford blood.

The Hereford can be finished and marketed as prime beef at an earlier age and with a greater weight of carcass than any other breed. The meat of the Hereford "baby beef" is not veal, but mature beef, but lacking in the excessive fat of the older animal. Repeated tests have shown that gain can be put on a young animal at a less cost per pound than it can be put on one of mature age, and therefore that there is more profit in feeding a young animal than an old one.

Herefords endure extremes of climate and withstand hardships better than any other breed. They are more rugged of constitution as a breed. They are more active and energetic in the pursuit of a livelihood, and will keep in better flesh where feed is scarce and difficult to get, than any other breed. For this reason they have practically supplanted the other beef breeds, in the sections where cattle are grown under range conditions.

Prolificacy is a characteristic that was early fixed in the Hereford breed. In range herds where Hereford blood predominates the calf crops are uniformly larger than those in herds where the blood of other beef breeds predominates. Hereford females are not only prolific breeders, but are

"Please advise us the best stock cattle for this state of the following breeds: Hereford, Shorthorn and Aberdeen Angus."—A. K., Coleman, Mich.

(Editor's note: The above question was referred to each of the Associations, representing the three breeds of cattle mentioned. The Hereford Association responded first, and we give herewith its arguments in favor of the Hereford breeds. Other articles will be published in early issues setting forth the qualities of the other breeds.)

the best of mothers, dropping strong calves and rearing them well. Prepotency, or the ability to transmit their characteristics to their offspring when mated with females of other breeds or mongrels, is a marked characteristic of Hereford males.

In testing of cattle for tuberculosis there are fewer reactions among Herefords than among any other breed of cattle, beef or dairy. This is substantiated by the official records of the cattle offered for export from England to the United States, and by the records of numerous state and private veterinarians. The practical immunity of Herefords from tuberculosis is due to their characteristic hardness of constitution.

Being more uniform as to quality and color, and possessing superior qualities as feeders, stocker and feeder cattle showing a preponderance of Hereford blood command a premium over those of other breeds at the market centers. When finished, both as baby beefs and as mature beefs, the Herefords command a higher price at the hands of the packers. Seventy-five per cent. of the top sales made at the market centers of the past year have been of cattle showing a preponderance of Hereford blood. This applies to dry-lot baby beefs, grainfed medium and heavy beefs and grass beefs.

Being hardier of constitution, greater rustlers and less fastidious in regard to their food, Herefords make better use of the products of the average farm, than any other breed. They will utilize feed and forage that other breeds will not eat, converting it into high priced beef. For this reason they are best adapted to beef production on the farms.

Former Governor Crapo, of Flint, experimented with several beef breeds including the Hereford, a few years ago when Herefords were not as well known nor as popular as they are now.

A contemporary writeup by a leading agricultural journal of the time follows: "The three breeds were treated alike as to food and shelter. The first year sixty heifers were purchased which grazed on the same fields in summer, were fed out of the same racks in the winter, and twenty bred to each of the three purebred bulls represented. The result was that after twelve years' experience with these three most prominent and distinct breeds of cattle, giving them all an equal chance from first to last Governor Crapo adopted the Herefords, and bred the other purebreds and their grades to registered Hereford bulls.

He was convinced that for farmers and breeders the Herefords were more profitable than the others because they mature earlier, are more hardy, less liable to disease, better feeders and grazers, fatten on less food in their stalls, keep in good flesh at all seasons of the year, when killed produce a higher percentage of dressed beef, and alive or dressed command a more ready sale at a higher price than the other beef breeds. This experiment was carried on when the other breeds were the most fashionable and commanded the highest prices for breeding stock. Gov. Crapo's foreman and herdsman were admirers of the other breeds and did not take kindly to the "white faces" but the Herefords worked themselves up to a tremendous popularity from every quarter."

If you desire to receive a more lengthy article or any information at any time, we will consider it a favor to have you call on us.

Michigan Potato Growers are Selecting Better Seed for this Year's Planting

By C. W. WAID

Extension Specialist, M. A. C.

MANY OF the potato growers of the state are of better seed potatoes. The movement is taking an active interest in the development one which has been started more particularly to benefit a large number of growers than to secure high prices for seed potatoes for a comparatively few growers.

Last fall a good many of the growers through the state hill selected at least a few bushel of seed which they expect to plant this season. This, of course, is the very best way to get started with better seed, and the men who took pains to hill select seed last season will be ahead of those who did put forth this effort. However, those who, for any reason, failed to hill select last year, do not need to wait until another season before getting a start along the line of improved seed. They will find it profitable to select some of the best shaped tubers from their present stock, and plant a few bushel of these in a portion of the field by themselves, or better still in a separate field where they can be planted closer and later than is common practice with a general crop.

All seed potatoes, whether hill selected or not, should be treated to reduce the danger of injury from Scab, Black Scurf and Black Leg. Corrosive Sublimate is the best material to use for this purpose, as it will have a greater influence on all of the diseases mentioned than Formaldehyde, which is a remedy more particularly for the Scab. Specific directions for the use of the Corrosive Sublimate may be secured in printed form from any county agent, or directly from the Agricultural College.

Potatoes, which are planted for a seed plot,

whether they were hill selected or not, should be planted on some of the best potato soil available. If it is practical to do so, so far as the convenience of cultivation is concerned, it is a good plan to plant the seed plot much closer one way than the other. If the rows are 32-36 inches apart, the plants in the row should be from 12-15 inches apart. Closer planting, however, should not be done on soil which is deficient in fertility.

If the planting is done from the middle to the last of June, or even the early part of July in the southern part of the state, the crop will be much more certain to continue strong growth until frost occurs than if the planting is done earlier. This is one of the advantages of late planting. Seed which is somewhat immature when the first killing frost occurs, has been found to be superior to thoroughly mature seed.

It has been a common practice in many parts of the South, more particularly Kentucky, to plant what is known as "second crop" potatoes. These potatoes are still growing when hit by frost, and, while the tubers are small, they have proven of superior merit, when used as seed the next season. We cannot follow this same practice in the North, but we can plant the potatoes at such a time that they will continue to grow until killed by frost.

If it is difficult, as it frequently is, to keep seed until such a time for planting, in the cellar or other storage place, this disadvantage may be overcome in a large measure by what is known as green sprouting or tubers. As soon as warm

weather comes, the potatoes may be spread out on a barn floor or in any location where the light will get to them freely, and where they will not be molested by livestock. The crates should be filled about 1/4 full of potatoes, and stacked in such a manner that the light will get to all of the sides of the crates. The potatoes will keep in this way for a number of weeks, although, of course, they will shrivel. Heavy green sprouts will form on the potatoes, and when such tubers are planted they will come up quickly. The ones which show a weak growth or no growth at all can be discarded, and as a result a much better stand will be secured than where no effort is made to green sprout them.

Anyone who expects to plant a seed lot of potatoes the coming season should notify the county agent in his county. An effort will be made during the season to have extension specialists or county agents inspect as many seed plots as it will be possible to do at least once during the growing period. The purpose of the inspection work will be to deduct and remove the mixtures and diseased hills if the grower wishes to have them removed. In some cases field meetings of growers will be held where the work is done in order that the growers in the neighborhood may become better acquainted with the diseases and methods of control. In every case the owner of the plot will be shown the nature of any disease which may be found in his particular seed plot or field.

At digging time a comparative record will be made between results secured from the hill selected and the other seed. The growers will also be encouraged to hill select for another season.

Vote "No" on Amendment to Permit Legislature to Increase Judges' Salaries

ONE AMENDMENT to be voted upon at the spring election, is framed to deceive. It is the so-called Salary Amendment. The section to which an amendment is sought, is upon the statute books as follows:

Article XVI, Section 3. "Neither the legislature nor any municipal authority shall grant or authorize extra compensation to any public officer, agent, employe or contractor after the service has been rendered or the contract entered into. Salaries of public officers, except circuit judges, shall not be increased, nor shall the salary of any public officer be decreased after election or appointment."

Now the lawyers and the higher court judges want this section amended to read as follows:

"Neither the legislature nor any municipal authority shall grant or authorize extra compensation to any public officer, agent, employe or contractor after the service has been rendered, or the contract entered into. Salaries of public officers except supreme court justices, circuit court judges, probate court judges, probate judges and judges of courts of like jurisdiction, shall not be increased nor shall the salary of any public officer be decreased after election or appointment."

Without knowing how the law now reads, the voter's natural conclusion is that the amendment is intended to restrict the legislature. As a matter of fact the purpose of the amendment is to decrease the legislature's power by permitting it to

advance the salaries of the judges as it may desire. When it is considered that the legal class of the state exert a predominating influence in the legislature, we can better appreciate the folly of conveying to the legislature this additional power.

Men who become candidates for offices within the gift of the people, or who accept appointments to salaried positions, do so with a full knowledge of the salaries attached thereto. No office ever goes begging for someone to fill it. There are always enough aspirants and there always will be enough to insure a fairly wide choice by the voters. If you believe this way, vote "no" against the salary amendment.

Dept. of Agriculture Announces Cost Plans

Services of Nation's Experts are Sought to Determine Cost of Producing Farm Crops

COST OF production studies are of value to the individual farmer and are helpful in ascertaining the economic status of farming as an industry says the report of committee appointed by the secretary of agriculture to consider a plan of organization for the Office of Farm Management, and outline the field of operation, and especially methods of procedure in making cost-of-production studies. The primary purpose of cost-of-production studies, says the report, are:

1. To record the details of the farm business for reference.
2. To give an insight into the elements and interrelations of the different farm activities.
3. To furnish information that may enable the farmer to reduce costs, or otherwise increase profits.
4. To make possible a comparison of the profitability of the different enterprises and combinations of enterprises.

From the standpoint of the public, cost-of-production studies provide the facts which give a basis for intelligent judgment upon the probable effects of any given legislation or other public activity upon the farmer as a producer and as a citizen. Cost-of-production studies are therefore one of the means of providing the basic facts needed by legislators and price commissions in comparing the profits of competing lines of production and estimating necessary price.

Men of ripe experience in various fields of agricultural research constituted the committee. They are: H. C. Taylor, Agricultural Economics, University of Wisconsin; Andrew Boss, Agronomy and Farm Management, University of Minnesota; J. A. Foord, Agriculture and Farm Management, Massachusetts Agricultural College; J. I. Falconer, Rural Economics, Ohio State University; R. L. Adams, Farm Management, University of California; G. I. Christie, Assistant Secretary of Agriculture; and representatives of the Bureau of Crop Estimates, the Bureau of Markets, and the Office of Farm Management of the Department of Agriculture.

Three Methods Recognized

The committee recognizes three ways of obtaining cost data—cost accounting, the survey method and the questionnaire sent by mail. The accounting method is based on complete records of all farm work and business transactions. Arrangements are made with farmers to keep detailed records of all operations and transactions in connection with the farm business. The work is supervised by personal visits to the farm. It is desirable, the committee says, that cost accounts be kept to obtain basic data, and cumulative results of such work become increasingly valuable.

By the survey method trained investigators obtain the necessary data, some from the farmer's books, some from the books of persons to whom the farmer sells and from whom he buys, some from his bin, silo and building capacities, and some from estimates made by the farmer. One of the advantages of this system is that records are obtained from all classes of farms after the close of the farm year, so that, when desired, areas more representative of normal conditions may be chosen.

Either method, the committee says, is useful and reliable when the work is carefully conducted but preferably both should be used. The detailed cost accounts serve as a check on the survey work, which in its turn shows the relationship of the farms on which cost accounts are kept to the average farm.

The specific items to be considered in cost-of-production studies, the report continues, will always depend upon the enterprise under consideration. When the survey method is used, it is essential that the list be complete enough so that no item will be omitted either by the farmer or the investigator. When the accounting method is used, a classification is needed that is broad enough to include all charges, but the cost items will be developed in the working out of the records and will vary with the enterprise. The following grouping is suggested:—

Labor—Man labor (including labor of men, women and children); Animal labor; Mechanical labor (tractor and truck).

Materials—Crop materials: Seed, Fertilizer, twine, sprays; Stock materials: Feed, Bedding.

Cash—Selling, insurance, taxes, threshing, veterinary, breeding fees.

Investment—Depreciation of investment in live stock; interest on investment in live stock.

SECRETARY HOUSTON of the Department of Agriculture, has at last awakened from his lethargy, and is apparently making some very decisive steps to investigate and determine the cost of producing various farm crops. The accompanying article sets forth at some length the scope of these plans. The names of those who have been selected to supervise this work are all well-known "experts." The committee is uncontaminated by the presence of a single farmer so no embarrassing questions are likely to arise over the method of procedure that is to be followed. Read the secretary's plans. Tell us what you think of them.

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A contemporary writeup by a leading agricultural journal of the time follows: "The three breeds were treated alike as to food and shelter. The first year sixty heifers were purchased which grazed on the same fields in summer, were fed out of the same racks in the winter, and twenty bred to each of the three purebred bulls represented. The result was that after twelve years' experience with these three most prominent and distinct breeds of cattle, giving them all an equal chance from first to last Governor Crapo adopted the Herefords, and bred the other purebreds and their grades to registered Hereford bulls.

He was convinced that for farmers and breeders the Herefords were more profitable than the others because they mature earlier, are more hardy, less liable to disease, better feeders and graziers, fatten on less food in their stalls, keep in good flesh at all seasons of the year, when killed produce a higher percentage of dressed beef, and alive or dressed command a more ready sale at a higher price than the other beef breeds. This experiment was carried on when the other breeds were the most fashionable and commanded the highest prices for breeding stock. Gov. Crapo's foreman and herdsman were admirers of the other breeds and did not take kindly to the "white faces" but the Herefords worked themselves up to a tremendous popularity from every quarter."

If you desire to receive a more lengthy article or any information at any time, we will consider it a favor to have you call on us.

Michigan Potato Growers are Selecting Better Seed for this Year's Planting

By C. W. WAID

Extension Specialist, M. A. C.

MANY OF the potato growers of the state are of better seed potatoes. The movement is taking an active interest in the development one which has been started more particularly to benefit a large number of growers than to secure high prices for seed potatoes for a comparatively few growers.

Last fall a good many of the growers through the state hill selected at least a few bushels of seed which they expect to plant this season. This, of course, is the very best way to get started with better seed, and the men who took pains to hill select seed last season will be ahead of those who did not put forth this effort. However, those who, for any reason, failed to hill select last year, do not need to wait until another season before getting a start along the line of improved seed. They will find it profitable to select some of the best shaped tubers from their present stock, and plant a few bushels of these in a portion of the field by themselves, or better still in a separate field where they can be planted closer and later than is common practice with a general crop.

All seed potatoes, whether hill selected or not, should be treated to reduce the danger of injury from Scab, Black Scurf and Black Leg. Corrosive Sublimate is the best material to use for this purpose, as it will have a greater influence on all of the diseases mentioned than Formaldehyde, which is a remedy more particularly for the Scab. Specific directions for the use of the Corrosive Sublimate may be secured in printed form from any county agent, or directly from the Agricultural College.

Potatoes, which are planted for a seed plot,

whether they were hill selected or not, should be planted on some of the best potato soil available. If it is practical to do so, so far as the convenience of cultivation is concerned, it is a good plan to plant the seed plot much closer one way than the other. If the rows are 32-36 inches apart, the plants in the row should be from 12-15 inches apart. Closer planting, however, should not be done on soil which is deficient in fertility.

If the planting is done from the middle to the last of June, or even the early part of July in the southern part of the state, the crop will be much more certain to continue strong growth until frost occurs than if the planting is done earlier. This is one of the advantages of late planting. Seed which is somewhat immature when the first killing frost occurs, has been found to be superior to thoroughly mature seed.

It has been a common practice in many parts of the South, more particularly Kentucky, to plant what is known as "second crop" potatoes. These potatoes are still growing when hit by frost, and, while the tubers are small, they have proven of superior merit, when used as seed the next season. We cannot follow this same practice in the North, but we can plant the potatoes at such a time that they will continue to grow until killed by frost.

If it is difficult, as it frequently is, to keep seed until such a time for planting, in the cellar or other storage place, this disadvantage may be overcome in a large measure by what is known as green sprouting or tubers. As soon as warm

weather comes, the potatoes may be spread out on a barn floor or in any location where the light will get to them freely, and where they will not be molested by live stock. The crates should be filled about 1/4 full of potatoes, and stacked in such a manner that the light will get to all of the sides of the crates. The potatoes will keep in this way for a number of weeks, although, of course, they will shrivel. Heavy green sprouts will form on the potatoes, and when such tubers are planted they will come up quickly. The ones which show a weak growth or no growth at all can be discarded, and as a result a much better stand will be secured than where no effort is made to green sprout them.

Anyone who expects to plant a seed lot of potatoes the coming season should notify the county agent in his county. An effort will be made during the season to have extension specialists or county agents inspect as many seed plots as it will be possible to do at least once during the growing period. The purpose of the inspection work will be to deduct and remove the mixtures and diseased hills if the grower wishes to have them removed. In some cases field meetings of growers will be held where the work is done in order that the growers in the neighborhood may become better acquainted with the diseases and methods of control. In every case the owner of the plot will be shown the nature of any disease which may be found in his particular seed plot or field.

At digging time a comparative record will be made between results secured from the hill selected and the other seed. The growers will also be encouraged to hill select for another season.

Vote "No" on Amendment to Permit Legislature to Increase Judges' Salaries

ONE AMENDMENT to be voted upon at the spring election, is framed to deceive. It is the so-called Salary Amendment. The section to which an amendment is sought, is upon the statute books as follows:

Article XVI, Section 3. "Neither the legislature nor any municipal authority shall grant or authorize extra compensation to any public officer, agent, employe or contractor after the service has been rendered or the contract entered into. Salaries of public officers, except circuit judges, shall not be increased, nor shall the salary of any public officer be decreased after election or appointment."

Now the lawyers and the higher court judges want this section amended to read as follows:

"Neither the legislature nor any municipal authority shall grant or authorize extra compensation to any public officer, agent, employe or contractor after the service has been rendered, or the contract entered into. Salaries of public officers except supreme court justices, circuit court judges, probate court judges, probate judges and judges of courts of like jurisdiction, shall not be increased nor shall the salary of any public officer be decreased after election or appointment."

Without knowing how the law now reads, the voter's natural conclusion is that the amendment is intended to restrict the legislature. As a matter of fact the purpose of the amendment is to decrease the legislature's power by permitting it to

advance the salaries of the judges as it may desire. When it is considered that the legal class of the state exert a predominating influence in the legislature, we can better appreciate the folly of conveying to the legislature this additional power.

Men who become candidates for offices within the gift of the people, or who accept appointments to salaried positions, do so with a full knowledge of the salaries attached thereto. No office ever goes begging for someone to fill it. There are always enough aspirants and there always will be enough to insure a fairly wide choice by the voters. If you believe this way, vote "no" against the salary amendment.

"for all the farmers of Michigan"

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The Warehouse Amendment

THE WAREHOUSE amendment still reposes in the protecting arms of the House committee on revision and amendment of the constitution. Will it ever come out? Not if the reactionary members of the committee and the unfriendly farmer members of the House can prevent.

This committee is composed of the following gentlemen: Ivory, Farrier, Woodruff, Wallace, Weidenfeller, Mol, Glaspie, Case and Haan. What interests do these gentlemen represent? Wm. E. Ivory is a farmer of Lapeer county, home, Elba; believed in favor of submitting amendment. Nelson G. Farrier is a newspaper man of Atlanta, Montmorency county; believed in favor of amendment. Ari H. Woodruff is an attorney of Ford, Wayne county; believed hostile to amendment. Robert N. Wallace is a son of W. H. Wallace, the sugar manufacturer, interested in a number of elevators and warehouses up in the Thumb district; believed opposed to amendment, but reputed to be in favor of submitting. Chas. A. Weidenfeller is "retired"; former occupation unknown; attitude toward amendment unknown. Jas. Mol is a merchant of Grand Rapids, the home of the Michigan Potato Shippers' Ass'n and certain large bean elevator interests; believed opposed to submitting amendment. Andrew B. Glaspie is a newspaper publisher of Oxford; attitude unknown. Wm. J. Case is a lumber dealer of Benzonia; attitude unknown. Wm. A. Haan is an insurance agent of Grand Rapids; believed opposed to submitting amendment.

We have it on good authority that the worst antagonists of the warehouse amendment are a few farmer members of the House who seek to avoid a vote on the measure by inducing the committee to refuse to report it out.

Here is a measure that has been scrutinized and approved by the senate for submission to the voters, tied up in a committee of the lower branch of the legislature. It is not necessary that the majority of this committee shall favor the principle of this measure in order to report it out. It is not necessary that the House of Representatives itself shall favor the principle in order to vote to submit to the people. But this committee, composed of representatives of the people, is asked and expected to report out this amendment so that the House may vote upon it, and the House, composed of representatives of the people, is asked and expected in turn, to go thru the formality of voting to submit the measure to the voters. If the voters don't want state-owned warehouses, they will reject the measure. If they do want them, they will accept the measure, and their wishes must rule.

Out in North Dakota the politicians sat on the pet measures of the farmers. Now in North Dakota farmers are sitting on the politicians. Here in Michigan a half dozen men

are sitting on a measure approved by the farm organizations. The farmers who voted for these men should write or wire them at once to get off and report out the amendment. And if that doesn't work, organize a little "sitting" club in your community next election and sit down so hard on the fellows who now defy your wishes that they'll grunt with remorse.

The Spring Tonic

THERE ARE tonics and tonics, "pink pills for pale people," "little liver liverers," and "Kidd's Kandy Kidney Kures," but the one never-failing, free-of-charge, guaranteed-to-cure elixir is the balm of nature which pervades the atmosphere, invades the body, tones up the liver, reddens the corpuscles, and sends a surcharge of energy, ambition and an "isn't-it-good-to-be-alive" feeling thru every nerve center.

Have you seen the crowd on the city street along toward the end of March? It shuffles along without evincing much of an interest in things about. It seems to be going somewhere all the time, but there is no joy in the going. It is in a waiting, expectant, half-hopeful, half-hopeless attitude, like the young man on the eve of his proposal to the lady of his choice.

And then spring, and a seemingly everlasting summer, for the city crowd,—and yes, the youth, too. There is a disillusionment in store for both, of course, but that's another story. When spring is come and distributes its tonic, man throws off his sluggishness. He sniffs the air, takes in the ozone and the dirt and the germs of the city street in great gulps. He straightens up his back. He puts a chip on his shoulder. He walks like a millionaire, and feels like one, too. And he is one, as rich in the bounties of nature as any man who walks by his side.

But even at that, the spring that finds its way in among the skyscrapers and fondles the folk of the city, after a valiant struggle with the odors of garbage and gas, and the shadows and rushing air currents about the giant buildings that impede its way, is a very poor substitute for the spring that extends a lavish hand unhindered over the open fields of the country. For here spring is at her best and her breath is pure and sweet. And blessed are those who dwell upon the farms and live and work and sleep in her soothing arms.

Why Not Organize?

FIVE YEARS ago it was complained that the farmer was the hardest mortal on earth to organize. Today he is the hardest man to keep from organizing. Not a week passes by that does not see the organization of some new farmers' co-operative enterprise. Some of them are good, some indifferent, some positively bad. The majority of them will succeed, but many will fail. The desire to organize often exists where the need is lacking. It's like putting the cart before the horse, this organizing without a program in the hopes of writing a program later. Organizations must to succeed, be founded upon definite needs.

In some respects the state of Michigan is over-organized. In other respects, it is under-organized. It boasts of many organizations, all of which are trying to exercise similar functions. All declare their faith in co-operative marketing enterprises; all swear by the need of more favorable legislation; all would wish for a better banking system, etc. With such a unity of opinion it is too bad that there is such a division of effort. The pressing need is for a predominant leadership. Either some well-established organization or some widely accepted leader should gather up the reins of these diversified associations, and direct them in concert. The power of Michigan farmers will never be felt until this is done.

The Press and Political Advertising

THERE IS still a chance that the corrupt practice bill of Sen. Baker will survive the opposition of the politicians and the mer-

cenary press and become a law. The Baker bill provides that all candidates for state and national offices shall confine their political advertising to a pamphlet to be issued at the expense of the state. Naturally, the politicians don't want such a law. They usually have all the coin that is necessary to buy the office they seek and they want to spend it to suit themselves. If they have to place all their advertising in the state pamphlet at a charge prescribed by law their money will give them no advantage over the man who has none. Naturally the newspapers, or at least many of them, to whom a dollar looks bigger than the League of Nations, don't like the Baker bill any better for it would deprive them of a very lucrative source of revenue. Ten years ago the entire press of the state would have let out an awful howl over this proposed legislation, but merits of the Baker plan are so unmistakable that only a comparatively few are openly lamenting such trespass upon the "privileges of the press and politicians." And most of these are the reactionary, a la Newberry, class whose only interest in political campaigns is the amount of money they get out of them. Yes, the Baker bill means a sacrifice for every newspaper in the state, but the newspapers' loss is the electorate's and the poor man's gain. Let the Baker bill become a law.

A Farmer Candidate

WE PRESUME that the state press and other prejudiced and misinformed agencies will characterize the decision of the farmers to name a farmer candidate for governor of Michigan as "another Non-Partisan League movement." And as usual, they will be mistaken.

That the campaign will be along non-partisan lines is true. If the man named is a Republican, as he must be to win in this state, every farmer embracing other political faiths will be expected to split his ticket when he comes to the governorship and stay behind the farmer candidate. That the campaign is intended to emphasize the class distinctions and arouse the bitter class enmity that has heaped odium upon the North Dakota Non-Partisan League in the conservative east is positively not true.

The man who is to receive the support of the farmers must be not only big enough to have a grasp of the farmers' problems, but he must be big enough, broad enough and sympathetic enough to have a clear conception of the needs of the state as a whole. He must be fair in his dealings with farmers, fair in his dealings with labor and fair in his dealings with the commercial and manufacturing interests. As one speaker at the Lansing conference put it, "The farmer does not want domination but merely recognition."

The state press and the people of the cities need view with no alarm this decision of the farmers to take a hand in state politics. The movement is rational, quite devoid of bitterness, wholly constructive, and entirely friendly to all interests looking to the future welfare of the state. The only interests that need tremble at the farmers' political strength are those which live by special privilege and cherish selfish aspirations.

Some of Michigan's greatest governors have been farmers. And there are many men who stand high in the agricultural ranks today who would dignify the gubernatorial office by their presence. With such a sane, broad-minded and intelligent conception of the qualities which the farmers say their candidate must have, who shall fear the election of a farmer governor?

Rep. Arlie Hopkins of Manistee county told the members of the farmers' conference at Lansing that they should unite under the banner of the Michigan Farm Bureau. Then Mr. Hopkins shattered whatever confidence the members might have had in the Bureau and its leaders by resenting a statement of Mr. N. P. Hull that the farmers' legislative committee would scrutinize every salary increase allowed by the legislature and circulate petitions to place the matter before the voters.

Lifting the Lid at Lansing



By HERB BAKER

NON-PARTISANSHIP

THESE ARE those about the state capitol who throw a fit every time they hear the North Dakota Non-Partisan League mentioned. The writer assumes that the farmers' movement in North Dakota is a manifestation of their desire to rid themselves of the parasites that peanut politics had fastened upon them, and to arrange matters so that the state government should function in the interest of the producing, rather than the predatory classes. This, of course, is all wrong. Farmers should confine their activities to making two blades of grass grow where one blade has grown heretofore, and leave political matters to the politicians. To do otherwise is to overrun the "established order," and to bring about uncertainty and confusion (among the pay roll patriots and the beneficiaries of special privilege).

This non-partisan business in North Dakota, while bearing the republican label, is none the less objectionable on that account. It is republicanism with an "if," and as such we are ag'in it. That it is such is evidenced by the large number of "true blues" who in that state, have been turned out to grass and their places filled with hyphenates. The instinct of self-preservation impels us to denounce non-partisanship whenever it rears its head at a distance. Bifurcated republicanism is none the less objectionable. The writer has had his try at party irregularity and has learned his lesson. We insist that none but "true blue" republicans be put on guard or upon the pay roll (in North Dakota.) Like William Alden Smith, we believe in them. We "have no criticism of any real republican that is, has been, or is to be" (in North Dakota) and we insist that they must again be permitted to come into their own and that the "Nons" and the "bi's" shall be cast into outer darkness (in North Dakota.) Of course, in Michigan it is different. Here a little non-partisanship now and then is a good thing. It may be taken either as a laxative or an emetic. In either case good results are assured. Extreme caution should be exercised by amateurs in its administration. Old Liners, however, may prescribe it with impunity. Witness: No serious criticism has been occasioned by the Governor's appointment of his Democratic business partner, Mr. Merrick, of Huron county, as banking commissioner. There has been no uproar among the simon-pure over the appointment to a life position as commandant of the state constabulary of "Colonel" R. C. Vandercok, well known as a democrat. In fact it is generally believed that the Governor has some perfectly good reasons of a "non-partisan" nature for choosing "Colonel" Vandercok as commandant of the state constabulary in preference to some of the many army officers now returning from overseas service, wearing decorations which bear witness to acts of heroism under fire.

Another instance of high-grade idealistic non-partisanship is to be found in the appointment to the \$3,500 secretaryship of the securities commission of H. N. Duff, graduate of the Pennsylvania Polytechnic Institute of Machine Politics, blatant democrat and chief lobbyist for the passage of the bill permanently establishing the state constabulary.

The appointment of democrats to these impor-

tant positions and the appointment of other democrats as oil inspectors and to other subordinate places is an exhibition of a highly idealistic non-partisanship that has the additional merit of strengthening personal political machines, but the North Dakota brand that has for its object no higher purpose than to pry a few parasites from the backs of the producers, Abas! Raus mit it!

MORE CAMOUFLAGE

THE FALSE alarm of "thief," "thief," sometimes used by shrewd criminals to distract attention from themselves, while they are getting away with something, finds its analogy in the methods of those in every walk of life who distract attention from their personal or selfish motives by loud clamor about some irrelevant matter that can be used to clothe their ulterior motives with a pro bona publeco appearance. When the state was being saddled with a \$500,000 a year silk stocking standing army of one hundred fifty-four men and fifty officers. As a permanent state institution it was camouflaged with the pretence that it was necessary to stop the rum runners from bringing liquor into Michigan from wet territory and they got by with it in spite of the fact that within four months of the day of its enactment there would be no wet territory in the United States or Canada.

Certain members of the state senate who do not believe that the legislature is a body whose chief duty is to create new jobs and to boost salaries for everyone in sight, have made a determined fight against the inauguration of a new system of fixing salaries whereby the salaries of the officials in each department shall at each session be made a part of the appropriation for that department recommended by the budget commission. They have held that the question of salaries should be separated from appropriation bills and considered by itself, that from start to finish it is a matter for the consideration of the representatives of the people rather than of a budget commission appointed by the governor. This contention, of course, did not harmonize with the plans of the state machines. It was the unpopular side here. It was poison to the salary grabbers and their name is legion; and they also have their friends in and out of the legislature. The budget commission plan which substitutes log rolling for open and above board methods of fixing salaries appeals, of course, to all the "boys" with "axes to grind." Naturally in each legislature there are those with other axes to grind than securing jobs or increased salaries for friends, and this administration has not been known to frown on any of these. Naturally the recognition of a real community of interest on the part of these results in a cohesiveness which it is difficult to disturb. The aggressive of this class are able to frighten the weak-kneed among those not really in sympathy with them and thus establish a dominant force composed partly of those to whom the end justifies the means and partly of those too weak to withstand the pressure of organized greed. Such a combination has gradually developed in the senate. Senator Chas. J. Deland of Jackson, is its

recognized leader. He is serving his third term in the senate. Everybody admits he is a mighty good fellow. He claims never to have opposed creating a new office nor to have opposed an increase of salary. He is admittedly a candidate for Secretary of State and his candidacy is said to be agreeable to those who have assumed the responsibility of arranging the "succession" in the state offices.

Several clashes have come over these bills mixing appropriations and salary increases, between Senator DeLand and his followers. On one side and those opposed to his methods on the other. In every clash the DeLand forces have carried the day. He put the constabulary bill across in record time, and for reasons heretofore stated on this page, secured the adherence of "Colonel" Vandercok's newspaper friends who promptly proceeded to color their reports in his favor—DeLand's opponents made a final stand on the salary-appropriation bill for the Drug and Food Department, partly because in it the bone of contention appeared with greatest force and partly because of specially vicious features of the bill. In 1917, this department cost the state a little over \$50,000. In 1918, it cost \$85,000, but this bill fixing salaries and appropriations for 1919 and 1920 carries an appropriation of \$495,000 for the two years. It enables the commissioner to appoint seventy-one "inspectors" at an aggregate cost per year for salaries alone of \$104,000 with a limitation on the salary of only sixteen of them. The bill also carries an appropriation of \$75,000 a year for traveling expenses.

Of course all this expense and that of the state constabulary is put up to the people as being necessary to stop rum running after the manufacture and sale of the stuff has been stopped in the whole United States. Of course these fellows are interested solely in the suppression of the cursed demon, rum, and the protection of the public morals. They have no thought that these "inspectors" spending \$75,000 a year running about the state might be used to influence the public in the choice of a candidate for governor who would have it in his power to say how long these parasites should hang on to the public teat.

Nine senators, Aaron Amon of Mecosta, Herbert Baker of Cheboygan, J. Mark Harvey of Constantine, William Lemire of Escanaba, William Hierd of Bay county, Thomas McNaughton of Kent, George W. Miller of Greenville, Vincent M. Brennan of Detroit, and Duncan McRae of Harrisville; stood resolutely against this vicious measure, and while they could not prevent its passage they did stop its getting immediate effect. Senator Deland at once became excited over the moral effect of leaving the administration's political "board of strategy" a few days without funds. Charley is a prince of a fellow; he believes in safeguarding the public morals adequately, even if it takes every man in Huron county to do it. As a step in this direction, last week he introduced a bill to legalize betting on horse races!

CREAMERY TEST BILL

Senator Davis of Lawton, one of the farmer members of the Senate, has introduced the following bill, in the hopes of overcoming the frequent variations in the creameries' test.

A Bill to provide for official county cream testers, the purchase of testing equipment, and prescribing their duties.

The People of the State of Michigan enact:
(Continued on following page)

SENATOR T. H. McNAUGHTON



Senator T. H. McNaughton

Senator T. H. McNaughton of Kent county; a real honest-to-goodness farmer, who has been connected with the Grange for many years. Author of the Terminal Warehouse proposition. He has served two terms in the House and is now serving his second term in the senate and takes an active interest in farm legislation.

SENATOR WILLIAM A. LEMIRE



Senator William A. Lemire

Dr. William A. Lemire of Escanaba senator from the 30th district, with the farmers all the time. He has served one term in the House and is serving his first term in the Senate. He is the author of constitutional amendments giving cities the right to establish municipal fuel yards, and for giving cities control of all public utilities.

SENATOR E. J. BRYANT



Senator E. J. Bryant

Senator E. J. Bryant of Lenawee and Monroe district, is one of the real farmers of the Senate. He is serving his second term in the Senate and has served two terms in the House. He is chairman of the committee on roads and has charge of many important road matters pending at this session.



JUST BETWEEN OURSELVES

THESE ARE wonderful days. Birds singing; the lark skimming over the pasture lot with his note of welcome; the robin back from the south land, wearing his breast-plate of red; the "kill-deer" uttering his shrill call as the sun drops behind the cloud bank and the night birds are on the wing. The breath of spring is in the air; nature's resurrection is near—oh, wonderful, wonderful days of spring!

Owen park is a beautiful spot on the Detroit river, just inside the limits of that great city. There you will find a touch of green fringing the sombre grey; there a place where one can hear, feel and see. Yes, and away from brick and mortar paved streets with their clatter; houses and houses and people here, there and everywhere.

You have lived in the great-out-of-doors, and you realize how these glorious days must have tugged at Anna's very heart strings. How the very air awakened thoughts of her girlhood days in the country and on the farm, where sun, air fleecy cloud and gentle breezes lure one on and on, over hill, through valley to the banks of shimmering pond, or along swollen stream.

Anna was a nursemaid, and into her care had been placed two little boys, Duncan and Johnny. A great responsibility; but Anna soon had the little fellows ready and with one in the cab; the other trudging along by her side—his wee little hand in hers—they were soon at Owen park. Oh, wonderful days of spring! God's own miracle, the fulfillment of that gracious promise: "And the dead shall live again."

As they approached the river little Johnny hurried along the cement pathway. He was toddling toward the deep blue waters; Anna took her hand from the cab for an instant and caught Johnny; but the cab with little Duncan rolled on and plunged into the river. Without a moment's hesitation Anna plunged into the river to save the baby boy.

Men with a boat located the cab, but little Duncan was dead. Grappling hooks finally caught into the clothing and Anna's body was brought to the surface. Poor girl; her first thought was "duty." Dear little boy!—Their bodies were soon resting side by side in the parlor of a wealthy home on Iroquois avenue. Anna's face bore a calm expression; "even Duncan's own mother could not have done more to save him."

The sacrifice, of which the Gallilean spoke, had been willingly laid on the altar of duty; the great sacrifice had been made. These days we say much concerning devotion to duty; bravery on the field of battle; of heroes; of sacrifices. Let the reader join me in offering a silent prayer in the memory of this brave girl from the country; this heroine who gave her life that one of God's little ones might be saved. And, too, a tear of sympathy for the little mother, who one spring night, waited under the stars on the depot platform at Alpena for the train which should bring back home the body of her dear little girl, just ANNA KOEPKE.

IT OCCASIONALLY happens that a public official is sent after a certain thing which he is not expected to find. And occasionally it happens that the official sent after a certain thing keeps right on looking until he finds the "thing," and gets himself into trouble by so doing. This very "thing" happened to Doctor Louis Levine, professor of economics in the University of Montana.

Doctor Levine was engaged by the university in the fall of 1916 and having made a study of the question of taxation, was soon set at work by Chancellor Elliott of the university to collect data and prepare same in support of a bill, through which the educational interests of Montana were to be financed. This young doctor took up the work enthusiastically and later aided the tax commission in securing data for an income tax bill.

Within the year he had accumulated a whole lot of figures and some startling facts regarding Montana's system of taxation. With the data at hand he took up the work of preparing his report, and in due time presented his findings to both the governor and Chancellor Elliott. Doctor Levine wanted to give the facts as he found them to the people, and asked that his report on the taxation of mines in Montana, be published in a pamphlet for general distribution.

Time passed and his report remained in the pigeon hole of Chancellor Elliott's desk. Levine had worked hard on his report, and he again pressed his demand that the pamphlet be printed. The whole matter was turned over to Governor Stewart later, and in January of the present year a decision was handed down, in which both the university head and the governor agreed. The verdict was that

"the university should avoid active participation in questions which sharply divide the people; including the question of taxation."

Levine asked the privilege of personally publishing the pamphlet. Chancellor Elliott is said by Levine to have put it this way: "If you publish that pamphlet you will be dismissed for insubordination. The newspapers of the state will not give you a fair hearing; they will becloud the issue in every possible way and your professional reputation will be so destroyed that you will not be able to get another position anywhere in this country." Doctor Levine did what any honest, law-abiding citizen would have done under like circumstances—he published the book at his own expense.

And he was relieved of his work at the Montana university the charge being "insubordination." And now the taxpayers of Montana are demanding that the spineless governor and the meek chancellor give good and sufficient reasons why they should not be thrown upon the scrap heap. Doctor Levine had no right to suppress the facts he had gathered as a public official. And from an ethical standpoint all facts ascertained by scientific men, belong not to the investigator but to the people whom they serve.

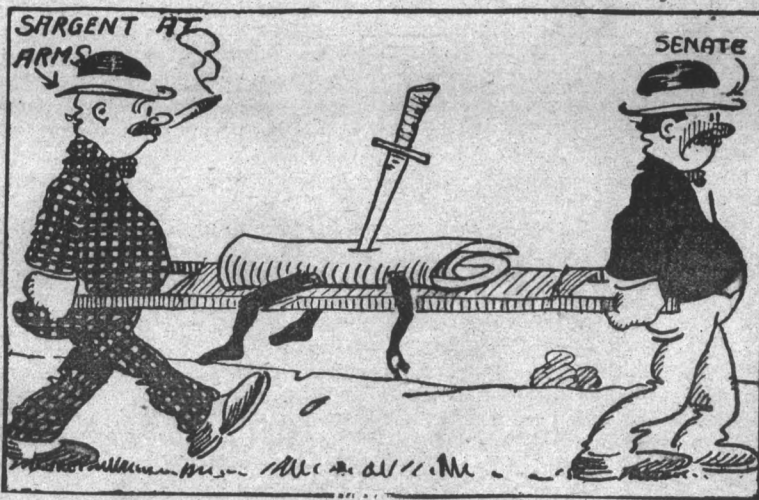
Dr. Spillman, for twenty years a valued official of the department of agriculture at Washington, was discharged because he had secured data as to the cost of producing certain farm products and was willing to give the result of his investigation to the people. Secretary Houston, like Chancellor Elliott, decided that the public was not entitled to facts, gathered by a government employee, especially when such facts might establish the people's rights, to the detriment of the interests whom these officials seek to serve.

And this reminds us that we don't hear very much about the tonnage tax in this state any more. Millions of dollars worth of copper is taken from the mines of the Upper Peninsula yearly; and hundreds of thousands of dollars in dividends are paid to Boston capitalists, who "toil not, neither do they spin." The people of Michigan are giving away these natural resources, for the taxes paid under the present plan, represent nothing tangible. And soon all that will be left to tax will be a "hole in the ground." Perhaps, if Governor Sleeper knew that Doctor Louis Levine, an expert on mine taxation, was out of a job, he might engage him to look over nature's wonderful storehouses in the Upper Peninsula. Will somebody kindly inform the governor that Louis is out of a job?

THE THIRTY-EIGHT senators, Republicans and Democrats, who announced to the world that they would fight the "League of Nations," and that they represented the people of the United States, ought to be proud of the results of their interference. Uncle Sam has called for 50,000 volunteers for service in France and the news from "over there" is not very assuring right now. Michigan has one senator, and expects to have another—when the legality of the election is determined. Both the senator Michigan has and the senator Michigan has not—lined up and tied up with the thirty-eight Republican and Democrat insurgents. Great company you are in, Senator Townsend; great! line up for the first try, Mr. Newberry. And yet we wonder why people are thinking seriously about a government by, of and for the people.

LAST WEEK I had something to say about Senator Sculley's income tax bill. Yes, we discussed the bill in the committee and many questions were raised. No one questioned the provisions of the bill; no one suggested that it was unfair or would work an injustice to anyone. But much was said about "earned and unearned increment;" about "exemptions," and many knotty problems soon became involved. There was not a single knot in the whole question; but neighbor, did you ever see a string so straight, that a laywer could not tie a knot into it?

When first born, that bill was a wonder. Its father was proud of it; it appeared healthy and took the bottle unhesitatingly. The bill found its way into the senate committee's hands, and strang to say, no wet nurse was found for it here. Finally it came out from the committee's hands, emaciated, and hardly recognizable. The senate took charge of the Scully Income Tax Bill, and the M. B. F. cartoonist has assisted me in illustrating to you, just how the senate proceeded "to carry out" the provisions of the bill. Poor little "Income Tax Bill," your name was your undoing—now that you are so soon done for, I wonder what you were ever begun for.



Sec. 1. In every county of this state having a county agricultural agent, such agent shall also be known and designated as "Official Cream Tester," of that county and shall be invested with powers and duties as provided for in this act.

Sec. 2. Upon petition of no less than twenty-five resident dairymen of a county, presented to the board of supervisors of such county at any regular or special meeting of such board, said board of supervisors shall as soon as may be thereafter cause to be purchased and delivered to said official cream tester of that county the necessary apparatus and equipment for the proper and efficient testing (for butter fat) of all cream and milk samples as shall be submitted to him by residents of the county in accordance with the provisions of this act; Provided That the total expense of such

testing apparatus and equipment shall not exceed the sum of one hundred fifty dollars.

Sec. 3. Such official cream tester, or his legally authorized deputy, shall, on Friday of each week throughout the year hereafter, receive and properly test all samples of cream and milk which shall be submitted to him under the provisions of this act, and shall immediately after such test, report to each person submitting samples, the results of the same as relates to the quantity of butter fat contained therein. All receptacles of sample milk and cream shall be returned to each owner thereof when transportation charges for such return are advanced by such owners.

Sec. 4. Such official cream tester, or his deputies or assistants shall receive no compensation or fees for services rendered under this act.

JUDGES' SALARIES

LAST WEEK'S paper contained a misleading statement regarding one of the constitutional amendments to be voted on this spring.

The constitution now provides that the salary of no public official may be increased or diminished during his term of office except circuit judges. The amendment on which we are called to vote April 7th proposes to change this so that the limitation shall be taken off justices of the supreme court, judges of superior and recorders courts and judges of probate. Those who would put judges in a class by themselves outside the limitations of the constitution where they can be continually lobbying the legislature and the board of supervisors for increases of salary should vote Yes on this amendment. If you would not make a privileged class of them vote NO.

WHAT THE NEIGHBORS SAY

THE BIBLE AND THE LIQUOR TRAFFIC

Have just been reading the article, "Why is Michigan Dry?" I am certainly surprised to hear the liquor question defended by a lady who professes to be a christian. Now, I wish to say right here that while I can lay no claim to being a christian, I admire it in those who live it, and I hate to see the good old Bible used to defend such an unholy cause. This lady writes, "Everyone must admit that there is no command of God prohibiting the use of tobacco, or wines and similar beverages." I really do not understand the drift of her argument. She has given numerous scriptures to prove that God is going to punish people with the sword, pestilence, famine, etc., but not one scripture to uphold the use of intoxicants. If she will take her Bible and turn to Proverbs XXIII-31, she will see something like this: "Look thou not upon the wine when it is red, and when it giveth his color in the cup, when it moveth itself aright." Again Romans XIII-13-14, reads that "We are not to walk in rioting and drunkenness, and make no provision for the flesh to fulfil the lusts thereof." This woman seems to think that we should make laws for men to satisfy the whiskey lust. In Romans XIV-19, "Let us therefore follow after the things which make for peace." I would ask does the saloon make for peace?

In the 21st verse, "It is good neither to eat flesh nor drink wine nor anything whereby thy brother stumbleth, or is offended, or is made weak." Galations V-21, in speaking of the works of the flesh reads, "Envyings, murder, drunkenness, revellings, and such like; of the which I tell you before, as I have also told you in time past, that they which do such things shall not inherit the Kingdom of God."

I am afraid Mrs. Baerwolf is not very familiar with the Bible, for I believe every christian man and woman in Michigan who votes will vote dry, because in Corinthians VI-16, in speaking of Christians it reads, "I will dwell in them and walk in them and I will be their God and they shall be my people. When we get near enough to God for Him to walk in, and talk to us we will vote right.—R. L. Cartright.

W. A. DEFENDS WHEAT PRICE STAND

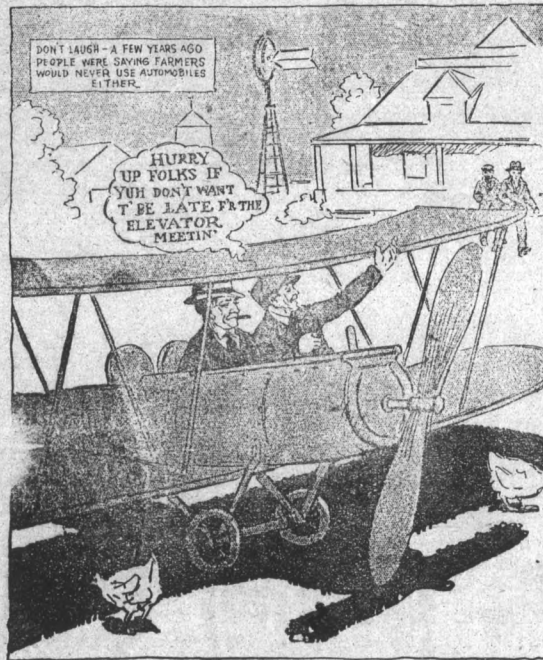
In writing a letter a few weeks ago and recently published in M. B. F., I anticipated a great deal of criticism, on the stand I took, but I see only two of the M. B. F. readers come to me—Bro. Theo Bengal of Clinton county in February 1st issue, says he bought a binder in 1902 for \$95; hired man for \$17 per etc. Yes, Brother, you did. You paid for them, selling hogs for \$3.15, cattle 3½ and 4c, wool 15c, lambs 4c, your oats 18c, corn 28c, hay about \$5.50 or possibly \$6. When you took say I thought wheat was too high; I said I had no sympathy with the fight for higher than the government fixed once for wheat during the war, and I still think I was right. Everything considered, the farmer was well taken care of on the wheat question during the war, and the prospect at your butter and eggs to your merchant he didn't know what to do with them but you were a good customer so he allowed you about 10c per pound and 8c per dozen, etc. Yes, those were the good old days. Along about that time the writer sold three good cows and yearling heifer for \$100. The same quartet today would bring \$350 or over. Again Brother, you misunderstand me; I did not present that the government will have to pay a billion dollars this year to make up the price guaranteed us, bear me out in my opinion. The trouble, Brothers, is this: Too many of us are trying to raise wheat on land that should be raising potatoes, beans, cow peas, etc. The man on sandy land can't compete, nor ought he even to think of figuring in the cost of raising wheat in competition with the clay, loam or timber land and prairie land farmer. Another time if our editor will permit, I would like to give the methods used by two farmers side by side, putting in on same kind of land the same number of acres of crops, the cost of raising the same number of bushels of grain on each farm is so far apart that it is startling.—W. A., Kalamazoo county.

UNION MAN SPEAKS

It is with some interest and with some contempt that one reads the continual walling about uplifting the farmer in our agricultural press. They are all outlining some plan through political activity by which the farmers conditions of

living will be improved. Why do the farmers expect the lawmakers of the country to cater to them? It would not be the right politics unless it was based on universal principles. This government is constituted as much for one class of laboring people as it is for another, as much for one class of any people as it is for another, as much for the City folk as it is for the country folk. If one is going into politics they must accept some underlying principle of government that can be applied universally. Like Democracy, Republicanism, Socialism or even Monarchism, however I pity the person who would try to advocate such a doctrine as the latter one. And then even this Non-Partisanship is a good underlying principle insofar as it is intended to purge the corruption of political organizations.

But when the farmers cry "make laws for the farmer," their intentions are not only wrong, but their efforts are in vain usually because by so doing they prejudice other elements of power against them and in that way laws that may be proposed for the general good and yet redound to great benefits to the farmer, are quashed by this prejudice. The city folks do not continually holler "make laws for us," but they act direct. But not by political activity. They have their labor organizations and their business associations and



—Rosenbaum Grain Review.

they act collectively and directly for their economic needs. Why does not the farmer act directly? Because they are getting the wrong guidance by these political maniacs who control the agricultural press. This may sound strong, but think it over and find an agricultural journal, periodical or paper advocating unionism and if you find one you can find one hundred talking for laws for farmers. When the farmers organize to fix prices on their products in accordance with costs of production they will better their living conditions and also put agriculture on a financial basis, inviting both capital and labor, whose interests are mutual, to patronize it.—A Member of a Labor Organization, St. Helen, Mich.

ANOTHER ANSWER TO MRS. BAERWOLF

Editor MICHIGAN BUSINESS FARMING:—May I be permitted to reply to Mrs. August Baerwolf of Sanilac county? My dear lady, since Jesus Christ was led of the spirit into the wilderness to be tempted of the devil, we have all known that Satan could quote Scripture. And we have often heard his agents quoting glibly from Holy Writ in an attempt to justify any evil they chose to advocate. But if I can read my Bible aright, Jesus replied to his tempter: "Thou shalt worship the Lord, thy God, and Him only shalt thou serve."

Does this good christian lady mean to tell us that we can serve our God by voting to bring booze back into Michigan? Well, I am glad to contradict the statement that there is no command of God against the use of wine and similar beverages. From cover to cover the Old Book sounds warnings against booze. Thank God, the day has come when we are heeding the warnings. But even if there were no commands against it, what difference would that make? There was no command against murder before Cain slew Abel. But I don't see that he profited any by that excuse.

Mrs. Baerwolf, I have seen the work of booze at close range. I have seen mothers with poor little children hanging to their skirts, waiting outside the saloon while papa got one more drink and swapped a few more coarse jests with the boys and parted with his last dollar, regardless of the fact that his wife and little ones were half-clothed, half-fed and utterly heart-broken. I have known a kind loving father who would cheerfully have laid down his life for his baby girl, to take from her fingers the money she had saved, a penny at a time, for a pair of shoes, and shoot it over the licensed bar to pay for a little more of the accursed poison that was killing him soul and body. And afterwards I have seen him suffering the tortures of hell in his self-shame and remorse. Sorry for little Nellie? Yes, but ten thousand times more sorry for the poor father so hopelessly enmeshed in the devil's snare.

I have taken money from the hands of a neighbor, the father of a large family, with the request that I buy food and clothing for his wife and children. "For," he said, "I dare not trust myself to go to town with all those bars running. The last time I tried it I swore I would do my errands and go right home but I met some of the boys and when I got one drink I stayed with them till I was broke. My family had to actually suffer in consequence." Since Michigan went dry that man takes his wife and children to town with him and they are happy together. I could tell you hundreds of instances within my own personal knowledge where Prohibition has changed poverty to plenty, sorrow to joy, and shame to self-respect and efficiency. And, if I live till Election Day I shall vote to keep our state a fit place to live in, assured in my own mind that I am serving God in so doing.

And, Mrs. Baerwolf, if you so dearly love your wine and beer and are certain that they do you no harm, being a good christian, can you not emulate the example of the Apostle Paul who declared, "If meat make my brother to offend I will eat no flesh while the world standeth; lest I make my brother to offend." This is my idea of the spirit of Christ which the Good Book says we must have or we are none of His.—Another Michigan Mother.

(Editor's Note: We very much regret that it is impossible to publish the score or more of splendid letters received in indignant response to the article "Why is Michigan Dry?" We have used such letters as we could, taking them in the order received, but the many we are obliged to omit contain just as convincing arguments against booze and the saloon as those we have published. Vote "NO!")

VIEWS ON ROAD BONDING AMENDMENT

Just read your article of March 22nd, "Road Amendment Will Cost Farms Little." Note the following: (1) Government will pay one-half of all expenses of Good Roads constructed. Why did not you say of all Trunk Line Roads Constructed Under Federal Road Aid Act and Supervision?

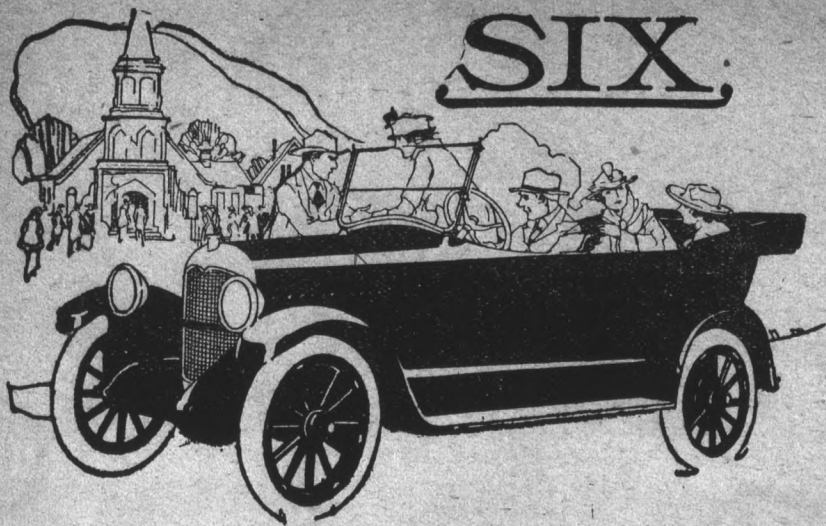
(1) a. You say other half to be borne as follows: One third of one-half by Wayne county? How by tax? If so, why not levy the tax now and not bond?

(1) b. The other two-thirds of the one-half by cities and villages, then tax them also, and not bond, and I am sure the farmers would not kick on the measley small sum of 80 to 90c per thousand dollars valuation. Now, let me punch a hole or two in this article. In the first place, Federal Road Aid Money must be spent on main trunk line roads according to the bill passed by congress appropriating \$200,000,000 for trunk line roads in the United States, of which Michigan will get as follows: 1919, \$1,447,213.80; add to that our share of the \$75,000,000 appropriated in 1916, which is \$872,708.53; total to July 1, 1929, \$2,319,922.33; July 1, 1920 to July 1, 1921, 1916 appropriation, \$578,885.52; 1919 allotment, \$2,170,820.70, making up for the two years a total of \$5,069,627.55. Then the third year the government has given us \$723,606.90 allotment of 1916 and \$2,170,820.70 1919 allotment; total per third year, \$2,814,427.60 or a total for three years of \$7,964,055.15 instead of \$7,500,000 in two years as your article says.

Further, if the largest amount is less than three million for one year, why bond for 10 million? Further light for us farmers look up the House Bill No. 49, called "The Aldrich Road Bill" and see what that says about who is to pay the largest part of the other half of cost of building these trunk line roads. Space forbids me to go into detail. But that says county or townships as the unit may be, shall pay from 10% up to 75% of said cost. Who are they, villages and cities? No, but farmers will do. They put in that Wayne county has her roads all built, therefor under the Aldrich Bill they will not have to pay for building or help build trunk line roads.

Farmers, don't be fooled. They put one over on Rural Carriers and the Postoffice Department in 1916; don't let them put it over the farmers now.

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MICHIGAN BUSINESS FARMING

BIBLE DOES NOT APPROVE OF STRONG DRINK

I certainly feel like answering the article, "Why is Michigan Dry?" which appeared in the last issue of your paper. Mrs. A. B. evidently thinks she has proven by the Bible why liquor should remain in our state. It is my intention to prove a different opinion on the subject.

As far as laws are concerned it is an undisputable fact that they are necessary in all good government. Paul, in Rom. 13:2, says, "The powers that be, are ordained of God. Whosoever, therefore, resisteth the powers resisteth the ordinance of God: and they that resist shall receive to themselves damnation. Let us now search the Scriptures and see if we can find any arguments against tobacco, wine, and strong drink.

Mrs. A. B. says that tobacco is not mentioned in the Bible. That is because tobacco was not then discovered. Also, it is impossible to name every sin one is apt to commit. We have therefore a general term to cover several things. In the instance of tobacco, turn to 2nd Cor. 7:1. It says, "Let us cleanse ourselves from all filthiness of the flesh and spirit." Tell me, please, if there is a habit that will compare with tobacco in filthiness. Ask the wife of the habitual user, or the user himself for a reply. Surely the use of it defiles the temple of God, which act is forbidden in 1 Cor. 3:16: 17. When used as it was intended: it feeds a horned specie of worm. Brewed, it is good to destroy vermin. So much for tobacco.

Is there harm in beer and wine? Christ, himself, was a user of wine on certain occasions. The apostle Paul advised his friend, Timothy, to use wine in place of the water which did not agree with him. You will understand however, that it was not intoxicating, causing them to do the shameful acts which are done when under the influence of alcoholic drink.

The Bible strongly declares against intoxicating liquor. The world's wisest man, Solomon, says: "Wine is a mocker, strong drink is raging, and whosoever is deceived thereby is not wise.—Proverbs, 20:1. He also says it is the little foxes that spoil the vine. The big fox, whiskey, has been banished. Shall we allow the little foxes, wine and beer, to appear in our midst to accomplish by lesser degrees that which whiskey could do in less time? The final ending must be the same.

Even tho there were no Bible, it seems that the nobler nature of humanity would revolt at so degrading a practice as alcoholic drink. Moreover, it doesn't seem possible that any person can conscientiously promote the liquor trade when they know full well it is the cause of more blasted hopes and wrecked lives than any other destroyer. Would like to add that as I believe a rum-soaked race is inferior to an abstaining people, I shall cast my vote in opposition to the liquor interests at the coming April election.

—J. W. B., Calhoun county.

"WORKETH NO ILL TO THY NEIGHBOR"

Inasmuch as the editor has invited an answer to Mrs. Baerwolf's article on "Why is Michigan Dry," I would say that in I John 5:17, we read that "All unrighteousness is sin." Then it is only necessary to establish the unrighteousness of the business. Mark you, I am not talking from a legal standpoint, but Scriptural. In Matthew 19:19, we read, "Thou shalt love thy neighbor as thyself." Rom. 13:10, "Love worketh no ill to his neighbor." Now I am going to ask one question and I have not the command of language to express my feelings in regard to it, in the light of boasted intelligence of this twentieth century. Can anyone, after a little careful thought, say that the man in the liquor business is not working ill to his neighbor? Under God I am unable to believe it.—J. E. C., South Haven.



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FRUIT SPRAYING

Please send me information about spraying and caring for fruit trees. What would you use for this method? How would you apply it? I am just a green hand and am asking your advice about this matter before I start. —J. S., Edmore, Mich.

To describe intelligently all the different sprays required for the different kinds of pests and diseases, together with method of making and applying would require several pages. The Michigan Agricultural College has embodied all this information in a treatise just off the press. H. J. Eustace and R. H. Pettit are the authors. The bulletin describes the diseases common to this state as they affect the various kinds of fruits and vegetables. It also gives very complete instructions for making the sprays and how to use them. If you are a fruit grower you cannot afford to be without Special Bulletin No. 93. It may be had free for the asking. Address Experiment Station, M. A. C., East Lansing, Mich.

In this connection it might be well to state that the U. S. Department of Agriculture has just issued a bulletin on "Growing Fruit for Home Use," which contains many points of interest to the commercial fruit grower. For copies of Farmers' Bulletin No. 1001, address Division of Publication, Department of Agriculture, Washington, D. C.

HOW THE SALMON BONES ARE SOFTENED

Can you or any reader tell us what the salmon canners use to destroy the bones in the fish? And how much do they use to the pound of fish? In this locality we catch quite a lot of suckers in the spring, and believe they could be canned for future use. The M. B. F. is a real farm paper and deserves to be in the home of every farmer in the state. —C. N. G., Thompsonville, Mich.

We beg to inform you that nothing is specifically used in the process of canning the fish to soften the bones. During the process the sealed cans of fish are submitted to cooking at quite a high temperature and pressure in order to sterilize, or destroy the bacteria so the fish will keep. It is during this cooking process that the bones are softened. Small bones are softened much more readily than larger ones. —F. C. Weber, Chemist in Charge Animal Physiological Chemical Laboratory.

BALANCED RATION FOR HORSE

"I would like to ask thru your columns what constitutes a balanced ration for a horse nine years old, weighing 1,000 lbs., and how much of this feed to a mess." —Subscriber.

Ten pounds oats and 12 pounds of mixed hay, per day, would constitute a balanced ration for a 1,000-lb. horse when at light work. With the increase of work, narrow the ration by feeding more protein in such feeds as bran and oil meal. For an idle horse, more roughage may be used in proportion to the grain and roots, or a small amount of ensilage (not over 15 lbs. per day) added to keep bowels in healthy condition. —R. S. Hudson, Farm Superintendent.

FEATHER EATERS

Can some one tell me through BUSINESS FARMING what causes chickens to eat their feathers. They are fed corn, barley, and oats; have barley straw and leaves for litter and oyster shells for grit. The pullets are the worst. Please give me cause and cure if any. —A. O. B., St. Louis, Mich.

In this instance which you have cited to us we think it possible that the chickens have formed a habit of eating the feathers because of not having meat in their food rations as this is the season of the year of egg production when they would require this in

their ration. As a preventative isolate those who have formed this habit, from other birds and, give them milk or meat scrap in their rations. —C. H. Burgess, Prof. of Poultry Husbandry.

FOR INJURY TO COW'S BAG

For injury to a cow's bag, where there is heat and swelling, mix quinine with flour, say about one spoonful to five or six spoonfuls of flour. It will take out the inflammation when nothing else will. Regulate the amount mixed by the surface to be covered. Paste it on almost a fourth of an inch thick. It works well on human flesh but mix with lard. If used too strong on children it will blister. —Mrs. R., Newberry, Mich.

P. S. I think M. B. F. is the most earnest, helpful farm paper I ever read and I have caught your watchword. It is "Organize." I wish more people would talk co-operation, unity, organization. Our county agent talks it. I say I wish he could pound it in. It doesn't seem to sink very fast but if he keeps it up he may wear the hard old shell away. It can't be harder than rock.

CORN AND BEAN FERTILIZER

I want to ask a few questions about putting fertilizer on corn and beans. How much do you put on per acre and what kind of proportion? I have a corn planter with fertilizer sower on it that I was going to use. —A Reader.

The same fertilizer will do very well for both corn and beans. For the average soil, that is soil that has not received special treatment, a fertilizer analyzing 2-10-4 for sandy soil, 2-12-2 for loam and 2-12-0 for clay, is about right.

The first number in the analysis refers to the percentage of ammonia in

the fertilizer, the second the percentage of available phosphoric acid and the last number indicates the percentage of potash. Should your subscriber be unable to get the exact analysis, efforts should be made to secure a fertilizer as near the above analysis as possible.

It is well to keep in mind that where large quantities of manure are used it is not necessary to use a fertilizer containing as much ammonia and potash as is necessary on land where large quantities are not used.

For best results not less than 200 pounds to the acre should be used and better results will be secured if 250 pounds to the acre are used. However, when high-grade fertilizer such as 2-12-2 are used, smaller amounts may be applied per acre, which will supply the same amount of plant food as will larger amounts of a lower grade fertilizer. Incidentally, the plantfood in the fertilizer can be purchased cheaper in high-grade analysis than in low-grade analysis.

The fertilizer can be applied very well through the fertilizer sower of the corn planter. —J. W. Henceroth.

Build Your Brooder

If you want to raise more chicks this year, build a Perry Brooder yourself. Hundreds of M. B. F. readers are building their own in a few hours on the Perry Plan out of scrap lumber. Send me \$1 for full plans, license and right to build for others in your neighborhood. You'll say it was the best dollar you ever invested. E. O. PERRY, 37 Henry St., DETROIT, MICH.

POTATOES

Did you know that our large yields of Petoskey Golden Russets are not a lot of overgrown pumpkins, grown on overly-rich land, but a smooth, scabless, medium-sized potato, secured only by selecting the heaviest yielding hills for eight yrs? And did you know that this is the cheapest seed on the market today, and that the supply is limited?

Twin Boy Farm, Alba, Michigan
C. D. Post, Prop.

SEED POTATOES FOR SALE

personally grown Late Petoskeys or Rural Bassett Seed Potatoes, field run, graded over 1½ inch screen. Field inspected; grown on new ground, practically disease free, \$1.25 per bushel sacked F. O. B. Supply limited. Order early. A. M. SMITH, Lake City, Mich.

SPRING WHEAT

No. 1 Northern "MARQUIS" Type Seed

\$3.25 Per Bushel F. O. B. Ypsilanti
Bags Extra—50c Each

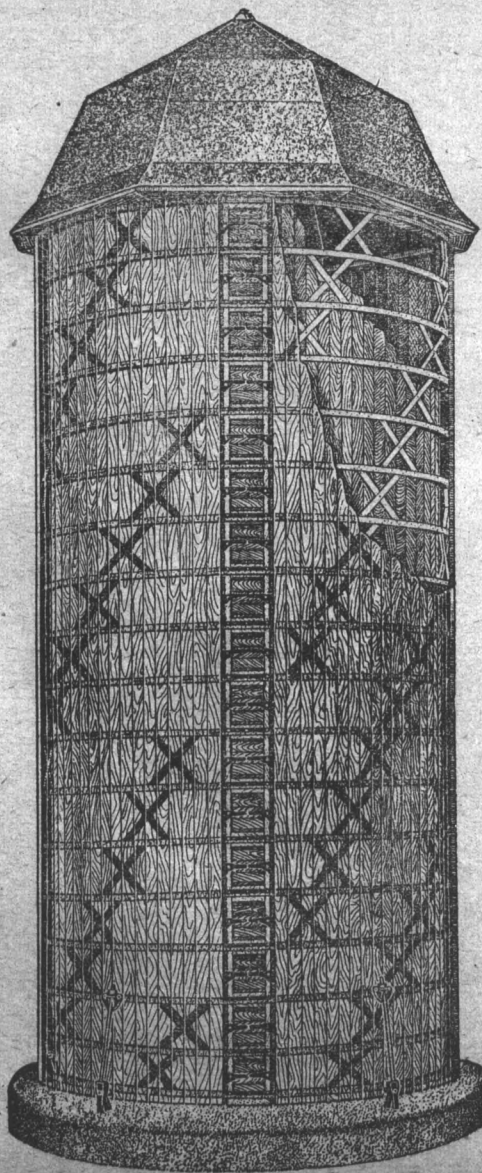
WE have put this variety out for three years and it gives best results. This is Northern Grown Wheat we are bringing in from Minnesota and Canada. Order now for immediate shipment.

WATCH FOR OUR SEED CORN ANNOUNCEMENT

MARTIN DAWSON CO.

Ypsilanti, Mich.

A Remarkable Achievement



The Saginaw Liberty Silo With the Cross-Truss

Here it is—the Cross-Truss—absolutely the greatest development ever made in silo construction. An exclusive Saginaw feature that brings to perfection the hollow-wall wood silo and makes it the strongest and most practical silo made.

The illustration tells the story. As you can see, it shows a series of trusses that unite this silo into a tower of strength. This is a new application of bridge construction.

But it remained to the McClure Company to bring this principle into silo building. By its use a rigid frame work is secured—nothing could be stronger. A heavy wind could strike one side of this silo but due to the silo Cross-Truss the strain is distributed evenly.

Then this silo is securely anchored to the foundation. So strong is this construction that no cables are necessary. In addition to this new feature, there are many other advantages of the Saginaw Liberty Silo with its hollow-wall, which have made this silo popular wherever introduced. Its heavy inner wall, the dead air space between that and the outer wall, assure perfect insulation—no more frozen or spoiled silage.

The fact that this is a Saginaw silo is sufficient guarantee of its construction and quality—the result of fifteen years of silo experience. Write us for additional information. We build a silo that fits your own particular needs and pocket-book. Write now.

THE McCLURE COMPANY

Saginaw, Mich.

Cairo, Illinois

Get our 1919 Calendar. If you are interested in live stock, you will enjoy this calendar. It is free. Send for it. A post card brings this attractive calendar.

SAGINAW SILOS

Wood Steel-Built—Wood Stave—Wood Hollow-Wall—Masonry



MARKET FLASHES



There was little trading in grain on Monday. Chicago's election, lack of supplies and a waiting demand tended to discourage trading. Despite the fact, there was a strong sentiment among the bulls that prices would be higher and bids on May and June grains were higher all along the line.



WHEAT

GRADE	Detroit	Chicago	New York
No. 2 Red	2.45	2.50	2.51
No. 3 Red	2.43	2.47	2.48
No. 2 White	2.43	2.47	2.48
No. 2 Mixed	2.43	2.47	2.48

Demand for wheat is very active and more mills are running today than for many months. Large quantities of flour are being exported in preference to the whole grain. This is a good thing, for it keeps the mills going and increases the domestic supply of grain feeds. The speculators still persist that the wheat price must come down, but the wheat prices still persist in going up.

A subscriber recently asked us the question if the government would pay its guaranteed price on spring wheat, he having read a statement to the contrary. The government will pay its guaranteed price on every bushel of 1919 wheat, whether planted last fall or this spring. Those who believed that the government should violate its contract argued that such a discrimination should be made in order to prevent farmers from forsaking other crops for spring wheat. It was soon discovered that it would be utterly impossible to carry out such an arrangement, as there was no way to keep the two grains separate when checking up time came.

We hope Michigan farmers will not be foolish enough to pin all their hopes on spring wheat. It's an uncertain crop for Michigan. Some years it does well; other years it yields poor returns. Farmers who are in the habit of raising spring wheat will be justified in carrying out their practice this year, but it is no time for experimenting. Oats is a far more dependable crop this year than wheat. There will unquestionably be a greatly decreased acreage of oats, and the farmer who includes a generous acreage of oats in his crop program will be wise.



CORN

GRADE	Detroit	Chicago	New York
No. 2 Yellow	1.65	1.59	1.79
No. 3 Yellow	1.62	1.54	1.76
No. 4 Yellow			

The "bulls" have the "bears" backed off the boards. Every day scantier supplies and higher prices have come to mock the speculators who have been banking their hopes on lower prices. The spectre of an Argentine grain surplus that has hung over the Boards of Trade and frightened the buyers has faded away, leaving an active demand with no supplies to fill it. A Chicago report says: "There is not enough grain coming forward to meet current demands of manufacturers. Corn traders are at the mercy of the farmer and unless he releases his grip on holdings the situation will continue to favor the man who believes in higher prices. Liverpool cables reported corn scarce there."



OATS

GRADE	Detroit	Chicago	New York
Standard	70	68	76
No. 3 White	69 1-2	67	75
No. 4 White	68	65	73

The oat market is developing a strength that is a surprise to even its most enthusiastic supporters. Altho the Bureau of Market says the sup-



All grains reported advancing and strongest tone of season prevails. Beans steady and slowly advancing. Potatoes firm and higher. Live stock steady. Butter and eggs higher on all markets. Dullness in apples and onions. Hay in scant supply and higher prices expected. General tone of all markets very encouraging.

ply in the hands of farmers is one of the greatest on record, it does not seem to keep the price down. On the contrary future deals are now being made at a considerable advance over any previous futures, and demand takes care of all the supplies as they come in.

The Price Current-Grain Reporter speaks of the oat and corn acreage in the following manner:

"The defeat of the amendment to the guaranty bill that the bonus should not be paid to farmers growing spring wheat this year who grew none a year ago was a further temptation to plant spring wheat on corn lands. But at present advises the corn acreage is not likely to suffer so much from that cause as is that of oats and barley. This is encouraging. The corn crop is this year far more essential to the rounding out of our agriculture than the production of wheat or even of oats and barley; and every dealer should put in these last days of seed bed preparation urging corn and more corn. Feed will be the great need of next fall and winter, and without corn the feed bin will be scant indeed. There is an ample supply of good seed. If your local supply is not enough, get into touch with the wholesale dealers and see to it that your patrons have all they shall need."

RYE AND BARLEY

Both these grains are in stronger demand and higher. As we go to press rye is quoted at \$1.65 per bushel and barley at \$2.20 per cwt.



BEANS

GRADE	Detroit	Chicago	New York
C. H. P.	7.90	7.00	7.25
Prime	7.00	6.50	6.50
Red Kidneys	10.25	11.00	11.00

Beans went up another 15 cents a

hundred the first of this week, making the total advance over ten days ago of 90 cents a cwt. The demand is still rather slow, but the market is in much better shape than it has been for several months. Talking with Frank Dreese, secretary of the Bean Jobbers Ass'n., in Lansing Tuesday, he said, "The beans are beginning to move. We have been trying for some time to open up some export business outside of the Grain Corporation, and have been partially successful."

The Michigan farm paper, which wept crocodile tears over the bean situation a few weeks ago, seems to have recovered its equanimity. We don't know exactly what happened. One week it charged M. B. F. with being in collusion with the bean jobbers to manipulate the bean market, or something. The next week it admitted that it was mistaken, that the bean jobbers were deserving of credit for the manner in which they had hand-

OVER-ZEALOUS PATRIOTISM

Federal Food Administrator Wilson of Minnesota has admitted that the administration was a little too previous in compelling farmers to produce their wheat under threat of penalties provided in the case of hoarders, and between 200 and 300 farmers in southern Minnesota who were caught with wheat on hand last July and were squeezed to contribute funds to the Red Cross to escape prosecution now expect to have their money returned to them. Altogether as a result of the activities of Vidien B. Vye of St. Paul about \$84,000 was exacted in penalties and under a recent ruling of the Food Administration all these cases are about to be reviewed.

The Month's Market and Financial Review

THE MONTH of March witnessed an improvement in nearly all business, commercial and market lines. Says a trade letter issued by the Detroit National Bank of Commerce, "Nothing startling appears from an analysis of the business operations of the country during February, the current operations for March and the prospective operations for April. The transition of business to a Peace basis is going forward with few serious jolts or hitches. Released and available labor is being absorbed faster than we had any right to expect and the danger of a great surplus of idle labor is growing less." Over 62 per cent. of the representatives of the various lines of business in Detroit, when asked their opinion, reported that business conditions were improving. Less than 9 per cent. believed conditions were declining. During the month of February Detroit bank clearings were \$262,243,536.92, over \$50,000,000 larger than any previous February's clearings.

This trade letter speaks encouragingly of the crop and market conditions. Its attitude is much different than the commercial interests usually assume. It says:

"On the first of March, corn still on farms was 34% of the last crop compared with 41% on hand a year ago of the previous crop; wheat still on farms was 14% of the last crop compared with 17% of the previous crop on hand a year ago; oats still on farms totaled 38 % of the last crop compared with 38% of the previous crop on hand a year ago; barley still on farms totaled 32% of the last crop compared with 31% on hand a year ago of the previous crop."

"The quantity of grain still on the farms from last year's crop represents a much smaller percentage than was on hand a year ago of the previous year's crop. The grain surplus of the country is much smaller than it was generally believed to be before the issue of the Report of the Department of Agriculture. The world needs all of the grain we have and all we can grow. There is little likelihood of an over-production of anything in the line of foodstuffs in the world for several years to come. In figuring the wheat crop of 1919 it should be remembered that the wheat crop is not yet made and one-third of it is not even in the ground."

During the month of March there were sharp increases in the prices of grains. Beans and potatoes took on a steadier tone with somewhat higher prices. The export demand that had been slowly shaping itself took definite form and uncertainty was succeeded by confidence.

We have no reason to believe that these conditions will become any the less favorable as summer advances. We still believe that there is a place for all our food and at as good if not better prices than now prevail.

led the bean situation; and the next week the Bean Jobbers Ass'n sent out a bulletin to its members urging them to subscribe for the aforesaid farm journal. Truly, the laborer is worthy of his hire.



HAY

Markets	No. 1 Timothy	Standard Timothy	No. 2 Timothy
Detroit	23 50 29 00	27 50 28 00	26 50 27 00
Chicago	31 00 33 00	30 00 31 00	29 00 31 00
Cincinnati	34 25 35 25	33 75 34 25	33 25 33 75
Pittsburgh	32 50 33 00	31 50 32 50	29 00 30 00
New York	35 00 35 00	33 00 34 00	31 00 32 00
Richmond			

Hay markets have again advanced under continued light supplies and good trade. Country loading is small owing to highway conditions and although rail deliveries are prompt, there is not much stock moving. Record prices are the rule in the western markets, and eastern points show advances aggregating at least half the amount of advance shown in the west. Visible stocks are small in many producing points and the movement will be light from all points until the spring planting is completed. —Hay Trade Journal.



POTATOES

Markets	Choice round white-sacked	Round White Bulk
Detroit	1.80 cwt.	1.70 cwt.
Chicago	1.80	1.70
Cincinnati	2.00	1.90
New York	2.10	2.00
Pittsburgh	1.88	1.80

The action of the potato market the past three weeks has upset all the dope of the speculators who insisted that the increasing shipments would send the market tobogganing. Every day for the past three weeks has shown new strength to the potato market. It is true that prices have not advanced considerably at primary markets, but local dealers were obliged to advance prices to growers anywhere from 10 to 40 cents a cwt. in order to secure enough supplies to meet the demands. This is most encouraging, and lends strength to the belief that potatoes are due for much higher prices.

M. B. F. was the first farm journal in this section to call the farmers' attention to the decreased potato acreage in the South and the effect it would have upon the late potato market. The advance of new Bermudas from \$10 a barrel a month ago to \$15 a barrel this week gives us some idea of what effect this decreased acreage may have on the old potato deal. Certainly the production of the early crop cannot be cut 40 per cent without having a great effect upon the demand for old potatoes.

The Bureau of Markets gives an excellent report of the potato market conditions elsewhere in this issue. Be sure to read it.



EGGS

Eggs are again higher. All parts of the country report an active demand. The east is flooded with eggs of a poor to medium quality which do not find a ready market. If you ship any eggs to New York, be sure they are A-No. 1 quality, for the best eggs are going at premium prices. It is the sentiment of the dealers that eggs will not go below their present figure. Detroit prices this week, 40 1/4 @ 43c.

Butter

The Detroit butter market is firm and a slight advance in prices is noted. The feature of the market is the export demand which makes up for a very poor domestic demand. Detroit prices on creamery ranges this week at about 61 to 62c per pound.

Poultry

Demand for poultry is good and supplies are none too large. The Detroit market quotes the following prices: No. 1 springs, 34@35c; stags, 27@28c; hens, 34@35c; small hens and leghorns, 33@34c; roosters, 24@25c; geese, 25@26c; ducks, 38@40c; turkeys, 35@36c per lb.

Leather Market Strong

Relative to the commercial leather market, including all varieties of the leather belt used in elevators, Babson says this week:

"While we do not know at the present time just how long the hide and leather market will continue as strong as it is at present, nevertheless the facts surrounding the situation are as follows: Altho the receipts of animals at the primary markets are exceptionally heavy, hide shipments are running comparatively large, stocks are not burdensome, and leather is finding its way to consumers about as fast as it appears on the market. This demand is probably due to the activity on the part of manufacturers to replenish stocks of staple shoes. Although admitting the present strength we hardly advise heavy commitments at the present high plane of values. On the other hand, we sanction a buying policy that will at least insure a constant supply. Looking further ahead, by the latter part of the year, after the rush of peace orders is over, the tendency should be unmistakably downward."

Hides—No. 1 cured, 18c; No. 1 green, 16c; No. 1 cured bulls, 13c; No. 1 green bulls, 10c; No. 1 cured veal kip, 23c; No. 1 green veal kip, 20c; No. 1 cured murrain, 18c; No. 1 green murrain, 16c; No. 1 cured calf, 40c; No. 1 green calf, 38c; No. 1 horsehides, \$7; No. 2 horsehides, \$6; No. 2 hides 1c and No. 2 kip and calf $\frac{1}{2}$ c lower than above prices; sheepskins, as to amount of wool, 50c to \$2.50 each.

BREADSTUFFS EXPORTS

Breadstuffs exports in the first eight months of this fiscal year increased 50%—\$577,850,285, against \$382,190,789 a year ago.

Last month out of the \$587,900,000 total exports \$256,600,000 were agricultural products leaving \$33,300,000 for other commodities. To understand what that means, it must be observed that the largest figure ever reached by exports prior to the war was \$198,800,000. That is to say even if we leave out of consideration the foodstuffs and cotton which the outside world must take from us, our monthly shipments of non-agricultural goods is running \$132,500,000 beyond the pre-war maximum.



LIVE STOCK

Detroit, April 1.—Cattle: Canners and bulls steady, others 25 to 35c higher than last week's close; best heavy steers, \$14 to \$15.50; best handy weight butcher steers, \$13.50 to \$14; mixed steers and heifers, \$12 to \$13.25; handy light butchers, \$10.50 to \$11.50; light butchers, \$8 to \$9.50; best cows, \$10 to \$11; butcher cows, \$8.50 to \$9.50; cutters, \$7 to \$7.50; canners, \$6 to \$6.75; best heavy bulls, \$9.50 to \$10; bologna bulls, \$8.50 to \$9; stock bulls, \$7.50 to \$8.50; feeders, \$9.50 to \$10.50; stockers, \$8 to \$9; milkers and springers, \$60 to \$120. Veal calves: Market strong on good grades; common dull, best, \$17 to \$17.50; others, \$8 to \$15. Sheep and lambs: Market steady; best lambs, \$19.50 to \$20.10; fair lambs, \$18 to \$18.50; light to common lambs, \$15 to \$16; fair to good sheep, \$13 to \$13.50; culls and common \$7 to \$10. Hogs: Market 25c higher; closed strong; pigs, \$18.25; mixed hogs, \$19.75 to \$19.80; few heavy, \$19.85.

Dressed hogs, Detroit market, 21 to 24c; dressed calves, same market, 21 to 25c.

(Continued on page 17)

County Crop Reports

Kent (N. E.)—At this writing it looks as though March might go out like a lion. It was getting quite summer-like and grass and wheat were looking green. Now they will suffer a set-back. The ground froze quite hard last night and today northwest winds prevail. Farmers have been drawing manure and working on their oat ground. Many believe in getting their oats in as early as possible. Most farmers will treat their oats for smut as they have done for a good many years. Some farmers are selling potatoes in Greenville. Grand Rapids is plugged full of spuds. Stocks of potatoes are exhausted close in to the big place, but trucks are continually picking up the scattering holdings twenty miles and farther out and keeping the market in bum condition. It seems to me that later on they'll want potatoes pretty bad in Grand Rapids. Farmers' holdings of potatoes in this locality are far below those of last year at this time. The following prices were paid at Greenville recently:—Wheat, \$2.30; corn, \$1.50; oats, 60; rye, \$1.53; beans, \$6; potatoes, \$1.15; hens, 20; butter, 50 to 55; eggs, 35 to 36; sheep, 10; lambs, 15; hogs, live, 16; dressed, 20 to 24; beef steers,

10; beef cows, 8; veal calves, 9 to 11.—G. M. W., Greenville, Mich., Mar. 28.

VanBuren, (east)—Farmers are finishing their grape-trimming, drawing out brush, setting in posts, tightening wires. Some have commenced tying. The weather has been fine and most of the work is up in good shape. The winter being open leaves the barn yards pretty well cleaned out. Hay still holds to \$30; oats are 55c or better; eggs, 35c and butter, 45c.—V. T. G., Mattawan, Mich., March 29.

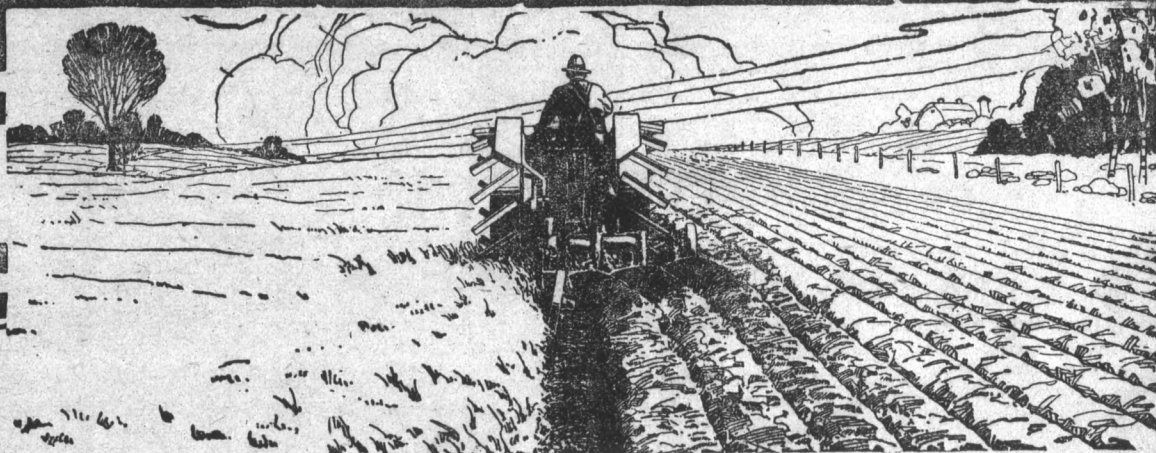
Weaford, (west)—A little flurry of snow this week and a cold north wind, but we anticipate it will not continue. At present it looks favorable for nice weather. Some farmers have started to plow. Charles Julian has tomato plants in his hot-bed three or four inches high—so much for a spring starter. The following prices were paid at Cadillac March 27:—Corn, shelled, \$3.25 cwt.; oats, 80; hay, 25 to 30; potatoes, \$1.20 cwt.; hens, 21 to 24; springers, 19 to 23; butterfat, 64; eggs, 35; hogs, 20; beef steers, 10 to 14; veal calves, 19.—S. H. S., Harrietta, Mich., March 26.

Calhoun, (N. W.)—Farmers are drawing manure and plowing for oats. There is some spring wheat being

sown. There is some hay moving at from 26 to 30 per ton. Oats are 65. Some are spraying orchards. The following prices were paid at Battle Creek March 28.—Wheat, \$2.30; oats, 65; rye, \$1.40; hay, 30; potatoes, \$1; hens, 25; springers, 25; butter, 52; eggs, 32; lambs, 14; hogs, 17; beef, steers, 7; beef cows, 6; veal calves, 11.—O. E. B., Battle Creek, March 28.

Ogemaw, (central)—No farm work being done here. Still freezing hard at night and thawing in the day time, which makes it hard on winter grain and new seeding. Roads are in bad condition, almost impassable in some places. Feed is getting scarce. A good many farmers are looking for hay. Clover seed is getting scarce and high. Beans are low. Butterfat is off again. The following prices were paid at West Branch Mar. 29:—Wheat, \$2.10; oats, 65; rye, \$1.50 per 100; hay, 20 to 22; potatoes, 75; hens, 20; butter, 45; eggs, 33; hogs, \$22 dressed; veal calves, 12; butterfat, 50.—W. N., West Branch, Mich., March 29.

Calhoun, (west)—Fine weather for the time of year. A number of farmers are starting the plow for oats. The subsoil is very wet yet but the surface seems to be in pretty good condition. Wheat and the new seeding, I do not believe, is injured to any great extent. The following prices were paid at Battle Creek March 20:—Wheat, \$1.15 to \$1.18; oats, 55; rye, \$1.45; hay, 28; butter, 45; eggs, 40; lambs, 12 to 14; beef steers, 7; beef cows, 7;—V. H. J., Battle Creek, March 21.



Good Plowing, Yes—

Operate on Cheap Fuel

GOOD work and plenty of it, whether plowing, disking, harrowing or belt work, is the rule where an International or Titan kerosene tractor is used. With it you can plow as deep as you want to, as fast as good plowing can be done, do any other farm power work, do as much and as good work during the last hour of the season as during the first, and know that you are saving money at every turn of the flywheel.

All tractors of the same size use about the same amount of fuel. It is not uncommon to use 1000 gallons in a season. International and Titan tractors operate on common coal oil, which costs about half as much as gasoline. Even if our tractors were superior in no other way, the fuel saving would make it worth while to own an International.

Tractor Service

Every tractor owner needs service at one time or another. When that time comes our Service Organization of 89 branch houses and thousands of dealers responds quickly. Think what it may mean to you in a rush season to get a repair part or have an adjustment attended to within a few hours. Every International or Titan tractor owner who needs service gets it without unnecessary delay or trouble.

Our tractors are made in three sizes, 8-16, 10-20 and 15-30-h. p. All operate on kerosene, or any other oil fuel down to 39° Baume. We will send catalogues with full information about tractors or any other machines in the list below. Write and tell us which machines you are interested in.

Work With All Farm Machines

The steadiness and dependability of International or Titan tractors are due, not to chance, but to skill and experience. We know farm machines, having marketed them for close to 88 years. We know the work you expect your machines to do and for twelve years have been selling tractors designed and built to furnish useful, economical power for that work. One or another of our tractors will draw or drive any farm power machine you have, requiring power up to 15-H.P. draw bar or 30-H. P. on the belt, and do good work with it.

The Full Line of International Harvester Quality Machines

Grain Harvesting Machines	Haying Machines	Belt Machines—Cont.	Dairy Equipment
Binders Push Binders	Mowers Tedders	Cream Separators	Cream Separators
Headers Rice Binders	Side Delivery Rakes	Feed Grinders	(Hand)
Harvester-Threshers	Loaders (All Types)		Cream Separators
Reapers Threshers	Rakes	Power Machines	(Belted)
	Combination Side Rakes	Kerosene Engines	Kerosene Engines
	and Tedders	Gasoline Engines	Gasoline Engines
Tillage Implements	Sweep Rakes Stackers	Kerosene Tractors	Motor Trucks
Disk Harrows Cultivators	Combination Sweep Rakes	Motor Trucks	
Tractor Harrows	and Stackers	Motor Cultivators	
Spring-Tooth Harrows	Baling Presses		
Per-Tooth Harrows	Bunchers	Corn Machines	Other Farm Equipment
Orchard Harrows		Planters	Manure Spreaders
		Cultivators	Straw Spreading Attach
Planting & Seeding Machines		Motor Cultivators	Farm Wagons
Corn Planters Corn Drills		Binders	Farm Trucks
Grain Drills		Ensilage Cutters	Stalk Cutters
Broadcast Seeders		Shellers	Knife Grinders
Alfalfa & Grass Seed Drills		Huskers and Shredders	Tractor Hitchers
Fertilizer & Lime Sowers			Binder Twine

International Harvester Company of America

CHICAGO

(Incorporated)

U S A



THE FARM HOME

A Department for the Woman and Children of the Farm



THE RESTFUL HOME

THE DAYS of bric-a-brac, ornamental cushions, useless vases, etc., is rapidly passing and no one who enjoys a restful home, will mourn their loss. Those were days when we had to have a "parlor" in which to keep them, for goodness knows one couldn't be comfortable and live with them all every day. Today the parlor has disappeared and in its stead we have the one large, general living room, with no space for these "extras" which have to be relegated to the attic. And how much more restful is the home which contains only the required number of comfortable chairs, the table which holds the daily papers and up-to-date periodicals, and the furniture which has an actual practical value.

And the walls too are apt to become over-furnished, if we may be permitted this expression. Pictures, like bric-a-brac, have a habit of accumulating along with calendars, etc., until sometimes one has to search to find the color of the wall paper. This only serves to make the room appear much smaller. On the other hand there is the room where one enters to find, perhaps, only two or three very good copies of famous works of art; of pictures which uplift and cheer and these pictures cost no more than the inferior, highly colored prints so often seen. Color can always be added by the bunch of freshly cut flowers, arranged just as they grow, and even in the winter it is usually possible to keep at least a single blossom in a small vase. It is in a room such as this that the very atmosphere invites you to drop down in the comfortable chair by the reading table and pick up the paper near at hand and rest a while. The bare room is not attractive, but a room which holds all the furniture necessary for the family use, the victrola and the books is surely never bare.

Spring is a good time in which to take stock of the rapidly accumulating things which aren't really necessary to the comfort or beauty of the home; articles which have perhaps been given to you as presents and which you haven't had the heart to put away. It would be better even that an "accident" happened to some of these in the spring clean-up than that the already overburdened mother should have them to dust and care for all summer.

CONTRIBUTED HELPS

I READ IN a recent issue of the M. B. F., that you had a hard time trying to make your page a help, so I am sending you some "Helpful Hints" which I have found of value.—A Willing Helper, Carp Lake, Mich.

Boiled cabbage is very much sweeter if water is changed while boiling.

To have a custard pie a nice, even brown color, sprinkle a little sugar over the top before putting it in the oven.

If a cake cracks open while baking, it is a sure sign that you have used too much flour.

Sour milk makes spongy, light cake. Sweet milk makes it cut like pound cake.

Do not warm butter. If it is too hard, mix it in a warm bowl or with warm sugar.

Boil fresh, young vegetables in hard water. A little salt will harden it at once. Salt also makes water heat faster.

Edited by MABEL CLARE LADD

A small cake needs a hotter oven than a larger one.

Don't use soap suds on windows. Use clear water.

To dry-clean a shirt waist, put four quarts of corn meal in a 24-lb. sack or pillow slip. Put waist in this and knead gently so that the meal will come in contact with all parts of the fabric. Leave two or three days, then shake well and press with a warm iron. Furs may also be cleaned this way.

THE ANNOUNCEMENT

I RECEIVED a tiny missive,
From whom you cannot guess—
Indeed 'twas not from Gracie;
Nor yet from laughing Bess.

'Twas from a tiny stranger,
A most surprising thing—
Scarcely a seven-pounder
With hair like a raven's wing.

She claims to be very busy
Writing letters, too—
A task I deem astounding.
For such a mite to do.

I strongly suspect her of cheating
Not thinking that I would guess
That papa was doing the writing.
You dear little culprit, confess.

'Tis a dear old name you've chosen
From out the common lot.
I fear it will waken for grandma,
Memories long forgot.

'Twill recall a golden-haired maiden,
Who lived long years ago;
Your dad was her little brother,
As Donald is yours, you know.

She must have been good, for Jesus—
Called her in childhood's years.
That's why I fear for grandma
'Twill waken a flood of tears.

Now you must take her place dear,
Proving both kind and true,
Helping and cheering grandma—
As she would have loved to do.

And for you I discern in the future—
Happiness none can destroy.
For Lillian stands for purity
And Gertrude meaneth joy.

—C. SHIRLEY DILLENBACK.

LESSONS IN HOME COOKING

(Conducted by Miss Elizabeth Matheson, of the Valley City Milling Co.)

A Few Suggestions on Bread

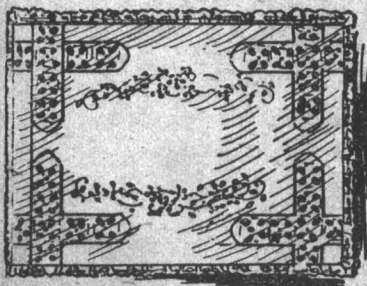
GOOD BREAD is indeed the staff of life, and we all agree that good home-made bread is more tasty, more appetizing, and more nourishing than any baker's bread can be.

Bread-making need not be burdensome and one is justified in having a feeling of pride over a perfect loaf of delicious bread.

THE NEW FANCY WORK

THIS Dainty embroidery design is used with filet inserts which we will show next week, and is very effective for either the boudoir set as illustrated, or can be used for the day pillow slips; in fact it will be found that it can be employed in many ways. The filet insert will be shown next week.

The small sketches here shown are the nightgown case and pillow, though the other pieces such as scarfs, pin cushion, etc., can be added, using the same design so that a very attractive set may be made for the guest chamber. The flowers are eyelet and satin stitch (three petals in satin stitch.) The center of the flowers are eyelets; the leaves satin stitch, and the stems are merely outlined.



Successful bread-making is a question of maintaining the correct temperature. The yeast is a delicate plant, and must be kept neither too hot nor too cold. Bread that feels warm to the hand while rising is too warm. A wooden pail makes an ideal dish for bread-making, for it is impossible to overheat the bread and it is better to let bread "climb up" than to spread out as it will in a flat pan.

The quantity of salt depends upon personal taste, but one level teaspoon to each loaf is the usual allowance. Too much salt hinders the growth of the yeast.

Sugar is a food for the yeast, and while good bread can be made without it, still the bread is a little nicer with it, and the yeast acts a little quicker. The amount will vary according to taste, but a teaspoonful for each loaf is suggested.

A little fat added to the bread makes it a little tenderer. Some can be kneaded in, though it is a good plan to rub a bit lightly over the bread when putting it to rise, as this prevents a crust from forming. Also grease the tops of the loaves when putting into the tins.

The liquid used may be water, potato water, part milk and part water, or milk alone. A water bread remains moist longer than a milk bread, and at its present price few of us use milk entirely for our bread.

Potato water makes a moister bread, due to the particles of potato in it, but much might be said in favor of using freshly boiled water with some finely mashed potato, rather than the water in which the potatoes were cooked.

Part milk and part water insures a prettier brown than an all water bread.

Compressed, or soft yeast, makes bread-making a simpler problem, and also a much shorter one than the dry yeast. One third of a cake for each loaf is a good allowance of yeast, though more can be used. In using dry yeast, one half cake to a quart of liquid, making three large loaves, is an ample allowance of yeast. Even more liquid can be used but the process of bread-making is a little slower.

Potato added to the bread gives a moister loaf, but the more potato used the stiffer the loaf must be for the potato is practically four-fifths water.

Make the loaf a little more than half the size of the tins. Let rise until level with the top of the tin, then put it into the oven, where it should continue rising until it is double its original size. Do not have your oven too hot. At the end of ten minutes the bread should have completed its rising, and be browned. Bake from forty-five to sixty minutes, depending upon size of loaf. A little water in the oven during baking makes a tender crust. Remove from tins immediately and put upon a rack to cool, or turn frequently to avoid while cooling.

The question of the flour to use is always an important one, but more and more millers are manufacturing a flour blended from different varieties of wheat, and containing both the hard and soft wheat in correct proportions to insure success for all purposes. Once the housewife becomes accustomed to using a blended flour she cannot easily be persuaded to return to the use of two flours. A blended flour gives a tenderer, sweeter, and more finely flavored bread than a straight bread flour; and as it contains the correct proportion of soft wheat to insure its being

LATEST STYLES

and New York Patterns

No. 2772-2799 — Ladies' Costume. Waist 2772 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2799 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require about 5½ yards of 40 inch material. Width of skirt at lower edge is about 12-3 yards. Two separate patterns.

No. 2797—Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 4 yards of 40 inch material.

No. 2779—Ladies' House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 5½ yards of 36-inch material. Width at lower edge is about 2½ yards.

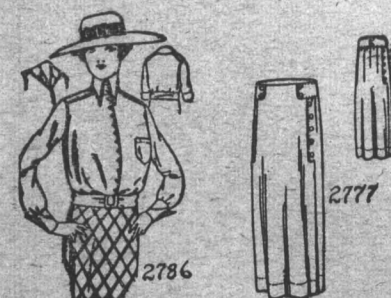
No. 2786—Ladies' Waist. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. Size 38 requires 2½ yards of 36-inch material.

No. 2509—Ladies' Dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 7½ yards of 44-inch material. The skirt measures about 2 yards at the foot.

No. 2775—Girls' Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 will require 3½ yards of 36-inch material.

No. 2800—A Comfortable Breakfast Costume. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4½ yards of 38-inch material. Width of skirt at lower edge is about 2 yards.

No. 2777—Ladies' Skirt. Cut in 7 sizes: 24, 26, 28, 30, 32, 34 and 36 inches waist measure. Size 24 requires 3 yards of 36-inch material. The skirt measures about 2½ yards at the foot, with plaits extended.



Herewith find cents for which
send me the following patterns at 10c each:

M

Pattern No. Size

Pattern No. Size

Be sure to give number and size. Send
orders for patterns to Pattern Depart-
ment, Mt. Clemens, Mich. Be sure to
sign your full name.

the perfect cake flour, it makes the
ideal flour for general family use.

It is not necessary for you to
change your recipe or method of
bread-making, if you are a user of
Lily White. Make your bread as you
always have, but keep the dough a lit-
tle softer than you did when using a
hard wheat flour. Too much flour
kneaded in makes a bread that is too
solid and dries out quickly. But one
or two trials will insure success.

If you wish a special recipe, here is
one for three loaves Lily White
Flour:

One pint potato water, one pint
milk, three quarts Lily White Flour,
measured before sifting, one cake
compressed yeast, two tablespoons
sugar, two tablespoons shortening,
one tablespoon salt. If you make
your yeast, one-half cake of dry yeast
in one quart of liquid will give the
same results.

Soak yeast with one teaspoon of
sugar in enough luke warm water to
cover, scald the milk. Place the rest
of the sugar, the salt and the shorten-
ing in the mixing bowl and pour the
scalding milk and potato water on
them. The water in which two or
three medium sized potatoes have
been boiled may be used if one has
not saved the water in which the po-
tatoes were cooked for dinner. When
cooled to lukewarm add the yeast and
about half of the flour. Set to rise in
a warm place for a half to three-quar-
ters of an hour, then add the rest of
the flour, enough to make a dough
that will not stick, when kneaded
with but a slight sprinkling of flour
on the kneading board. Stir in the
mixing bowl or knead until the flour
is well worked in. A cup of mashed
potato will improve the quality of the
bread. Let it rise in a warm place un-
til almost double in volume, then
knead until smooth and velvety and
mould into loaves.

Put in tins and when it has raised
so that the volume or size has about
doubled it is ready for the oven.
Bake about 45 minutes in a moderate
oven.

This produces six small loaves of
delicious home-made bread, or three
very large loaves.



The Government's aggregate ex-
pense in the 22 months of war were
recently placed at \$26,356,000,000. This
includes \$7,875,000,000 loaned to the
Allies.

It is estimated by the United States
Department of Agriculture that road
building throughout the country this
year will involve the expenditure of
\$1,000,000,000.

The state of Illinois recently voted
a \$60,000 road bond issue while over
\$600,000 is to be spent for concrete
roads in Arizona, and Governor Rob-
ertson, of Oklahoma, is endeavoring to
promote for a \$25,000,000 State High-
ways bond for that state.

The Belle Fourche irrigation dam
in South Dakota is the largest earth
embankment in the world. Its con-
struction was authorized by Congress
at a cost of \$5,000,000,000. From an
engineering standpoint this project is
one of the most interesting which the
government has undertaken. The res-
ervoir created by this dam covers
about 9,000 acres and will be the larg-
est lake in the world.

Because of the scarcity of leather,
strange developments are being made
in this industry. It has recently been
ascertained that the skins of frogs
and toads can be tanned and turned
to account for card cases and other
fancy articles. The Government fish-
eries bureau says the skin of the cod
fish furnishes an excellent leather,
tough as parchment and very dura-
ble. The same is true of salmon skin.
Eel skins are employed in Europe for
binding books, and in Egypt shoe
soles are made from the skins of cer-
tain fishes caught in the Red sea.
Sturgeon skin affords a handsome or-
namental leather, and the hide of the
armored garfish is much valued in
Europe, being covered with horny
plates that can be polished to an
ivory-like finish.

Spraying for Profit

Give trees more care and they yield better fruit. Spraying
is the best protection for your trees and your profits. How
free your crops are from blight and blemish depends on how
carefully you spray and how reliable are your spray materials.

Exercise the same care in protecting your trees and plants
as you would in buying them. The names of spray materials
are the same but the quality differs. Buy Orchard Brand
and you buy the best quality. Orchard Brand is the trade
name of a complete line of insecticides and fungicides that
do the work. The name on the package is an assurance of
full money's worth of crop protection.



**Orchard
Brand**
Spray Materials

are manufactured by the largest chemical company in
America. Several valuable products possessing decided ad-
vantages have been originated by our Research Department.
A partial list of our products which are invaluable to the
farmer at the present time is given below:

FOR FRUIT TREES AND VINES:	FOR POTATOES:
B. T. S.	Arsenate of Calcium
Lime Sulphur Solution	Bordeaux Mixture
Arsenate of Lead	Atomic Sulphur
	Arsenite of Zinc
	Zinc-Bordeaux
	Lazal (for dusting)

We maintain a Service Bureau to aid the farmer in solving
his spraying problems. Write us concerning yours.

General Chemical Co.
Insecticide Dept., 25 Broad St., New York

Grow Wheat in Western Canada
One Crop Often Pays for the Land

Western Canada offers the greatest advantages to home seekers.
Large profits are assured. You can buy on easy payment terms.

Fertile Land at \$15 to \$30 per Acre—

land similar to that which through many years has averaged from 20 to 45
bushels of wheat to the acre. Hundreds of cases are on record where in Western
Canada a single crop has paid the cost of land and production. The Govern-
ments of the Dominion and Provinces of Manitoba, Saskatchewan and Alberta want
the farmer to prosper, and extend every possible encouragement and help to

Grain Growing and Stock Raising.

Though Western Canada offers land at such low figures, the high
prices of grain, cattle, sheep and hogs will remain.

Loans for the purchase of stock may be had at low interest;
there are good shipping facilities; best of markets; free schools;
churches; splendid climate; low taxation (none on improvements).

For particulars as to location of lands for sale, maps, illustrated literature,
reduced railway rates, etc., apply to Supt. of Immigration, Ottawa, Can., or

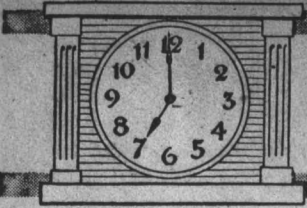
M. V. McINNES

178 Jefferson Ave., Detroit, Mich. Canadian Gov't Agent

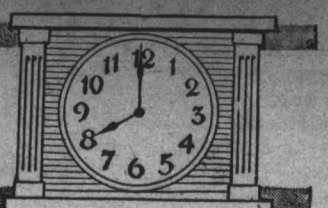


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Michigan; fine land and ideal location;
near good schools and churches. Will sell
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Farm Bureau, Monroe, Michigan.

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Best market blackberry grown; \$15 per
1,000; \$2 per 100, f. o. b. Any quantity.
Cash with order. H. L. Keeler, Grower,
Elberta, Mich.



The Children's Hour



(Send all Stories and letters for this Dep't direct to "Laddie," care Rural Pub. Co., Mt. Clemens, Mich.)

DEAR Children: Interest is running high in our guessing contest of ten great men. I am glad to report I have received over 200 correct answers to the last one, which, if you have not guessed it, you will find correctly given in several letters which we are printing in our page this week. Remember you must guess all ten if you are to secure the prize, so just keep busy and I am sure that with a little work you can succeed.

Some of the children expected that I would print all the names of those who guessed correctly each time, but we can't do that as if we did we wouldn't have room for any letters or the Doo Dads and I am sure that you would rather see your letters than just a list of names. However, rest assured that I am keeping them all carefully in a little book, and that I will publish every letter we have room for every week. And one of our little club members asked for some games to play at her birthday party, but she only gave me a few days, and the postman delayed her letter so that it did not reach me until the day before her party; too late for me to send her the games asked for. Remember if you want anything like this, you must write your letter at least two weeks ahead.

This week we have the Doo Dads again and next week we are to have another one of our great men.

Affectionately yours,

"Laddie."

Dear Laddie—I am sending you the story I promised to send. I can knit, tat, crochet and embroider. One girl saw my letter in the paper. Her name is Imogene Klingaman. She wanted to make friends with me so she wrote to me and I am answering her today. We have lots of ice around here but not very much snow. I have a pair of skates. We have lots of fun. I go to school every day. As I haven't much to write tonight will close.—Bertha Kulish, Minden City, Mich.

The Story of Cinderella

Once there was a king. He married a queen who had two daughters and they were very proud, but Cinderella was more beautiful than they so she was made to sit on ashes behind the stove. The older sister used to call her Cinderella but the younger one was kinder and called her Cinderella. One night there was a dance and the two proud girls went, but Cinderella didn't go because she had no nice clothes to wear, so she sat down on the ashes behind the stove and began to cry. Her godmother heard her crying and came and asked her why she cried and Cinderella replied, "I want to go to the dance and I haven't any nice clothes to wear. Her godmother told her that if she would be very good she might go to the dance so she told her that in the garden was a big pumpkin and to bring it in the house. So Cinderella brought the pumpkin in but just as she did so the godmother changed it into a very nice gown. Then she told Cinderella to go and get some rat tails and these were changed into golden slippers. Then the godmother told her to go to the dance but be home at 12 o'clock or there would be no pretty gown. So Cinderella went to the dance and when she got there she saw the two proud girls dancing with princes, but when the princes saw Cinderella they stopped dancing with the sisters and danced with Cinderella. The sisters didn't dance again that evening. Cinderella danced until nearly 12 o'clock and all the princes there wanted to take her home but none wanted to take the other girls home, so one took Cinderella home and just as she got by the door it struck 12 and the pretty gown and slippers changed into the pumpkin

and the rat tails. Afterwards a prince married Cinderella and they lived happily ever after.

Dear Laddie—I have never written to you before and so I thought I would write now. I am a girl 11 years old and in the 6th grade. We have five horses four cows and eight calves. For a pet I have a cat named Bobby. I have one brother and one sister. We take the Michigan Business Farming and like it very much. I take lessons on the piano every Saturday. I am going to send you the story of "The Snow House That Jack Built."—Hazel Williams, Elsie, Mich.

The Snow House That Jack Built

Jack was a happy boy when he awoke one morning to find the ground covered with the first November snow. Billy Evans, who lived next door, came running over after breakfast, all glee. "Hello, Billy!" Jack cried, "isn't this great? Let's build a snow house." "All right," said Billy, "I'll get my shovel." "Don't need any shovel," replied Jack, who was making a snowball as large as his two hands could hold. "We'll make a lot of balls for it." "I see," cried Billy, quickly following suit. Both boys dropped their handmade balls into the snow and rolled them over and over. At each roll more and more snow stuck to the original ball, and in a short time several huge balls stood ready for use in building the snow house. With a stick Jack marked out on the snow the size and shape of the house. Jack and Billy then rolled the balls into place on this line. In the wall that formed the front of the house a space equal to the width of one ball was left for the doorway. The first row of balls in place, Jack and Billy set to work to make more balls which they placed on top of the first row. A third row was soon on top of the second row with one ball left out in end wall for a window. For a roof across the top the boys laid some old bean poles that they found in the garden. "Hurrah!" they both shouted as they dashed into the cozy house. "This is the best house this side of the North Pole."

Dear Laddie—I have never written to you before, so am writing now. My par-

ents take the M. B. F. and I always like to read the letters. We live on a 75-acre farm. I am 9 years old and in the 4th grade. We have 18 scholars. The name of our school is the Long Lake school. I have three sisters I have two War Savings Stamps. We have a dog and two cats. The dog's name is Heiney. One day we thought we would change his name because Heiney is Dutch, but he was named that when we got him. We thought we would call him Bob, but every time we called him Bob he would bark and act mad, so we still call him Heiney. I like the Doo Dads very much. I think I have written quite a long letter for the first time. Hoping to see my letter in print soon.—Gertrude A. Berryman, Fenton, Mich.

Dear Laddie—I have never written before. I like to read the letters the boys and girls write. I am 9 years old and in the 4th grade. My birthday is the 14th of May. I have not missed a day of school this term. This is only my third year of school. I like to read the Doo Dads very much. My oldest brother, Ralph, is in the army; he is at Archangel, Russia. My other brother, Leslie, was at Fort San Houston, Texas. He died October 18th last. I have one sister; her name is Beryl. She is married. Her husband is in France. We take the M. B. F. now.—Edwin Theodore Bennett, Coopersville, Mich.

Dear Laddie—I have been reading the stories in the M. B. F. this forenoon and thought I would like to write one too. We live on a farm of 120 acres. I have 11 rabbits, four ducks and two cats. We have three ponds on our farm and we can get up to the top of one of the hills and go clear across the biggest pond. I have about a quarter of a mile to go to school. I come home to my dinner every day. I like to go to school very much. Our school was not closed for the flu and all the children were glad. There are just 20 in our school. I am 10 years old and in the 5th grade. I will close and look for my story in the M. B. F.—Maynard Burdick, Schoolcraft, Mich.



Doc. Sawbones is always looking after the health of the Doo Dads. Things had been rather quiet in the Wonderland of Doo for a few days and so he had no operations to perform. But he felt that he must do something. He got the notion that some of the Doo Dads were getting too fat and that others were not keeping themselves as clean as they might, and so he set up a Turkish bath. Here it is in operation. First he has to steam the Doo Dads. See how those little fellows over the fire are sweating. As soon as they are steamed enough Poly takes them in

Doc. Sawbones' Turkish Bath

hand. See how he rubs and punches them. No wonder that little fellow on his back is so frightened-looking. Percy Haw Haw, the Dude, is waiting his turn in his bathrobe. He is wondering how he will be able to stand Poly's treatment. The next stage is to jump off that spring board into the icy cold water. Old Doc. is right on hand to see that no one escapes. One of his helpers is right there in the water to give the

Doo Dads a good scrubbing. Smiles, the Clown, is feeling the water. He thinks it is pretty cold for taking a plunge bath. He will soon know how it feels for that young rascal behind him is going to push him in head first. In the last part of the treatment the Doo Dads have to take that wonderful shower bath. From the looks of the Doo Dad who is in it now it cannot be very pleasant. Poly is also helping Doc. Sawbones.

His part is to give the Doo Dads a plunge bath with that wonderful contrivance. He was just letting one of them down when a young rascal with a catapult let fly and struck him on the hand with a stone. He had to let go, with the result that the Doo Dad is getting an awful ducking. See the horrified look on Sleepy Sam's face. Flannelfeet, the cop, thinks if there is anyone in the Wonderland of Doo who needs a bath, it is the dirty little hobo. After Doc. Sawbones and his helpers get through with him he will be a better looking Doo Dad.

Chicago Livestock Letter

Chicago, March 31, 1919.—It was thought by traders that a fairly liberal supply of cattle would reach Chicago Monday, because of the appreciation in steer prices registered last week. However, such was not the case, as only 15,000 cattle arrived. Demand was good and the market proved active at generally 15 to 25c higher prices, making quotations from 75c to \$1.25 higher than those prevailing a week ago or practically highest rates of the year. Bulk of the steer supply, which consisted of medium and short-fed offerings, sold between \$15 and \$18, while a strictly top-notch class was quotable upward to \$20.50.

The stress of spring work and scarcity of offerings ready for market were, in a large measure, responsible for the decrease in receipts. Last week's run of 40,800 cattle proved 18,000 less than the receipts of the previous week while for March this year approximately 197,000 cattle got in, a decrease of about 50 per cent., compared with last March. February's receipts were about 61,000 heavier than this month's total.

The advance in prices of late is bearing out our statement made recently that we did not think supplies would be of generous volume for some time, and we repeat that we think the market will at least sustain a highly remunerative basis until some reactionary force, such as large runs of grass cattle, arrive at the market.

Trade on the better class of cows and heifers now stands generally 50c higher than a week ago, while canners and cutters are only 15 to 25c higher. Prime yearling heifers and heavy kosher cows are finding outlet as high as \$16 per cwt., while best cutters are stopping at \$7.40 and best canners, \$6.25. Bull trade is about 25c higher than a week ago, best best bolognas selling as high as \$10 per cwt.

Last week's supply of calves, numbering 20,800, came within hailing distance of setting a record and prices declined sharply. Present rates are practically \$1.50 lower than a week ago. Bulk of the desirable vealers are selling at \$14 to \$15, with hand-picked specialties going at slightly higher rates. Stocker and feeder cattle are of limited supply and met with good call from country buyers, prices advancing 25 to 50c since last week.

On the midweek session of last week best hogs sold at \$19.60 per cwt., a decline of 25c since our last report. Since then, however, receipts have

decreased sharply and values have ascended rapidly, prices now ruling 30 to 40c higher than the low time of last week. The big hog run of early last week looked like a final clean-up so that farmers could get busy with their spring work and traders are of the opinion that runs will continue light for some time to come as yet. Top on the Monday market was \$19.90 within 5c of the banner price of the year. The following quotations prevail on other grades: Heavy, \$19.75 to \$19.90; medium, \$19.60 to \$19.85; light-light, \$18 to \$19.50; smooth heavy packing sows, \$18.65 to \$19.25; roughs, \$17.50 to \$18.60; pigs, good to choice, \$16.75 to \$18.

Predications are being made quite freely that \$20 hogs will be ushered in soon. Shippers and pig packers were very eager competitors on the initial session this week, and with prospects of only very meager runs the chances of establishing new record rates for this year are quite bright.

The sheep market maintained a fairly steady basis the most part of last week. However, towards the close a severe decline was enforced, a drop of 65 to 75c being registered from Wednesday to Friday. This big decline in values automatically curtailed receipt Monday and the trade responded with a 25 to 35c advance which made best lambs quotable up to \$20.10 per cwt. Some 95-lb. offerings reached that price.

Shorn lambs are showing up more freely now and are quotable up to \$17.25. Hardly enough aged sheep are coming to make a market. Prime matured wethers are selling as high as \$17.15 while yearlings are quotable at \$18.50 and prime fat ewes as high as \$15. Demand for feeding lambs is very limited and the trade slow. A medium to pretty good light kind of feeders sold at \$16 to \$16.50 while choice grades are quotable higher. Lambs of good shearing capacity had value as high as \$18.50.

After reading it one year I am convinced that it is a valuable asset to any farmer who is interested in his own and his brother farmer's welfare.—M. J. Smith, Jackson county.

Think your paper fine. Pleased you have the "stuff" to go after the middlemen as well as our political grafters. Now if the Non-Partisan League has any new tricks in the graft game which our two grand old parties haven't learned, they ought to be rewarded with a gold medal. I am expecting to see the two old parties wake up some fine morning to find themselves shaking hands with each other, wondering how it happened. Yours for a howling year.—G M. Grant, Huron county.

"Keep M. B. F. coming!"

YOU WANT THIS WEEKLY IN YOUR MAIL BOX EVERY SATURDAY, BECAUSE—

- it brings you all the news of Michigan farming; never hiding the plain facts.
- it tells you when and where to get the best prices for what you raise!
- it is a practical paper written by Michigan men close to the sod, who work with their sleeves rolled up!
- it has always and will continue to fight every battle for the interest of the business farmers of our home state, no matter whom else it helps or hurts!

One Subscription price to all! (ONE YEAR.....\$1) No Premiums, (THREE YEARS...\$3) No free-list, but worth (FIVE YEARS....\$5) more than we ask.

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Keep M. B. F. coming to the address below for..... years for for which I enclose herewith \$..... in money-order, check or currency.

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Tobacco Co.

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Get it straight that what you've hankered for in pipe or cigarette makin's smokes you'll find aplenty in P. A. It never yet fell short for any other man, and, it'll hand you such smokesatisfaction you'll

think it's your birthday every time you fire up! *That's because P. A. has the quality!*

You can't any more make Prince Albert bite your tongue or parch your throat than you can make a horse drink when he's off the water! Bite and parch are cut out by our exclusive patented process!

You just lay back like a regular fellow and puff to beat the cards and wonder why in samhill you didn't nail a section in the P. A. smokepasture longer than you care to remember back!

Buy Prince Albert everywhere tobacco is sold. Tippy red bags, tidy red tins, handsome pound and half pound tin humidors—and—that clever, practical pound crystal glass humidor with sponge moistener top that keeps the tobacco in such perfect condition.

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Knife on the Fly-Wheel Type Cuts as fast as you can feed it and elevates to any height with small power. Has a capacity up to 20 Tons per hour. Blower and Cutter on one wheel—made of cast steel and unbreakable. Can't choke or "blow up". A dozen other good features on 1919 model makes this machine the simplest, safest, most efficient machine you can buy. Write for catalog and complete details.

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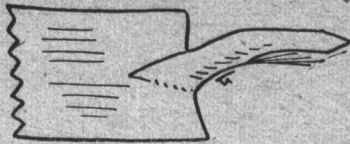
FLORIDA LAND FOR SALE. 80, 200 or 300 acres good garden soil, near Brooksville, at \$7 per acre. Write Owner, I. M. Hall, Los Angeles, Calif.

LABOR SAVING HINTS

(Readers are invited to contribute to this department. Ideas and descriptions of labor-saving devices will be paid for according to length and practicability.)

REPAIRING WORN-OUT SHOVELS

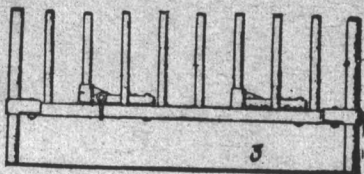
What do you do with your shovels when they become worn and cracked? The sketch shows a method of repair-



ing them and making them give much more service. Lay the shovel on an anvil and with a cold chisel cut notches in it as shown. Then file the edges of the notches and flatten any irregularities that may have occurred by pounding them on the anvil.—A Reader, Big Rapids, Mich.

PIG GUARD

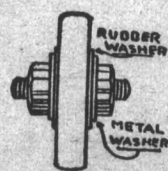
This guard is fastened out from the wall to prevent the sow from crushing her young and is moved back a-



gainst the wall when not in use. It is made of iron and the horizontal bar can be adjusted as to height. (Hunt-Helm-Ferris & Co., Harvard, Ill. U. S. Patent 1,283,712).—O. J. Lynde, Canada.

RUBBER WASHERS SAFEGUARD EMERY WHEEL

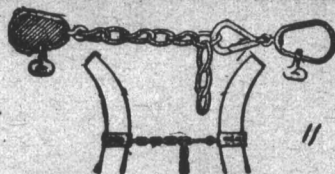
A very good way to prevent fracturing of the emery wheel due to too much tightening of the nuts is to use rubber washers as shown in the sketch.



The two rubber washers are cut from rubber 1/8 in. thick and somewhat larger than the metal washers. A hole for the shaft is then made in the washer. Then place one of the rubber washers on each side of the emery wheel and then the metal washers. The nuts are then put on and tightened. When rigged up in this manner the emery wheel will give better satisfaction and stand greater strains. The rubber allows a certain amount of flexibility and at the same time holds the wheel firmly. The sketch shows everything clearly.—P. A. G., Big Rapids, Mich.

HAME FASTENER

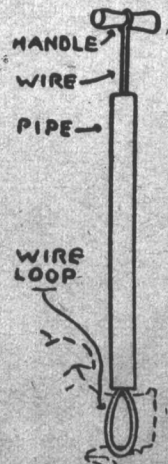
The advantages claimed for this fastener are: that it can be readily ad-



justed vertically, that it fits collars of any size, and that it is very durable since it is made of metal. (V. W. Wilson, Brooklet, Georgia. U. S. Patent 1,285,530).—O. J. Lynde, Canada.

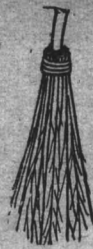
TO RING HOGS

For those who have had trouble in ringing large hogs here is something to help. Take 8 feet of 1/4 inch pipe. Put a 5-16 in. rod through it and bend the top for a handle and drill a hole thru the bottom large enough for bailing wire. Drill one about 2 inches from the bottom of the gas pipe same size. Now make a loop about 6 or 7 inches long by fastening a wire from the hole in the rod to hole in gas pipe. About 9 inches of wire. To use—Slip the wire over the hog's upper jaw then pull up on the rod.—W. G. R., Moscow, Mich.



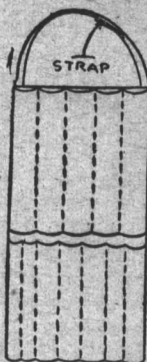
HANDY BROOM

A handy broom for the garage, lawn, barn, etc., is shown in the illustration. Secure 50 to 60 twigs and carefully trim them at one end; tie them securely with a strong rope and drive the pointed end of a broom stick into the tied end. The other end of broom is left untrimmed as shown.—P. G., Big Rapids, Mich.



HANDY TOOL BAG

A convenient tool bag for use when working about the garage, tractor, auto, machinery, etc., is shown in the sketch. It consists of an old grain bag cut off about 15 inches from the bottom. It is then sewed across 6 inches from the bottom. The pockets for the tools are next made by sewing up and down as shown. The upper pockets are larger allowing larger tools to be carried. A strap is attached to the top for carrying the bag and the whole is complete.—P. T. G., Big Rapids, Mich.



TRAILER

This invention provides a trailer connection which keeps the floor of the trailer horizontal no matter how high or low the connecting device on



the puller may be. This is done by making the trailer tongue in two parts which may be bolted together at any angle vertically. (Warner Mfg. Co., South Beloit, Ill. U. S. Patent 1,285,929).—O. J. Lynde, Canada.

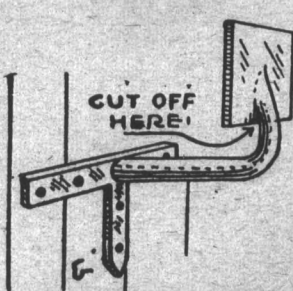
FORK HANGER

You will save many a broken fork handle by having one or more of these handy fork hangers in every part of the barn where the fork is used. Take an old horse shoe, cut off the toe, calk and bore a hole through the center for a nail or spike. Bend up ends and faster to a beam by putting two nails or spikes in each side and one in the center.—W. G. R., Moscow, Mich.



GOOD HARNESS HOOK

Take an old buggy step. Cut off the step as shown in illustration and fasten to beam with spikes or screws.—W. G. R., Moscow, Mich.

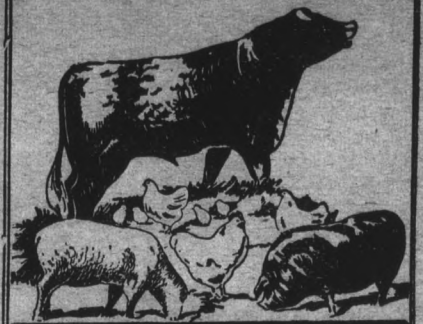


FARM HOUSE

The construction of this farm house and others, is described in a bulletin on "Farm Houses" issued by the National Lumber Manufacturers Association, Chicago, Ill. Write for it if you are interested.—O. J. Lynde, Can.



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THE BROWN FENCE & WIRE CO., Dept. 328 Cleveland, Ohio

April 5, 1919

MICHIGAN BUSINESS FARMING

U. S. WEEKLY MARKET REPORT

Values Tend Upward; Movement is Active

Potatoes, cabbage and sweet potatoes advanced. Apples, oranges and onions ranged steady to firm. Most leading lines of southern truck tended slightly to moderately upward. Total movement increased to 7,143 cars, most of the gain being in potatoes and oranges. Gains in sweet potatoes, lettuce and strawberries were more than offset by decreases in movement of apples, old cabbage, celery, grapefruit and onions. Other lines showed little change in volume compared with last week. Commercial stock of miscellaneous dried fruits January 1 were 11 per cent. less than on January 1, 1918.

Potatoes Much Higher

Early potatoes starting from San Benito, Texas district. Movement from Hastings district, Florida, expected to begin this week. General advances of 10 to 40 cents occurred. Markets were especially strong in the Rocky Mountain section. Colorado No. 1 sacked white stock gained 40 cents, closing \$1.65 to \$1.75 f. o. b. Greeley and gained 25 to 35 cents in south central carlot and jobbing markets ranging \$2.25 to \$2.50 per cwt. No. 1 sacked burbanks again advanced 10 cents at northwestern shipping points, closing at \$1.60 to \$2 f. o. b. No. 1 sacked white stock strengthened further at Wisconsin and Minnesota shipping points, closing at \$1.50 to \$1.65 f. o. b. Minnesota Red River Ohios advanced fully 10 cents ranging \$1.30 to \$1.50 f. o. b. shipping points. Tracks and warehouse sales by growers in western and northern producing sections gained 15 to 35 cents, ranging at the close \$1.35 to \$1.55. Northern stock strengthened slightly in Chicago carlot markets, closing at \$1.65 to \$1.80 per hundred-weight and advance in leading jobbing markets to \$1.85 to \$2.10. New York round whites advanced 10 to 20 cents, closing at \$1.82 to \$1.87 per cwt. in bulk and continued to advance in consuming markets, ranging 25 to 30 cents higher at \$2 to \$2.45, reaching top point in Philadelphia. Maine Green Mountains advanced about 5 cents in shipping sections, reaching \$1.60 to \$1.68 f. o. b. sacked and gained 10 cents in leading distributing markets, ranging \$2 to \$2.35. Nearly all markets closed the seven-day period strong and active. Shipments increased with 3,339 cars compared with 2,901 cars last week. There were also 3 cars of new potatoes. Canadian imports were light.

Cabbage Advance Continues

Prices of old northern stock made further gains in leading terminal markets, ranging \$55 to \$80 per ton bulk, an advance of \$20 and New Orleans quoted top of \$110. Similar gains were made in values of new stock, southern California Winningstadt reaching \$70 to 85 bulk f. o. b. shipping points and ruling \$90 in St. Louis. Various California stock advanced about \$2 in consuming markets, reaching \$4 to \$6 per crate. New Florida cabbage advanced moderately in producing sections, ranging \$3.50 to \$3.60 per barrel crate f. o. b. and gained about 25 cents in northern consuming markets, ranging \$3 to \$3.25 per 1½ bushel hamper. Texas stock exceeded \$100 per ton in several middle-western jobbing markets. Shipments of old stock decreased to 61 cars compared with 108 last week, and shipments of new stock were 279 cars compared with 261 cars last week.

Onion Market Slightly Weaker

A few scales of sacked yellow stock from cold storage in western New York shipping sections were quoted at \$4 per cwt. f. o. b. General range of good sacked yellow stock in consuming markets was \$3 to \$4.25 although quotations in a few markets weakened to a range of \$2.50 to \$3. California Australian Browns still ranged \$3 to \$3.50 per cwt. f. o. b. shipping points, with confident tone prevailing. Range in consuming markets was fairly steady at \$3.50 to \$4.25 for jobbing sales and \$5 to \$6.50 for sales of small lots in south central markets. Shipments continued to decrease with 126 cars compared with 153 last week and 200 the week preceding.

Better Tone Prevailing in the Bean Market

Values strengthened slightly with many advances of 25 to 50 cents per cwt. Michigan white stock, handpicked basis, advanced 25 to 50 cents ranging 5 to 6 per cwt. cash to growers. Eastern handpicked sacked white pea beans strengthened to a range of \$7 to \$7.75 in consuming markets, advancing slightly in New York, Philadelphia and Chicago. Southern California sacked small whites also advanced 25 to 50c., closing at \$6 to \$6.25 to growers and ranging \$7.50 to \$7.75 in leading terminal markets. California Limas advanced to \$6.50 to \$6.75 cash to growers and ranged firm in consuming markets at \$7.50 to \$8.50. Colorado Pintos ranged firm at \$4 per cwt. in bulk to growers and continued nearly steady in consuming markets. Shipments were 109 cars compared with 120 last week. Stocks of dry beans held by wholesale dealers, manufacturers and storage establishments Jan. 1 were 12,711,539 bushels. Comparative stocks were 41.5 per cent. more than for Jan. 1, 1918. Stocks of dry peas were 2.8 per cent. less than for Jan. 1, 1918.

Apples Continue Dull and Steady

Markets were rather inactive, but tone was firm and values held about steady for good stock. New York Baldwins, A-2½, from cold storage ranged \$9 to \$10.50 in most leading consuming markets. Southern Bendavis A's, from cold storage, tended slightly upward, ranging \$8 to \$9.75. Northwest extra fancy boxed Winesaps were firm in consuming markets at \$4 to \$4.75, while sales of small lots in southern and south central markets ranged \$4.50 to \$5.50. Shipments of barreled stock decreased to 218 cars compared with 293 cars last week and 252 cars the corresponding week last year. Boxed apples decreased to 87 cars compared with 103 cars last week. Total shipments of apples to date 56,008 cars, compared with 58,926 the corresponding date last year.

BUSY DAYS FOR MILLERS

Flour markets are humming with activity. Instead of the situation noted a few weeks ago, when the larger buyers, and the smaller ones to a great extent, withheld purchases in the hope of witnessing declining prices or because of fear that the market would suffer a sharp break, the trade is buying eagerly. Consumers are gathering in a considerable quantity of flour to tide them over a period that is expected to witness sharply higher prices than now prevail. The attitude of the trade on the whole is bullish, the result, no doubt, of the surprising strength of the cash wheat markets of the country, particularly the winter wheat belt of the southwest.

Trade activity prevails in both domestic and export markets. The Food Administration Grain Corporation has purchased a total of more than 4,000,000 barrels of flour since the middle of February, at which time export buying by the government was resumed. Winter wheat millers are sharing only to a very small extent in the purchases of flour by the Barnes organization, southwestern flour producers considering the prices at which the government buyers obtain their supplies unsatisfactory and unprofitable. Domestic trade has improved to a point where mills quite generally are required to operate at full capacity to meet the needs of their buyers.

The present period of activity in flour had its inception about a month ago, or soon after the Grain Corporation resumed flour purchases for export. At the outset of the renewed federal flour buying, the low prices tended to depress mills and their customers, as the Grain Corporation obtained supplies actually below the cost of production. But, as the buying for export proceeded, prices advanced gradually and then sharply. In the meanwhile, consumers who had deferred purchases began to regain confidence, and now the milling industry is enjoying an active and profitable demand for flour. No cessation in this activity seems probable within the next 60 days.—Rosenbaum Grain Review.


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People who complained about the excessive cost of coal during the past winter—and that includes about every coal user in the country—will be glad to know of a plan which will enable them to save many dollars a year on their coal bills. The plan is to have the coal shipped direct from the mines, eliminating all the middlemen's profits—saving hauling expenses, also. This has been made possible by the Bernice Coal Co., 808 Come Bldg., Chicago. This concern has been selling in carload lots to manufacturers, owners of office buildings, department stores, greenhouses, and other large consumers all over the country, and now enables the small consumer—the household, storekeeper, etc.—to avail himself of the same economies and advantages in coal buying.

All kinds of domestic and steam coal are supplied, being shipped from mines located in the West, the East and the South. The purchaser pays for his coal after its arrival. Quality, quantity and service are guaranteed. As this is an opportunity to save considerable money, and as spring is the most favorable time to lay in the winter's fuel supply, every coal buyer should write the Bernice Coal Co., at once, stating what kind of coal he uses and how much, and asking for quotation.—(Adv.)

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FARM FOR SALE—130 ACRES, AT \$50 per acre; 8-room house, 2 good wells, barn 45 by 76 ft., granary, hog house and hen house and sheds, 300 bearing fruit trees, 90 acres of clay loam under cultivation free from stumps and stones, 30 acres pasture and sugar bush, well fenced all level land, good school and store on the same corners, good gravel roads to all towns. All buildings are on stone foundations; good basement and wind mill in Oceana county, Mich. Reason for selling is old age. Box B. in care of Business Farmer, Mt. Clemens, Mich.

FOR SALE—100-ACRE FARM; MIXED black loam and clay, easily tile drained; five miles from market on good roads; 80 acres under plow and 7 acres in wood-lot, the remainder in pasture. Good barn, house, tool shed, granary 20 x 30, 1/2 story, and other buildings; a splendid flowing well of sweet water. I have two orchards in bearing and other small fruit. Write L. K. Hendrick, Hemlock, Mich., for fuller description and terms.

FOR SALE—SACRIFICE; A GOOD 80-acre farm for home. Greeley Hutzler, Manton, Michigan.

MY HOME OF 40 ACRES FOR SALE. Price \$1,100. A. Neal, owner, White Cloud, Mich.

80 ACRES, ABOUT 50 CLEARED and stumped; good gravel clay loam soil; fences fair; on good state award gravel road, five miles from good market; short distance to school; good orchard; timber for fuel; small frame house; small barn; good well. Price \$2,500; \$1,000 down. Write W. F. Umphrey, Evart, Mich.

FARMS FOR SALE—BIG LIST OF farms for sale by the owners, giving his name, location of farm, description, price and terms. Strictly mutual and cooperative between the buyer and seller and conducted for our members. GLEANER CLEARING HOUSE ASS'N., Land Dpt., Gleaner Temple, Detroit.

\$1,200 DOWN SECURES 159 ACRES, pair horses, 10 cows and wagons, harness long list implements, hay, straw, seed grain, potatoes, etc.; 80 acres loam fields, clay subsoil, spring, creek-watered 30-cow pasture, valuable wood, timber, great amount fruit; large two-story house, big basement stock barn, silo, three hay barns, granaries, tenant house, hog, poultry houses, all good repair, only 1 1/2 miles to creamery and town. To settle now, \$4,600 takes all, easy terms. Details page 33 Spring Catalog Bargains '19 states, copy free. Strout Farm Agency, 814 B. E. Ford Bldg., Detroit, Mich.

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SEED OATS, BEST MICHIGAN northern oats. Buy good seed and grow 80 to 100 bushels per acre. Price, 90c per bu. Sample free. Mayer's Plant Nursery, Merrill, Mich.

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YELLOW DENT SEED CORN; heavy yielding; butted and tipped; shelled 56 lbs., \$5; sacks free with 2 bushel or more. Germination test above 90%. Leo M. Worden, Ionia, Mich., R. F. D., No. 4.

ONION SETS, CHOICE HAND SE- lected, reds. Postpaid, 2 lbs., 35c.; 5 lbs., 75c.; quantity price on application. Thelo Gifford, Winn, Mich.

FOR SALE—SWEET CLOVER PURE white; official list 99.94% pure seed. No foul seed. Price \$13.50 per bushel; 75c. for new bag. Ref. J. W. Nicolson, M. A. C. C. A. Thomas, Shepherd, Mich.

SEED CORN—"PICKETT'S" YELLOW Dent, early maturing selected seed. \$3 for 56 pounds shelled corn. E. N. Ball, Hamburg, Mich.

CHAMPION BEARLESS, MANS- bury, Silverking, Bearded Early Scottish Chief White Oats, prices cheaper for the best seed. A little pure Marquis Spring Wheat. Get circulars and prices. Frank Bartlett, Dryden, Michigan.

STRAWBERRY PLANTS, CHOICE rural collection. 50 early, 50 everbearing, 50 late, all postpaid, \$2.00. Strawberry Farm, Niles, Michigan.

SENATOR DUNLAP STRAWBERRY Plants—Money-Makers. \$3.00 per 1,000; 500, \$1.75; trimmed. J. E. Hampton, Bangor, Michigan.

FOR SALE—ITO SAN SOY BEANS. Fine quality. G. P. Phillips, Bellevue.

EVERBEARING STRAWBERRIES, Progressive and Superb; 100 plants \$1.50 postpaid. 17 Spring Varieties at 50c per 100. Send for catalog of Small Fruit Plants. Hardy Shrubs, Roses, etc. George H. Schenck, Nurseryman, Elsie, Mich.

PEDIGREED GRAINS—WISCONSIN Pedigreed Barley (6 rows) and Worthy Oats. Pure, cleaned, sacked, ready to sow. Fifth successful year in growing pedigreed grains. Prices and information on request. Fertland Farms, R. 4, Mt. Pleasant, Mich.

I HAVE 100 BUSHELS OF GOLDEN Wine Seed Peas to offer. They are a good variety; will yield 25 bushels per acre. Price, \$3 per bushel; sacks at cost. A. M. Caverly, Prescott, Mich., R. 2.

FOR SALE—PERSONALLY GROWN Late Potatoes or Rural Russett Seed Potatoes, field run, graded over 1 1/2 inch screen. Field inspected; grown on new ground, practically disease free, \$1.25 per bushel sacked F.O.B. Supply limited. Order early. A. M. SMITH, Lake City, Michigan

MISCELLANEOUS

OVERLAND ROADSTER BARGAIN— 4-cylinder, 1917 model, good condition mechanically. Can be repainted and new top put on for \$50, but is perfectly serviceable as it stands. Electric starter, new battery, two extra over-sized tires. Three hundred dollars takes it, here at Mount Clemens. Box G., Michigan Business Farming, Mt. Clemens, Mich.

FOR SALE—COMBINATION 2 AND 3 bottom tractor gang plow. Plowed less than 25 acres. Cheap for cash. Wm. C. Howe, East Jordan, Mich., R.F.D. No. 2.

FOR SALE—COMBINATION TWO and three Tractor gang Plow. Plowed less than 25 acres; cheap for cash. Wm. C. Howe, East Jordan, Mich., R. 2.

FOR SALE—A SECOND-HAND Belle City Incubator and Brooder in good condition. Price, \$7. E. J. Allman, Lachine, Michigan, R. 3.

TOO LATE TO CLASSIFY

FOR SALE—FIVE FULL BLOOD- red Bulls, 3 Short Horns, and 2 Polled Durhams; 1 Polled Durham, 18 months old; 1 Polled Durham, 6 weeks old; 2 Short Horns, 12 months old; 1 Short Horn, 6 weeks old. Clarence Wyant, Berrien Center, Mich., R. 1.

Apr. 19

IF the yellow address label on the front cover reads this, or any month preceding—IT'S TIME TO RENEW!

Clip it out, and send one, two or three dollars in bills, money-order or check for a one, three or five year renewal, so you won't miss any important issues of your Michigan Business Farming, Mt. Clemens

Pass it on to a Neighbor

Any subscriber who happens some week to receive an extra copy of M. B. F. can "boost the cause" if he will hand it to a neighbor, who may not be a regular reader.

VETERINARY DEPARTMENT

I have two young cows whose milk possesses a very offensive odor. Their breath smells the same as their milk. They are somewhat off their feed, and have shrunk more than half in the amount of their milk. I am feeding a scant bushel of ensilage with a little cotton seed meal sprinkled on it morning and night, and clover hay at noon. The cows referred to, have rather gone back on the ensilage, but eat the hay very well. What is the trouble, and what shall I do for it?—C. G. D., Charlotte, Mich.

There is something about the ensilage which has caused the condition to which you refer; you should give a good saline purgative and follow up with internal antiseptics; I would recommend the following: Magnesium sulphate, two lbs. dissolved in two quarts of hot water; let cool and give slowly to each cow. When bowels become normal the following prescription will do the business: Nux Vomica F. E. ounces two, Salol ounces one, Aque., add sufficient to make eight ounces and give two tablespoonfuls morning and night. Discontinue the ensilage for a few days.

I have two calves about two months old which have the scours. Could you give me through the columns of your valuable paper a remedy for same and oblige—E. N. Gagetown.

White scours in calves is a disease which, if neglected, terminates fatal in a great many cases. The cause is an internal infection and can only be controlled by a powerful antiseptic such as Diluted Aromatic Sulphuric Acid and Camphorated Opium, equal parts. Calves two months old should be given two teaspoonfuls of each thoroughly mixed in one half pint flour gruel every four hours till bowels are normal.

I have a horse which caught a very bad cold when coming down with the distemper. His throat swelled so near shut the doctor put in a tracheotomy tube in his windpipe so he could breathe. He appears nearly over the distemper, but when holding the hole shut it is rather hard for him to breathe and he makes a slight roaring noise. Can you tell me if there can be anything done? Can you give me any preventative for distemper?—S. M. G., Sanilac county, Mich.

Have your veterinarian examine the opening made in the trachea; should there be a small portion of one of the rings of cartilage forced in the opening of the trachea you would get a whistling sound similar to what you have described; should it be in the throat a strong blister should be applied to regain the lost power of the cartilages there. The only preventative treatment for distemper is vaccine which in injected subcutaneously. Obtained from Parke-Davis Co.

Will you please publish in your next issue of the M. B. F., what causes lump jaw and the remedy for it? Is it contagious? and should the cow be taken from the other animals? Is such an animal fit for market?—Lee Williams Wheeler, Mich.

Actinomycosis ("Lumpy Jaw") is an infectious disease, although only one cow in a herd of dairy cattle may have the disease in a well marked form and not another animal in the herd become affected; but often more become affected, the number sometimes including twenty-five per cent. of large herds. When the disease makes its appearance at the angle of the jaw it is in the form of a smooth tumefaction or lump, or "bunch." In the early stages this bunch increases in size, becomes more firm, and usually tends to become fixed to the bone. Later the center becomes necrotic and the typical, narrow-colored pus is discharged. If the case is not checked at this time it may progress until the bone itself becomes involved and treatment then becomes difficult. In the early stages treatment is often very satisfactory; Tr. Iodine should be en out, and the meat then well dried.

be applied to the entire enlargement once daily and internally give two dram doses of Potassium Iodid morning and night. This treatment should be kept up for at least a month. As this is a local disease the affected part should be removed where the carcass is used for food. In cases where there is a discharge the affected animal should be isolated.

I have a flock of 15 sheep. They are pulling their wool out in bunches. Would like to know what is the cause and is there a remedy for it?—J. A. Bartlett, Capac, Mich.

Your sheep are affected with a disease known as "Alopecia" commonly known as Baldness; the only symptom noticed is the falling out of the wool; this is frequently seen on the range, and to the inexperienced, looks like scab. Ewes that have lost their lambs, had severe attacks of mammitis or "blue bag" are common victims. Sometimes lack of food and exposure are the contributing factors. No treatment has been found successful, except to let it alone, and in case of old ewes, prepare them for market.

I notice you answer some questions of live stock ailments. Please answer mine in your valuable paper. I have a horse that seems to be rather weak in the hind ankle joints. As he goes to take foot forward the ankle jerks forward some. Have heard that eggs in strong vinegar was good. I also have a heifer with warts; one wart on breast has a neck about one inch long, wart 1 1/2 inches across it.—W. M., Middleton, Mich.

The weakness in ankle joints causes your horse to knuckle; this does not materially injure an animal except that the joints become enlarged; the condition can usually be overcome by applying a suitable ointment and allowing a short rest. Use the following: Pulv. canth., Hydrag. iod. rubr. aa., dram 2, Adeps ounces 3. Apply all around ankle joints rubbing well in for five minutes; after forty-eight hours apply lard once daily till hair starts.

Can you through the columns of your department advise me in regard to a heifer that I would like to breed, but does not come in heat. She is a young animal; has had two calves with no trouble either time and seems to be in a healthy condition. I have fed her a box of the much advertised Kow Kure but it has no effect in this case.—Carl B. Middleton, Kalamazoo.

You should have this heifer examined by a competent veterinarian; the uterus may be displaced, or she may have cystic ovaries. There is another and quite common cause of this condition, namely, infection of the uterus from retained afterbirth; this is usually characterized by a fetid discharge for some time after calving; an afterbirth should never be left longer than twenty-four hours without proper attention.

We have had a nice big cow die, also a fat sheep and I want to prepare them into beef scraps for my chickens. The sheep was hurt and died after giving birth to three immature lambs. The cow slipped on the ice and her death was due to the same cause, so the meat isn't diseased. I do not know how to prepare the meat for scraps and the warm weather will be on before I can feed it all up so if you can let me know how to cure it I will surely appreciate your kindness.—Mrs. J. D., Lincoln, Mich.

To prepare meat properly for scraps for chickens requires specialized machinery. First, the meat must be thoroughly cooked and then all moisture and grease extracted by pressure, after which the meat is dried and will then keep. It would be extremely difficult upon the farm to press the oil and moisture from this meat, and, also, provide artificial means of drying.—Geo. A. Brown, Professor of Animal Husbandry.



WHY A SILO?

There are thousands of stock keepers in this country who need a silo and have needed it for several years. They either have not answered this question or have answered it in the negative, or it may be they have postponed the matter, or felt that they could not afford the investment. The silo should be considered a part of the necessary equipment of a dairy or a stock farm for it has to do with the success of the business. The largest item of expense in keeping a herd of cattle is the feed bill and therefore it is the first question demanding our attention. Labor comes next but the feed bill is generally twice that of labor, and the silo strikes directly at this overhead, making a big saving in the cost of feeding. It also produces better young stock and increases production. Practically all of the great milk and butter records of the country are held by cows that have been fed silage. Large, growthy, vigorous young stock are easily and cheaply obtained by the liberal use of silage. If you have a silo you may need to answer this question in order to find if you need another. It is surprising to find on our best stock farms not one but often five and six silos.

It is difficult to determine accurately the saving made by the silo when the cost of the ration is considered for so many conditions enter in which makes a variation in the result, but it is safe to assume that from ten to twenty-five dollars can be saved in the cost of feeding a cow one year by the use of the silo. It is also safe to say that with silage the cost of butterfat can be reduced from six to twelve cents per pound and the cost of producing a hundred pounds of milk from thirty to fifty cents, a hundred pounds of beef from a dollar to two dollars, and a hundred pounds of mutton from seventy-five cents to a dollar and a half. With such a saving it can easily be figured that a silo would soon pay for itself where ten or twelve cows are kept.

The convenience of the silo is well recognized by men who have given it a thorough trial. By properly arranging the silo and the barn it is possible for one man to feed forty cows in thirty minutes and the work can be done with ease and without the use of a horse or wagon. The silo can be considered a time and labor saver.

The silo is the most economic equipment for the storing of silage. When space is considered eight times more feed can be kept in a silo than in a haymow. It would be difficult indeed to construct a barn which would hold two or three hundred tons of forage, while it is an easy and simple matter to put up a silo that would hold this amount. There is less deterioration in holding over silage than in holding over dry fodder. I have seen excellent silage that was six years old and this same silage was fed successfully to cattle who seemed to relish it more than new silage.

The silo stands ever as insurance against forage failures, especially damages by frost and drought. Any kind of feed which can be grown, can be saved in the silo though it may not mature a grain crop. It makes farming more secure and warrants a cheap and excellent forage for all kinds of stock is both winter and summer seasons.

The heavy bulk feed on a stock farm should be produced at home, and the concentrates, such as grain and mill feed, can best be purchased. With the fertilizer, which is always found on the stock farm, big crops of forage can be grown. It is not uncommon to see corn fodder produce as much as twenty tons of silage per acre. This feed, grown close at home, can be

rushed into the silo and the bulky ratio for the year is supplied.

Silos should be provided for both winter and summer. Consider carefully the earning of your pasture. Six times more feed can be furnished on pasture ground if it is put in the form of corn and siloed. The pasturing of land worth a hundred dollars and up per acre is questionable, especially in sections where summer droughts are frequent. As Mr. Van Pelt recently stated, "The summer season is more severe on our dairy cows than the winter." It is fortunate that our summer is only four months long for if it were eight the chances are we would force our herds dry or starve them to death. The summer silo in many sections is needed more than the winter. It is better to build two or three silos than one big one. Like canned fruit, make your silos so you can feed off a good layer each day and thus keep the forage fresh and sweet. Why a Silo? can be answered by considering all of these items, considering the cost of feeding an animal, the cost of production, the cost of your land, the earning power of your farm. Scientifically stated, the silo will lower the cost of digestible carbohydrates, it will make your acres earn more, your stock earn more, your work easier, your storage greater, the production of your cows higher, your farm richer, and with these advantages you will derive more pleasure and profit from your labor.—A. L. Haecker.

GOVERNMENT DAIRY HERD HAS NEW QUEEN

A new queen reigns in the herd of Holsteins on the Government Experiment Farm at Beltsville, Md. She is as unassuming and peace-loving as any of her subjects, although she bears the name Calamity Wayne Pauline 2nd., and has just completed a test in which she produced in a year more than 11 tons of milk. In 365 days she produced 22,547.8 pounds of milk which averaged 3,805 per cent. butter fat, the total fat being 855.4 pounds.

This animal was selected by dairy specialists of the United States Department of Agriculture from a Michigan herd in July, 1917. She was brought to the Beltsville farm, where she produced a heifer calf and was started on her test December 7, 1917, at the age of 8 years. The test was run through the coldest winter that section had experienced in 40 years, and a summer that was extremely hot. The test for advanced registry was conducted under the rules of the Holstein-Friesian Association. During the year the animal was handled by two different herdsmen.

A son of Calamity Wayne Pauline 2nd has been placed at one of the government substations, and one of her half-sisters is making a fine record at the Michigan Agricultural College. Calamity's 305-day record was 19,246.6 pounds of milk, averaging 3.7 per cent. butter fat, making a total of 718.14 pounds of fat.

All the dairy cattle on the Beltsville farm are used for experimental purposes and will be given at least two advanced registry tests to determine their capacity for production.

DEAD OF WINTER BEST TIME TO CUT POSTS

Yours of the 8th, where a subscriber asks when to cut oak posts to make them resist decay. Mr. Lillie seems to think it makes no difference as to the time of year, but my experience is that posts cut in the dead of winter, frozen hard, will last longer than posts cut when the sap forms in them.—F. J. Somerville, Jackson county.

A CHEERFUL HOME-COMING

Home means comfort and good cheer when there is a CALORIC FURNACE in the basement.

Your slippers, pipe, favorite reading and the CALORIC are a combination that make you forget the howling wind and drifting snow. And how the wife and children appreciate such a home—warm and comfortable in every room.

More than 50,000 satisfied users testify to the splendid success they have had with the



This is the furnace which has revolutionized heating. Instead of using numerous pipes and registers, it heats the entire house through only one register. It is therefore easily installed in new or old houses, usually in one day, without interfering with your present heating arrangements.



The CALORIC heats all types of homes up to eighteen rooms, also churches, stores, factories, halls and other buildings. It burns coal, coke, wood, gas or lignite, and, because of special patented features, saves from 1/3 to 1/2 your fuel. The CALORIC is sold under the Monitor Iron-clad Guarantee, which insures the purchaser thorough and economical heat.

See the nearest CALORIC dealer or send for our new catalog. If you write us, we will send you the names of some CALORIC users in your locality so that you may investigate the claims we make.

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Add CANE MOLA to roughest Feeds



Reduces Feeding Costs to a Minimum

Give it a Trial

If you are not already using Cane Mola, here is a special inducement for you to try it out. Send in your order for a barrel or more today. If you do not find it as represented, let us know and we will return your money. Cane Mola is shipped in steel bound barrels of about 630 pounds net (54 1/2 gals.) No danger of breakage. Feeding instructions and booklet on economical feeding FREE.

Not a beet molasses—not that bitter blackstrap; not a mixed feed—just the straight goods.

SPRINKLE ON ROUGHAGE

Cane Mola, diluted with water and sprinkled over your straw, corn fodder, hay, silage, etc., will turn these into feeds of high value—100 pounds of Cane Mola has the food value of 100 pounds of cornmeal.

MIX WITH GRAINS FEED TO HOGS, HORSES

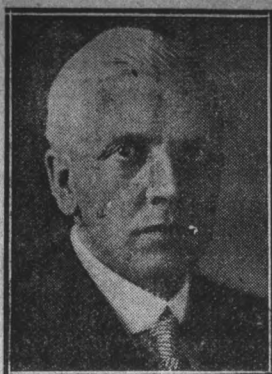
Watch how much quicker hogs will take on weight. Observe the greater vim of your horses. Cane Mola will keep your stock in splendid condition. It will grow up your young stock in fine shape.

COWS YIELD MORE MILK

Cane Mola is endorsed by American Milk Producers Association and other authorities as a great milk producer and economic feed. Feed about 2 pounds a day to cows—4 pounds to horses—1 pound to each hundred weight of swine.



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will disperse his entire herd of

60 Holstein-Friesian Dairy Cattle

(None reserved)

on his farm one mile east of Wayne, Michigan, on Michigan Avenue, Ann Arbor car line, 16 miles west of Detroit, on

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This herd contains some of the best Holstein strains. Two daughters of Concordia Houwtji Sunlight DeKol made a butter record of 31.69 and 654.10 lbs. of milk in seven days.

50 - FEMALES - 50

A few young Bulls from well bred dams

All animals are tubercular tested.

This entire herd butter-fat tested by Huron Valley Creamery was 3.08.

Transfer papers same day of sale.

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Send for Catalogue, 824 Ford Building, Detroit Mich.

Two Daughters
Concordia Sunlight
Korndyke DeKol. Butter record 7 days, 31.69; milk record, 654.10.

One Daughter
Flint Ferndale Aggie. Butter record 7 days, 31.05; milk record, 487.90.

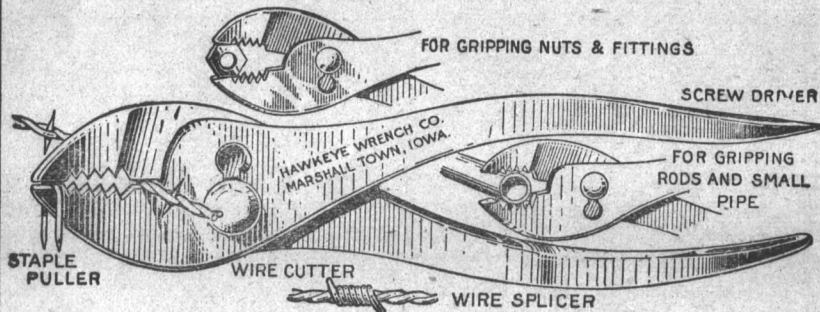
One Daughter
Pontiac Agnes Korndyke. Butter record at 2½ years old, 2.05; milk record, 326.50; average butter fat test, 4.91.

One Daughter
K. P. Queen Burke. Butter record 7 days, 28.85; milk record, 503.80; average butter fat test, 4.58.

One Daughter
Princess Sunny Mede Sieges, 5 years old. Butter record 7 days, 31.40; milk record, 467.20.

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This handy combination pliers will cut and splice wire, pull staples, grip pipe rods and nuts, and has a screwdriver attachment. The "Hawkeye" is drop forged and case hardened, highly nickelled. It will work in closer quarters than any wrench, and is light, compact and easily carried in the hip pocket.

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White Orpingtons.
Single Comb Black Minorcas.
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Eggs from any of the foregoing breeds for sittings or in quantities for incubators. Special price on 500 to 1000 eggs during season, and on Eggs for Broilers. Eggs from White Pekin Ducks and Gray Toulouse Geese.

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JOHN'S BIG BEAUTIFUL BARRED Rocks are hen-hatched, quick growers, good layers; 30 eggs, \$3.00; 100, \$8.00. Postage paid. Cockerels, \$4.00. Circulars, photos. John Worthon, Clare, Mich.

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BARRED ROCK WINNERS. Won 1 Pen, 2nd Cockerel and 4th Cockerel at Chelsea Big Show. Hatching Eggs from Pen 1 \$2.50 per 15; Pen 2, \$2.00 per 15, or \$5.00 per 50. By parcel post. Carrier returned. SAM STADEL, Chelsea, Mich.

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REDS THAT ARE REDS—S. C. Combined with high eggs-producing quality eggs, per setting, 15, \$1.50. F. F. Whitmyer, Williamston, Mich.

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2 Bull Calves to offer; one roan and one red.

REGISTERED PERCHERONS; mares in foal, fillies, and one black stallion coming 4 years old.

DUROC JERSEYS, Fall and Spring Pigs of both sex.

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SHEPARD'S BUFF ROCKS; PRIZE winners at the big Detroit Poultry Show 1919. I have two grade pens mated. I will hatch my winners from these matings. I will have a limited number of eggs to spare at \$3 per 15. If you want some good Buff Rocks order one or two of these settings; they will please you. Satisfaction guaranteed. Irvin Shepard, Chesaning, Mich.

MAMMOTH BRONZE TURKEYS — Strictly thoroughbred, for sale. Gobblers weigh 15-38 lbs., Hens 9-16 lbs. Price, \$7.00 to \$25.00, according to weight and beauty. Eggs, \$4.00 per setting of ten. John Morris, R. 7, Vassar.

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CHICKS WE SHIP THOUSANDS. Different varieties; Brown Leghorns, \$13 hundred; booklet and testimonials. Stamp appreciated. Freeport Hatchery, Box 10, Freeport, Mich.

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EGGS FOR HATCHING FROM THOR-oughbred S. C. W. Leghorns. 260 Eggs Strain \$2 per 15.—Julius Pommerenk, Rogers, Mich., R. F. D. 1.

SINGLE COMB RHODE ISLAND Reds' thoroughbred eggs for hatching; \$2 for 15; postpaid. Mrs. Wm. Vandevanter, Mesick, Mich., Wexford county, Rt. 1.

MUD-WAY-AUSH-KA FARM OFFERS hatching eggs from superior matings of bred-to-lay White Wyandottes and Barred Rocks at \$1.50 per 15. White Runner ducks \$1.50 per 11. White Chinese Geese 40c each, \$3.50 per 10. Dike C. Miller, Dryden, Michigan.

FOR SALE BARRED PLYMOUTH Rock Eggs for hatching. A Bred-to-lay strain. 13 years careful selection. Cockerel and Pullet matings. Selected pens, \$3.50 per 15 eggs; utility pens, \$2 per 15 eggs. H. E. Hough, Hartford, Mich.

Barred Rock Eggs From strain with per year. \$2.00 per 15 Prepaid by parcel post. Circular free. Fred Astling, Constantine, Michigan.

FERRIS STRAIN SINGLE COMB White Leghorns. Hatching eggs, \$1.50 for 15; \$7 per 100. Lida Brooks, Midland, Mich., R. 3, Box 73.

FOR SALE—EGGS FOR HATCHING from Barron Single Comb White Leghorns; 300 eggs strain 7-lb. cock, \$1.65 per 15 by mail; \$4 per 50; chicks, 20 for \$5. R. S. Woodruff, Melvin, Mich.

EGGS FROM HIGH GRADE UP-TO-the-Standard Light Brahmas; \$2 per setting of 15. Mrs. E. B. Willits, Reading, Mich., R. 1.

ROSE COMB RHODE ISLAND REDS. Eggs for hatching; prize-winning stock; \$1.75 for 15 or \$6 per 100 postpaid. Wm. J. Rusche, Alpine, Mich., R. 1.

MICHIGAN'S PURE-BRED 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 to-day!)

BREEDERS' DIRECTORY, MICHIGAN BUSINESS FARMING, Mt. Clemens, Michigan.

CATTLE

HOLSTEIN-FRIESIAN

E. L. Salisbury Breeds High Class Holstein-Friesian Cattle
Twenty dams of our herd sire
Walker Lyons
average 30.11 lbs. of butter in seven days. Nothing for sale at this time but young bull calves.
E. L. Salisbury, Shepherd, Michigan.

MUSOLFF BROS.' HOLSTEINS

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

BULL SPECIAL

A 2-year-old son and a 3-months-old son of twin granddaughters of King Fayne Segis with 25 lbs. butter each and 547 and 572 lbs. milk. The sire of the bulls is a 27-lb. Hengerveld Butter Boy bull whose first daughter to freshen (an own sister of the 3-months calf) made 19 lbs. butter, 385 lbs. milk after having twin calves; also her bull calf for sale. These are show bulls with all kinds of show backing and records and I would ship them subject to approval. Price \$100, \$150, \$200 in order of age. Robin Carr, Fowlerville, Mich.

TWIN BULL CALVES

Born October 29, 1918; sired by Sir Calantha Segis Korndyke 104008; dam's record, 24.35 lbs. butter and 621 lbs. of milk in 7 days; fine straight calves. Send for particulars. C. & A. Ruttman, Fowlerville, Michigan.

REGISTERED HOLSTEIN BULL SIX months old for sale, $\frac{3}{4}$ white, a fine calf. A bargain for someone. Inquire of Frank S. Knoll, Capac, Mich.

Woodland Border Stock Farm
Offers a splendid two-year-old grandson of the great sire Dutchland Cream-elle Lad; dam a high producer and will be tested this spring. Bull is a very good individual, nicely marked, and priced to sell; also a 5-months-old bull calf whose young dam is sired by 40-lb. bull. He is a fine growthy fellow nearly white. Cheap, if taken soon. Fred Lord, Stockbridge, Mich.

PREPARE

For the greatest demand, future prices that have ever known. Start now with the Holstein and convince yourself. Good stock always for sale. Howbert Stock Farm, Eau Claire, Michigan.

Bull Calves

sired by a son of Friend Hengerveld De Kol Butter Boy and by a son of King Segis De Kol Korndyke, from A. R. O. dams with records of 18.25 as Jr. two year old to 23.25 at full age. Prices reasonable breeding considered.

WALNUT GROVE STOCK FARM
W. W. Wyckoff, Napoleon, Mich.

LANGHURST STOCK FARM

Offers young Holstein-Friesian Bulls from dams with records up to 24 lbs. and sires' dams up to 46 lbs. Write for pedigrees and prices. Fred J. Lange, Sebewaing, Michigan.

BULL CALF

Born August 15, 1918. Sire's dams average 37.76 butter 7 days, 148.93 lbs. butter 30 days, testing 8.53% fat. Calf's dam a 21 lb. daughter of a cow with 4 A. R. daughters. Nice straight calf, well marked. Write for price and detailed description. Herd tuberculosis tested annually.

BOARDMAN FARMS
Jackson, Mich.

HOLSTEINS OF QUALITY. Two near-est dams of herd sire are both above 83 lbs. butter in 7 days, average 700 lbs. milk. E. A. Hardy, Rochester, Mich.

REG. HOLSTEIN BULL CALF from good producing cow and sired by a No. 1 bull. Price \$50.00 for quick sale. F. W. Alexander, Vassar, Michigan.

SUNNY PLAINS HOLSTEIN

Type, Quality. A few bull calves from A. R. O. dams for sale.

ARWIN KILLINGER,
Fowlerville, Michigan.

Reg. HOLSTEIN COWS, bull and heifer calves for sale. Come and see them. C. L. HULETT & SON, Okemos, Mich.

WOLVERINE STOCK FARM

I want to tell you about our Junior Herd Sire, "King Pontiac Lunde Korndyke Segis," a son of King of the Pontiacs, his dam is Queen Segis of Brookside, a daughter of Pontiac Clothilde De Kol 2nd and Prince Segis Korndyke, a great combination of breeding.

We are breeding this young sire to the daughters of Judge Walker Pieterse, our Senior Herd sire whose first five dams each have records above 30 lbs. he also has two 30 lb. sisters. How can you go wrong by buying a bull calf of this popular line of breeding?
T. W. Sprague, Battle Creek, Mich.

FOR SALE 7 PURE BRED HOLSTEIN-Friesian Heifers. These heifers are yearlings sired by 24-lb. Bull and from heavy producing dams. Nicely marked and well grown. If these heifers are sold within the next 30 days will price them very cheap.—Harry T. Tubbs, Elwell, Mich.

CHOICE REGISTERED STOCK

**PERCHERONS,
HOLSTEINS,
SHROPSHIRE,
ANGUS.
DUROCS.**

DORR D. BUELL, ELMIRA, MICH.
R. F. D. No. 1

JERSEY

The Jersey has ever been noted as the profit breed. But these days of high-priced feed are making her even more famous. You must look into this Jersey matter. It will show you the difference between keeping a cow and having the cow keep you. Ask breeders for prices and pedigrees. Write us for important Jersey facts, free.

The American Jersey Cattle Club
367 West 23rd St., New York City

The Wildwood Jersey Farm

Breeders of Majesty strain Jersey Cattle. Herd Bulls, Majesty's Oxford Fox 134214; Eminent Lady's Majesty 150934. Herd tuberculin-tested. Bull calves for sale out of R. of M. Majesty dams.
Alvin Balden, Capac, Michigan.

GUERNSEY

GUERNSEYS WE HAVE A FEW Heifers and cows for sale, also a number of well bred young bulls—write for breeding. Village Farms, Grass Lake, Michigan.

Registered GUERNSEY COWS. Bull ready for service April. Bull calves, best of breeding. Write for particulars and prices.
A. M. SMITH, Lake City, Michigan

ABERDEEN-ANGUS

ABERDEEN ANGUS CATTLE
We are offering at attractive prices, a number of high-class young bulls, well able to head the best herds in the land. Best in blood lineage on either side of the ocean. Write for price list, or call and see us.
Woodcote Stock Farm, Ionia, Michigan.

ANGUS BULLS and HEIFERS from choice registered stock. Also have some nice Registered Duroc Boars ready for service. Will crate and ship for \$50.00. Geo. B. Smith & Co., Addison, Michigan.

SHORTHORN

OAKWOOD FARM SHORTHORNS
Bull calves of Bates Breeding.
COLLAR BROS., R. No. 2, Conklin, Mich.

FOR SALE FIVE HEAD REGISTERED Durham Females from four months to four years old. Bates strain. Also some large Poland China Boars, six months old, bred from a sow that has just farrowed 16 pigs.
Wm. Cox, Williamston, Michigan.

FOR SALE TWO ROAN SHORTHORN Bulls, one year old, sired by Cornerstone 865530, a son of Avondale. 1 young mare and 1 Campbell.—Claret G. H. Parkhurst, Orion, Michigan.

MILKING SHORTHORNS

Maplelane Laddie No. 504725, a Grand-son of General Clay 255920, at head of herd. Young stock of both sexes for sale. Can spare a few cows.
A. W. Thorne, Fife Lake, Michigan

RAY WARNER, ROUTE 3, ALMONT. Mich., breeder of Purebred Shorthorn Cattle and O. I. C. swine. Orders taken for March and April pigs.

DUAL PURPOSE SHORTHORN Bulls. One yearling and two fine calves; all roans; heifers all sold.
ROY FINCH, Fife Lake, Michigan

TOO LATE TO CLASSIFY

FOR SALE — SHORTHORN AND Polled Durham Cattle. Herd bulls are grandsons of Whitehall Sultan and Avondale. C. Carlson, Leroy, Mich.

FOR SALE—SHORTHORNS

Of Quality, Scotch and Scotch topped. Maxwellton Monarch 2nd & Maxwellton Jupiter in service.
John Schmidt & Son, Reed City, Mich.

SHORTHORNS and POLAND CHINAS all sold out. None for sale at present. F. M. Piggott & Son, Fowler, 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, Secretary Central Michigan Shorthorn Association, McBrides, Michigan.

FOR SALE—Two Shorthorn Durham bulls, Bates strain and good individuals. One 3 years old; one 6 months. Geo. W. Arnold, Bates, Mich.

THE VAN BUREN CO. Shorthorn Breeders' Association have young stock for sale, mostly Clay breeding. Write your wants to the Secretary. Frank Bailey, Hartford, Michigan.

For Sale SCOTCH TOPPED SHORTHORNS, roans and reds, both sexes. At head of herd grandson of famous Whitehall Sultan. Write for prices and description.
S. H. PANGBORN, Bad Axe, Michigan.

HEREFORDS

LAKEWOOD HEREFORDS

Not how many! but how good! A few well-developed, beefy young bulls for sale, blood lines and individuality No. 1. If you want a prepotent sire, that will beget grazers, rustlers, early maturers and market-toppers, buy a registered Hereford and realize a big profit on your investment. A life-time devoted to the breed. Come and see me.—E. J. TAYLOR, Fremont, Mich.

HORSES

FOR SALE—FIVE REGISTERED Percheron horses, three stallions, two mares, all blacks and priced to sell.
C. S. Young, Shepherd, Mich.

SHETLAND PONIES

SHETLAND PONIES For Sale. Write for description & prices. Mark B. Curdy, Howell, Mich.

HOGS

POLAND CHINA

FALL PIGS SPECIAL SALE NOW ON Butler's Big Bred, Profitable Poland Chinas. How would you like one out of a litter of 14? We are pricing them for a quick sale at \$25 and \$30 each. A pedigree with every pig.
Jno. C. Butler, Portland, Michigan.

FALL BOAR PIG will weigh 75 to 100 lbs. are extra good Pigs and Priced so you can buy them. C. E. Garnant, Eaton Rapids, Michigan.

L. S. P. C. BRED GILTS, ALL SOLD; two boars ready for service and one bull boar. H. O. Swartz, Schoolcraft, Mich.

Large Type Poland China Hogs

Write that inquiry for L. T. P. C. serviceable boars to Wm. J. Clarke, Eaton Rapids, Mich., instead of Mason. I have sold my farm and bought another, one mile west and eight and one-half miles south. Come and see me in my new home. Free livery from town.

WM. J. CLARKE,
R. No. 1, Eaton Rapids, Michigan

BIG TYPE POLANDS, GILTS ALL sold, one yearling sow bred to farrow May 29th, for sale. O. L. Wright, Jonesville, Mich.

BIG TYPE P. O. I have a few extra good Fall Boars left, sired by Grand Superba and out of Big Prolific Sows. Their breeding traces to the best herd in Ill. Iowa and Neb.
C. E. GARNANT, Eaton Rapids, Mich.

BIG TYPE P. O. BOARS, all ages, the kind that make good. Meet me at the fairs. E. R. Leonard, St. Louis, Mich.

BIG TYPE P. O. gilts, bred for April farrow, the big smooth kind. A. A. WOOD & SON, Saline, Mich.

BIG TYPE POLAND CHINAS. Spring boars all sold. Bred gilts ready for shipment. Inspection invited. L. L. Chamberlain, Marcellus, Michigan.

WALNUT ALLEY BIG TYPE Gilts all sold. Keep watch of 1919 crop sired by Arts Senator and Orange Price. I thank my customers for their patronage.
A. D. GREGORY, Ionia, Mich.

L. S. P. C. BRED GILTS now ready to ship at prices any good farmer can afford to pay. Also dealer in Raw Furs. Write for prices.
H. O. Swartz Schoolcraft, Michigan.

O. I. C.

Shadowland Farm

O. I. C's.

Bred Gilts in May and June. Booking orders for Spring Pigs. Everything shipped C.O.D. and registered in buyer's name. If you want the best, write
J. CARL JEWETT, Mason, Mich.

BIG TYPE P. C. Choice bred sows from Iowa's Greatest herds. The big bone prolific kind with size and quality. Elmer Mathewson, Burr Oak, Mich.

SAGINAW VALLEY HERD
Headed by C. C. Michigan Boy, son of Grand Champion Schoolmaster and Perfection 5th. February pigs for sale.
John Gibson, Bridgeport, Michigan.

O.I.C. FALL BOARS AND GILTS; Extra large boned. Best I ever raised. Priced to sell, also good grade Holstein bull calf. Will Thorman, Elm Front Stock Farm, Dryden, Michigan.

RAY WARNER, Route 3, Almont, Mich. Breeder of Pure Bred Shorthorn Cattle and O. I. C. Swine. A few Oct. pigs on hand.

DUROC

50 DUROC BRED SOWS AND 50 fall pigs. You need a litter by Orion's Fancy King, the biggest pig of his age ever at International Fat Stock show. Catalog tells all.—Newton Barnhart, St. Johns, Mich.

FOR SALE—TWO REGULAR DUROC Jersey boars, 1st of October farrow; weight, 150 lbs.; sired by Orion Cherry King 8th No. 79931; dam by Defender. C. E. Davis & Son, Ashley, Mich., R. 1.

MAPLE LAKE FARM
Registered Duroc Jersey Pigs, either sex. J. E. NEUBAUER, Imlay City, Michigan

Durocs Spring Boars and gilts. Ten years experience. A few black top Rams left. Newton & Blank, Hill Crest Farm, 4 miles south of Middleton, Mich.

DUROC-JERSEY SWINE

Bred sows and gilts all sold. Nice bunch of fall pigs, both sex, sired by Brookwater Tippy Orion No. 55421, by Tippy Col., out of dam by The Principal 4th and Brookwater Cherry King. Also herd boar 3 yr old. Write for pedigree and prices. Satisfaction guaranteed.
Thos. Underhill & Son, Prop., Salem, Mich.

PEACH HILL FARM

Registered Duroc Jersey fall boar pigs. Also two choice last spring boars. Write to us. Our prices are very reasonable. Visitors welcome.
INWOOD BROS., Romeo, Mich.

DUROCS SPRING GILTS and brood sows. Gilts by a good son of Panama Special. Newton & Blank, Hill Crest Farms, Perrinton, Mich. Farm 4 miles s. of Middleton, Gratiot county.

MEADOWVIEW FARM

Registered Duroc Jersey Hogs. Buy your spring pigs now.
J. E. Morris, Farmington, Mich.

BERKSHIRES

GREGORY FARM BERKSHIRES for Profit. Choice stock for sale. Write your wants. W. S. CORSA, White Hall, Ill.

CHESTER WHITES

Chesters MARCH AND APRIL PIGS, from prize winning stock; in pairs or trios; at reasonable prices.—F. W. Alexander, Vassar, Mich.

J. F. Westfall

Breeder of big type Chesterfield swine. My herd is headed by Petroleum King 51,008 and he by Petroleum Giant 37,115, and he six times grand champion. Some good October males for sale. Write me for further particulars and prices. J. T. Westfall, Breckenridge, Mich.

HAMPSHIRE

HAMPSHIRE BOAR PIGS OF JAN. 30th farrow only, for sale now. Book your order for Spring Pigs now. John W. Snyder, St. Johns, Mich., R. 4.

A FEW SPRING BOARS and bred gilts of Joe Orion and Defender Breeding at a bargain. Write for prices.
John W. Bach, R.F.D. No. 1, Honor, Mich.

FOR SALE—250-EGG CYPHERS incubator, used 4 hatches. Newton Colony Brooder Stove, good as new. Tony Motz, St. Johns, Mich., R. No. 1.



Vote Yes for Good Roads!

NEXT MONDAY the forward thinking men and women of Michigan face a great privilege! They can vote YES (X) for Good Roads—a system of paved highways that will eventually link every farm with the markets where good prices await the farmer.

Is there a man or woman in Michigan blind to this privilege?

Is there one voter who blinds his eyes with silver dollars and prefers to drag himself and his children after him through the hub-deep mud of impassable roads?

We will not believe it.

For thinking business farmers and their wives know that the value of their farm depends upon its access to profitable markets—

—that the price they receive for what they raise is measured by where they sell it.

—that any farmer on or near a paved road can afford a motor truck that measures miles in minutes, that once he counted in hours.

—that schools, churches, enlightening amusements, libraries and countless advantages lie at the end of the good road from their gate!

And yet this is Michigan's privilege next Monday!

How fortunate, too, that the noble women of Michigan should for the first time be permitted to vote on a question which is so vital to their interests

—to whom can the good road nearby mean more than it does to mother?

—broadened of mind with the coming of good roads, she radiates that influence to her children—

—O, the wonder of good roads to wives and families of Michigan's business farmers!

We hope every voter now knows that when he votes YES (X) for the Good Roads Amendment he is not levying a debt of \$50,000,000 on his state, as at first he was led to believe.

—for this is only an enabling act, which empowers the legislature to sell bonds if necessary, to build good roads which all know Michigan needs.

—as it is today, our legislature is powerless to accept the dollar-for-dollar which the U. S. government has offered to give our state for every dollar we expend during the next three years for good roads!

—already plans have been suggested which may mean that never a dollar of money need be raised for this purpose by the sale of bonds!

A VOTE YES (X) FOR GOOD ROADS on Monday next, means simply that you, for one, as a citizen of Michigan, want good roads.

—that you are glad to have the help of Wayne, Kent and other counties that have their own paved roads largely completed, but are willing to help the poorer counties, in order that the whole state may be linked from top to bottom and side to side

—that you are too frugal a citizen of our state to let Michigan lose the good roads millions which Uncle Sam says he will give us if we meet him half way

—that you are for good roads first, last and always, and that you have enough confidence in the men responsible to know that they will in the end adopt the best means of carrying out your wishes.

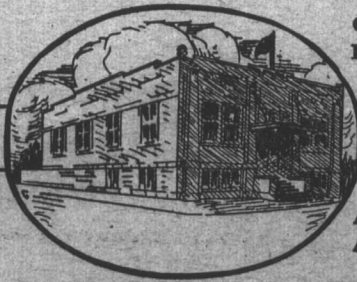
Next Monday above all, go to the polls, you forward thinking men and women of Michigan and VOTE YES (X) FOR GOOD ROADS, for there will be enough selfish interests who care not how long men and women drag themselves through hub-deep mud to defeat this amendment, unless you vote.

W. E. ROBB, Secretary

CITIZENS MUTUAL AUTO INSURANCE

Fire - Theft - Liability - Collision

HOWELL, - MICHIGAN



Our own Modern Office Building at Howell.

COMPANY

America's Largest Mutual Auto Insurance Company