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Investigation Shows Packers Exert Virtual

FOR CLOSE to two months the Senate Committee on Agriculture and Forestry, and the House Committee on Interstate and For-eign Commerce, have been conducting hear-

ings on the meat packing industry and allied industries. These hearings following upon the investigation of the meat packing industry

FEDERAL TRADE COMM'N RECOMMENDS

That the government acquire all rolling stock used for the transportation of meat animals, the principal and necessary stock yards of the country, all privately owned refrigerator cars and all necessary equipment for their proper operation, and that such ownership be declared a government monopoly, also that the government acquire such of the branch houses, cold storage plants and warehouses as are necessary to provide facilities for the competitive marketing and storage of food products in the principal storage of the storage of t ing and storage of food products in the principle centers of distribution and consumption.

by the Federal Trade Commission, have been the most searching and illuminating expose of business methods in America since the famous investigation of the United States Commission on Industrial Relations. But Congress has adjourned and no legisla-tion has been enacted to meet the conditions shown by the Federal Trade Commission and by the hearings. The American voter will ask himself "Why?" Some twelve thousand pages of testimony have been taken on Capitol Hill, most of it relevant and some of it irrelevant. With minor exceptions the findings of the Federal Trade Commission have been corroborated at the hearings and the necessity for the prompt enactment of legisla-tion to make the four recommendations of the Federal Trade Commission to deal with the meat packing industry the permanent policy of the country have been confirmed.

Mr. Francis J. Heney, special investigator for the Federal Trade Commission was retained as counsel for the Farmers' National Committee on Packing Plants and Allied Industries in these hearings and was asked by the Senate Committee on Agriculture to act as its counsel and he conducted most of the examination of the principal witnesses. Interest naturally centered around the testimony of the four of the big packers, Louis F. Swift, Thos. E. Wilson, Edward Morris, and

Control of Foodstuffs By Special Washington Correspondent

> J. Ogden Armour. Mr. Armour's counsel, Levi Mayer, and Mr. Swift's counsel, Henry Veeder, also occupied a conspicuous place in public interest during the hearings. The fiction of big business efficiency received several blows. One was led to wonder how the packers ever developed such marvelous ca-pacities for forgetting and how they have completely avoided possessing any public conscience.

> Mr. Thos. E. Wilson gets a salary of \$125,000. He was asked how much of the capital stock of his company was paid in and how much represented surplus converted into capital and frankly admitted, "I do not know, Senator,-Mr. Heney and the Federal Trade Commission have the complete record of all those transactions up to the time I went into the business. I am not interested in those different steps of the whole business,

WHAT THE PACKERS CONTROL

Commissioner Colver introduced evidence showing that the big five packers now slaughter 70 per cent of the animals slaughtered by packers engaged in interstate commerce and control 65 per cent of the interstate poultry and egg trade, 75 to 80 per cent of the cheese in Wisconsin, the cheese-producing state, handled more than 6 per cent last year of the poulin Wisconsin, the cheese-producing state, handled more than 6 per cent last year of the poultry pack of the country; manufacture more than 60 per cent of the oleomargarine made in the United States, and went into the butter business to enable them to put the prices of oleomargarine higher than was otherwise possible. They have gone into the fish field and secured control of the canned fish business. In one year, 1917, Armour & Co. became the second rice dealer in the world, and in the same year that company handled 25 per cent of the grain produced in the United States.

and have got plenty to do to take care of it from the time I got in there."

On cross-examination Mr. Swift admitted that in 1917 the capitalization of his company included twenty million dollars of common stock, ten million, four hundred thous-and of preferred stock and that the surplus

was fifteen million dollars. Wilson objected to the licensing system, as he thought that it would be detrimental to the business to have such close supervision by any govern-

mental agency.

As part of their campaign to educate the public on their generosity, and the hard work

THAT "DOLLAR PROFIT" PER HEAD

The dear public has been informed through the advertisements of the packers that the packers made only a dollar per head. Mr. Heney read into the record a statement of Libby on results for eight months in 1915. Libby, it is admitted, was 99 and a fraction per cent Swift. The average profit of 185,284 cattle, according to their own figures, cut in three different plants was \$6.14 per head. 26,752 cattle yielded a profit of \$1.25 per head; 97,310 a profit of \$7.61 per head; 11,222 cattle a profit of \$5.04 per head. Mr. Swift admitted a profit of 83 1-8 per cent on the capital in 1917, which they figured at thirty-four millions while the Federal Trade Commission reported a profit of forty-seven millions. The dear public has been informed through millions.

they have done to prevent themselves from making any profit, the packers have advertised that their profits were less than those permitted by the Federal Trade Commission. Under careful cross-examination several of the packers, notably Mr. Armour, admitted that they were making much larger profits than advertised, and that they had been cleverly concealed. The truth leaked out that for several years before the war several of the five big packers had been making profits very similar to those which have been supposed to be the exclusive privilege of the "war brides." Mr. J. Ogden Armour in a printed statement which he submitted at the hearings, in justification of the enormous profits which his own company has made, declared that the profits of Armour & Co. were moderate, and seemed to think that they were shamefully out of the running with the other profiteers. In 1917 his company earned on the capital stock, according to Mr. Armour's figures, only 21.29 per cent, while the American Beet Sugar Co. earned 88.84 per cent, the American Woolen Co. 20.22 per cent, the Anaconda Copper Co. 29.04 per cent, the Bethlehem Steel Co. 43.02 per cent, the Standard Oil Co. of Indiana 89.36 per cent, and the (Cont. on page 19).

A Last Appeal to Michigan's Farm Women to Register and Vote

T IS estimated that three-fourths of the women of Michigan towns and cities have already registered with the intention of voting at the spring election.

Have the farm women of Michigan done as well?

On April 7th, the citizens of Michigan will be called upon to vote on two very IMPORTANT amendments. One of these is to wipe out state-wide prohibition and legalize the sale of light wines and beer.

The other is to permit the state to issue bonds to build good roads.

If there is any farm woman in Michigan who is not interested in either of these subjects there is no need of her registering. If she is satisfied to have the saloon come back so that her husband or her son or her relatives may spend their leisure time in drinking and carousing, she probably will not take the trouble to register and vote.

We learn that thousands of women of foreign extraction have been taken to the registering places in droves by men formerly engaged in

the saloon business who hope to have their support of the light wine and beer amendment. It is difficult to say how these women will vote. Many of them who have been accustomed to beer drinking from childhood, will undoubtedly vote for the amendment. But no matter what way we THINK they will vote, the people of the country CANNOT TAKE A CHANCE. They put Michigan into the dry column in the first instance, and they must work and vote to keep her in that column. If the light wine and beer amendment passes at the spring election, it will be the fault of the FARMERS AND THE FARM WOMEN, and nobody else's. If all the farmers and farm women of Michigan REGISTER and VOTE, the beer amendment will be defeated. If part of them stay at home it may win.

PLEASE DO YOUR PART, Michigan farm women. REGISTER and urge your neighbors to REGISTER. There is yet time. See your township clerk on Saturday, March 15th and 22nd and REGISTER.

"One Grade of Spuds is What we Ordinary Growers Want" says A. M. Smith, Pres.

SHALL THE potato growers of Michigan accept the grading rules of the Bureau of Markets as the final word on potato grading? I think they will not, for while there is not the expressed dissatisfaction with the amended rules now in force that there was a year ago, there is a strong feeling on the part of leading growers that the action of the Michigan Potato Growers' Association demanding a grade calling for the use of an inch and three-quarters round mesh screen and naming such a grade of potatoes "Michigan Standard Grade," is just the way Michigan's great commercial crop should be marketed.

After studying the potato question from every angle, the writer is firmly convinced of the opinion that such a grade is what we should all work for as the grade to be adopted all over the United States for marketing the bulk of the potato crop. The experiment of two grades has been tried by the Bureau of Markets and the result has been that No. 2 grade has not figured much in markets and that the bulk of the potato crop has been marketed as No. 1's, and that there is really no demand for No. 2

Potato Growers' Ass'n

potatoes. Michigan growers have been in favor of one grade of potatoes for the great commercial crop and all shippers I have talked with are of the same opinion.

When only one grade of potatoes is marketed it is obvious that the grade should include all good edible stock. Therefore, such a grade excluding stock too small to be acceptable to the consuming public, One-eighth inch change in the size of a screen seems very little, but it is surprising what a difference such a change made this last season. Now one more change to what the growers want would fix the potato situation as far as grading is concerned to the should include smaller potatoes than the present U. S. grade No. 1, while at the same time satisfaction of both growers and consumers: Provision might be made for a special grade to supply special trade, but that is a secondary matter. The specialists can take care of that to suit themselves.

The last meeting of the state association instructed our secretary to correspond with other state associations on this subject and the writer believes that this is the correct method of procedure to secure a change in the U. S. Bureau of Markets' rules. It would seem that if several states adopt one grade—one and three-quarters inch—that the Bureau of Markets would make their rules to conform to the wishes of the growers, for government by the people is according to American ideals.

Other provisions of the Bureau of Markets' grading rules dealing with such matters as sunburn, cuts, scab, rot, etc., have been recently amended to make more liberal provisions and are now fairly acceptable to growers. In fact, no honorable grower wants to sell worthless potatoes, but all growers do object to rules shutting out of the markets or putting in an inferior class sound, edible stock which is just a trifle too small to go over an inch and seveneights screen, but which would go over an inch and three-fourths screen. One grade of spuds is what we ordinary growers want. Let us keep at it until we get what we want.—A. M. Smith.

Co-operative Venture has 43 Local Exchanges---Combined Capitalization Half Million

THE ORGANIZING of over forty local marketing associations, federated under the control of the Michigan Potato Growers' Exchange, by Hale Tennant of the Bureau of Markets was a remarkable co-operative achievement. The combined membership of these associations is nearly 5,000, and their total capitalization nearly half a millien dollars.

These associations have had their troubles as all oc-operative ventures do, but with a few exceptions the members have stood loyally by determined to see the thing through. Despite a most discouraging marketing season and the best efforts of the old dealers to undermine the morale of the associations, they have weathered the storms of adversity and are looking forward to a very prosperous second season.

Below is given a list of the forty-odd associations, together with the names of the managers. The location of each association is indicated on the accompanying map by a dot.

Alba Marketing Ass'n., Alba, Mich., Mgr., A. M. Watson; Alden Co-operative Marketing Ass'n., Alden, Mgr., Geo. Angell; Benzie Farmers' Oo-operative Ass'n., Beulah, Mgr., H. H. Blaine; Barker Creek Co-operative Marketing Ass'n., Mgr., H. W. Copeland; Barryton Co-operative Ass'n., Barryton. Mgr., Andrew Nelson; Bellaire Co-operative Market Ass'n., Bellaire, Mgr., Sec'y. L. Van Liew; Bendon Produce Exchange. Mgr., R. B. Reynolds; Boyne City Co-operative Marketing Ass'n., Mgr., F. W. Dilworth; Brutus Co-operative Market, Brutus, Sec'y., Tom Struble; Co-operative Marketing Ass'n. of Cadillac, Mgr., A. A.

Smith; Cedar Produce Exchange, Cedar City, Mgr., W. O. Ashmore; Central Lake Marketing Ass'n., Mgr., W. L. Burns; Cheboygan Co-operative Market Ass'n., Mgr. H. T. Clezen; Dighton



Each dot represents a co-operative marketing association that is a member of the Michigan Potato Growers' Exchange.

obs; East Jordan Co-operative Ass'n., Mgr., R. C. Supernaw; Elk Rapids Co-operative Marketing Ass'n., Mgr., C. I. Wood; Banks Township Mar-Co-operative Marketing Ass'n., Sec'y., Matt Jac-

ket Ass'n., Ellsworth, Mgr., F. M. Skow; Elmira Marketing Ass'n., Elmira, Mgr., Frank S. Jordan; Empire Produce Exchange, Empire, Mgr., Thos. I. McCormick: Evart Co-operative Shipping Ass'n., Mgr., Joe Cockerton; Garfield Marketing Ass'n., Fife Lake, Mgr., O. T. Hart; Gleaner Farmer Producing Co., Fife Lake, Mgr., George Stults; Falmouth Co-operative Marketing Ass'n., Mgr., A. J. Felter; Otsego County Co-operative Ass'n., Gaylord, Mgr. A. C. Ward; Hart Co-operative Marketing Ass'n., Mgr., John Wachter; Hobart Co-operative Marketing Ass'n., Mgr., J. Loom-Kalkaska Produce Co., Kalkaska, Mgr., Burt Wright; Farmers' Co-operative Ass'n., Kingsley, Mgr., A. B. Stinson; Lake City Co-operative Marketing Ass'n., Mgr., A. E. Armstrong; Levering Co-operative Market Ass'n., Mgr., B. F. Stoneburner; McBain Co-operative Marketing Ass'n., Mgr., Wm. Kennedy; Mesick Co-operative Marketing Ass'n., Mgr., J. O. Percell; Manton Cooperative Marketing Ass'n., Mgr., Ival Shirley; Mancelona Marketing Ass'n., Mancelona, Mgr., Frank Hopkins; Petoskey Co-operative Market Ass'n., Mgr. O. C. St. John; Provement Co-operative Marketing Ass'n., Mgr., Joe Burns; Posen Co-operative Marketing Ass'n., Mgr., Peter Przybyla; Rapid City Co-operative Marketing Ass'n., Mgr., M. F. Whiteman; Rodney Co-operative Ass'n., Mgr., A. C. Ledin; Stanwood Co-operative Ass'n., Mgr., T. J. Horger; Leelenau Potato Growers' Ass'n., Suttons Bay, Mgr., C. A. Richner; Farmers' Co-operative Ass'n.. Traverse City, Mgr., C. M. Buell; Wolverine Co-operative Market Ass'n., Mgr., Henry Sowton. Associations have just been organized or are in process of organizing at Millersburg and Onaway in Presque Isle county, and Scottville in Mason county.

Suggestions for Preparing Perishables for Market with Less Loss to Producer

FOR THE benefit of farmers, inspectors of the express company have recently prepared a number of concrete suggestions as to how the express shipments of a perishable nature from the country districts can best be prepared for movement by express. Among them are the following:

Always show your own address as well as those of the person or firm to whom you are sending your goods. As an additional precaution, it is well to enclose your name and address inside the shipment.

Place plain, legible marks directly on each shipment by use of crayon (not chalk) brush or stencil. Always erase old marks of every description. In marking shipments of feed goods, place the marks on some protected part of the shipment where it will not come in contact with any other package. Never rely on a single tag. Avoid the use of tags if possible, but never be satisfied with less than two. Never use a tag when the address can be written directly on the article.

Regarding the shipment of eggs, do not use second-hand egg cases, unless they are reinforced and all old remarks are removed. Do not use second-hand fillers.

As to the handling of poultry, the express officials have several suggestions to make. In packing, they advise that farmers wait a sufficient time for the poultry to cool before placing it in barrels. Coops containing live poultry should never be overloaded, and all old marks should be erased, as they always cause trouble. Instead, a strong tag should be tacked on each end of the coop. Never use what is known as a "one trip" coop a second time. Always show the shipper's name and address. On this point, the comment of the express experts is as follows:

"We believe that a general practice of showing shipper's name and address on every shipment made, perishable or otherwise, would result in much quicker returns to shipper and much better service generally. This is particularly true when the shipments are forwarded to large cities, and it does not take much power of imagination to comprehend the difficulty a commission man in New York or Chicago has in trying to pay for a shipment of eggs or poultry, which does not show clearly the name and location of the shipper, Hence, we urge shipper's name and address on every piece of every shipment."

In shipping fruit and vegetables, the express company again emphasizes the value of direct marking on all crates, and other containers used, and urges shippers not to fail to give their names and addresses.

It has been demonstrated that it is inadvisable to pick, pack and forward fruits and vegetables immediately after a rain. Pack such commodities in suitable containers. It is preferable to spend a little more money for a good package and thereby have the fruit and vegetables present a good appearance, when they arrive on the market than

to save a few cents in the initial cost of the package. Comparison of the returns received by the man who packs well with those of the man who packs poorly will prove the soundness of this advice. Keep the over-ripe fruit and vegetables at home.

A tremendous amount of milk and cream travels by express, and there has been so little difficulty in keeping the milk cans going so that they are returned promptly to their owners. This has been due largely to the fact that it has been difficult to find an effective method for keeping the identification of the owners clear. It is claimed that the best way is for the owner to have his name permanently attached to the metal plate of each can. One strong tag should be tied to every can, showing the name and the address of the consignee.

When shipping dressed animals, such as hogs, sheep and veal, see that the meat is fully protected by a covering of burlap or heavy cloth. This keeps it clean, and it brings a better price when sold.

Live calves shipped outside of crates should bear metal tags, as the calves eat the tags attached to animals beside them, rendering it impossible at destination to tell to whom they belong.

In selecting markets for your products, it is best to ship to a place reached by a local line, and avoid a transfer or a lay-ever in one of the larger cities, it is to your advantage to favor the local market.

CRAMTON ASKS SIFT AGRICULTURAL DEP'T

Investigation Requested in Resolution Submitted by Mr. Cramton Cannot be Acted Upon Until Next Session

Acting in accordance with a request from Michigan Business Farming, Congressman Cramton introduced a resolution in the house of representatives asking for a congressional investigation of the charges preferred by Dr. Spillman against Secretary Houston of the Department of Agriculture. These charged were published in last week's M. B. F., and indicate a condition of affairs which certainly ought to be remedied at once.

We are in receipt of the following letter from Mr. Cramton:

"Upon receipt of your telegram I secured a copy of Spillman address and the reading of it convinced me of the importance of the statements therein made, and the need of a thorough investigation of his charges by a committee of Congress. If the charges therein made are untrue, they should be refuted. If the charges are true, they indicate a condition of things in the Department of Agriculture that should not be permitted to continue, and Congress should be advised of the facts, and should be prepared to take any action necessary to secure the desired results.

"Unless the Department of Agriculture can have the confidence of the agricultural interests of the county, its usefulness is limited, and unless the secretary of agriculture is in harmony with the aspirations and desires of the agricultural interests, the department will cease to be the aid to the development of agriculture it was intended to be.

"While it is of course impossible to secure action under this resolution at the present session of Congress, which is to close next Tuesday noon, I have no doubt that if the attention given this resolution by the farm interests and farm organizations of the country indicates a substantial interest of the farmers in this movement, that, at the next session of Congress, action can be secured.

"I thank you for bringing this matter to my attention. I will be glad to have any assistance that you can give in bringing about the investigation in question and establishing the true facts."—Louis Gramton.

Mr. Cramton's resolution embodies the complete text of the Spillman charges and concludes with the following:

"Whereas, the statements thus publicly made by a man but recently in a position of high responsibility in said department constitute charges against the conduct of said department by the Hon. David F. Houston, as Secretary of agriculture, and his policies with reference to matters of vital interests of the Nation which, if true, should be the basis of action to secure the adoption of new policies in said department to bring it in harmony with the purposes for which it was created and is maintained, and to secure such further action as will insure the confidence and co-operation of the agricultural interests of the nation in said department: Therefore be it

"Resolvde, that the Speaker of the House is hereby authorized to appoint a select committee of nine members of the House, whose duty it shall be to make a thorough investigation of the statements and charges so made in the speech above set forth, and the administration of the said Department of Agriculture, and to report its conclusions and recommendations to the House." * * *

It should not be necessary to explain M. B. F.'s position in this matter. We wish the Department of Agriculture nor its honorable secretary no ill luck. The ordained work of this department is of the highest importance and value to the farmers of the United States. The department of agriculture should be so conducted as to have the most enthusiastic support from the farmers and render them the greatest possible service. If the Spillman charges are correct, the department is not so being conducted, and every farmer, farm organization and farm paper should rise and demand that the facts be brought to light.

GOVERNMENT STIPULATES EVERY ELEVATOR RECEIVE PART OF BUSINESS

We understand that one of the conditions of the contract recently entered into between the bean jobbers of this state and the U.S. Grain Corporation for 350 cars of beans was that the business should be apportioned among all the elevators of

the state according to the quantity of beans on hands.

Now there are many small struggling co-operative elevators thruout the state whom some of the big jobbers would like to put out of existence and information comes to us that those who have the distribution of this business will "pass up" some of these elevators. In fact,, we have a letter from one of these elevators claiming that it is not to receive any of the government orders. This elevator has endeavored to keep the faith with the farmers by paying them \$8 per cwt. for beans even when the market did not warrant, and it has a number of cars now on hands which it must move in order to save itself from a large financial loss and enable it to buy the balance of the crop in the hands of the farmers of the locality.

We have wired the Grain Corporation at New York City a statement of this situation, and we do not believe that anyone will be permitted to get away with an unfair share of the business. We ask that every elevator in Michigan which is denied a portion of the government business promptly notify us that we may place the facts before the Grain Corporation.

OLEO, THE DAIRYMAN'S GREAT ENEMY

"One of the special needs at this time is the awakening of our people against the encroachment of the packers in their effort to get the people to using oleo," says R. C. Reed. "A campaign is on now in the United States, and the workers are on every field. In the last week the smaller towns of Michigan have been visited by the agents or demonstrators in various stores, trying to persuade the people to use oleo in the place of butter because it is cheaper.

"The farmers have bought hundreds of thousands of pounds of oleo—in this way destroying their own industry. We beseech of you to stand by your own interests, urge the use of butter and dairy products, and under no pretence whatever allow oleo to be served on your own table."

Big Rapids—At recent meetings of farmers in Mecosta county the farm bureau has received manimous endorsement. The interest now being taken by the bureaus and county agents in the solution of marketing problems appeals greatly to the farmers and it is believed that the majority of them will stand behind the farm bureau in this county from now on.

St. Joseph—About one hundred and eighty Berrien county farmers attended a joint meeting of the Berrien County Horticultural Society and the Farm Bureau held on Monday of this week at the court house, and listened to a most instructive program.

STATE AGRICULTURAL BRIEFS

Albion—A. B. Cook and Hale Tennant were the principal speakers at the mid-winter picnic of the farmers of this locality. Said Mr. Cook on this occasion: "There is nothing wrong with the farming game. If things don't go right, part of the fault is with the farmer himself. No business runs itself and farming is no exception. It is just as important to market produce as it is to produce it. The farmer must have the assurance of a fair price and he should not let go of his produce until he can get more than cost of producing it. The farmer is coming into his own."

Dowagiac—Grand Parent, local canner, is signing up contracts for small fruit acreages the coming season. He finds hundreds of acres of suitable fruit land in this vicinity, which could be made to yield magnificent profits from small fruits. He reported cases where last year an acre of dewberries brought a harvest worth to the owners from \$600 per acre up, and believes that ten acres of this fruit properly cared for would yield larger returns than the average 160-acre farm.

Pompeii—At one of the largest gatherings of farmers of this community in recent times, Mrs. Dora Stockman, the farmers' nominee for the Board of Agriculture, gave a fine address. Others who participated in the program were Charles Kerr of Ashley, J. W. Nicolson of the M. A. C., Austin E. Cowles, Arthur W. Simmons, Hugh G. Aldrich, Livingston county school commissioner, and Mr. Townsend of the State Highway Department.

Corunna—It seems at last that the difficulties of the farm bureau and county agent in Shiawassee county are to be ironed out. At a number of mass meetings held last week throuout the county, the farmers expressed great enthusiasm over the work of the bureau, and pledged it their support. A membership of one thousand is sought, each member paying in an annual fee of \$2 to help support the work, the balance of the expense coming from state and national sources.

Grand Blanc—Commencing at 10 o'clock Saturday, March 8th, 1919, an all-day get-together meeting of the stockholders of the Grand Blanc Cooperative Elevator Company will be held at Grand Blanc. Forrest Lord, editor of Michigan Business Farming, and other speakers not yet scheduled are expected to address the meeting. Dinner will be served free to the stockholders thru the courtesy of the company.

Meet Senator DeFoe, who Played Important Part in Farmers' Great Victory at State Convention

H AD YOU been in the State Capitol on the Friday just preceding the Republican State convention, you could not have helped noticing an alert, yet calm and dignified gentleman bustling about the Senate chamber,



SENATOR DE FOE

the House and the corridors. and intercepting certain of his colleagues as they passed to and fro. Had vou drawn near to them, you would have heard this gentleman arguing and expostulating

with his "victim." Listening, you would have undoubtedly caught some such words as the following:

"The farmers of this state are certainly entitled to representation on the Board of Agriculture, and it's up to us fellows in the legislature to do our part in seeing that they get it. Do you agree with me?"

"Yes-yes," you would have heard the "victim" mutter.

"All right, thanks, good-bye," and the alert gentleman would have passed on to the next one. It is generally conceded among those who took an active part in securing the nominations of Mrs. Stockman and Mr. Watkins that Senator Merle DeFoe,—the alert gentleman,—did as much if not more than any other single indi-

vidual to marshal the "powers that be" in support of the farmers' candidates. For several days prior to the State Convention, Senator Defoe went about among the senators and representatives pleading the farmers' cause. Mr. Defoe is a popular and well-liked member of the legislature and his colleagues listened with respect to his arguments. The most of them conceded that he was right, and promised to do what they could "back home" in arousing sentiment for the farmers' candidates at the county conventions.

The result of Sen. DeFoe's work is now well-known and Michigan Business Farming, in behalf of its 80,000 readers, extends to Mr. DeFoe the thanks of the farmers for his unselfish interest and efforts in their behalf.

Merle DeFoe is editor of the Charlotte Republican, one of the brightest and most influential Republican weeklies of the state. He is a young man, independent in his views, aggressive and progressive, and standing uncompromisingly by his convictions. He is a close student of state affairs and is performing valuable service in the senate not only for his constituents but for the entire state as well. He is not a farmer, but his sympathies are largely with the agricultural interests, because he believes in rule by the majority and in legislation that will protect the majority's rights.

Senator DeFoe has for a number of years taken a leading part in the counsels of the Republican party, altho he is not strongly partisan and does not believe that because a man embraces some other political faith that he is a heretic or a fanatic. Mr. DeFoe was publicity manager of the Federal Food Administration here in Michigan and gave freely of his time in helping to make Mr. Prescott's administration a successful one.

Keep your eye on Merle DeFoe. He is one of Michigan's coming young men and we are sure the farmers will hear from him again.

"Communities should Underwrite Credit of

Y OU ASK ME to give you my suggestions as to bettering the condition of farmers in Northeastern Michigan, and of further development of agriculture in that locality.

At the meeting of the Northeastern Michigan Development Bureau at Saginaw I tried to explain what, to my mind, was necessary in order to work out successfully the settlement and improvement of that portion of Michigan, or any other new portion of Michigan.

I am thoroughly convinced that the chief difficulty in the progress of the settler on new land is the want of capital sufficient to successfully carry on his operations. He purchases the land at the outset because it is cheap, with practically no improvements; he pays the larger portion of his savings as a first payment on the land, and by the time he has the most humble of homes and outbuildings completed he is absolutely out of funds, and starts in to make a farm with his bare hands, as it were. Perhaps somebody has trusted him to one or two old horses that are absolutely worthless, and that in the winter eat twice as much as they can earn during the summer. He may have a cow ,socalled, that has been tested out and found unprofitable, and with a pig or two he starts out to make a living for himself and his family, with but very few, if any, acres of land cleared, and it is no wonder that he gets discouraged and comes to Flint to work in the factory where the high wages look at least encouraging, and where he feels he can enjoy some of the blessings of civilization, and with at least as much chance for the future as he would have on the farm under existing conditions. In my own judgment there is no excuse for this. If this settler is indolent or lazy, or a man of vicious habits, or treats his family illy, I would

Future Hope of Northern Sections Rest on Agriculture

banish him from the community, but if he is worth while, if he is worth saving, and his in-

dustry well directed would add to the wealth

of the community and of the county, I would

help him work out his problems, which can be

done with absolutely no expense so far as dol-

lars and cents are concerned, but will require

effort, aid and service on the part of the citi-

zenship of the county where this man lives.

ET ME TAKE, if you please, the county with which I am most familiar—Cheboygan, in Northeastern Mich., rich and fertile practically the entire county, new and unsettled the major portion of it. Practically no wealth is being created in the county of Cheboygan except that taken from the soil either in crops or stock. Then the future hope of all the people of Cheboygan county rests in the success of agriculture and animal industry. As that community hopes to prosper so must it expect to see prosper, agriculture, and the men and women of Cheboygan county ought to be willing, and I believe they are, to render any reasonable service that will make their community more progressive and successful, and lend to the general welfare of the community.

You ask me how the condition of these persons can be bettered who have gone on this land, paid out all the money they have, and have not sufficient with which to finance themselves to carry on their operations, and what security is the person to have who furnishes the money? Now let us analyze the situation and see if we can determine where the security exists, for that will be a very important item with those who furnish the money on credit. The man's labor on the farm is directed to the production of his crops, the raising of his stock, and the improving of his land. In the city of Flint as a common laborer he would be paid \$3.00 or \$4.00 a day for that work, and I believe it is conceded that well-directed effort in agriculculture, in the improvement of land for agricultural purposes, and in the raising of animal food is as valuable as if directed in any other particular, and the great mass of the people believe that the farmers have been paid better for their labors than any other class of people during the last three years. Conceding, however, that the result of the farmer's labor is worth

Worthy Farmers"

By D. D. Aitken

A NEW CREED FOR COMMUNITIES

"If the settler * * * * * is worth while, if he is worth saving, and his industry well directed would add to the wealth of the community and of the county, I would help him work out his problems, which can be done with absolutely no expense so far as dollars and cents are concerned, but will require effort, and and service on the part of the citizenship of the county where this man lives."

"Suppose the men and women of Cheboygan county (for instance), are interested in its welfare, of building it up, promoting its interests and increasing its wealth and prosperity should enter into an agreement to underwrite the credit of worthy and needy farmers in Cheboygan county and provide some committee among themselves who should pass upon the eligibility of the applicant for credit. * * I would venture the assertion that if they were to adopt the plan I have suggested and carried it out for ten years in Cheboygan county, that the entire loss for all the underwriters .put together would not be one per cent of the underwritings, and that the addition to the property value of Cheboygan county would run into the millions by reason of their efforts."

"It all resolves itself back to the problem of co-operation among the people of communities in the interest of all because it is the people instead of the lands and the houses that make communities. Every person who produces something and improves the condition is an asset and should be encouraged."

as much to his land, stock and crops as though it were sold in the market of Flint or elsewhere for other purposes, then 300 days of labor is put out upon the farm; this man's entire family, probably, has not consumed to exceed \$300 during the entire year, while in the city of Flint it would have cost him to have lived the whole \$900, or \$1,200 if he had gotten it for his labor. The farm improvement, the cattle improvement, and the grain raising should simply represent on that farm the saving out of the man's labor sale, and if this argument is not good and the saving is not reflected in the improvement, then the man is either useless in the field of labor or the land of Cheboygan county is not worth improving. These would be the only conditions under which there would be any hazard to the man who furnished the capital.

I do not mean to say that every settler in Cheboygan county is a good financier, and is competent to administer and handle money in large amounts, but I do maintain and say that if a man on a piece of new land in Cheboygan county has a worthless cow that is producing milk at a cost in excess of the selling price, and you want him to succeed you must help him make an exchange for a cow that will produce the milk for half what he can sell it for, and with the same amount of feed as the poor cow. If he has poor seed and is using it because he cannot get credit to get better seed, then that credit should be afforded him. If he is raising inferior animals of any kind he ought to be put in a way where he could bring about improvement through herd sires of pure blood. There are a hundred ways that he could be assisted in a financial way that would make possible him working out his problems and paying for his farm in half the time that he could hope to do it even though he struggled through without any assistance.

Better Social Conditions Needed

HEN IT ought to be aimed to better the cial conditions. I have sometimes wondered what the result would be on these new farms where the father and mother had been working from daylight until dark with no more, prospects than are oftimes apparent, if they had not been physically tired out at night so that they could sleep and forget, because, Mr. Editor. I can appreciate somewhat the conditions on these new lands where these people have so apparent little prospect. They can hardly see any improvements that are made from year to year; the children go a long ways to school and are oftimes illy clothed; what is taken in the pail to be eaten at noon by the children is sometimes eaten secretly because they do not want

the other children to see what they have for their lunch. Those are the people who oftimes lose faith, sell out for what they can get and come to the city. They think they are coming to the city because of the children and because of the better schools, but the truth of the matter is they are coming to the city because of their own discouragement and want of faith, and it is up to those who have charge of these land development propositions, and the people who have lived for years in these communities, to help work out this problem, furnish credit to the deserving farmers and social encouragement to the mothers of the sturdy race that is being raised on these newly settled farm lands.

Citizens of many cities for years in the past have worked out different problems for furnishing credit to those who wished to start manufacturing. I remember we had a plan submitted to our Board of Commerce in Flint some years ago whereby each citizen of Flint who was interested in the welfare of the city, of the community and of its future progress, agreed in writing that he would assume the responsibility for the extension of credit up to a certain amount. One man might say he would assume the responsibility of extending credit up to the extent of \$10,000, others \$5,000, others \$3,000, others \$1,000 until a credit of \$100,000, or \$200,000, or \$500,000 was extended. This was put in writing whereby these men agreed among themselves, and with each other, and with the bank which was to extend the credit,

on an endorsement of a committee representing all these underwriters, that investigation should be made of any industry that wished credit, and if the committee, upon investigation, determined the industry was worthy of credit and reasonably sure of success, then this committee representing the underwriters was to endorse the paper and the bank was to advance the money. If any loss did occur then it was to be made up by these underwriters in proportion as the loss might appeal to their undertaking; for instance, if a loss was \$1,000 on an underwriting credit of \$500,000 then that endorser would be out \$2.00 and that would be the relative proportion.

Home Communities May Help Their Farmers

AM UNABLE to understand why this same problem can't be worked out in a county like Cheboygan, if you please. Suppose the men and women of Cheboygan county are interested in its welfare, of building it up, promoting its interests and increasing its wealth and prosperity should enter into an agreement to underwrite the credit of worthy and needy farmers in Cheboygan county and provide some committee among themselves who should pass upon the eligibility of the applicant for credit. First, he must be an honest, industrious man and must be working under conditions and purchased his farm under such conditions that showed a good reasonable probability of his making a success of it if he received necessary assistance in the way of credit. He might need some piece of machinery on his farm with which he could accomplish twice the work that he had been able to accomplish with his previous machine. You might find that by putting on eight or ten cows of large producing capacity that they would net him a large profit because he had elegant pasture, a large amount of coarse food and land that would successfully grow alfalfa and ensilage. He might have a large tract of cut-over land that was fenced and could handle a reasonable number of sheep because of his soil being adapted to clover. Then he could be safely furnished credit with which to purchase sheep. He might have 20 or 40 acres of good pasture with running water, and be in a condition where if he could buy six or eight steers he could run them through the summer, help keep down the brush in his pasture lots and at the same time add 300 lbs. to the weight of the steers and make them marketable for beef in the fall. Or, he might wish this credit with which to purchase some breeding sows because he sold his cream and had plenty of skimmed milk to feed the pigs, and dozens of other conditions might arise whereby this credit could be safely given, the condition of the individual

improved by reason of the returns, and the entire public of Cheboygan county so much richer because this was new property that was created. The only new property, mind you, that comes to Cheboygan county must come from the soil through animal industry or grain.

You may say to me that the banks will furnish such cases as I speak of. They would, a good many of them, and will, a good many of them, but there will be a great many of them, and perhaps 80 per cent of them who will never go to the bank because they do not know anyone in the bank, they are afraid they will be refused, and they have not courage enough to tackle it, while if John Jones who keeps a store in Cheboygan and was one of the underwriters, would talk to him about it when he came into his store to buy groceries, he would listen to John; John could tell the committee representing the underwriters about him, and that man would not only get the benefit of increasing his production but he would have the satisfaction

of feeling that the people of Cheboygan appreciated and trusted him.

It all revolves itself back to the problem of co-operation among the people of Cheboygan in the interest of all of them because it is the people instead of the lands and the houses that make Cheboygan county. Every person who produces something and improves the condition is an asset and should be encouraged; every person in Cheboygan county who commits a crime or a misdemeanor or a waste is a liability, and the whole community has to suffer for They could do away with the great majority of these liabilities if they will get together and work out some of these problems of turning the fertile soil of Cheboygan county into improved farms by co-operation, and without any money loss. I would venture the assertion that if they were to adopt the plan that I have suggested and carried it out for ten years in Cheboygan county, that the entire loss for all the underwriters put together would not

be one per cent of the underwriting, and that the addition to the property value of Cheboygan county would run into the millions by reason of their efforts.

Farm products are going to be lower, in my judgment, and dairy products are going to be lower, and it is going to be up to the farmers and dairymen of Michigan to have the best possible machinery for producing the results, and the public can well afford to give credit to the man who wants to get rid of the poor piece of machinery and get an efficient machine for producing his output. This would be done by cooperation among communities. There is no place in all the world where there are so fertile opportunities and so much that can be accomplished with a small amount of investment, or small amount of effort service as in these new farming communities where they have industry-untiring industry-and only want to be shown the way.

How Highway Dep't views Bonding Amend't

THE PROPOSAL to amend the state constitution to permit the legislature to vote bonds seems to be misunderstood in some instances

Article X, Section 10 reads: "The State may contract debts to meet deficits in revenue, but such debts shall not in the aggregate at any time exceed two hundred fifty thousand dollars. The State may also contract debts to repel invasion, suppress insurrection, defend the State or ald the United States in time of war. The money so raised shall be applied to the purposes for which it is raised or to the payment of debts contracted." The proposed amendment is to add the following sentence to Section 10. "The State may borrow not to exceed fifty million dollars for the improvement of highways and pledge its credit, and issue bonds therefor on such terms as shall be provided by law."

Pertinently, what does this mean?

First, let us see why such a step is necessary, then why bond rather than raise such an amount by direct taxation from year to year.

This is a period of the reconstruction era. The issue of bonds will not only help to stabilize the money market over a long period of years but will give employment to a large body of men drawn in the draft and now suddenly released who must find employment almost immediately or throw labor conditions in a violent agitation. The recent strikes in Seattle, Butte, New York City are but a tempest in a teapot compared with what can be expected unless laboring men are given employment. An early bond issue will give available money immediately. While if left to direct taxation at least a year would elapse before labor could be employed. Bear in mind that Michigan is only one of a number of states in this movement. Already Pennsylvania has voted to bond for sixty millions; Washington is voting forty million; Georgia forty million; Missouri for sixty million; California a third issue of thirteen and a half milBy Harley L. Gibb Michigan State Highway Department

lion making a total of over forty-six millions of dollars of bonds already issued; Oregon is voting a second issue of bonds for ten millions; Illinois has voted

FRANK F. ROGERS ma; North Dakota Michigan's Efficient State High- for fity millions; Way Commissioner Colorado and Tay-

paigns are on in
Kansas, South Carolina, Iowa, So.
Dakota, Oklahoma; North Dakota
sh- for fity millions;
Colorado and Tex-

sixty millions and

Minnesota is mak-

ing a strong cam-

paign for a \$100,-

000,000 bond issue

with strong pros-

pects of passing

it by a good mar-

gin. Similar cam-

as for amounts varying from 6 to 90 millions.

Nor is this a movement to lend a charitable arm to the soldier suddenly returned among us. The war has shown the value of good roads as no other agency could have done.

"What, would you have our soldiers go out on the highways and exchange rifle and field equipment for pick and shovel?" someone asks who has a mental image of sewer construction where the city engineer has been a ward politician. Road building is not done by hand these days any more than a farm crop is put in, cultivated and harvested by the primitive methods of twenty years ago. Road work is done in the same efficient manner and in the same magnitude as the factories are operated. In fact the engineering work is so carefully planned and the cost of units of operation so computed to fractions of a cent that the greatest amount of work possible is produced from the mon-

ey available. Of the 5,000 miles of trunk line about 3,000 are unimproved, the improved portions varying from 9-ft. gravel roads to the best types known. To fill in all the existing gaps will rerequire an approximate expenditure of forty million dollars.

Legislation is now pending to provide a large amount of financial aid in co-operating with the counties. This bill (the Aldrich bill) provides that counties shall receive aid in proportion to their financial need, the poorer receiving the most aid.

The amount of money which each county will be expected to provide is in proportion to the valuation of the county per trunk line mile according to the following schedule:

County valuation below \$50,000, 10% county, 90% state; county valuation between \$50,000 and \$75,000, 15% county, 85% state; between \$75,000 and \$100,000 20% county, 80% state; between \$100,000 and \$150,000, 25% county, 75% state; between \$150,000 and \$200,000, 30% county and 70% state; between \$200,000 and \$300,000, 35% county and 65% state; between \$300,000 and \$400,000, 40% county and 60% state; between \$400,000 and \$500,000, 45% county and 55% state; over \$500,000, 50% county and 50%, state.

The Federal government has just appropriated (February, 1919) \$200,000,000 to aid the states in road building in addition to \$75,000,000 previously appropriated in 1916. Michigan's share of this last appropriation will be about six million within the next two years. To get this allotment we must put up an equal amount. With a continuance of this policy we can reasonably expect many more millions from the Federal government in the next ten years.

This program necessitates a bond issue. The State Highway Commissioner, Frank F. Rogers, recommends that the Legislature will make available during the next two years not more than ten million dollars of this money, bonds for which should be issued only as the money is needed for actual road construction.



The country's transportation systems are constantly breaking down under the strain of "excess baggage." High freight rates and poor service militate against both producer and consumer. Hard roads and trucks will provide the eventual solution to the increasing problems of transportation, especially of good roads that will sooner or later touch every farm and hamlet in the state.

tting t dat MICHIGAN'S RAILWAY COMMISSION

N A LITTLE Massachusetts city, many years ago, the citizens were squarely divided into two distinct groups over the question of whether geese should be permitted to run at large. As the goose owners and the non-goose owners were about equal in number, it naturally became a matter of great public concern. Those who kept geese in conformity with the principle of economic determinism favored the freedom of the goose; those who did not own geese, for the same reason opposed.

At the annual city election the goose question naturally became the "paramount issue." Fearing the popular decision of the matter might not be to their liking, the "best citizens" of the town who, of course were "no goose" men, resorted to a little strategy. They put forward as their candidate for mayor, a local character who stood high in the esteem of all the citizens, goose and nogoose alike named Paddy O'Brien. Paddy had no record on subject to embarrass him, and while he owned no geese, many of his friends did. As the election approached, Paddy had important business in Boston for several days and one Finnigan sallied forth as his champion. He went from house to house extolling the virtues of O'Brien; telling how he had fed the poor, ministered to the sick, led the blind, c mforted the widows and orphans, and how he had even gone to the aid of those whose errors had placed them in prison and finally, says Finnigan, "O'Brien is right on the goose." At the election O'Brien was "tribund here." At the election O'Brien was "triumphantly" elected and later took his seat amid the noisy acclaim of the people-and a few weeks later instructed the police to enforce an old ordinance against geese running at large

Chapter II.

A FEW YEARS since the legislature created the state Railroad Commission and endowed it with great power with regard to the railroads and the other service corporations of the state. It was intended that this commission should compel observance of the laws made by the legislature, and act as a arbiters between public and private interests in all questions arising out of the administration of such laws. It was vested with extraordinary judicial and executive powers, and functioning properly, would be one of the greatest safeguards to both public and private interests, conditioned always upon the personnel of the board being men big enough and broad enough to grasp its problems and sufficiently honest to go straight away down the the pathway of Dutybut: the members of this board are appointed by the governor, and in the exercise of their rate-making powers, involving the possing on items to be included or excluded in figuring the capitalization or investment account on which they may be permitted to draw interest or dividends, from the contributions of the public, this board exercises extraordinary powers.

It is said that our Saviour in the exercise of his extraordinary powers, on one occasion, transformed water into a grade of wine that got by with the wedding guests, but this board in the exercise of its extraordinary powers with relation to capitalization and consequent rates for service, transforms pure water into real money.

The real basis of capitalization upon which the public should pay a fixed interest charge in arriving at the cost of service, is the actual investment in the things used in providing the service. This would exclude franchise values, the unearned incement in land values; the mistakes, honest or dishonest, of present or past managements as well as the pure water so frequently and so generously poured into the cap-

REPRESENTATIVE FRANK B. ALDRICH

Frank B. Aldrich, representative from boygan county, is serving his first term in the House. He is a farmer and extensive producer of the "big red apple" for which his county is famous. He is a "good orads" enthusiast, and author of the Aldrich Highway

bill.



By HERB BAKER

italization of public utilities. No one could succussfully contend against rates based on the cost of service in which was included a fair return upon the investment if it were figured upon this basis. But to apply this principle, which Attorney General Groesbeck contends should be applied would involve the depreciation of certain beautifully engraved bonds and certificates of stock, and the impairment of certain highly satisfactory sources of revenue in which some of our "best people" are deeply interested. If the public interest should demand that the principle above mentioned should be applied, the private interests involved, inspired by the instinct of self-preservation would most strenuously insist that it should not be applied. Upon the decision of the question would hinge the value of hundreds of millions of public service debentures. The power to determine the matter is in the hands of the state railroad commission. The railroad commission consists of three members, appointed by the governor and confirmed by the senate. Two members control the action of the commission.

The dullest intellect can comprehend how important to the private interests concerned, is the personnel of that commission. How can it be controlled? Simplest thing in the world. Get a small bone politician of plastic nature in the governor's chair-one who will "listen to reason" and remember his friends. Then some "mighty good fellow." whose psychology has been developed in the right environment can be appointed railroad commissioner. When this has been twice done you can start the machinery for turning water into money and the courts are your only relief. The question-And then suppose-but, perish the thought. The question arises, how are they to get such a governor? That's easy-A small percentage of the water waiting the action of the commission to turn it into money, secure the gratuitous (?) services of Paul King or some other expert at making whistles out of pigs' talls, and let the state be flooded with literature telling how as a boy he went to school with an empty dinner pail, later worked in a saw mill to support a family that perhaps never existed, how in young manhood he once gave an old woman a sack of flour costing 79c, how as township treasurer he took hold of a busted treasury, took the money the fellows brought in ,paid the outstanding orders and turned the office over to his successor with everything paid and a cash balance of \$13.78; how he once lent his overcoat to some poor devil who was caught away from home without one, and how, as Finnegan said of O'Brien, he was "absolutely right on the goose."-The populace take him up with a whoop and he wins in a walk. Then if the fog rises and things look different than expected; Well, what are you going to do about it-

Now, this story is written to make our readers sit up and look for moves of this kind should some of these smart Alecks who pull them off in other states come along and undertake to monkey with us Michiganders. No one thinks that any such stunt has been pulled in Michigan. At the same time an unfortunate situation has developed in our railroad commission. Judge West by injunction stopped the majority of that commission, (Cunningham and Kiser) from unloading on the city of Detroit a decision that, it is alleged, would transform a lot of water Dy increasing telephone rates. Bills and constitutional amendments are accumulating in the legislative hopper, to take out of the commission's hands every form of municipal utilities.

Deep-seated distrust of the commission on the part of the legislators is apparent. The senate has unofficially refused to confirm Gov. Sleeper's reappointment of Com. Cunningham, and he will very likely be requested to ask for the resignation of Com. Kiser, and to avoid possible future mixups. It is suggested that a public utilities commission be substituted, whose members shall be nominated by primary and elected by the people as the best means of curbing private interests.

TERMINAL WAREHOUSES

THE RESOLUTION proposing an amendment to the Constitution to be voted on at the November election in 1920 authorizing an issue of state bonds in an amount not to exceed \$5,000,000 for the erection of terminal wavehouses in the lawrence that terminal warehouses in the large cities of the state for the marketing direct, from producer to consumer, of farm products, passed the 27th by the following vote:

YEAS-Baker, Bierd, Brennan, Bryant, Clark, Condon, Davis, DeFoe, DeLand, Harvey, Hayes, Lemire, McNaughton, Millen, Miller, Penney, Rowe, Scully, Smith, Stoddard, Tufts, Vanden

boom, Watkins, Wilcox, Wood.

NAYS-Amon, Forrester, Henry, Hicks, McRae. Following is the joint resolution:

"A joint resolution proposing an amendment to article 10 of the Constitution of the State of Michigan by adding thereto a new section to be known and designated as section 10a of said article 10, authorizing the State to borrow money to be used for the construction and opera-tion of terminal warehouses within the State, and to issue bonds therefor.

"Resolved by the Senate and House of Representatives of the State of Michigan, That the following amendment to article ten of the Conknown and designated as section ten-a of said article ten, authorizing the State to borrow money to be used for the construction and operation of terminal wa houses within the State, and to issue bonds therefor, is hereby proposed, agreed to and submitted to the people of this

(Sec. 10a. The State may borrow not to exceed five million dollars for the construction of terminal warehouses in the cities of the State and may operate the same for the reception, storage and sale of foodstuffs grown in the State and consigned thereto by the producers thereof or by co-operative associations of such producers and pledge its credit, and issue bonds therefor on such terms as shall be provided by

And thus closed, so far as the Senate is concerned, the greatest of the farmers' battles of the session of 1919. The interests affected will now begin to hammer the members of the house, and a few of their letters may frighten some members of that body as easily as they frightened some of the senators.

With regard to this matter it should be remembered that if this resolution is passed and submitted to the people and adopted by them then you have only commenced. Not a bond would be sold, not a dollar would be spent until both branches of the legislature and the governor had agreed on a plan of operation. If the people adopt this plan, it should be entered upon with reasoncaution. Senator Boulanger suggests that an initial expenditure of \$50,000 should be made on a warehouse at Detroit where farm products should be handled by a state market director. Here the producer could consign his products, and here the individual, or better, the organized consumer could buy such of these products as he needed. In this case there would be only the transportation charges and the market commissioner's charge between them.

It would work to the advantage of both producer and consumer, and finally we should have them in all our leading cities and perhaps in cities outside the state. It will interfere with the present business of some people just the same as prohibition did, but no one should get cold feet when their cry of Wolf! Wolf! is heard-

This legislature is within your grasp. It is up to you. Don't lie down and then damn the legislature. Poke up your representative with a petition and some good sharp letters and watch results. This is a case where "God helps him who helps himself."

SENATOR CLAUDE M. STODDARD

Senator Stoddard represents Genesee and



Livings ton counties. He is counties. He is a real farmer, living on a farm of more than 400 acres in Genesee county. He is serving his first term in the Senate and is giving a mighty good service to his district and to the state in general.

n



WHAT IS THE WORLD'S WHEAT SUPPLY IS AN UNSOLVED QUESTION

There are amazing discrepancies between the U.S. Department of Agriculture's figures on the world's wheat supply and figures obtained by Senator Gore, chairman of the committee of agriculture, from the American consuls-general in Australia, Argentine and Canada.

"Our latest information upon the subject was contained in our circular on agricultural production dated January 23d. It shows Argentina has available for export 185,000,000 bushels, and Australia 210,000,000 bushels. It also shows that Canada has 100,000,000 bushels."—Sec'y. Houston.

The Department of Agriculture, therefore, goes on record with a definite declaration that these three countries now have available for export 495,000,000 bushels of wheat. Turn now to what Senator Gore told the senate February 11th, in debate. Senator Gore said that to ascertain the facts he called to the United States consul-general in Australia, who cabled back under date of January 9th. saving that the available surplus in Australia was only 120,000,000 bushels.

today, is too high. India will have no wheat surplus. I saw in London, three weeks ago, a telegram from the Indian government advising the

Senator Gore further presented a cable from our consul-general of Calcutta, received January 11th, saying there was no available surplus of wheat in India, and that India is importing wheat. Senator Gore contrasted this with estimates put out in Washington that India has an exportable surplus of 150,000,000 bushels. He also said that the 120,000.000 bushels available in Australia has been seriously damaged by lack of storage facilities, by exposure to the weather and by rodents.

Senator Gore quoted a telegram from our consul-general in Canada that the available surplus there is only 75,000,000 bushels.

It is thus seen that our Department of Agriculture is disseminating statements that Argentina, Australia and Canada now have available for export 495,000,000 bushels, while Senator Gore has definite reports from the highest authorities, the American consuls-general in those three countries, that their available surplus is only 239,000,000 bushels, a quantity less than one-half that given out by our Department of Agriculture.

Another high authority, Julius Barnes, president of the food administration's grain corporation, flatly disputes the high estimates of certain witnesses before the congressional committees. When before the house committee on agriculture on February 5th, Mr. Barnes said:

"The 175,000,000 estimate for Argentina is too high, the 250,000,000 for Australia is absolutely too high, the 50,000,000 for Canada, as existing

British government not to expect any wheat or rice this year because India's crop outlook was poor. The impression that we start today with an enormous surplus large enough to supply the United States and foreign requirements, independent of the new crop coming up in the meantime in Canada, United States and India, is false."

The effect of the exaggrated stimates given out by the Department of Agriculture is only too apparent. In the first place they convey wrong information to the American wheatgrowers. Reading these estimates and trusting in them, our wheatgrowers naturally will say: "This is going to be a poor year to grow wheat." If our farmers can not have dependable information on world crops from the Department of Agriculture, they would better have no reports at all.

\$500,000,000 FOR FEDERAL

GOOD ROADS WORK IN 1919

Expenditures for highway work in the United States this year are likely to amount to a half billion dollars or even more, according to a statement made today by officials of the Bureau of Public Roads, United States Department of Agriculture. On reports received from state highway departments, the bureau estimates the expenditure for 1916 and 1917. This estimate 000, or \$110,000,000 more than the average expenditure for 191 6and 1917. This estimate does not include, however, the additional Federal funds which will be available if the amendment to the Post Office apropriation bill, making \$50,000,000 immediately available and \$75,000,000 more on July 1, is enacted into law.

Estimated work under control of the state highway departments includes \$45,000,000 for the construction of 5,000 miles of road now under contract, \$30,000,000 for 4,000 miles of construction ready for contract, \$100,000,000 for 16,000 miles of contemplated construction, and \$60,000,000 for maintenance of 200,000 miles. Expenditures of counties, townships, and local road districts are estimated at \$100,000,000 for the construction of 15,000 miles; \$50,000,000 for maintenance of 100,000 miles.

HERB BAKER ELECTED ON THE

POTATO EXCHANGE BOARD

Senator Herb Baker, of Cheboygan county, has been elected to the executive board of the Michigan Potato Growers' Exchange, to fill the vacancy caused by the resignation of Mr. E. J. Smith. Sen. Baker is president of the Cheboygan County Co-operative Association, and a pioneer in the co-operative movement. He will be a valuale addition to the executive board of the exchange.

NATIONAL MILK AND DAIRY

FARM EXPOSITION FOR 1919

Announcement is made that New York will again be the scene of the National Milk and Dairy Farm Exposition. It will be held in the 71st Regiment Armory during the week of April 21st, and judging from present indications, it will be far the best exhibition of its kind ever held. Nearly \$100,000 is being put into this exposition to convince the milk consuming public of the food value of milk; also that milk costs are reasonable and that a big milk industry is involved.

The Armory will be filled to overflowing with exhibits of all forms of milk foods, milk products, processes of milking, handling, machinery and equipment, and all manner of things relating to the dairy farm and its allied interests.

So successful was the exposition last year that it is safe to say a greater success is in store for the 1919 display. Never before has the scientific and practical side of the industry been promised such a complete show. There will be numerous exhibits of live cattle as various cattle clubs have secured exhibition space. The exhibits relating to the practical side of the dairy industry will be more interesting than ever and a great deal of the machinery will be in motion. This big exposition will cover all the ramifications of the industry and will be complete in every detail. The show has the backing of the allied agricultural interests of the state and nation and special features are planned for each day.

Because of the character of the exhibits and the conditions that prevail in the dairy industry today, the exhibition and the various conferences to be held in conjunction with it will be of inestimable value. The Exposition will afford an opportunity which seldom comes in the life of the average man on the farm. It is thru co-operation that the best results can be obtained in any industry and those exhibitors who will display their products at the exposition have shown the right spirit of co-operation by arranging their displays so as to afford not only the farmer but the layman an opportunity of getting a viewpoint on the conditions as they exist in the industry today. In general, the exhibition will be in a large measure educational and designed to teach better efficiency. Special features will be introduced bearing on the following subjects included in the scope of the exhibition: Agricultural education, dairy farms, cows, country milk shipping stations, railroad transportation, city milk distributing stations, infant milk depots, etc.

If you think Michigan Farmers' Unreasonable, Look what They're Asking in Nebraska

THE BASIS of legislative action to remedy alleged evils in marketing of Nebraska farm products has been laid by introduction of two bills in the lower house. Around them there promises to center one of the most important and possibly one of the most bitterly fought contests of the legislative session. Both are backed by the Farmers' Union, and one is also supported by the Non-partisan League.

One of the bills, H. 329, proposes to place all persons and organizations handling farm products under the control of the State Railway Commission and to provide for the licensing system with regulation to insure fair dealing, to prevent monopoly. Co-operative associations, such as the Farmers' Union, are specifically exempted from its provisions.

The other bill, H. \$45, declares all grain, live stock or other farm product exchanges to be public markets and requires that they be open to membership of all who agree to comply with the rules. Rules tending to create a monopoly or to restrict the method of distributing profits, such as co-operative distribution, are forbidden. Among the introducers of this bill are representatives of both the Farmers' Union and the Nonpartisan League.

House 329 provides that "all terminal elevators, stock yards, boards of trade, chambers of commerce, grain and live stock exchanges and all other exchanges, facilities and organizations doing business in the State of Nebraska in the marketing or handling of grain, live stock or

any other farm products" shall be deemed to be charged with a public use and under control and supervision of the state railway commission. Co-operative associations are exempted. The railway commission is authorized to issue licenses running two years, providing the applicant for a license shall agree to maintain an open market, to make no attempt to establish a monopoly or unfair or fraudulent methods of dealing, and to make reports daily to the commission as to the amount of products handled and the price paid or received. Before issuing such a license the Commission must hold a public hearing, at which protests may be offered. The license is revocable at the will of the commission if the licensee violates any of the provisions of this law or any rule of the Commission, or if he is found guilty of any unfair, at or unlawful practice, or of an attempt to secure monopoly. The Commission need give only twenty-four hours' notice of a hearing of evidence on a proposal for revocation, and may suspend the license at once pending a decision.

The penalty for handling farm products without a license is fixed at imprisonment for from ninety days to a year, or a fine of not to exceed \$10.000.00

Handlers of grain are forbidden to mix grades in order to sell grain at a higher grade than that for which it was purchased, the penalty being a fine of from \$1,000 to \$10,000 and revocation of their licenses. False weight or grading is penalized by imprisonment of from ninety days to one year for the individual responsible, and a fine of from \$1,000 to \$10,000 for the corporation. Provision is also made for the appointment of a state farm products inspector, salaried at \$5,000, and for assistants.

H. 345 declares all associations or organizations which handle grain and farm products exclusively between members to be public markets. They must admit to membership any person or organization that agrees to comply with their rules. The bill forbids any rule which tends to create a monopoly or prevent free competition. It further forbids any rule affecting the distribution of profits. The purpose of this bill, in part, is to admit to membership on the Omaha Grain and Live Stock Exchange the Farmers' Union, the rules of the Grain Exchange forbid division of profits of members of the Exchange on a co-operative basis. Refusal of an Exchange to admit members on the basis provided for in the bill, refusal to trade with all members on a perfect equality or adoption of forbidden rules renders the Exchange offending an unlawful monopoly under the terms of the bill, and further trading is forbidden. The attorney-general is required, in such cases, to institute proceedings to dissolve the Exchange and enjoin its further operation. If the attorneygeneral does not act, any private aggrieved individual or organization may do so in the name of the state.

"-for all the farmers of Michigan"

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Capital,—the Farmer's Great Need

EARLY EVERY farmer in Michigan could use additional capital this year to good advantage. The majority of them will have no difficulty in securing that capital at a nominal rate of interest. But we dare say that there are some twenty or thirty thousand farmers of ability and integrity who will find it difficult to borrow money at a rate of interest they can afford to pay. Farmers who can get money for a term of one year at six or seven per cent interest will probably make some investments this spring in more land, machinery, live stock, buildings, etc. But farmers who can borrow for only ninety days or perhaps six months at the outside and are asked by the money lenders to pay ten to twenty per cent interest, will have to worry along somehow with limited funds.

We all recognize that the lack of capital and credit facilities in certain portions of Michigan is a great handicap to agricultural development. Many are the schemes that have been suggested for remedying this condition. Some of them are practical; others entirely theoretical and without value. The federal farm loan act comes the nearest to any plan broached or attempted so far to provide relief for any considerable numbers, and it does not go half way in solving the

D. D. Aitken, in this issue discusses a rather novel plan for providing worthy farmers with needed capital. Its main appeal lies in the fact that the capital would be furnished by people who would receive some benefit from the expenditure of the money. Mr. Aitken believes that individuals with good credit ratings should underwrite the credit of worthy farmers of their respective communities and thus aid in the development of agricultural lands and in the creation of a wealth, part of which would eventually find its way into the pockets of the underwriters.

The farmers on the newer lands of Michigan frequently need small sums of money for short periods of time. They need this money to buy tools, seed, feed, cattle, etc. Or per-chance, they need money to finance part of their farming operations. In some sections no matter how badly they need the money, they can't get it; while in other sections they must pay exorbitant interest rates and give security that is ridiculously iron-clad. As a result many improvements are delayed and many investments deferred. For the lack of a little capital, great wealth is left undeveloped in the soil, and not only the farmer but the entire community is deprived thereof.

We should like to see Mr. Aitken's plan given a trial. It calls for a faith in the integrity of farmers and in the future of local agriculture, which most communities do not have. They seem to lack the vision. They seem not to appreciate how much their own welfare depends upon the welfare of the

farmers. If communities could successfully finance the needy and worthy farmers who patronize them, the greatest problem of the northern Michigan farmer would be solved and development would be greatly encouraged. If they cannot or will not, agricultural development in this state must continue to go forward at a snail's pace, unless the state itself desires to loan the money. Down in that greatest of all agricultural states of the Union, Illinois, they are talking about a state rural credits law. If they need such a law in Illinois, how much more do we need it here in Michigan, where there are several million fertile acres yet to be reclaimed from their wild state. Perhaps Mr. Sleeper, who a fortnight before his first nomination as governor pledged himself to help solve this great problem, now has the solution up his sleeve and is preparing to spring it as a happy surprise to the farmers before the legislature adjourns. And then, again, perhaps not.

Leadership

F ALL mankind followed the path of least resistance, there would be no leaders, and little progress would be made. Many men have great dreams and visions of wonderful accomplishments, but few of them have the initiative or the courage to take the steps which are necessary to transform those visions into

There are not many real leaders. Many pose as leaders who are actually trailers. They capitalize upon the ideas of others, pattern their ambitions, their acts, their lives after the leaders, and hope thereby to reach a coveted niche in the hall of fame.

It is easy to tell the difference between the leader and the trailer. The leader points the way; the trailer follows. The leader expresses a new thought, perfects a new machine, performs a new service, always anticipating the coming needs of the people, while the trailer copies, copies, loudly proclaiming the while that he is the original master of that which he copies.

Qualities of leadership are found not only in men, but in the things that men make and do. There is a leader in almost every branch of business. There is a model machine, a model organization, a model farm, a model business, a model newspaper, etc., after which countless other machines, organizations, farms, businesses and newspapers are pat-

Leadership is woefully lacking in the great field of agriculture. That is because other fields of endeavor have offered better opportunities to men who possessed the qualities of leadership. The result is that farming as a business is far to the rear of the caravan of progress and is only now after many centuries awakening to the splendid possibilities that lie before it. Those few who have developed as leaders in the agricultural field have accomplished much against great odds. They have not been accorded the fullest measure of support by those whom they have tried to aid. Farmers have not always differentiated between the leaders and the trailers. Consequently there has been a lack of cooperation which has been a great obstacle to the development of the farming business.

It were well for farmers to study the aims and efforts of men and newspapers devoted to the betterment of farming conditions, and to distinguish between those who lead and those who trail. True leadership should be encouraged and rewarded. Do not be deceived. Follow the leaders and you will be brought safely to the goal which you seek.

The Farm Bureau

SIMPLY BECAUSE M. B. F. has refused to endorse all that the farm bureau organizations have attempted to do, and has indulged more or less freely in criticism of their methods, a few of our readers profess to believe that we are opposed to the farm bureau and county agent movement.

Nothing, of course, could be farther from the truth. On the contrary we have time and again endorsed the general aims of the county farm bureaus, and have no apologies to make for criticism of particular cases in which it

appeared to us that bureaus and county agents had departed from the path of great-

It should not be lost sight of that the farm bureau is yet the organization of the minority. This may not always be the case. If the farm bureau continues as an instrument to be wielded solely by the farmers themselves, independent of any outside arbitrary authority, we hope to see the day come when every farmer will be a member of his county farm bureau, helping to direct and co-operating with the work of the county agent.

It is no secret that until quite recently the county agent frequently acted quite independent of the farm bureau and the farmers of his community. No doubt a score of cases could be brought to mind in which county agents assumed to represent the wishes of their constituents, but actually misrepresented them. Who should be blamed in a case like this, the county agent or the farmerr?

If the county farm bureau and the county agent are to get their orders from East Lansing or Washington, we shall oppose them. If they are to be guided, however, by the wishes of the majority of farmers themselves we shall help them, for we firmly believe despite the indifference and opposition of large numbers of farmers that the county farm bureau and the county agent have come to stay and are potential factors in the upbuilding of farming communities.

The Smell of Spring

WEATHER PROVERBS reversed themselves this past winter. When by all the signs of the Zodiac and the convincing prognostications of the almanac, it should have been cold it was warm; when it should have been warm it was cold; when it should have snowed it rained; and when the winds should have brought howling blizzards down from the north, they brought soft zephyrs from the south. And so, while March came roaring in like a lion, and according to its past performances should pass meekly out of the calendar like a little lamb, we are not altogether sure that it will do so. For remember, the ground hog saw his "shadder!"

This week spring is in the air. True, the robins have not yet arrived, but surely you have heard the crows caw-cawing their annual spring-time greeting from the wood-lot? And you have felt that strange tugging at your heart and heard the call of the out-ofdoors to come out and get busy in the fields? And even though the earth still shows great patches of snow upon its bosom, and the ground is still frozen in places, and there is a bite in the morning air, the smell of spring is everywhere. The earth is breathing again as the snow melts and wears little crevices in the soil and the frost breaks down the clods turned up in last fall's plowing. The smell of spring is the breath of earth, and for the rest of March every south wind will be laden with the perfume.

Wm. Howard Taft has arisen immeasurably in the estimation of the American people since he said: "The gentlemen in the senate who are setting out to defeat this League of Nations are those I would not trust over night. They are citing the Constitution as an argument against it. I reverance and worship that great instrument. (Those who remember the official words and acts of that great jurist know that none loved better the rights guaranteed under the Constitution) But it is a new story to me if the Constitution prevents this people from playing their part in bringing peace and order and happiness to ourselves and the other peoples of the world. * * This is not a political question. God forbid! I am glad President Wilson went to Europe, because he went bearing a promise of a League of Nations."

It's a funny world. Capital has been complaining that President Wilson was partial to labor. And last Sunday a mob of Socialists and labor representatives met in Detroit and howled, "down with Wilson." 0



SHALL WE RAISE MORE FOOD?

According to correspondents of various farm papers at Washington, farmers of the whole U. S. are about to be urged to raise more food this coming summer than ever before, to feed the starving people of Europe, but what gets my goat is this: They want the farmer to work 16 hours a day, which he would have to do to raise this food on account of the scarcity of farm labor.

After we have this food raised Mr. Speculator steps in and takes it over at his own price, which is never more than 35 per cent of consumers' price, and from that down to almost nothing.

See where prices of farm commodities have gone and are still going. What is the cause? Mostly selling "futures" by the speculators, or speculation in farm produce ,if you please. Do prices of what we have to buy take a tumble? Not so you can notice it with the naked eye.

According to the last U. S. census the average gross income of the American farmer is \$836, which is less money, by far, than the poorest paid mechanic gets in the city for his year's work.

In earning that \$836 a farmer's wife and children work for nothing and "eat themselves," as the Irishman said.

It costs like h- to manufacture farm produce nowadays. Does the average farmer know what it costs to produce an acre of corn, oats, wheat or potatoes? I don't believe he does. When we sell, why shouldn't we get cost of production plus 10 per cent profit. Do we get it usually? I guess not. We farmers never will get what belongs to us until we enough farmers in the state and U. S. legisla tures to represent us, and keep the balance of power in our favor, or at least give us an equal show with other people. This is all we ask or need. Farmers of our state need state-owned and operated warehouses, operated at actual cost, where we can ship our product and get a bigger slice of the consumer's dollar, and at the same time the consumer could buy cheaper.

Will we get them? Yes, if we have enough farmers at Lansing to put McNaughton's bill across. Otherwise not. If farmers were properly represented in all our state and U. S. legislatures how long would there be Boards of trade and packers selling futures, and otherwise speculating in farm commodities?

Where is the sense in farmers working double time mining their lands to raise crops to let the "other fellow" have at his own price? What's the remedy? Organize and combine

What's the remedy? Organize and combine as all other classes have done; produce no more than enough to cover cost of production and a profit. See? People who produce what we buy would go bankrupt in a short time if they did business the way we farmers do. Why should a farmer work for nothing and "eat himself," as he does a large part of the time? Does the other fellow do it? Not as you can notice.

If we dig in this coming summer and double our production, as they are asking us to do, what will the result be? It will divide by two the prices we have been getting the past year. It would also double the profits of the middleman.—A. A. Lambertson, Kent County.

TO "EQUALIZE TAXES"

I notice you quote Theodore Roosevelt as saying: "Upon the development of country life rests ultimately our ability, by methods of farming requiring the highest intelligence, to continue to feed the hungry nations."

Mr. Roosevelt saw that something was the matter with the business of farming; something that discouraged farmers to do their very best, either for themselves or for the community. In hunting around for something worth while, he ramarked: "It might be best to try the graduated land tax, or else to equalize taxes as between used and unused agricultural land, which would prevent farm land being held for speculative purposes."

The Michigan Site-Value Tax League is trying to bring about this "equalization" by exempting improvements from taxation; for that would insure the assessor placing site value only, for taxation-purposes, on improved and unimproved land—to the benefit of those who improve and the dis-

advantage of those who keep the land idle.

The farmer who is a land speculator will strenuously object to this. The farmer who is satisfied with the full fruits of his toll (and that is all a farmer or any other wealth producer is entitled to), will say Amen.

By the way, it will be strange if the farming community of Michigan, which is the very backbone of the Republican party of this state, does not nominate the farmers' candidates for the state agricultural board, it will be surprising evidence of political imbecility.—Judson Grenell, Waterford, Michigan.

A DEFENSE OF HENRY FORD

Just a few words to let Mr. Weaver know that I read his seemingly somewhat prejudiced letters in M. B. F., regarding principally, the value of Henry Ford's activities during the war.

Of course, Mr. Weaver, you must know and also consider the fact, that the plant in which Mr. Ford built his "Eagle" boats, was not the only plant he had in use during the war and that of course he must have received large profits from these plants, which went in to make up the 200 per cent. dividends which you spoke of, and remember, that to make this up he did not take one cent of profit from his Eagle plant.

Henry Ford finished and launched seven "Eagles," and it certainly was not his fault that the war ended before he had launched enough ships to satisfy some of his more critical observers.

Also when the Government asked for bids on the manufacture of cylinder for the Liberty motor, Ford offered to make and did make them for nearly one-half of what his nearest rival bidder would make for.



One Type of Business Farmer

I did not notice in your letter anything about the great Ford hospital, or the good it has done, but perhaps you were so intent on your criticism that you forgot to mention any of the good he might have done.

You claim that you asked exemption for your son until after the fall work was over and you were refused, whereas, Edsel Ford was exempted on industrial grounds.

Your claims were probably considered by your local draft board and if they were refused, it must have been because in their judgment your boy was able to do more good in the war than on the farm. Whereas, if Henry Ford's son was exempted by the draft board, on industrial grounds, they certainly must have known more about where he could do the most good, than you do, and as I understand it the work of the draft board was to bring together in the shortest possible time, an army sufficiently strong to lick the hun, and at the same time to accord to every man the justice he has a right to expect under the laws of the constitution

And as for your criticism of Edsel Ford for playing golf, well, President Wilson played golf and I defy you or any other man to name any man who has done more for the cause of humanity, or for bringing about victory, and remember, that when you criticize Ford for playing golf, that no truly-great man ever lived who did not, along with his work, find time for recreation.—
C. A. M., Carson Gity, Mich.

DOES YOUR HIGHWAY COMMISSIONER COMPL WITH THE LAW?

To the Readers of M. B. F.-What, or what kind of a road law do you want?

1st. Let us refer you to our township commis-

soiner's way of compliance or appliance of the present law, Chapter 10, Section 3: Has your commissioner complied with the provisions of this section, or have you known him to advertise for bids by contract for doing any work exceeding \$500.00 more or less? "Priviso collusion among bidders." Has not the "collusion" been between the township board and the commissioner in carrying out a kind of secret diplomacy? Why not have a public sale? In this township-16-6-they have ignored the law, the commissioner taking charge of repair, as well as the improvement fund, thus prolonging his days of employment at greater pay than the men that did the actual work, (and many times taking his son and team off of his farm to work on a section of road building). I might refer to many acts of injustice to the public welfare, practised under the present law but will refer to only one other.

In the spring of 1918 the commissioner condemned one mile of road but did not put up any sign—required by law—but relied entirely on telephone as a notice to the public that the said road was impassable. By observation I know there were four autos stalled at one time, and one truck at another. Did the commissioner apply any road funds to repair said road during the season? Not one cent. So far I have followed the general trend of letters written by the subscribers for the M. B.F.

Question: What is the remedy?

Ans.: Each congressional district shall constitute a road district administered by three county commissioners in each county assisted by oneor more if necessary-civil engineers, to draw by profile and specify all ditches and road improvements-approved by said commissioners-and shall be known as the "Good road and ditch congress." All expenses to be paid by the tax on the district apportioned by the congress. Were the congress to consider the issue of bonds for some special improvement-assisted by the Agricultural Bureau Washington and Lansing. Such bonds to be paid on the amortizement plan not to draw interest above 5%. (Due regards paid to the Constitutional homestead where not mortgaged). Article XIV Sec. 2. Constitution of Michigan. Upon inquiry I find it would cost around \$50 to \$100, possibly more to put in legal phraseology a bill to present to Congress. So far I find no serious objection to this plan, but I do find the present law very unsatisfactory."

Now, Farmers, think this over in detail; bring out the objections and let us hear from you.—N. R. Cheadle, Clare county, Mich.

ANTRIM GRANGE WANTS TERMINAL WAREHOUSES

WHEREAS; It is reported that the Legislature will not submit an amendment to the constitution at the April election, for permission to bond the state for \$5,000,000 for State terminal warehouses, and

WHEREAS: the farmers believe the interests of both the consumer and the producer will be greatly benefited by state ware-houses thereby stabilizing our markets for produce, and

WHEREAS; We believe terminal ware-houses are just as important as good roads to the consumer and producer.

THEREFORE; Be it Resolved, that; Antrim County Pomona Grange No. 38 in session at Forest Home Grange hall, Forest Home township, urge the Legislature to make provisions for the submitting of this amendment at the April election 1919.

—R. E. Morrow, Acting Secretary.

A SILO EXPERIENCE

I have read about different silos in the M. B. F., telling all about their good points. Now let me tell you about my silo which I had built seven years ago (a little idea of my own.) I had been thinking of building a silo for a long time, but never liked the idea of hanging on the ladder every week to either tighten or loosen the hoops. So this is what I built:

I took some black ash logs to the saw mill and had it sawed into strips three inches wide thick, then dressed down to 5-8 inches thick. 'Out of these strips I had 13 hoops made of seven strips in thickness, perfectly sound. I had my wall made and the 13 hoops were all laid on the wall, the lower hoop being bolted to the wall with eight 20-inch bolts. Then a scaffold was built around the wall and the 12 hoops were raised and fastened on the scaffold, the lower hoops a little closer together than the upper ones. Now the inside of the hoops are sided up with Southern pine flooring, leaving an opening for doors to be fitted in, and the outside with hemlock shiplap, 8 inches wide. This makes an air chamber of 4 3-8 inches preventing the silage from freezing as thick around the wall as it does in

stave silos. The hoops will answer for a ladder to climb up. My silo has stood up without a single anchor, and the silage keeps perfect.

As to the cost of the silo, when I built this my neighbor bought a stave silo which cost him \$200 just for the material. Mine cost me completely finished 3 1-2 foot wall, two coats of paint and roof, \$149.57. Both silos being 12x30. There are more silos being built like it every year and all are more than pleased with them. -R. P. Doll, Isabella county.

SAYS SUPERVISORS MAY HIRE AGENT

Mr. Custer Higgins of Benzie county says that the voters of his county have twice voted down the county agricultural agent proposition, but notwithstanding this, the board of supervisors have employed a county agricultural agent. Mr. W. E. Brown, your legal editor, answers the query by citing Section 7868 of C. L. 1915, which section, he says, deals with the question raised by Mr. Higgins.

While I am not a resident of Benzie county, am more or less familiar with conditions there, and if I understand the proposition correctly, Benzie County last year acted in conjunction with Leelanau county in employing a county agricultural expert. These counties act-ed in co-operation with the Michigan Agricultural College under authority of Act 3 of 1912, second extra session. This Act provides that the supervisors in any county in Michigan are authorized "to appropriate or raise money by taxes to be used for co-operative work with the Michigan Agricultural College in encouraging improved methods of farm management, and practical instruction and demonstration in agruculture." If the voters of Benzie county have voted on the proposition of employing an agricultural expert, it has evidently been at the request of the Board of Supervisors.

Act 67 of 1913, which is the one to which Mr. Brown refers and under which he says that the supervisors "would have no right to appropriate money for such purposes nor order any tax spread for such purposes until approved by the electors first in adopting the provisions," does not apply to the conditions referred to by Mr. Higgins owing to the fact that Act 67 of 1913 provides that the county may employ an 'agricultural commissioner" without co-operation with state and federal governments. Under this Act the county must pay, not only all the salary, but all the expenses, while under Act 3 of 1912, the Agricultural College pays \$1,200 of the agricultural expert's salary.

The mistake which Mr. Brown made is frequently made and it is to be hoped that the present legislature will provide a bill which will do away with all of the possibilities of misunderstanding in connection with county agent work .- J. B. McMurty, Cheboygan county.

QUITE A CONTRAST

Two prominent American citizens were heard from the other day.

One stood on the floor of the United States Senate and heaped partisan ridicule and political invective upon Henry Ford, manufacturer and noted advocate of the \$5 day for laborers.

Senator Lawrence Y. Sherman of Illinois, who always placed party above patriotism and progress, halted the already overburdened wheels of Congress at the eleventh hour of legislation to tell a handfull of politicians what he thought of Henry Ford.

He wasted two golden hours of senatorial time on sarcasm when it is action the nation asks of its Senate.

On the other hand that same day, Henry Ford

"I am going to provide jobs for 4,000 disabled soldiers," Ford announced, "and without discharging any of the workers now employed. These disabled soldiers will be trained to earn the same wages other employees receive. No disability other than the loss of both arms will bar a returned soldier."

And Henry Ford started hiring disabled veterans that day!

While the country is begging Congress for reconstruction and prosperity legislation Lawrence Sherman gives us "hot air" and peanut

While the nation vainly waits for Congress to help solve the unemployment problem facing so many returned soldiers, while many big employers are shutting down because they won't pay high prices and high wages, Henry Ford opens his shop, at good wages, to 4,000 soldiers-and disabled heroes, at that!

Honestly, folks, we believe this land of ours

is so great and prosperous because there are so many Henry Fords here and so few Lawrence Shermans.—Published by request.

TRACTORS AND TRACTORS

With the launching of the "Food will win the war" slogan, there was started an ever-increasing tractor propaganda, which misled thousands of farmers into believing that the day of the horseless farm had arrived. For nearly two years magazines and other papers have been literally filled with "catchy" photographs and sensational tractor articles until almost every farmer as some time or other has been afraid that running a farm without a tractor might stamp him as a "hayseed." Magazine writers have been especially skillful in picturing farms run without hired help and tractors harnessed to do the milking and churning and the sweeping and family washing. To get this "Jack-of-all-trades," thousands of farmers went into debt ,and most of them did it out of patriotism, for all of them were anxious and willing to plant the biggest crops they ever raised, regardless of any scarcity of labor.

Tractors have been successfully used for many years, but in all this propaganda there has been a careful avoidance of explaining that there are tractors and tractors, and thousands upon thousands of dollars have been wasted in the belief that any tractor will do, as long as it is a tractor. This especially applies to the newer sections of Northern Michigan and other regions where farms upon which tractors might be used, have cleared areas ranging from forty to upwards of a hundred acres. On such farms two or three horses are generally used and any



-Orr, in the Chicago Tribune.

kind of a tractor is merely an additional expense, for the same number of horses are needed to do the work during late fall and winter. It is not a question of whether the "Red Devil" is a better tractor than the "Blue Bird," nor whether the "Swift Kid" is cheaper than the "Fast Pull." The main question is that there is a vast difference between the heavy tractor which has been in use for many years, and the so-called light tractor which is of recent origin. The heavy tractor which pulls at one time six to a dozen plows, two or three harrows and as many seeders, takes the place of many horses and several hired men and does the work many times faster. The light tractor cannot do this, for it is not expected to pull more than two plows, and if it is to do a good job of plowing, it cannot travel faster than horses any more than the heavy tractors can. Whether the light tractor will pull even two plows in any kind of soil is still to be proven.

As far as harrowing is concerned, the light tractor will work faster than horses, for, even though the speed is increased, the harrow will do good work as long as it keeps close to the ground, and the same is equally true of other work of a similar character. This, however, is of questionable value on farms which are operated with two or three horses, for, on such farms a tractor is practically useless if these horses are needed at such times of the year when tractors cannot be used.

Whether the tractor can be used economically on the somewhat larger farm which requires four or five horses is an open question. While it can be made to take the place of one team, the fact is that the horses which it could duplicate, if a pair of mares, might raise a couple of colts each year, while no farmer can cross a "Blue Bird" with a "Fast Pull" and expect to

raise a "Kid" tractor.

It may be that a light tractor, practical for the average farm and for every day use, may be built in the "sweet bye and bye." Until then, wait; don't worry and "let George do it." And above all, don't get excited over the abundance of frenzied tractor propaganda, for "there's a

reason."—Leo M. Geismar, Houghton, Mich. (Editor's Note: Many of Mr. Geismar's points are well taken, and we agree with them. Howbeit, we know there are a number of light tractors on the market which are successful, a statement which we have no doubt a number of our readers can substantiate. Let's hear from you satisfied tractor users. Mr. Geismar is from Missouri and we've got to "show him.")

PROHIBITION BLOW AT POOR FARMER

'In a recent issue I saw an account of some legal points Attorney Foster has spoken of, and as prohibition is a direct blow at the poor class of farmers, and being one of such, I feel it my duty to contradict over half of his statements. First, No. 4. The local option law was repealed when state-wide prohibition became a law. Point 5, the legislature will still be able to pass any laws it deems necessary to control liquor traffic. Point 14, we already have laws to take care of such points raised in this point. Point 15 contradicts point No. 7 Point 19 is a simple falsehood, as it is illegal to give or sell liquors of any kind to a minor or habitual drunkard, or prisoners in jail. Point 21, a person may be charged with a misdemeanor or disorderly conduct for being drunk. Points 22 and 23, with the high cost of beer and wine it is very doubtful if anyone would give it away. Point 24, we have a law that compels saloons to close at 10:00 p.m. in this state and they may open at 7:00 a.m. Point 27, the state law already provides for the number of saloons, according to population, and also district in which they may operate, and also use of screens, employment of girls and dance halls in connection. Point 34, the legislature may at any time pass laws to put in force other laws which, of course, as has always been the case, would be subject to referendum. Point 35, under our present laws one must not sell beer or wine without a license. Point 38, a person should have the right to keep what he or she wishes in their private residences, providing it is not a public nuisance. And if the wine, cider and beer amendment is defeated at the spring election, it will be illegal for a farmer to have cider in his possession, and the price of grain will continue to decline, so I feel it is to the interest of all farmers to vote "yes" April 7th, and let the country continue to be free .- F. C. Dunston, Clarkston, Michigan.

OPPOSED TO BOND ISSUE

I would like to say a few words on this bonding matter. I think, to begin with, the state highway commissioner had better find out what constitutes good roads, form some definite plan for building good roads and for raising money for building and plans for the expenditure of the money after it is raised, then publish the plans in different papers so they will get before the people, so they will know just what they are voting for. Under the present system of road building there is a lot of money spent without accomplishing much benefit. Under the present system, as I see it, the money is spent to benefit the few, not the many. These trunk line highways benefit the auto tourists, not the farmer, and the farmer pays the largest per cent of the cost. So to sum up the whole proposition, I think the only wise thing to do is to turn down the present bonding proposition until we have a few facts and also some specifications to tell us what we are voting for. -Robert F. Kelly, Newaygo county.

HOW TO "SMOKE OUT THE HOG."

Please pardon the intrusion on your time once more. However, the article, "Who Owns the Chicago Stock Yards?" interests me; I don't care "how old Ann is," but I submit the following for your own amusement. So far as evidence shows, no one owns the yards, very well, let us then assume that they must be owned by German capital (?) that being the conclusion, let whoever is armed with the proper authority, requisition the yards the same as they did certain other German interests during the war. This is using extreme measures, of course, and depends on how keen they are for information. But, if this doesn't make the hog squeal, and does not have the desired effect. (Smoke them out). Then I guess we must admit that the government has been out-witted E. E. Hoehn, Kalamazoo County.

ARMERS SERVICE BUREAU

A clearing department for farmers' everyday troubles. Prompt, careful attention given to all omplaints or requests for information addressed to this department. We are here to serve you.)

CORRECT WAY TO FEED A HORSE

Which is the correct way to take care of a horse, to first feed him his grain, then the hay, and then water, or water, hay, and grain? Some say that a horse's stomach only holds sixteen quarts. If so, if you feed him his grain first he will get no benefit from it. Thanking you in advance.—D. C., Meauwatake, Mich.

There is more theory about this question than anything else. It is one that we can give opinions about but we really know very little about it and the trouble of it is there isn't any practical way of finding out whether our theory is correct or not. I have heard it argued many times even by veterinarians that if you feed a horse hay and grain and then give him water that some of this food will be washed or drenched out of the stomach before it is properly acted upon by the gastric juices. But the fact is, I think, that most of the water passes through the membranes of the stomach into the circulation, or blood stream direct from the stomach. Very little of it goes through the stomach into the bowels. The theory, of course, is that the horse should be watered, say in the morning before it is fed its grain, but this is hardly practical and most everybody feeds the grain the very first thing, then they feed hay and after breakfast the horse is harnessed and taken out and watered before they go to work. Now this seems to work out well in practice. Horses seem to do well and so far as one can tell no food My judgment is, that more food is wasted by horses eating too rapidly and not properly masticating their food than there is by its being washed through the stomach by water. really don't believe that it makes very much difference. Nature has taken pretty good care of such things. A horse drinks when it is thirsty if it can get it and eats when it is hungry if it can get it, and so do all of us, and the results seem to be satisfactory. I really think that there is much more in feeding a horse or any other animal regularly and systematically, feeding them every day as near alike and as near the same time as you possibly can, than there is in this idea of whether it should be fed grain before watering or after watering. Colon C. Lillie.

LAND FOR BURYING GROUND

Is there any law by which a cemetery association may compel a land owner to sell ground to enlarge a cemetery? Now, when we bought this farm, the agents agreed to furnish clear abstract to 40 acres of land in Sec. 35 and when settling up the trade we found a plot 12x8 rods had been deeded to this cemetery association and was rebated \$300 for same. Now they want to buy more land from us to enlarge this cemetery and it is only a district association. As we only have a small place of 50 acres, I don't feel that we could sell any more. Now, what I wish to know is, can they force us to sell it? Please answer through the Legal Department of MICHIGAN BUSINESS FARMING and oblige—J. E., Milbrook, Mich.

Section 5123. C. L. 1915, provides that boards

Section 5123, C. L. 1915, provides that boards of health of the townships may take land for burying grounds and the following sections point out the way. This, however, must be a township burying ground and not for private burying ground.—W. E. Brown, legal editor.

WHEN TO APPLY MARL TO LAND

Would like a little advice in the line of putting marl on the ground. I have a piece of clover sod which was in hog pasture for the last season. It is very rich soil and I am going to put it to corn this spring. Now, what would be the

best way to apply the marl, on the furrow or plow it under? My intentions are to sow this same piece to alfalfa the following year and put barley as a cover crop with it.

As you know, the marl will not act much on the acidity of the soil in the first year so I thought by plowing it under this year and then turning it up the following year would bring the marl in direct contact with the alfalfa and also applying a little more. Would the marl seep away when plowed under or not, as our soil is of clay loam and clay subsoil? Answer through our favorite paper.—H. K., Hartford, Mich.

I think it can be put down as a well established principle that marl or lime in any form should not be plowed down. It will go down quickly enough of its own accord. What you want to do is to mix the marl or

the lime with the top surface of the soil so that it will neutralize any acidity that will be present. If you plow the lime down it cannot come up and will not affect the soil turned by the plow. But if you put it on top every rain tends to wash some of it down and in that way it will neutralize the acidity in the surface soil.

Marl will begin to correct acidity just the moment it is applied to the soil. It is one of the best forms of lime to be applied. It is very fine and you get action at once but of course it will, as you say, probably take one year for the lime to correct all the acidity in the first six or eight inches of the surface soil.

Of course, marl or any other fertilizer ingredient would not leach away as fast in clay or soil with a clay subsoil as it would where we have sand or gravel subsoil but it does leach in this soil after a time.—Colon C. Lillie.

DISPUTED EXPRESS CHARGES

As a subscriber of the M. B. F., I would like to ask if I should pay this express bill. In regards to the Fordson tractor. It wasn't right when I got it. The man they sent out to fix it it said it was doped before it left the factory. When I found out that my tractor wasn't right I telephoned to Dearborn for a man. It took two weeks and I had to telephone to Dearborn three times before I got a man here. He ordered a new engine and it was two or three weeks before I got it. During this time I sent a man to Dearborn to find out why I didn't get it. Wm. Ford said the engine had been shipped a week ago but he would telephone to Lapeer Monday morning and if it wasn't there he would send one out with a truck Monday. waited until the next Thursday and then two men came from Lapeer with it and put it in. The same day it came I got notice from the express com-pany that it was shipped the day but one before. They asked me if I would take the old engine to the depot and I did. Now should I pay this express bill or not?—A. N. S., Lapeer, Mich.

If, as appears from the letter, nothing was said about the method of shipment, I would be of the opinion that shipment by express would be proper, in view of the need of prompt delivery. I am of the opinion also that a delivery to the express company at place of manufacture would be a delivery to buyer and that he would be liable for the express charges to place of destination.—W. E. Brown, legal editor.

WHEN TO CUT OAK POSTS

Would you pleae advise me through the M. B. F., the best time of the year for cutting oak posts to make them last best?—C. E. B., Midland county, Mich.

I never knew that it made any particular difference the time of the year that you cut oak for posts to increase their resistance to decay when set in the soil. It may be that this is something that has never been called to my attention or that no one with whom I am acquainted ever had any experience, but the fact is that I never heard of this idea before. You can treat oak posts or any other kind of posts with certain preparations like creosole which will make them more resistant to decay but it is a question whether any of this work pays when we take into consideration the extra cost.

I should cut the oak and split the posts when I had the most time to do so and pay no attention to any idea of this sort.—Colon C. Lillie.



Farm Home and Family of Irvin L. Howe, Allen, Hillsdale County, Mich.

FARM BULLETINS

Monthly list of publications, issued by U. S. Department of Agriculture for January, 1919.

A copy of any of the publications listed below may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts:

Canada Thistle and Methods of Eradication, No. 1002. By Albert A. Hansen.

Sweet Clover on Corn Belt Farms, No. 1005. By J. A. Drake, Agriculturalist, and J. C. Rundles ,Scientific Assistant.

Practical Hints on Running a Gas Engine, No. 1015. By A. P. Yerkes, Assistant Agriculturist.

Farm Practice in Growing Sugar Beets in Michigan and Ohio, No. 748. By R. S. Washburn, L. A. Moorehouse, and T. H. Summers, Office of Farm Management, and C. O. Townsend, Bureau of Plant Industry.

Agricultural Production for 1919, with Special Reference to Crops and Live Stock. (Circular 125, Office of the Secretary.) A resume of existing conditions and statement as to food requirements for 1919-20.

The Monthly Crop Report. Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

INFORMATION ON INCOME TAX

Everyone seems to take all their troubles to you so I am going to ask for a little information. I was unable to get it at my bank.

In making a report for the income tax what are the dates from January to January or March to March, and is a farmer allowed any exemption for the capital he has invested in his farm, any interest I mean? Ordinarily I wouldn't have to pay any attention to the income tax but this year I had three years' hay to sell and so may have a small tax. I am unable to find any sale for my beans. We think a great deal of your paper and after reading it we send it to some one else and hope you have secured several new subscribers this way.

Thanking you for the information I have asked and wishing you every success.—J. D., Almont, Mich.

There is not information enough in the letter for me to base an opinion concerning the allowances and deductions and interest charges. I believe the representative of the treasury department will be in the county for the purpose of aiding.—W. E. Brown, legal editor.

(Editor's Note): The federal income tax is compiled on income for the calendar year, that is January to January. The tax is due and one-fourth is payable on March 15th).

WHAT GRAIN TO BUY FOR DAIRY COWS

I have read many questions asked and answered in your paper, from which I have received much benefit, and thought I would ask one too. I would like to know what is the best ration to feed my dairy cows for which I have ensilage, clover hay, oats, and a limited amount of dry corn fodder. The cows are grade Durham and Jersey, three being heifers weighing under 1,000 pounds, and six being matured cows weighing over 1,000 pounds.—R. C. Mc., Scotts, Mich.

You have two of the best basic dairy foods in your roughage ration that can be obtained in Michigan. There is nothing better or more economical to feed a dairy cow than corn silage and clover hay and one supplements the other. That is, one, the corn silage, is a carbonaceous food and the clover hay contains a liberal amount of protein. But a cow cannot do her best on bulky

foods alone; she must have concentrates. The rule is that for every pound of concentrates we should have two pounds of bulky food to give the best results. You have in oats one of the best concentrates that you can get for dairy cows; there is nothing better. But this concentrate doesn't contain a large enough amount of protein to balance the roughage and make a balanced ration, especially where you feed one feed a day of dry corn fodder. I would suggest that you feed two pounds a day per head of cottonseed meal and a sufficient amount of ground oats to give each cow one pound of grain for every four pounds of milk produced in a day. This cottonseed meal will supply you with a sufficient amount of protein to balance the corn fodder and the corn silage fed.-Colon C. Lillie.



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JUST BETWEEN OURSELVES

SHOULD WE BUILD THE GOVERNMENT HIGHWAYS NOW?

HE FEDERAL AID ACT was passed by Congress in 1916, in answer to an almost universal demand throughout the United States for rederal aid in building the nations highways. Under the provisions of this act an appropriation of seventy-five million dollars was made. Of this amount \$5,000,000 was to be available during the fiscal year 1917 and an increasing amount each year until 1921, when \$25,000,000 would be available. It was made conditional that each state receiving aid should contribute an amount equal to that drawn from the national treasury.

Uncle Sam thus pledged himself to build roads on a fifty-fifty basis. No doubt the war had much to do with the very startling statement in recent reports to the effect that less than forty-five miles of road has been constructed and accepted under the Federal Aid Act. The appropriations thus far made by Congress to aid in road building has now reached \$48,000,000 and will pass the \$200,000,000 mark within the next four years. It would seem from these figures that Uncle Sam has been indeed generous, and that it is up to the several states to make good their "bluff" that good roads would be constructed if the Federal Government would lend a hand.

The farmers of Michigan should study well the proposed amendment to the constitution of the state, which would permit the issuing of road bonds. Before the State of Michigan can get one dollar for road building from the national treasury she must promise to match this amount with a dollar from her own treasury. This appears eminently fair, and now that the war is over, there will no doubt be a rush for the Government's half of each dollar expended. Minnesota is asking for sixty million dollars; California is asking for a hundred million, and other states have the matter under consideration.

There is a limit to the amount that may be secured from the Government, and it would seem the part of wisdom for Michigan to get busy and start her good roads program without delay. It is true that the farmer is not the only one benefited by good roads, but it is equally true that good roads mean more to the farmer than to the manufacturer or city dweller. The system of good roads proposed would not reach the door of every farmer, but it would place every farm within a short distance from a trunk line, and the distance from his home to this line could be easily cared for through our present liberal and efficient road laws.

No question now before the farmers of Michigan is of more importance than the good roads amendment. The time for considering the question is limited, and yet any voter seeking information can squared away long before election day, if he will do less talking and discussing and secure the real facts. If Michigan ever expects a system of good roads, the time to act is now. We borrow money to build homes that we might enjoy them while living. I see no reason why we should not borrow money to build roads that we may use them while living, though our children may also be required to help pay for the good roads they are privileged to enjoy after we have left our "fliver" and gone hence because of a "bad liver." Think it over, brother.

PLEASE REMEMBER THAT THE WAR IS NOT OVER

RUE, GERMANY as an armed enemy of civilization does not at this moment cause unrest among the nations of the world. She has signed the armistice; turned over a greater part of her war machines, and the army is partly demobilized. She is asking for mercy and awaiting the terms of the Peace Conference but at heart is unrepentant and unreformed.

Surely the reports from the German press would lead to no other conclusion. Her soldiers marched back home; were welcomed by the populace and found things in town, village and country-side just as they were when they marched away in July, 1914. A striking contrast to the home-coming is that

of the soldiers of France and poor, stricken Belgium.

An American writer says: "Germany apparently is not sorry for outaged, pillaged Belgium and Northern France; for the brutalities practised by her military dictators; for the millions of lives lost in opposing her organized raiders and plunderers; on the other hand she really seems proud of her medals given for U-boat sinkings and the Lusitania and other coldblooded murders.'

The American people must not go to sleep; German propagandists are still among us. The cost in blood and treasure has been too great and we shall be wise indeed if we keep our national lines taut, while Germany is stripped of her power and those responsible for the world conflict have paid the extreme penalty. We don't want the German military tribe to change their skin and then pose as a republic.

It is to be regretted that in the light of certain recent events, that Germany was not obliged to take some of the medicine of her own gun cotton; something of an "eye for an eye" order. But perhaps this savors of revenge; nevertheless our soldier boys now sleeping where the poppies grow, "over there" asked us to "carry on," and we must do it at all hazards, until the enemy is made powerless forever.

We fought to make the world safe for Democracy, therefore Germany must not be turned loose until she is tried, bound, defenceless, and penalized for damages inflicted, and what is most needed is evidence of penitence, sorrow for her wrong-doings and the German mental attitude changed toward the war fought and lost, as well as her mental attitude changed toward all wars. Let us remember "Over Here" until it is all over "over there."

Up in the "Thumb" of Michigan there's a wheel within a wheel. big condensary wants milk, and they can't get milk unless the farmers keep cows. So a lesser wheel goes down into another state and buys cows. These cows are sold the farmer who gives a chattle mortgage in payment, and the chattle mortgage is paid through turning over the milk checks received for milk delivered at the condensary. There you have the old merry-go-'round, "buy more land to feed more hogs to buy more land to feed more hogs." But why let the other fellows buy the cows? Here's a place where a few farmers could buy their own cows and have the satisfaction of knowing, at least, what the cows cost; that require the mortgage, to get the milk to turn over the milk-check to pay for the cow that the condensary bought. Perhaps you don't understand this. I am in the same boat—neither do I. Grand Slocum

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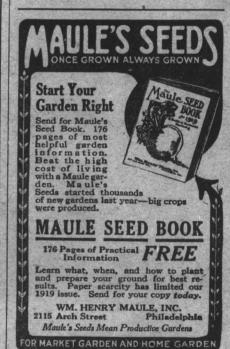
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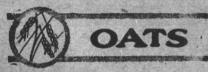
GRADE	Detroit	Chicago	New York 2.36
No. 2 Red No. 3 Red No. 2 White. No. 2 Mixed	2.30	2.30 1-2	2.36
No. 3 Red		2 20	2.32
No. Z Walte.	2.26	2.28	2.34 1-2

American wheat is in good demand, but the buyers are not stocking up with any large quantities. They are holding off in hopes of getting Argen-tine and Australia wheat at lower prices. The conviction that there will prices. The conviction that there will not be so great a surplus of wheat as at first supposed is growing. What the spring acreage may be is yet in doubt. It is almost certain that many acres usually planted to corn will be turned over to wheat this spring. Michigan farmers will do well to watch this situation closely. If good seed can be obtained and planting conditions are favorable, it may pay the ditions are favorable, it may pay the Michigan farmer to plant more corn and less wheat. The world has a plentitude of wheat. There is a shortage of live stock and live stock feed. Corn prices should be good next year and the established wheat price will have an effect of keeping up care prices. an effect of keeping up corn prices. Corn will be in great demand both in our own country and in Europe. Michigan is neither an ideal corn nor spring wheat state; it's about a tossbetween the two, but this year, we believe the odds are in favor of corn.



GRA	DE	Detroit	Chicago	New York
No. 2 Yo No. 3 Yo No. 4 Yo	ellow	1.38 1.33	1.33 1.31	1.54 1.52 1.49

The fluctuations in the corn market The fluctuations in the corn market are so frequent that prices we quote today may be incorrect by the time this issue reaches you. There has been a steady tho small advance in corn prices for a week. The belief that hog prices will remain practically the same for March as February; the decision of many farmers to plant spring wheat instead of corn; the refusal of producers to sell at present prices, have all been bullish factored, and may succeed in maintaining the and may succeed in maintaining the present corn prices. There is the same uncertainty about the corn market that has existed since the war closed. that has existed since the war closed. No radical declines or advances are noted, and this condition may be expected to continue until such time as the European countries begin to hid in earnest for American food products. It is announced that strikes in a receiving are helding up the ship. Argentine are holding up the ship-ments of grains from that country, and that threatening strikes in Great Britain will speed up her demands for American products.



GRADE	Detroit	Chicago	New York
Standard No. 3 White No. 4 White	61 1-2 61	60	.68 1-2 .67

For the first time in many months, the oats market has refused to follow the corn market. The demand for oats is poor. The knowledge that there is a huge crop influences deal-ers to buy from hand to mouth and this week prices are quoted slightly



The advance of four cents per bushon rye last week has been sustain, but there is little activity. Some rye is being exported, and dealers look for higher prices later on. The mar-ket is now quoted at \$1.44. Barley is quiet at \$1.80@\$1.85 per cwt.

DETROIT—Potatoes slowly strengthening. Eggs lower but trading active. Hay firm, Grains steady.

CHICAGO—Hay firm and advancing. Potatoes firmer and higher. Little doing in beans. Grains firm, with higher corn prices in prospect. March hog price uncertainty makes hog market erratic.

NEW YORK—Hay firm, higher prices expected. Potatoes in better demand, prices slightly higher. Apples and onlons hold firmness.



Markets		lo. 1				dare				othy	
Detroit	26 50	0 27	00				00				00
Chicago	26 00		00			27			00		00
Cincinnati	30 2		75				00			29	50
Pittsburgh	30 00		50				00				50
New York Richmond	28 00	0 30	00	27	00	29	00	25	00	27	00
Markets		o. 1 t Mix				Mix	od	96	CI	o. 1	
Detroit	25 50	0 26	00	24	50				50		00
Chicago	24 00		00				00		00	23	00
Cincinnati	27 00		00						50	24	50
Pittsburgh	28 00		00						00		50
New York Richmond	25 00	0 27	00	22	00	24	00	21	00	23	00

The Detroit hay market is firm, with little trading. Receipts are small and demand fairly active. The Hay Trade Journal gives the hay conditions for week ending March 1st as follows:

"The amount of hay moving mar-ketward this week is lighter than it has been at any time in months and stocks on hand have worked down very low. Shippers' stocks are pretty well exhausted, although there is still some high priced hay held back. Farmers did not take kindly to the lower prices and held off for some time, but reports indicate that ship-pers are now purchasing again, al-though not in a large way because of the uncertainty of the general situation. Offerings are firmly held and values have made substantial gains during the week. Reports as to the amount of hay still available are con-flicting. There seems to be consider-Cheer up, spud growers, potatoes

able hay left in some sections, but there are many others that have less than usual. The future is hard to foretell, due to the reticence of con-sumers."



Markets	Choice round Round W	
Detroit	1.70 cwt.	1.60 cwt,
Chicago	1.70	1.70
Cincinnati	1.85	1.75
New York	2.08	1.90
Pittsburgh	2.00	2.00

are higher. Prices have advanced at nearly all points with the exception of Detroit where the market is still in a more or less unsatisfactory condition. It is very evident that supplies both in shippers' and growers' hands in many sections are being cleaned up and a stronger tone is expected from now on. Farmers should pray for a couple weeks of cold weather. A short spell of freezing weather would put "pep" into the potato market and shoot prices up several notches. Despite this extraordinarily warm weather, the situation is encouraging.

This week we received the following letter from a Kent county subscriber:

"I notice what you say about pota-toes this week. Now, as I am a bit of a sport will tell you what I will do if you dare go me. I say potatoes will go to \$2 before the season is over. If they do not I pay you \$3 (for the names of three subscribers he sent with his letter). If they do you send the paper gratis.

"We have about 15 papers coming to our place, all farm papers but one so you can see I have a chance to keep pretty well posted. I keep tab on the potato crop from start to finish. Number of acres planted, condition all through the season and final yield in the Fall. What ails potatoes now is this: A year ago the best price was early in the season before they

was early in the season before they sprung the grading racket on to us.

"This last Fall farmers remembering how they came out the year before rushed their crop to market as fast as possible and the weather being favorable all the time up to now they have kept that right up. The wonder is that we have any market at all now. all now.

"The last crop in the south, as you know, didn't begin to pay expenses. Result, 50% cut in acreage for 1919. Prospects are, Virginia will do the same and there you are.

"Tell me, if you can, why potatoes will not go out high at end of the season? I really think, though I "dassent" say it right out loud, that they will finish me to pay the south of the season? "The last crop in the south; as you

sent" say it right out loud, that they will finish way above \$2. Winter killing of grain will cause an excitement I think later on which will affect the the price of potatoes to a considerable extent.

"Here is another forecast I wish to "Here is another forecast I wish to make and it is coming just as sure as the sun rises and sets. 'Tis this: If the Government continues letting the farmers be dominated by the Rocke-efellers, Packers, and other monied interests it will not be long before every state in the union will be controlled by the Non-Partisan League. You see if I am not right."

We can't refrain from accepting such a tempting offer. While we don't

we can't reirain from accepting such a tempting offer. While we don't believe that potatoes will go to \$2 a bushel, we do believe that they will be higher than they are now. Anyway it's a good bet. We take you up, old sport, and if potatoes do go to \$2 a bushel, the editor will pay those \$3 out of his own jeans and he glad of out of his own jeans, and be glad of the privilege of celebrating such a happy development at so small a cost.



GRADE	Detroit 7.75	Chicago	New York
C. H.P. Prime	7.00	6.75	7.50
Red Kidnevs	10.25	11.50	11.50

The bean market has not reacted to the government purchases as rapidly or to as great an extent as hoped and believed. The mere announce ment that the government would buy strengthened the market for a time, but there has been a slight slump of 25 cents on the Detroit market since, and there is a most discouragingly easy tone to the situation. Prices at local buying points have been stimulated only a little, as most of the elevators are filled up with beans bought at the \$8 price, which they naturally want to move on the gov-ernment order before buying any more. We are unable to advise at this time how soon the government expects to complete its purchase of these beans. It is possible that the effect of their buying is yet to come in which event the prices would naturally tend higher.

Ever and always we must keep in mind that there are enormous quantities of beans in the hands of growers of western states and the market is bound to be a slow and unsatisfactory one until the majority of these beans are moved. It is estimated that the buyers and jobbers of California hold 2,934,000 bags of beans; that in the hands of the organized growers there are still 500,000 bags of white beans and 800,000 of limas. Idaho, Colorado, New Mexico, and the Orient, all have large quantities yet to dispose of. The demand for beans the balance of the season is expected to be abnormally large, but the supply is also abnormally large, and then some. We now know that only the careful marketing of beans by the farmers

(Continued on page 17)

The Month's Market and Financial Review

ITH SLIGHT variations, there is and always will be a direct ratio between the prosperity of those who produce and those who consume. Therefore, the financial condition of manufacturers and commercialists are of interest to farmers, just as the financial conditions of farmers are of interest to the commercialists. So long as the cities are prosperous the farmer may feel reasonably sure of a profitable market for the bulk of his produce; barring large over-production; but a panic in business circles means a panic in agricultural circles. So keep your eye, Mr. Farmer, on the business barometer.

The month of February has passed into oblivion with scarcely a tremor in the business of the nation. The month was generally looked forward to with a great deal of apprehension; and many business failures were pre-

dicted, which did not, however, materialize to the extent expected.

In the survey made by the National Bank of Commerce of Detroit, 20 per cent of its correspondents reported business conditions for February above normal; 30 per cent, normal; 50 per cent below normal. 49 per cent reported conditions improving; 38 per cent, stationary; 23 per cent, declin-

The month witnessed a gradual decline in prices of most farm commodities. The greatest declines were in butter and eggs; there were slight declines in potatoes; advances in apples and onions; declines in most grains;

practically stationary prices in live stock.

Export trade for February while apparently showing an increase over January did not come up to expectations. Particularly was this true of the exports of farm products. Manipulations of various markets during normal marketing seasons have caused irreparable harm to these markets, and delayed the marketing of many important crops causing great loss to producers.

It is with a feeling of confidence and optimism that the American people enter the months of March. Nearly everyone held his breath during February, and nothing happened. The world moved on just the same, with few people much poorer or richer than at the end of January. With their fears thus quieted and the real financial strength of the nation exhibited, it looks as if everyone would throw gloom and nessimism to the winds roll. it looks as if everyone would throw gloom and pessimism to the winds, roll up his sleeves and start in with a vim on the great work of reconstruction.

The month of March opened with advancing prices on almost all farm commodities, which have been sustained thruout the first week. The weather is still against the farmer, and it is surprising to all that prices hold to their present level. But there is nothing now to indicate that there will be any material decline in these prices.

There is talk of great activity in industrial circles. Manufacturers are preparing to increase their outputs; builders are placing contracts; the number of unempoyed is on the decrease.

Farmers should plan for the coming season with the utmost care and judgment. It will be easy to over produce, and we are not yet certain as to the kinds of farm produce that will be in greatest demand and smallest supply next fall. Nor are we altogether sure that the 1918-19 accumulations will be sufficiently cleared away to permit forming an intelligent opinion as to the safest crops to plant this coming spring.



CATS OR BIRDS

"Bearing Me cross, while Ohrist passed forth forlorn, His God-like forehead by the mock crown

torn,
A little bird took from that crown one thorn.
To soothe the dear Redeemer's throbbing head. That bird did what she could; His blood,

Tis said,
Down dropping, dyed her tender bosom red.
Since then, no wanton boy disturbs her nest,
Weasel nor wild out will her young molest;
All sacred deem the bird of ruddy breast."

ERY SOON now the birds will be returning from the south to build their nests and welcome their little families. We always greet them as the harbingers of spring, but what do we do to keep them with us, to protect them and their young during the breeding

Millions of birds are killed every year by cats, as shown by actual census, and yet the birds are the greatest destroyers of insects and weeds, upon which the birds depend for their main supply of food. True, there may be a short season when cherries are ripe when Mr. Robin wants to have his share, but which would you rather lose a bushel of cherries from your tree or a whole field of grain which can be lost in a short time when the cut-worm gets to work, and the cut worm is the favorite food of Mr. Robin red breast, as shown by actual test.

Many farm homes house as many as six cats, and it would be an interesting subject to compare their loss through insects with that of the



farm home where the family cat was a thing of the past. Kittie may kill a few rats or mice for you, but a mouse trap with a bit of cheese is far cheaper and cleaner than Tabby. A single bird often eats more than 100 insects at a single meal and sometimes consumes several thousand small insects, and the bird will not spread disease, while the cat is known to be one of the worst carriers of disease known. And the birds that are destroyed by the cats are mainly of the species that are most common about gardens, orchards and fields.

It is the mother in the home who shall say whether or not she will have cats or birds, and it is the mother who will influence her children to help the birds care for their young, rather than to destroy their nests. The study of birds their habits, food, and for the boys the building of bird houses is very interesting. There are many bird houses which can be built by the average boy right on the farm with the materials he has at hand, a few of which we are showing. Children become intensely interested in the study, especially if they learn to tell the different birds by their plumage and their calls. If interested in this subject and you desire further information, just write to the Home De-

partment. (Michigan Business Farming) and I shall be glad to give you more complete information than space will permit here.

WOMEN IN POLITICS

ALK ABOUT due deference not being shown women if they were accorded the right to vote-did you ever receive so much attention from the men in politics in your life as you have within the past month? They have found out that a woman has to be shown, that she will not rely merely on hearsay; that she stands for what is right and honorable and therefore, the office-seeking

Edited by MABEL CLARE LADD

men are going about telling you what good fellows they really are, but do not be deceived, it's only another form of political graft. Be sure you know all about the man for whom wou would cast your vote, not what he claims to be, but what he is; what he has stood for in the past, for we are going to be watched now very

Surely the old order of things has passed away, and very blind is that politician who will not smilingly concede this point and adopt himself to the new way of doing business.

NAME YOUR FARM

N THE EAST a large proportion of the farms are named, and in the west the ranches are named, but we who are just between the two have not seemed to pay much attention to this showing of individuality. A neat sign hung above the driveway, or placed above the mail box, serves to attract attention to the farm, and most especially so if that name conveys some idea of what the farm specializes in. For in-

"ROBIN, THOU SINGEST ALL DAY"

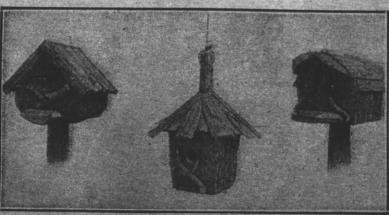
ROBIN, thou singest at break of day!
Robin, thou singest all day!
Where are the sorrows—the tears of today— Where all the griefs of dead yesterday? Flown like the thistledown, far far away Over the shadowy void astray? Robin, thou singest all day!

> Teach me thy song of Love, Robin, I pray! Peace, hope, and faith from above, Robin, oh stay! Guide my soul ever to love, Robin, thy lay! Heavenly blessings enough My prayers repay.

Robin, thou singest at twilight hour-Robin, with sweet soothing power,
Of a theme sublime—of a peace divine—
In the mellow light of the day's decline,
Of dreams that entwine in the silence of time
And love, love, love in perfect rhyme—
Robin, thou singest all day.—Rose Wolz.

stance, on a farm where a large herd of dairy cattle are kept, and this farm is rolling, as it often is, a very suggestive name would be "Dairy Dale Farm." No one passing would fail to know that the owner of the place was an upto-date farmer and that he was a specialist in his line—a business farmer, if you please.

If the farm boasts a maple grove, then "Maple Ridge," or "Maple Dell," are pretty and appropriate names, while if the farm is a large one and the view an especially fine one, "Fair Acres" is a distinguishing name. A farm that boasts a fine peach orchard might depart from the regular form a bit and name it the "Peach Every other business advertises its goods, why not the farmers' wives, for it is usually up to the women and children of the farms to start something like the above, the man of the house thinking he is too busy to bother with these things. However, we notice the men like the looks of the attractive farm home and yard quite as well as the women, so with the rest of the planting for spring why not get an individual name for your farm home and when the yard is cleaned up this spring, add the farm



START A SCRAP BOOK

F YOU haven't a scrap book in your home, you don't know what a valuable lot of information you are letting get away from you. Didn't you ever want some information for a special gathering, club work, church work, or some other use and just know that you had 'seen it somewhere," and only wish you had kept it? A new scrap book at the book store doesn't cost much, but you can make one at home which will answer the purpose in a crude way by taking some large book which you are not using and cut out every other page, leaving about one inch margin on the leaf which you cut out, so that the book won't come apart. Now classify this book, putting games, etc., in one section, hints on how to arrange vegetables and fruits for the county fair in another, for almost always right after the fair there are plenty of good suggestions with pictures available, but it is nearly a year before you will want to use them. Then there are the special holidays which we celebrate, and the material can well be clipped and saved for the following year.

Then, too, there are the bits of poetry which we would like to read again. Really, some one has said that you could tell the character of a person if you could read their scrap book clippings, or their diary.

WHAT HAVE YOU TO SUGGEST?

I want your help for I would be glad to find a pattern suitable for a big girl, 12 years old, but 16 inch size; has 36-inch bust, and is above five feet tall. I would be grateful to the editor of this department or to other mothers for suggestions as to how to dress children large for their age.—Mrs. E. A. D., South Lyons, Michigan.

NDER separate cover we are making some suggestions as to patterns to this subscriber, and would suggest that she buy material for spring with a stripe; the striped ginghams are beautiful for spring, and then if it is made in the long straight lines so favored this spring, the tendency will be to lengthen out the lines of your daughter and make her appear more slight. Be sure and not choose a pattern with a peplin, with sashes or that is very closely fitted, as these would not be becoming to this child. However, the style which favors the apron effect, if it drops from the shoulders and extends almost to the hem of the skirt in back and front with a straight panel front is both youthful and pretty. What have our readers to suggest to help this reader?

COMES WITH HER SPINNING WHEEL

I have never written to this department before, but I am coming with my spinning wheel to help Mrs. H. H., of Bayshore, Mich., as I have done some spinning last winter for one-half or one dollar per pound. Now I do not know if this is right or not, but the neighbors were glad to give this amount for spinning. We have been readers of M. B. F. and like it very much, as it seems to be fighting for the farmers' rights.—Mrs. Wm. Behrens, Mason county.

LESSONS IN HOME COOKING

(Conducted by Miss Elizabeth Matheson, of the Valley City Milling Co., who will answer all questions asked if they are sent her in care of this department).

DESSERTS

No matter how often we decide not to have desserts I think we all agree that the family

likes them and sooner or later we go back to them; for I believe we all like to leave the table with the taste ert in ou what that dessert shall be depends upon two things—the family and what you have served for the balance of the meal. If the meal has been a hearty one then the dessert should be a light one, while if the meal has been light in character a hearty dessert can be eaten.

But now is the season when eggs are becoming more plentiful and consequently cheaper and I think custards made in various ways are as satisfactory as any dessert and they

certainly are nourishing for child-ren and adults alike. Two things one should remember about eggs are that they are chiefly a protein or a body-building food and that they cook at a very low temperature. Undoubtedly the safest way to cook the "boiled" custard, which isn't boiled at all, is over hot water or in a double boiler, if you have one, though it can be safely managed over a direct fire if one uses an aluminum pan. One egg to each cup of milk is a pretty good proportion, though the old-fashioned recipe of our mothers' is three eggs to a pint of milk. But eggs were cheaper in those days. Probably a quarter of a cup of sugar for each cup of milk will make it amply sweet for most of us, but the amount of sugar used will vary to taste.

Slightly beat the eggs and add sugar and a pinch of salt and part of the milk. Have the balance of the milk hot and stir into it the eggs and stir constantly until a coating forms on the spoon. Then remove instantly from the hot water. Flavor to taste. Be careful not to cook too long for if you do the egg hardens and the custard is not mooth and remember one can payor. smooth, and remember one can never uncook an egg. If only the yolks are used in the custard it probably will be somewhat smoother

when made with the whites, but the whites can be beaten stifly with a tablespoon of sugar added for each white used and the resulting frosting poured over the custard and then slightly browned in the oven. Or it can be put by spoonfuls over the top of the custard, making the familiar "floating island." Bits of tart felly added give a pleasant flavor, or the custard can be poured into a pitcher beaten well with the Dover egg beater and then the stiffly beaten whites beaten in. This makes a very light frothy custard.

If one wants a firm custard it

If one wants a firm custard it must be baked. Use the same proportions of egg and milk as given above; set the custard in a dish of hot water and put into a very slow oven. The water in the dish must not boil or the custard becomes too hot. Flavor a baked custard with a few gratings of nutmeg. If bak-ed in cups or individual dishes it is more easily managed than in a large

The question of using cornstarch for part of the eggs is one that every woman must decide for herself but she ought to know just what she is doing when she changes. Two level teaspoonfuls of cornstarch have practically the same thickening properties as one egg has, but their similarity ends right there. As said before an egg is a protein or a body-building food and contains besides some valuable mineral salts. Cornstarch is a cereal product and a pure carbohydrate or energy-producing food. An egg

cooks at a very low temperature while a starch should cook at the boiling point or if cooked below the boiling point then cooked for a long period of time. Probably one of the reasons for the common dislike to corn starch puddings is the fact that they so frequently are not sufficiently cooked.

BLANC MANGE OF CORNSTARCH PUDDING.

For each cup of milk used take 2 level tablespoons of cornstarch. Use sugar to taste and a speck of salt. Wet the dry ingredients with part of the cold milk and scald the remainder. Then stir the scalding milk into the wet cornstarch. Cook over hot water, stirring constantly until it thickens, at least ten minutes, though lifteen or twenty minutes' cooking improves the flavor. Flavor to taste and pour into a cold wet mold to harden.

You will want something to serve with this and several things may be used. Sweetened cream, or milk flavored with vanilla, or nutmeg, whipped cream, or soft custard are all satisfactory.

The pudding itself can be varied in many ways. Just before pouring into the mold, some broken nutmeats may be added. Or melt a square of chocolate in a quarter of a cup of hot water and pour in. As chocolate is bitter add more sugar and also an extra tablespoonful of cornstarch for you have added more liquid to the pudding. If you wish to use cocoa about 4 cup of cocoa scalded with a bit of boiling water will give about the same flavor as the square of chocolate.

Peanut Brittle

Boil 1½ cups granulated sugar, ½ cup of Karo and 2-3 cup of water until brittle in cold water. Add 2 tablespoons butter and 1 cup peanuts. Stir thoroughly, then add 1 teaspoonful soda dissolved in a tablespoonful of cold water, and stir vigorously. When the mixture is through foaming, turn onto an olled platter and let cool a little. Then turn it with a

knife or spatula and pull into as thin a sheet as possible.

Nos. 2756-2753 — Ladles' Costume Waist 2756, out in 7 sizes; 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 3½ yards of 27 inch material. Skirt 2753 is out in 7 sizes; 22, 24, 26, 28, 80, 32 and 34 inches waist measure, and requires 3 yards of 36 inch material for a merium size. Width of skirt at lower edge is about 1½ yards. Two separate patterns.

No. 2758—Giris' Dress. Cut in 4 sizes: 8, 10, 12 and 14 years, Size 10 will require 8% yards of 4? inch material.

No. 2519—Ladies' Kimono. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size Medium will require 5% yards for full length, and 1% yard less for sack length, of 36-inch material.

No. 2746—Ladies' Skirt, Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 will require 3 % yards of 44 inch material. Width of skirt at lower edge, is 1% yards.

No. 2602—Ladies 'Dress, Cut in 7 sizes: 34, 36, 38, 40, 43, 44 and 46 inches bust measure. Size 38 will require 5 yards of 44-inch material. The dress measures about 21/4 yards at the foot.

No. 2437—Girls' Dress. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 8 requires 31/4 yards of 44-inch material.

No. 2766—Ladies' Apron. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size 38 requires 3% yards of 36 inch material. The Sleeve protectors require % yard.

No. 2745—Ladies' Waist. Cut in sizes: 34, 36, 38, 40, 42, 44 and 46 inch bust measure. Size 38 requires 25 yarof 40 inch material.

Don't Scold Your Wife

In the first place a good many wives won't be scolded.

Then again, the vast majority do not deserve to be.

Furthermore, wives as a general thing, are more nearly living up to their responsibilities than are husbands.

Besides scolding anybody is a bad practice and generally result in illwill, bad feeling, and a lot of other disagreeable things.

Better, a great deal, buy her

Lily White

"The Flour the best Cooks Use"

and give her a real chance to show you what she can do in the way of providing you with good things to eat.

She can do it with LILY WHITE FLOUR, and don't you forget it.

And you will discover that you have one of the best cooks in the land.

In fact you will have to watch yourself or you will be bragging just a little bit about what good things you have to eat at your house.

Now bragging in a way is all right. For instance tell your wife first what a good cook she is and how much you appreciate her, and your friends afterwards.

Don't tell your friends and depend upon them to tell your wife; they might forget, and your wife deserves to be told-by you.

Don't scold her. Buy her LILY WHITE FLOUR instead.

VALLEY CITY MILLING COMPANY

Grand Rapids, Mich.



Pattern No. Size



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

EAR CHILDREN: So many of you little folks have taken such an interest in Longfellow, such an interest in Longfellow, the Children's Poet, that I have decided to give a little more space this week to a story of this poet. He was born February 27th, 1807, and died March 24th, 1882, long before any of our little folks were alive, but inasmuch as his birthday and the day of his death came right at this season, it is a good time for us to learn something more of him.

N Cambridge, Massachusetts, there stands, on a quiet street, a large old house, famous the country over as the home of "the Children's Poet." Longfellow loved children Poet." Longfellow loved children above all else. Many of his best poems were written for and about his little friends who used to come to visit him and beg for his signature in their autograph albums. Of his many poems perhaps the best beloved by children is "The Village Blacksmith." This blacksmith was a real man who lived on a real street near a real spreading chestnut tree. Longfellow loved the old tree with its great branches and when the street in which the tree grew was about to be widened by the city officials it was decided to cut the chestnut tree down.

The poet was among the loudest protesters but in vain. Much to his sorrow the tree was felled and mourning filled the hearts of all the Cambridge children, who, like the poet, had learned to love the chestnut tree from beneath which:

"....children coming home from school
Look in at the open door;
And catch the burning sparks that fly
Like chaff from a threshing floor."

of the Smithy's famous shop. Then some of Longfellow's friends conceived a great idea. In secret they went to the school children of Cam-bridge and told them of their plan. It was to have a large arm-chair carved from the wood of the old tree. The children thought that this was a beautiful idea, and each child contributed ten cents to have the chair made. As there were nearly a thousand of them they collected quite a sum, and had a handsome chair made designed by Longfellow's nephew. The wood was ebonized so that it was very black and it had chestnut leaves carved upon it.

The poet knew nothing at all of the surprise that was in store for him, and when he walked into his study on the morning of his seven-ty-second birthday, on February 27, just forty years ago, there stood the beautiful chair for which the boys and girls (they are all grown men and girls (they are all grown men



and women now) had saved their pennies. Beneath the leather cushion is a brass plate bearing the following inscription:

To
The Author
of
"The Village Blacksmith"
This chair, made from the wood of the
Spreading Chestnut Tree, is
presented as
An expression of grateful regard and
veneration by

THE CHILDREN OF CAMBRIDGE
who with their friends join in be
wishes and congratulations
on
this anniversary,
February 27th, 1879.

Every child that came to the house to see the chair was allowed to do so, and for many days the house was and for many days the house was full of children who had come to see their gift to their beloved poet and friend. Many children sat in the chair, just to try it out, and Long-fellow encouraged their coming. He had copies of "The Village Black-smith," printed and gave a copy to each child.

All his live he kept a warm spot in his heart for his little friends. His last visitors were two little boys from Boston who had come to ask for his autograph in their album; and one of the last letters that Longfellow ever wrote was to a little girl who had written a poem about him on his last birthday.

Longfellow died March 24th, 1882, but his memory will live in the hearts of children forever, for he was the children's poet, and children the world over love him and reverence his name.

Affectionately yours, "Laddie."

Sleepy Time Stories

Written especially for Michigan Business Farming

T WAS in the early summer and Jack and his little sister Edith were playing in the shade, while their mother was busy cooking and baking in the kitchen near where the children were playing. "Edith," called her mother, "I wish you would take this basket and go down to the orchard and gather it full of those nice harvest apples. I want to make nice harvest apples. I want to make a couple of pies for dinner." "Can't Jack help me?" asked Edith. "Yes, I am sure that Jack will be glad to go and help you pick up the apples and carry the basket to the house," replied the mother. So the two children started out on their errand. children started out on their errand.

In order not to have to climb the fence or open the gate, the children thought they would crawl under the fence, for they were not very large, you know. As they crawled under the fence Edith noticed a whole lot of little black ants crawling rapidly toward their little hill, which was their home. One of the ants was tugging at a huge crumb, or least it seemed huge for such a tiny little ant to be pulling. other ant joined his broth-Soon an-

er, then another and still another until as many as could surround the crumb had taken hold and were helping to pull this parti-cle of food to their home. "Oh, let's watch the ants," said Edith to Jack, "How do you suppose they ever hope to get enough for a meal when there are so many of them and they travel so far for their food?" Just then the leader of the ant family answered: "We always feed our family and there are never any hungry little mouths at our home. But we all work, and we all help each other. You never see us sitting in the sun, doing nothing. We are just as busy as we can be all the day long, and if the load is too heavy for one, do you suppose they ever load is too heavy for one, we call on others to help us, and we never quarrel about it, for we would lose time then. Sometimes we

carry a load several times our size, because there are so many of us to do it. If we tried to bring home our food alone we wouldn't succeed."

Just then came a clear voice from the house, calling Edith. "Where are my apples, dear? Don't you know are my apples, dear? Don't you know that the men will be up to dinner and the pies won't be cool if you don't hurry?" Hastily the children scampered to their feet, filled the basket and started for the house. It was not until they were within sight of their mother that they stopped long enough to discuss what they had just seen. "Isn't it funny what big things just little ants can do?" said Jack. "Yes," replied Edith. "You know father talks about co-operating or working together so co-operating or working together so much, and I have always wondered what he meant, but I know now, for that is why the ants can do so much." And mother didn't scold when she came to take the basket of apples, for she had heard what the children were talking about and knew they had learned a more beautiful lesson than they could have, even in shool.



Letters from Our Boys and Girls

Dear Laddie—I am a giri 12 years old. I am in the 7th grade. I go to the East Side school. My teacher's name ig Marguerite Carrol. I like her very much. I live on a farm of 80 acres. My father owns 120 acres of land. We have 12 cows, seven of which we are milking. Their names are Old Vhone, Alma, Cherry, Brindle, Dalsy, Meggy, Peggy, Ruby, Nigger, Nellie, and Jenny. We have 17 calves, three horses, Fred, Benn and Nancy. We have 12 pigs and 40 hens. I have three sisters and one brother. Their names are Vera, who is 10, Lois. aged two, Dorothy, 8 months, and Maurice, 5. We have a Ford car. I like the Doo Dads very much. My father takes the M. B. F. and likes it very much. I will give you a riddle, "What kind of tables has no legs?" Ans., Multiplication table. My letter is getting long so I will close—Hilda Hennen, West Branch, Mich.

Dear Laddie—I am a little boy 6 years old and live on an 90-acre farm in the township of Marion, Saginaw county. We have three horses, two colts, and four

cows. I have a dog named Tige and a cat named Susie. I have four brothers and one sister. Their names are Ronald, William, James, Hugh, and Kathryn. Hope to see my letter in print.—Francis Mc-Donald, St. Charles, Mich.

Dear Laddie—I have read the boys' and girls' letters in the M. B. F., so I thought I would write too. I live four miles from town. I am 8 years old and am in the 3d grade. I have a good teacher. Her name is Ione Bacheller. I have one brother who goes to high school at Grant. My brother and I have some nice pets, two white rabbits and one red, a big yellow dog named Carlo, and a cat, named Cotton, two goldish, and a black pony whose name is Kitty. I would be very glad to hear from some of the M. B. F. girls.—Earma Fern Kohler, Grant, Mich.

Dear Laddie—I have been reading the girls' and boys' letters and I thought would write. I am 8 years old and have two brothers, Their names are Hax

old and Leslie, and little Clarence, the last being a baby. I have had the flu and didn't like it. I am in the 3d grade and my teacl.r if Grace L. Bulter and I like her. We have 12 scholars.—Lillian Wanderburg, Alamo, Mich.

Dear Laddie—I have been reading the boys' and girls' letters and like them very much, so thought I would write. I am 10 years old and in the 4th grade. I have two sisters and one brother. Their names are, Nourne, Albert, and Katherine. We live on an 80-acre farm. We have a dog named Snyder and two cats, Bob and Bill. We have five horses, 13 head of cattle, and 18 hogs. I go to Ottsville school. Well, I will close for this time.—Lena Leffler, Otisville, Mich.

Dear Laddie—I was just reading the boys' and girls' corner. I like to read the letters. I like to read the Letters. I like to read the Letters. I like to read the Doo Dads, too. My mother got those "Giants of Liliputania" for my little sister, Ilea. Ilea and my brother, Chester, and myself had lots of fun cutting out the men, women, trees and flowers. I would like to have some one correspond with me. I am about five feet tall; have brown eyes and hair being dark complexioned. I am 13 years old. I have one and threequarter miles to walk to school and am in the 7th grade. I belong to the Junior Agriculture Club. It is a fine club. We are going to have a meeting next Saturday night. We expect to elect new officers. We haven't had very much skating this winter and what we did have was so far away. I think it's fun to skate. Nearly all the children in our school can skate. Well, it is nearly dark now, so I will close my letter. Hoping to see it in print.—Velma Angel, Morley, Mich.

ter. Hoping to see it in print.—Velma Angel, Morley, Mich.

Dear Laddle—As I have never seen any letters from Rogers I thought I would write. We live on a farm of 120 acres of which 100 acres are cleared. We have two horses, whose names are Tom and Dolly. We have six head of cattle, names being Boss, Gertle, Missy, Dolly, Jilly, and Sam, also two calves, June Wilson and Betsy Ross. We have about 65 chickens and four turkeys. We go to school in Rogers which is two miles from our place. My sister and I are in the 9th grade. We have three public schools in Rogers because the brick school is so crowded. From the 3d grade to the 12th grade is the Brick school. The primary and 2d grades are in the old school. Part of the 5th and 6th grades are in the old German school. In the Rogers public schools there are 15 teachers. Two miles east of Rogers there is a large limestone chemical plant. This plant is said to be the largest chemical plant in the world. It employs between 400 and 700 men each year and ships about 25,000 tons per hour and piling it 60 feet high and 120 feet back from the edge of the dock. The stone is blasted at first to loosen it up, then taken up with steam shovels and loaded into dinkeys running on high tressles. Then it is washed, dried and again loaded into dinkeys running on high tressles. Then it is to see to the lock where it is loaded into boats. This stone is used for almost every purpose and shipped to all ports in the world. My father takes the M. B. F. and we enjoy it very much. We couldn't do without it. I like to read the Doo Dads and letters from the cousins. I will close and hope to see this letter in print.—Lydia Simons. Rogers, Mich.

Dear Laddie—I am well and hope you are the same. I saw in the Business Farmer that the girls were writing so I thought I would write you a few lines. My name is Frances Lashbrook. I go to school every day and am in the 5th grade. There are three in my grade, two boys and myself. I have two brothers and their names are Charlie and Guy. They also go to school. There are 23 in our school, Our teacher is Miss Savage. I am 13 years old. I have an uncle in the war. I have a walk of a mile and a half to school. I am writing this letter at my grandma's, She lives only a little ways from the school house. I stopped with her tonight.—Frances Lashbrook, Wales, Mich.

Dear Laddie—I have never written to you before so I thought I would try. I like to read the letters from the M. B. F. I am a little girl 9 years of age and have brown eves and brown hair. I weight 70 pounds, wear glasses and am in the fifth grade at school. My teacher's name is Miss Johnson, I like her very much. I have one sister. Her name is Leola Ezaleah Wall. She is 6 years old. I saved for Thrift Stamps, picking up potatoes and running errands. My sister and I have two War Saving Stamps. I live in town. We have two horses whose names are Dan and Kernal. We have two pigs and 12 chickens, I have a bantam hen. I have written vou a story. "The Belgian Children's Happiness."

Vera May Wall, Mayville. Mich.

The Belgian Children's Happiness."

When the war was started the Belfathers had to go and fight, and their gian children were very sad. Their homes were destroyed. One day the American children heard of their sadness and said they would try and help them, so their daddies could come home. So they bought War Saving Stamps and Thrift Stamps, and so one day the war ended and their daddies came home. They were very glad and thanked the American children They ran around their daddies singing:

"The war is over—Peace is here. Let hearts rejoice and be of cheer, For Peace shall ease the world's distress.

And bring us all new happiness.—Vera May Wall. Mayville. Mich.

MARKET FLASHES

(Continued from page 13)

nouncing the March minimum hog has kept the price up to its present level, and while some growers may be forced to sell a part of their re-maining crops at say \$7.00 per cwt., they may be perfectly sure that had they rushed all their beens to market at a time when they were dis-posed to do they would have demor-alized the market in short order, and thousands would have been left with a far greater quantity on their hands than they now have. The bean market this week is a disappointment to us. There may be causes for it which will be removed before another week. We have wired to the Grain Corporation for certain information on the situation, and hope to be able to present additional facts to our readers the com-

Onions

Onions are still in strong demand onions are still in strong demand and slowly advancing. The Pittsburg market went to \$3.50 last week, and advances were also noted at other points. The Texas onion supply will be way below normal and this fact has a healthy influence on the old onion market

Eggs

Eggs show a temporary decline. The higher prices encouraged much larger shipments and despite an unusually good demand, the receipts have been more than ample and the price is down a few cents this week. Prices are 40 ½ @41c.

Butter

Butter holds its position and the tone is firm. Detroit market was quoted the first of the week at 53@

New York, March 1, 1919.—Unforseen agencies have tended to cause an upward trend to the market this week. Business has been ac-tive the greater part of the week and most of the accumulations have been moved. The activity has been due largely to the desire of local jobbers and retailers to stock up but there has also been a keep debut there has also been a keen de-mand from out-of-town sources. In addition to the home demand agents addition to the nome demand agents of foreign countries have been active in picking up considerable quantities of butter for export trade, principally for the Scandinavian countries and France. A small quantity has also been accumulated to be shipped to England Reed to be shipped to England. Receipts this week have been slightly lighter than for last week.

lighter than for last week.

On Monday the quotation on all grades of butter advanced 1c. That was followed by advances of 1c on Tuesday and 1-2 cent on Thursday. Friday showed less activity than any other day of the week but no decided weakness developed. The one particular bright spot of the week has been the cleaning up of large quantities of firsts and seconds which have been in receivers' hands for some time. A good portion of such stocks were absorbed for export trade. Several cars of centralized butter have changed hands at prices ranging from 50c to 52 1-2c, although in a few instances 53c has been obtained, but the stock had to score uniformly 90 points to bring that figure. Unsalted butter is in extremely light supply, there being an insufficient quantity available

to supply the demand. At the close yesterday established quotations were as follows: Extras, 55@56%c; higher scoring than extras, 56@56%c;, and seconds, 48@49c, Unsalted butter is quoted at the extreme differential of 3c over corresponding grades of salted responding grades of salted.



Detroit—Dressed hogs: Choice, country dressed, under 150 lbs., 21@ 22c; over 150 lbs., 20@21c per lb.

Dressed calves, Fancy country dressed 23@24c; choice, 21@22c; common, 18@20c per lb.

common, 18@20c per lb.

Chicago Live Stock Letter

Chicago, March 3, 1919.—Trade anticipated a fairly liberal run of cattle for the initial session this week which they thought would be cut loose by the 50 to 75c advance in prices last week. However, a big storm west of Chicago offset calculations and held the run locally to 11,000. The market was a very active af-000. The market was a very active affair Monday of this week at prices generally 25c higher on all classes of offerings. Bulk of the steer supply offerings. Bulk of the steer supply arriving is made up of medium and short-fed stock selling largely at \$14.50 to \$17.00, while a better class of stock is realizing up to \$19.00. Cattle good enough to pass the latter price, however, are forming only a very insignificant quota of the run. A strictly prime grade of weighty steers have significant quota of the run. A strictly prime grade of weighty steers have value up to \$20.25. Last Friday a load of prime 1.196-lb. long yearlings sold at \$20, a new record for such weight. It is the concensus of opinion that the great bulk of cattle ready for market have already found their weight. ket have already found their way to the shambles and little relief is expected before grass offerings are ready for the trade, which will be some time as yet. An occasionally large run of cattle is expected to materialize from time to time when advances in trade are quite pronounced, but the big runs such as we had not long ago are considered we had not long ago are considered out of the question until early in the summer

Cows and heifers shared in the full advance registered monday of this week, but ruled very uneven last week. Demand for canners and cutters was very limited and closed 25 to 50c lower than the previous week's final basis, while fat cows and heifers, although meeting with slow call early last week, show-ed an improvement toward weekend and closed 25 to 50c higher than the previous week's finish. Prime yearling heifers and select kosher cows are selling at the year's best prices with a quotable top of \$16 being in force for the right kind of either class. Good meaty cutter cows are selling up to \$8 and fair to good canners \$7.25 to \$7.50. Bull prices are 25 to 50c higher than a week ago, with choice sausage grades selling as high as \$9.75 and prime butcher bulls upward to \$13.50. Veal calves set a new high mark for the year on Monday of this week when prime reached \$17.65 per cwt. Prices are now 75c to \$1 above a week ago. Increased runs of calves are due to arrive from dairy districts and prospects point dairy districts and prospects point to a downward revision of prices. The Government's delay in an-

(Continued on page 19)

The Easiest Riding Light Car Built

Correct spring suspension and proper weight distribution have given the GRANT SIX an unbeatable, world-wide reputation for ease of riding. People who have ridden in other lightweight cars are amazed at its superiority. Get a ride in the GRANT SIX. Prove for yourself that it is really a comfortable

You will find the GRANT SIX has the most powerful overhead valve motor of its size ever built—that every part is accessible—that crank shaft and connecting rod bearings are extra large. In every detail this motor is finely built. It is now in its fifth season, refined and improved, with a splendid reputation for service and reliability back of it.

GRANT SIX owners average 20 miles to the gallon of gasoline, 900 miles to the gallon of oil and 7000 miles to the set of tires. Some do even better than this.

The GRANT SIX typifies the latest style ideas in body lines, in body colors, in upholstery and details of finish. The top has the popular "Gypsy" curtains with oval plate glass lights in the rear. It is made of best grade "Neverleek." The hood fits tightly and neatly on a handsome aluminum ledge. Every detail reflects quality. At the big shows everywhere the demand for the GRANT SIX has surpassed all previous records. For genuine value buy a GRANT SIX.

Select your GRANT SIX from these models

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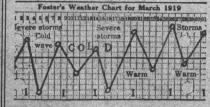
All prices F. O. B. Cleveland

Write for latest descriptive matter and name of nearest dealer

GRANT MOTOR CAR CORPORATION CLEVELAND, OHIO

THE WEATHER FOR THE WEEK

As forecasted by W. T. Foster for Michigan Business Farming



WASHINGTON, D. C., March 8, 1919.—Last bulletin gave forecasts of warm wave to cross continent March 12 to 16, storm wave 13 to 17, cool wave 14 to 18. This period will average coldest of the month; precipitation will be more general than usual and the storms will be severe. This disturbance will affect all of North America.

Next warm wave will reach Vancouver about March 17 and temperatures will rise on all the Pacific slope. It will cross crest of Rockies by close of March 18, plains sections

19, meridian 90, great lakes, middle Gulf States and Ohio-Tennesse Valleys 20, eastern sections 21, reaching vicinity of Newfoundland about March 22. Storm wave will follow ut one day behind warm wave and

March 22. Storm wave will follow ut one day behind warm wave and cool wave about one day behind storm wave.

A great rise in temperature will begin not far from March 16 and balance of month will average much warmer than from 9 to 18. Not much precipitation is expected the last third of March. Severe storms near middle of March throws doubt on what they will do to Winter grain and these storms will increase in force till end of May. The greatest of these will be near March 17, April 27 and May 29. With a very large crop of Winter grain in the ground a considerable acreage must necessarily be killed. Now is the time to consider what kind of crops shall be substituted.

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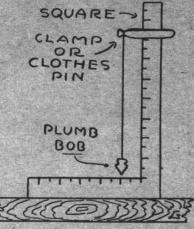
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LEVELING WITH THE SQUARE

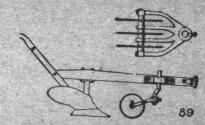
Who has not been annoyed by not being able to find the level, or may be the level was broken? The illustration shows a method of leveling in such emergency. Fasten a clamp—a clothespin will do—to the



verticle arm and attach a plumb bob, as shown. When the distance between the string and the vertical arm (x) is equal to the distance between the string and the vertical arm (Y), the surface upon which the lower arm rests is level.—P. A. B., Big Rapids.

PULVERIZER FOR PLOW

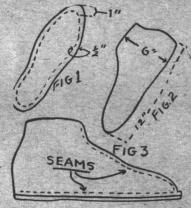
This attachment consists of three atting disks which, it is claimed, cutting disks which, it is claimed, break the soil thoroughly before it is turned and thus produce a pulverized



soil underneath the furrow slice. (J. O. Copeland, Ohio, U. S. Patent 1, 283,679, C. J. Lynde, Can.

MOCCASINS FROM OLD SHEEP-SKIN-LINED COATS

The service of the common sheepskin lined coats which are worn so much, needs not end, by any means, with the



wearing out of the coat. For after a coat of this kind is beyond wear, the lining will always be found in a good

Such lining if properly cut, will make two pair of as warm house shoes or moccasins, as may be bought for mon-

To cut the pieces, use one shoe of the person to wear the moccasins, as a pat-tern, and cut out a piece, an inch long-er and a half inch wider than the sole of the shoe, as in figure one. Then,

OKEHOUSE

I am sending an idea of a smoke-house that can easily be made out of an old barrel and a piece of old stove pipe. It is as follows: Dig a small hole in the grounr; put a piece of tin with

a hole in it over and set barrel without any bottom on the tin, and have a narrow tunnel in which you put the stove pipe with fireplace at end. Cover the barrel with carpets or old clothing to keep the smoke in the barrel.—M. A. W., Manistee County, Mich.



supposing that the shoe is a number seven, cut two strips in the shape shown in figure two, twelve inches long and four inches high at the cen-

These are then sewed together as in figure three, and the edges trimmed to evenness. There is enough elasticity in the slipper to insure easy putting on and removal, and are well worth the time spent on them.—Date R. Van Horn, Nebraska.

DAIRY AND GENERAL PURPOSE BARN

This barn is described, with others, in Farm Bulletin No. 7, "Dairy and General Purpose Barns," issued by



the National Lumber Manufacturers Association, Chicago, Illinois. Write for it if you are interested.—C. J. Lynde, Can.

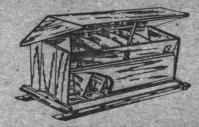
GATE FASTENER

Buttons on gates or doors are apt to become loose and then drop down allowing the door or the gate to wing open. The ordinary kind is here shown at (x), it is and

turned by own weight. If made as shown at (y) it will remain fastened even if it becomes loose on the screw or nail.—A Reader, Big Rapids, Mich.

AGITATOR FOR FEEDER

The agitator of this feeder is operated by the hogs themselves; it consists of a series of fingers attached to an axle which in turn is attached to a



trough. The hogs move the fingers when they step on either platform. (H. F. Brown, Washington Court House, Ohio, U. S. Patent, 1,283,464).

—C. J. Lynde, Can.

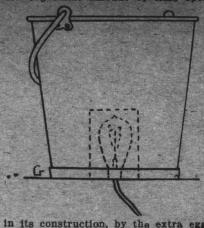
TO DRIVE NAILS IN HARDWOOD

As a usual thing when one drives nails into hardwood they bend over and another nail must be started. To overcome this drive the nail thru a cork first and cut away the cork as the nail is driven in. The cork holds the nail steady and does not allow it to bend in either direction.—A Reader, Big Rapids, Mich.

WARM WATER FOR CHICKENS

The water for the chickens can be The water for the chickens can be kept from freezing very easily on farms where electricity is available. A tin can and electric bulb is all that is necessary. The sketch shows the arrangement of the parts. The can is soldered to the bottom of the pail. The bottom of the pail is cut away enough

to allow the bulb to enter as shown. It is easily constructed and will pay for the small amount of time spent



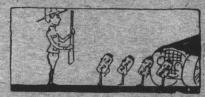
in its construction, by the extra eggs that will result from its use. - A Reader. Big Rapids.

TO MOVE GAS ENGINE EASILY

The gas engine can easily be moved by rolling it on the fly wheels. Place timbers, of such a size as to raise the skid of the engine from the floor a trifle, under the fly wheels and turn the wheels./ A good length for the timbers is four feet. The timbers can be of any size, depending of course, on the engine. 4x4 inches will be suitable for most engines. The compression should be off so as to allow easy moving of the wheels.-A Reader, Big Rapids, Mich.

HINTS FOR MOTORISTS

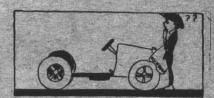
DRILLING PISTONS FOR LIGHTNESS



I am rebuilding a touring car into speedster and am thinking of lightening the pistons by drilling holes in them. Can this be done without dan-ger of weakening them?—S. P.

In a general way, this cannot be regarded as a safe proposition because, in a well designed engine, the pistons may be assumed to have been proportioned with very little excess strength. Still, pistons have been drilled in numerous cases without bad results. We idvise you to take advice from a firstclass engine man as to the manner and the extent of the drilling out. What holes are drilled should be well below the lowest ring groove and not too close to the bottom flange of the piston. They should not involve any stiffening ribs which there may be and they should not be too large. Each piston should weigh the same after the drilling out is finished.

REPLACING LOW WITH HIGH TENSION MAGNETO



I am converting an old passenger car into a light truck. The ignition of this outfit is from low tension and I have been advised that, if a high tension magneto was put on, the enwould it pay to make this change?—W.

If your present magneto is in first rate condition or can readily be put into such, we should not advise you to make any change. Arguments have been adduced to prove that the high tension magneto spark is superior as an igniting agency, and there may be something in them, but experience indicates that there is very little if any difference in the practical results obtained from the two types, assuming that the apparatus is in good or-

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THE GOOD-ROADS QUESTION BOX

(Editor's Note: No man is honest either with himself or his neighbors, who votes either for or against the bonding amendment, without a complete understanding of its provisions. We, therefore, invite the fullest possible discussion of the subject and in this co'umn will answer any and all questions submitted by our readers).

Why Issue Bonds?

What is the use of bonding to build roads? Why not build them each Year as we need them and spread the cost on the tax rolls?—M. L., Santlac coun-

If it was desirable to raise a sufficient amount to build a state wide system of roads and pay the enormous tax in one year, it would not be neces-sary to bond. In making permanent improvements that will live with the years and that future generations shall have the benefit of, it would seem only just and right for those who shall come after us, shall help and assist in paying for the things in which they have a direct benefit. By issuing the bonds of the state we are enabled to carry the burden over a number of years and make the tax very light from year to year. If a township were to build a wooden bridge that would soon wear out, it would not be wise to issue the bonds of the township running over a number of years. You would rather pay for it now because it is not of a permanent character. If, however, you were to build a steel bridge or one of concrete, it would only be just and right that such a permanent structure should be paid for in part at least by those who shall come after us and share in the benefits. Are we ready to make a Christmas present to future generations?

What does it mean to vote yes on the proposed constitutional amendment?

It means simply that we will give to the Legislature of Michigan, the power and authority to issue road bonds as necessity may require. Our main line roads must be built first. The Federal Government has and will distribute to the various states a large amount of money on the basis of what is called, 50-50. The Federal Government will give to Michigan a million or ten million or whatever amount it may be, conditioned, however, that Michigan shall put up a like amount. In other words, the Federal Government pays one half and the State of Michigan and the local communities will pay the remaining one half. If, however, our state neglects or refuses to come across with its share of the money, the Federal Government will distribute the same to the states more progressive, and who are willing to match the Federal Government for every dollar it is possible to so re-

It would seem not only unpatriotic but a most senseless thing for us as citizens to turn down a proposition of so much importance: The Federal Government realizes the necessity of building up the highways of our country, over which are carried more than ninety per cent. of the products of toil. The Government itself uses more than half of our highways to carry mail and parcels post, and now that the trucks have come into being and that rural motor express lines are being established everywhere, the necessity is so apparent that immediate action seems absolutely necessary.

lings realizing \$15.50 and wethers \$12.50. Some Colorado lambs are finding their way marketward but the run is a month or more behind in

MARKET FLASHES

(Continued from page 17)

price basis caused much uneasiness in trade last week and the market was in very poor shape most of the time. On the opening day last week best hogs were selling at \$17.85. Runs then became excessive and prices headed downward; in fact, dropped to the minimum basis, and continued that way until week-end, at which time receipts were curtailed, the market then showing a small advance. On the Monday session of this week receipts were exceedingly this week receipts were exceedingly short, only 25,000 getting in, and activity featured the trade at prices 15 to 25c higher than the closing session of last week. Top Monday was \$17.95, while bulk of the prime medium weight stock suitable for shipping outlet sold at \$17.65 to \$17.90. Light and light mixed grad-Light and light mixed grades which were such poor sellers, met with better demand on Manday of this week because of the short sup-ply and sold at \$17.40 to \$17.65. Good packing hogs are selling at \$17.40 to \$17.65. The trade is anxiously awaiting the decision of the Government as regards future hog prices and guesses on what the final decision will be vary widely. How-ever, the general opinion is that the \$17.50 minimum will remain in force until last year's crop of hogs are

A healthy dressed sheep and lamb market and very meager runs of ovine stock have been responsible for a record market so far as this season of the year is concerned. Local and eastern killers are quite active competitors for stock and sharp advances in the trade are common occurrences. Values last week showed irregular gains of from 50c to \$1 per cwt., and added to those advances was another 25c rise in values on the Monday market of this date. Best fat lambs are selling at \$19 to \$19.25. with \$18.25 to \$18.75 taking a large part of the run. Lambs of good chearing cathe run. Lambs of good shearing capacity but in light flesh are selling up to \$17.50, while stock of feeder flesh is clearing at \$16.50 to \$17. Best aged wethers are quotable up to \$14 and yearling wethers as high as \$17.50. Choice fat ewes are selling at \$13.25. The first shorn sheep of the season arrived on today's session, some yearschedule. The tone of the sheep trade is quite healthy and prospects are

PACKERS CONTROL FOODSTUFFS (Continued from page one).

United States Steel Corporation, 39.15 %. Pity the poor 21.29% profits.

Mr. Armour admitted, however, that

in 1900 the capitalization of his company was twenty millions and the surplus thrity-three millions, while at present the capital is one hundred milions, and the surplus one hundred and sixty-nine million, three hundred sixty-six thousand dollars, all of it, he claims proposed in said in said. he claims, representing paid in capital, though he admitted the increase of capitalization of a few years ago from twenty millions to eighty mil-lions, saying, "All the new capital we have had has been earnings of busi-The company has not even attained the dignity of a close corpora-tion, it is a family party, for Mr. Ar-mour admitted on the stand, that six or seven members of the family own

Mr. Levi Mayer, reputed to be one of the best paid attorneys in the United States, said to one of the committees: "When this committee was appointed, Mr. Armour, and I, and his attorney, hailed with delight that words cannot describe, the opportunity which Mr. Armour would receive at your hands for the first time in his existence,—an opportunity to tell the truth." Mr. Armour just threw this chance away. He said: "We do not make any money out of our refrigerator cars. They are a necessary thing for us to have,-it makes our other business run smooth."

The Interstate Commerce Commission, however, a few days later, sub-mitted figues showing that in 1916 Armour & Co., on their car department, almost exclusively refrigerator cars, made \$375,960, and in 1917, \$270,026. The commission also showed incidentally that Cudahy Packing Co had made profits of \$212,000 to nearly \$314,000 on the refrigerator cars in recent years, and Merris & Co., from nearly \$93,000 to \$183,000.

(To be concluded in next issue)



I WANT A FARM for sale ad that won't pull results in our "Want Column," but if you want to sell a farm, write out the brief description, but give all the facts and send us 5c for each word. Get it in next week's M. B. F. and find a real farmer buyer among our \$0,000 weekly readers. Address Want Ad Dep't., Michigan Business Farming, Mt. Clemens, Michigan.

FARMS AND LAND

HAVE DECIDED to sell my home of forty acres, well improved new barn, 48x28x14 hip roof on stone basement, good granary, good 8-room house, two good cellars, about thirty bearing apple trees. Good well of water. Place all cleared but about two acres of wood, all tillable, soil is sandy loam, fenced and cross fenced and located on graveled trunk line road. One mile from Hersey, the county seat. Will take \$2,200 if I can sell soon. Write or better yet come and see it, \$1550 cash, balance on time. F. J. Beggs, Hersey, Mich.

FOR SALE—80 Acre Farm, three miles from Clare, modern frame house in good condition with furnace, water in house, painted, windmill, garage, roundroof barn, 34x78, silo, other outbuildings, 65 acres cleared, clay loam soll, fair fences, deal with owner only. Price \$7,500. ORA F. PRUSLEY, Clare, Mich., R. 5.

FOR SALE—80 acres, 2½ miles north west of Gaylord, 60 acres improved, free from stumps, 20 acres wood timber, green. Modern house with furnace, windmill and good outbuildings, well fenced and will be sold at a bargain. Easy terms. Box M., Michigan Business Farming, Mt. Clemens, Mich.

107 85-100 ACRE MICHIGAN farm for sale; fully equipped or farm alone. Located in fine farming community, good neighbors. 60 acres cleared, balance easily cleared, Would like to hear from parties wishing to buy. All mall answered immediately. Address owner, John Rose, Billings P. O., Gladwin county, Mich.

FOR SALE—80-acre farm 2 3-4 miles from Alanson, 50 acres cleared, frame house 20x40, with basement; small barn, chicken coop 10x26; good well with windmill. About 75 fruit trees. Price, \$2,500. Terms, Cash. H. E. Kahler, Alanson, Emmet county, Michigan, R.F.D. No. 1.

FOR SALE—My 80-acre farm, good land, good buildings, good water, pumped by windmill in house and barnyard. 5 miles from good markets, good roads. Sold at a bargain if bought at once. For particulars write to August C. Borek, Reed City, Mich. R. No. 3.

40 ACRES 1½ miles from Wolverine; 23 acres cultivated, 7 acres seeded; about 40 bearing apple trees; 9 acres pasture enclosed with 4-stran barbed wire with cedar posts; tool shed 12x20. Price, \$450. For further particulars write owner, E. S. Griswold, 412 Harrison St., Monroe, Mich.

TWO HUNDRED FORTY acres ,good clay loam, three large barns, nine room house, windmill, large silo, mostly woven wire fence. Price, fifty dollars per acre. Stanley J. Sanford, Reed City, Michigan.

EIGHTY ACRES SUBSOIL. New bungalo house, good basement barn; well fenced, woven wire. Price, forty dollars per acre. Stanley J. Sanford, Reed City,

FOR SALE—Gentleman's country home 148 acres, extra good. Ernest LaFleur, Vermontville, Michigan.

IF YOU WANT to sell or exchange your property, write me. John J. Black, 100 St., Chippewa Falls, Wis.

GOOD PRODUCTIVE 80-acre farm. Idress Charles Ichbrecht, New Haven, address (Michigan.

SEEDS AND PLANTS

POTATOES

Did you know that our large yields of Petoskey Golden Russetts are not a lot of over-grown 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. C. D. Post, Prop. Alb

Alba, Michigan

FOR SALE personally grown Late Petoskeys or Rural Russett 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, Michigan

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.

PURE BRED SEED—Wis. Barley (6 ROW) and College Success Oats, passed inspection in field and bin. Worthy Oats, not inspected this year. These grains took 4th prize at M. A. C. Grain Show. Write for prices, Earl C. McCarty, Bad Axe, Michigan.

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

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

CHAMPION BEARDLESS, Manshury, 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.

I HAVE 1,000 bushels of Worthy Oats to offer at \$1.50 per bu. Sacks free f. o. b. They are nice bright oats and free of weed seeds, 10 acres of these oats yielded 90 bushels per acre.—Elmer E. Smith, Redford, Mich.

Blue Stem Spring Wheat. Raise spring wheat that there is a guaranteed price on and let someone else raise 50c oats. Write for prices and information. Raised and for sale by Ward B. Brown, R. F. D. 3. Climax, Mich.

FOR SALE—About 40 crates of Seed Corn, White Dent mixed a little with yellow Dent. Will guarantee it to grow, at \$1.50 per crate. C. F. Nique, Homer, Michigan.

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

PURE WORTHY OATS—Free from any foul seed at \$1,00 per bu., sacks at cost. Write A. A. Patullo, R. F. D. No.4, Deckerville, Michigan.

For Sale, Worthy Seed Oats. M. H. KNOLL, R. 3, Holland, Mich.

I HAVE ONE Hundred and Fifty bushels of A No. 1 Spring Rye for sale at \$2.00 per bushel f.o.b. Mayville; sacks not included. J. L. Borck, Mayville, Mich.

FOR SALE, WISCONSIN Pedigreed Barley, 5 to 24 bushel lots, \$2.15 bu.; bags extra. Member of Michigan Crop Improvement Association, Lee Fowler, Fostoria, Mich.

MISCELLANEOUS

WANTED TO BUY. Old False Teeth. We pay up to \$35.00 per set (broken or not.) Send now. Prompt remittances, Package held 5 to 10 days for sender's approval of our offer. Highest prices paid for old gold jewelry, gold crowns, bridges, dental gold, platinum, diamonds, and silver. Tell your friends. U. S. Smelting Works, Dep't 43, Chicago, Ill.

OVERLAND ROADSTER BARGAIN—4-cylinder, 1917 model, good condition mechanically. Can be repainted and new top put on for \$50, but is perfectly servicable 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.

WANTED—MAN of good standing in his community to take orders for trees, shrubs, roses, vines, bulbs, old fashioned flowers. Permanent. High commissions paid weekly. No delivering or collecting. Write today, FIRST NATIONAL NUK-SERIES, Rochester, N. Y.

FOR SALE 1 Fairbanks-Morse house-lighting outfit complete with 2 h.p. gasoline engine, generator, switch-board and storage batteries, 40 volts, 12.5 amp., first-class condition, guaran-teed; cost \$200. J. M. Simmons, 28 3rd St., Mt. Clemens, Michigan.

FOR SALE—250-egg Cyphers Incubat-or, used 4 hatches. Newton Colony Brooder Stove, good as new. Tony Motz, St. Johns, Mich., R. No. 1.

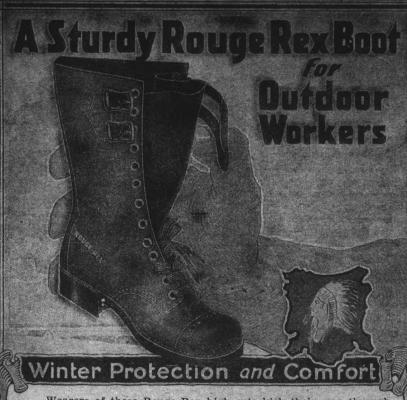
Paint Without Oil

Remarkable Discovery that Cuts Down the Cost of Paint Seventy-Five Per Cent

A Free Trial Package is Mailed to Everyone Who Writes

A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powdrpaint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather proof, fire proof, sanitary and durable for outside or inside painting. It is the cement principle applied to paint. It adheres to any surface, wood, stone or brick, spreads and looks like oil paint and costs about one-fourth as much.

Write to Mr. A. L. Rice, Manufacturer, No. 13 North Street, Adams, N. Y., and he will send you a free trial package, also color card and full information showing you how you can save a good many dollars. Write today.



Wearers of these Rouge Rex high cuts kick their way through storms, slush and bitter cold with a laugh.

All men who work out-of-doors will appreciate these high-laced, bellows-tongued Rouge Rex Boots.

They Keep Men's Feet Warm and Dry

These Rouge Rex boots are lighter, better for the feet than heavy rubber footwear, and cost less per year. You won't go back to heavy Arctics and Lumber Jacks once you've worn them.

Rouge Rex Shoes Are Your Full Dollar's Worth.

We want to sell Rouge Rex shoes to men who count their shoe dollars. We know that such men will save money and be foot-happy if they buy Rouge Rex shoes all the year round. There are other styles suitable for all the seasons of the year.

Rouge Rex shoes are made in our own factory, from best materials throughout. The Rouge Rex trademark is your guarantee. On sale everywhere. If you don't find them at your store write us.

HIRTH-KRAUSE COMPANY
HIDE-TO-SHOE TANNERS AND SHOE MANUFACTURERS
Dept. G, GRAND RAPIDS, MICH.

Everybody wants a Camera!



With spring approaching now is the time YOU would most enjoy a camera. Whether boy, girl, man or woman the Seneca Scout Camera pleases all. It makes splendid pictures and is light and strong. It has a good clear lense and takes a picture 2½x3½ inches. You can take either time exposures or snap-shots.

Once you get one of these handy, roll film, box cameras you will find any number of people and objects you will wish to photograph.

Just see a few of your neighbors who are not now subscribers to M. M. B., get six of them to hand you a dollar each for a year's subscription, and then as soon as you send in those 6 subscriptions the Camera

will be sent you all charges paid. It won't cost you a penny. Why not go right out and see your neighbors now? Show them a copy of MICHIGAN BUSINESS FARMING. You will be surprised how easily you will get the 6 subsriptions. Everybody is talking about M. B. F., and everybody likes it.

Address Circulation Manager
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Above Gas Engines have all been used for a short time; are good as new. Prices quoted at % original cost. Can be fitted to use Gasoline or Kerosene, at small additional cost. Terms, net cash., F. O. B., Detroit for Engines only. Write us for further information, or for Gas Engine Parts, Batterles, Battery Renewals, etc. These prices are for quick sale in order to clear out balance of our stock.

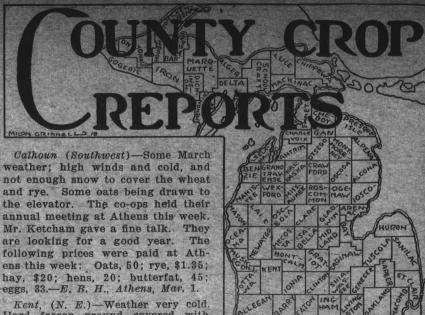
UNITED TOOL & MANUFACTURING CO.

94-96 Brush Street, Detroit, Mich.

A SHREWD MAN

who is in the farming business for profit, makes a mighty good investment by sending in his subscription to

MICHIGAN BUSINESS FARMING



Kent, (N. E.)—Weather very cold. Hard frozen ground covered with ice and snow. Winter wheat appears all right; if the roots are broken by the heaving of the frost time will tell; quite a little of it was sown last fall. This locality has never raised the spring variety and will not start doing so this spring. Some are talking of sowing a little spring wheat with their oats to make their ground feed a little heavier and help take the place of corn, which the past few years has not been a roaring success here. Those who have their beans yet now have hopes of a living price for same. Those who have their potatoes must have hopes also, as they are not selling to any extent. Nothing moving on the roads except the flivers. The following prices were quoted at Greenville this week. Wheat, \$2; corn, \$1.20; oats, 50; rye, \$1.25; beans, \$6; potatoes, \$1 to \$1.10; hens, 20; butter, 40; eggs, 30; sheep, 10; lambs, 15; hogs, live, 16; dressed, 21; beef steers, 10; beef cows, 9; veal calves, 9 to 11.—G. M. W., Greenville, Feb. 28.

Jackson, (N. E.)—The weather has been stormy the past week with rain and snow flurries, but hardly cold enough to freeze the ground except when the snow melted. A heavy storm on Feb. 28th of hail and rain and high wind but little damage has been reported. Farmers working at their wood, chores and baling hay; some buzzing wood. A few silos have been sold for spring delivery. Very little being sold as prices are not satisfactory to farmers. The following prices were offered at Munith this week: Wheat, \$2.13 to \$2.15; oats, 51; rye, \$1.25; hay, \$20 to \$25; butter, 35; butterfat, 38; eggs. 35; hogs, \$16.50.—A. F. W., Munith, March 1.

Wexford (West)—Change of weather Thursday, cold and blustery. A plenty of snow for good sleighing on an average of 12 inches. The following prices were paid at Cadillac this week: Corn, \$3,25; oats, 60; rye, \$1.40; hay, \$25; beans, \$5; potatoes, 50c bu.; onions, \$1.25; hens, 13 to 16; springers, 16 to 17; butter 30; butterfat, 35; eggs, 25.—S. H. S., Harrietta, Feb. 27.

Tuscola, (Central),—Everybody is buzzing wood and cutting saw logs and trying to put up their ice but have a hard time cutting ice as it is only about six or seven inches thick and has to be floated to shore as it is not safe to put a team out on it. Not much going to market just now. There were a few head of cattle taken to Mayville last week. Lots of auction sales around here. Cows are bringing a good price going from \$75 to \$115 and good young matched horses are bringing from \$125 to \$175. That is a good deal better than a year ago but they must be good, big, well-matched teams to bring that light. Light, old ones don't get a bid. The following prices were paid at Caro on February 28th: Wheat, \$2.10; barley, \$1.75 cwt.; oats, 53; rye, \$1.12; hay, No. 1 Timothy, \$18; No. 1 Light Mixed, \$16; buckwheat, \$2 cwt.; strawrye, \$8; wheat-oat, \$8; beans, \$8; potatoes, 75; onlons, \$1; cabbage, 2c lb; hens, 25; springers, 25; ducks, 24; geese, 18; butter, 42; eggs, 33; sheep, \$6 to \$7; lambs, \$10; beef cows, \$4 to \$5; veal calves, \$16; apples, 75 to \$1.—R. B. C. Caro, Mich., Feb. 28.

Calhoun. (N. C.)—The farmers are having sales, attending sales and moving. A few want to put up ice but the crops seem poor. The weather is very mild and dry and changeable for the farmers. It is bad for wheat and farming in general. Level fields have not suffered much but the high rolling land is dried out and hurt some. Not much to market in this locality now, a few cattle later. Farmers are buying lots of grain. The following prices were paid at Olivet on February 25th: Wheat, \$2.10; oats, 50; rye, \$1.37; hay, \$19; butterfat, 47; eggs, 32; hogs, 16; beef steers, \$10; beef cows, \$7.—G. R., Olivet, Feb. 27.

Tuscola, (N. E.)—Weather is quite changeable. Farmers are selling cattle and some grain. Auction sales nearly every day. Those who have a sugar bush are getting ready to tap. As there is not much frost in the ground not much of a run of sap is expected. Quite a number of farmers are getting ready to build silos this spring. The following prices were paid at Cass City on February 28th: Wheat, \$2.10 oats, 55; rye, \$1.15; hens, 22 to 25; springers, 22 to 25; ducks, 25; geese, 25; turkeys, 25; butter, 38; butterfat, 48; eggs, 32; sheep, \$5 to \$8; lambs, \$13 to \$15½; hogs, \$14 to \$16; beef steers, \$11½; beef cows, \$5 to \$8; veal calves, \$10 to \$15—S. S., Cass City, Mich., Feb. 28.

Newaygo, (East)—Rainy and disagreeable weather for out-of-doors' work. Several farmers have installed feed grinders and are accommodating the neighbors in grinding all kinds of grain for feed. Not very good season for putting up ice. The general condition of live stock is good. The buyers are beginning to buy beans again. A few horses are being sold but the prices are lower than former years. The following prices were offered at White Cloud February 28th: Wheat. \$2.15; corn, \$1.20; oats, 55; rye, \$1.18; beans, \$7; potatoes, \$1 cwt.; hens. 21; butter, 45; eggs, 30; hogs, dressed, 17; beef steers, live, 5; veal calves, live, 7; dressed, 12; apples, \$1.25.—F. S. Big Rapids, Feb. 28.

Monroe (Southeast).—Cold snap hit us on the 25th. Frogs and mud frozen up and the walking is good. Farmers are selling hay and oats where they are located, near the stone roads. Others can't get out. All are busy. Some are repairing fences, trimming orchards and making a general cleanup. Very little snow, and wheat needs the covering, though not badly injured as yet. Preparation is being made for a large acreage of sugar beets, oats, barley and corn. The following prices were paid at Toledo on Feb. 26th: Wheat, \$2.10 to \$2.20; corn, \$1.50; oats, 60 to 67; hay, No. 1 timothy, \$27; No. 1 light mixed. \$23 to \$25; wheat-oat, \$8; potatoes, \$2.50 to \$3; onion, \$2.50 per 100 lbs; cabbage, 2½ per lb.; hens, 25 to 30; springers, 30; ducks, 30; geese, 27 to 30; butter, 50 to 55; butterfat, 55; eggs, 41 to 45; sheep, \$9 to \$10; lambs, \$11 to \$18; hogs, \$16 to \$17.80; beef steers, \$13 to \$16; beef cows, \$12 to \$15; veal calves, \$18 to \$19; apples, \$7 to \$9 bbl.—E. W. H., Erin, Feb. 27.

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HOW TO AVOID UNPROFITABLE HENS

IRECTLY A hen begins to show the first signs of becoming proody, she should be transferred from the nest box to the broody coop, with which all runs containing sitting breeds should be furnished. By this treatment pullets and hens generally re-commence laying immediately they are returned to the pen after they have ceased to be broody, which is in five to seven days, provided they are given attention at once.

When pullets and hens which are not required to sft become broody, they should not be left on the nest, but should be transferred immediately to a coop which has bars across the bottom to prevent the fowls which occupy it from sitting down. Along the length of the coop a trough should be placed for feeding the birds, and a metal trough for water is also necessary. The coop should be placed in the run occupied by the fowls in full view of their companions.

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e, e, er, 5; Exercise is an important factor in success when birds are concerned, and this is especially the case when breeds which lay brown eggs are kept, for these birds have a tendency towards that inertia which results in the accumulation of adipose to the detriment of egg production. Internal fat causes sluggish liver, and prevents the egg organs performing their normal functions. Lazy hens are unprofitable, but no hen should be condemned as lazy till every provision for scratching has been made.

Laying hens require shell and grit, and are anxious to get both. They need a run and a scratch, and an opportunity to consume shell and grit before breakfast. If they get all three they feed much better than if they eat before they have had time to scratch and pick up grit.

When hens do not run after their food greedily, a meal should be missed, and they will then be likely to eat their next meal with avidity. If they do not, they should be given a dose of warmed castor oil, followed by a dose of some reliable roup powder every day for a week.

The value of a dose of cathartic medicine can hardly be over-estimated. Many serious cases of internal stoppage could be entirely avoided and the lives of chickens saved, if this preventive measure was adopted in time. When birds stand around with their feathers ruffled around their heads they need a dose of castor oil, as they are generally suf-

fering from intestinal inactivity.

One of the secrets of successful poultry keeping is to feed the birds so that they obtain all possible nourishment from their food, and this is accomplished by giving them an ample supply of grit which is both hard and sharp. Broken flint answers better than any other material—does its work more thorough-

ly, and lasts longer. Grit should be kept in a trough in the run for the birds to help themselves, and once a week a teaspoonful for each bird should be added to the soft food. This usually prevents internal stoppage, but slight derangement should be treated by giving each bird a teaspoon of warmed castor oil, followed two hours later by one of warmed cotton-seed oil (properly purified, of course,) or corn oil. The male birds should each be given one and a half teaspoons. Bottles containing the oils should be placed in a bowl of hot water after corks have been removed so that contents may become quite liquid, otherwise there is a risk of choking the birds when administering the castor oil, for it is sometimes thick and liable to cover the windpipe, and when the bird breathes to pass down the wrong channel, causing suffocation.

Shell-forming material in the shape of ground oyster shells or flint dust is essential for chickens during the cold weather, as at other times. It can readily be mixed with the soft food, and forms shells of good consistency—in fact, when flint dust is fed regularly shellless eggs are practically unknown. It can also be used as bone-forming material for young chicks and is as satisfactory as bone meal.

For rattling in the throat or wheeziness, warmed glycerine and stewed flaxseed (linseed) quickly cure the trouble which caused the rattling. Stewed linseed may be mixed with the soft food if the birds' appetites are good, but when they are not eating well it is wise to give each bird its dose, five teaspoons, every morning and in addition, one teaspoon of warmed glycerine.

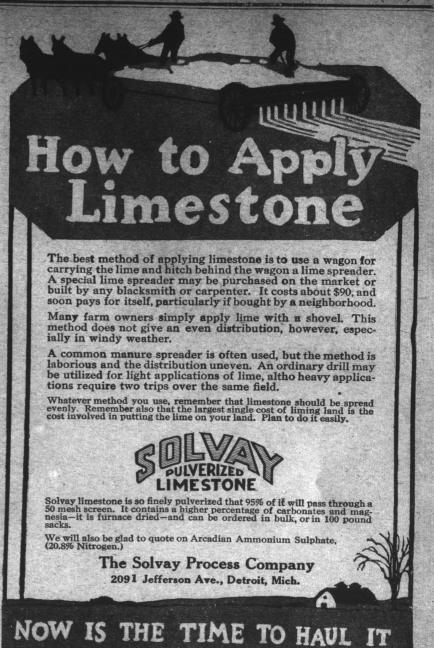
Diarrhoea in chickens, whatever their age, must never be neglected. The cause should be removed by a dose of castor oil, followed by a teaspoon of powdered chalk mixed with half a teaspoon of ginger (also powdered, of course.) When the birds' appetites are good, the chalk and ginger should be mixed with the soft food, but if they are not feeding well, the ingredients are best administered as pills. If, thru neglect, any birds get dysentery, chloranodyne (obtainable at any drug store) is the most satisfactory remedy-five drops for a hen, seven for a rooster, given on a lump of sugar. A teaspoon of tepid water should be given later.

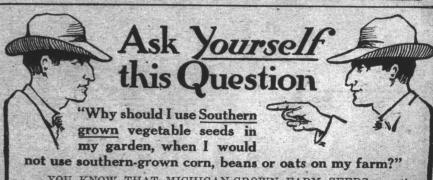
After diarrhoea chickens are liable to be weak. For a few days after they have recovered, bread and milk is the most suitable diet.

Change of diet is always desirable when chickens show any sign of not caring for their food. At mid-day a little meat may sometimes be given with advantage. Ground oats may also be used, one-third to two-thirds middlings of good quality not oftener than three times a week.—Lawrence Irueli,



Spring Wheat in Kalamazoo County, Mich. Scene on Mark R. Brown Farm, Climax.





YOU KNOW THAT MICHIGAN-GROWN FARM SEEDS are the best, and that's why I sell them. They are acclimated, they are hardier, the plants mature quicker, and yield bigger and better crops.

SAIER'S GARDEN BOOK give definite reasons why Michigan planters should use Michigan-grown seeds on the farm and in the garden. It lists the prices and varieties that stand the tests I give. Write for a free copy.

HARRY E. SAIER, Seedsman
Box 19, Lansing, Michigan.





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Fee \$15.00.
Michigan State Champion.

Offers at Stud

Ship your females; satisfaction guaranteed, Good puppies of all breeds bought and sold.

Dr. W. Austin Ewalt, Mt. Clemens, Mich., Owner and Prop.

The Milking Shorthorn

is the Farmer's Cow

Come with me to the Milking Shorthorn Congress Show and Sale

at Erie, Pa., March 20 and 21, 1919 If you are thinking of attending this meeting or wish to know more about it write

Chas. Bray, Okemos, Mich., Breeder of Milking Shorthorns

Are you in the market for a good Holstein Calf from 38 lb. Bull, a son of Rag Apple 8th.

ROBERT R. POINTER & SON DEARBORN, MICHIGAN

JERSEY COWS

.I offer for sale ten pure bred Jersey Cows, three registered: sired by Blue Majesty 93,987, son of Royal Majesty 79,313. Dames sired by Stoke Pogis, of Armada, 72,588 G., son of Stoke Pogis, of Prospect 29,621. All young, all in good condition; all giving milk or soon to be fresh. Tuberculosis tested. Would

W. E. DAY, Armada, Mich.

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Saginaw

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SILVER LACED GOLDEN and White Wyandottes, Only a few Large Golden or White cockerels left. Eggs in season \$3.00 per 15, \$5.00 per 30. Clarence Browning, R. 2, Portland, Mich.

COCKERELS R. C. R. I. White Large pure white husky fellows, prices reasonable, satisfaction guaranteed. O. E. Hawley, Ludington, Mich.

STANDARD BRED COCKERELS— Mated Anconas; Buff and Partridge Rocks; Ronen Drakes. Hatch-ing Eggs in season. Sheridan Poultry Yards, Route 5. Sheridan Michigan..

WHITE WYANDOTTES "Exclusively" for 15 years. Fine Birds. Best layers. Keeler's strain. Eggs, 15, \$1.25; 100, \$6.50. Cockerels, \$2.00. Nick Fleck, R. 6, Plymouth, Ind.

TURKEYS

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.

HATCHING EGGS!

EGGS FOR HATCHING, from pure-bred Buff Orpingtons, \$2.00 per 15. Postpaid. R.F.D. No. 1.



VALUABLE Poultry Catalogue Free, pure bred poultry, our win-nings prove high class quality, all leading varieties. Don't delay, write Blue Ribbon Poultry Farm, Altoona, Iowa.

DOGS

FOR SALE—Male Collie, extra fine breeding. Ernest LaFleur, Vermontville, Michigan.



SAVING THE LAMB CROP

Lambing time is the shepherd's busiest season. The success of the year depends largely upon the percentage and vigor of lambs born and saved, says D. A. Spencer, sheep extension specialist to the University of Missouri College of Agriculture. Warm quarters are necessary in cold weather. A movable pen, four feet square, furnishes the best place for a ewe and her lamb until the lamb is one or two days old. The ewe is more sure to own her lambs, especially when she has twins, if she and her lambs are kept in this sort of a pen until they become thoroly attached. The ewe flock needs plenty of room, 12 to 15 square feet of floor space for each animal. Feed the ewe lightly on grain, about one-half pound daily, till her lamb is three or four days old.

When lambs are coming rapidly the ewes should be watched day and night to avoid unnecessary losses. Occosionally a ewe will have difficulty in giving birth to her lamb, but it is unwise to give her help until she has tried for some time and appears to be unable to effect a delivery. When help is given care should be exercised not to excite her more than is necessary. The essentials of aid are to see that the unborn lamb is in a normal position with legs in such shape as not to hinder the progress of birth. When it is possible to draw on the lamb do so as gently as possible and pull only at the time the ewe strains. As soon as the birth is about complete and it is possible for the lamb to breathe, remove the birthsack from the mouth and nostrils and blow into these parts to assist the new thing in getting its first breath. As soon as the danger of smothering is past leave the pen and let the ewe clean and care for her lamb a few minutes. If the lamb does not succeed in find-ing the teat in twenty or thirty mining the teat in twenty or thirty minutes give it some help by placing the mouth of the youngster to the teat of the mother. If it is a weak and indisposed to suck place the teat in its mouth and squeeze some milk into it. The shepherd should be very careful to see that there is not excess of wool about the udder of the ewe; if there is, these locks should be clipped away. This will prevent any trouble the lambs might have in finding the teat and from the sucking of wool locks. Sucking these locks often cause wool balls in the stomach of the lamb and usually result in a stunted or dead lamb.

After the birth of lambs, gradually increase the grain allowance so that the ewes will be getting about one pound daily for each 125-pound ewe, in ten days or two weeks after lamb ing. A satisfactory grain mixture is equal parts by weight of oats and corn when it is possible to furnish a daily allowance of two to four pounds of good clover or alfalfa hay. Rather heavy feeding is advisable until regular pasture season. Afford the flock plenty of daily exercise.

Veterinary Department

I have a Collie dog that is troub-led with worms. He has an awful appetite, can't seem to fill him up. He goes around stretching, then will lie down on his stomach as though he was sore. Would like to know through your paper a good remedy.
—C. H. S., Eaton Rapids.

Your dog has Tape Worm:-Treatment: -First give one ounce caster oil, tie animal up and allow no feed of any description for twenty-four hours; while stomach. is empty give one dram 'of oil of male fern, follow in eight to ten hours by a saline cathartic consisting of Epson Salt four drams. The expelled parasites should be careful-

ly examined to ascertain if the head has been expelled, and if not the treatment should be repeated in ten days. All worm segments as well as the bowel discharges should be burn-

Can you advise me what is the matter with one of my pigs? I am fattening a flock of 5-month-old's, and about a month ago one became sick, vomited, and had diarrhoea. I took her away from the flock and she was better in a few days. I put her back but she has not gained since and seems to eat good .- Leo J.

Vomition is rather common in swine and is the result of stimulation of the vomiting center, which is located in the brain. This stimulation may be direct from irritation in the nerve center, but more frequently it is indirect from irritation of some portion of the intestinal tract. Vomiting is therefore, a symptom of a variety of disease conditions; it may be caused by engorgement of the stomach, nature having provided this method of relieving an overloaded stomach. Intestinal obstruction is another frequent cause of vomiting in swine, as is also irritation of the lining of the esophagus, intentine, and more especially the stomach. Worms also cause sufficient irritation to produce violent vomiting, while chemical irritants acting upon the digestive lining may produce vomiting. Swine as a rule vomit easily. The affected animals become uneasy and restless. They extend the head and depress the nose; the abdominal muscles contract, and the stomach contents are thus forced out. The vomited material usually consists of particles of food mixed with mucus, altho it may be composed entirely of a thin, shiny mucus. The expelled material may contain intestinal as well as gastric contents. Wood Charcoal is the best treatment I know for vomiting in swine; give from one to three teaspoonfuls , (according to the size of the hog) in the feed twice

I would like to ask a question in regards to a heifer, that is two years old and has a heifer calf. Would the calf make as good a cow when grown up as an older cow's calf? Please answer through your good paper, M. B. F.—E. C., Blanchard, Mich.

If the calf from your heifer is of the same breed as the dam, there is no reason why it would not grow to be a desirable size cow; provided, however, the heifer has attained a good size for one of her age and breed.

I would like to know your opin-ion of a young sew which weighs about two hundred and fifty pounds. which sometimes comes in heat about ten to twelve apart, and she will not get with pig .- A Reader, Mason county, Mich.

Your sow is, in all probability, too fat, which condition would pr vent her from being a successful breeder. If this is not the cause, then she is affected with diseased ovaries, and will never breed.

Who Has Goats for Sale?

An Alma subscriber wants to get in touch with some one having goats for sale. Name and address of subscriber will be given to anyone interested. Write Editor M. B. F.

I don't want to be without the M. B. F. I think it is the only paper for these times.—Clarence Britton, Newaygo Co.

E. I

Flint. L. O B

Bul ords of at full conside

LANG Offer from da sires' d igrees waing,

I was Herd Stack his a daug 2nd an combine We the dat our Sedams e also hayou go

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CATTLE

HOLSTEIN-FRIESIAN

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.

Musolf Bros., South Lyons, Michigan.

M.B. F. has sold my caives. I now offer a light colored 6 yr. cow that milks up to 60 lbs a day, \$^550. The best of well bred bull calves bred for show and production. From dams with A. R. O. records of 25 lbs. butter, 546 to 574 lbs. milk 7 days, \$1.25.

ROBIN CARR FOWLERVILLE, MICHIGAN

Clover Dairy Farm offers a beautiful light colored straight and well grown bull calf, born Dec. 2,1918. Sired by Flint Hengerveld Lad whose dam and sire's dam average 32 lbs. butter in 7 days. Dam is a 17 lb. Jr. 2 yr. old, sired by a son of Pontiac DeNijlander, 35.43 hutter and 750.20 lbs. milk in 7 days. Price, \$100, f.o.b. Flint. Write for photo and pedigree. L. O KETZLER Flint, Michigan

PREPARE

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

Bull Calves 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 28.25 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 ped-igrees and prices. Fred J. Lange, Sebe-waing, Michigan.

BULL CALF

Born August 15, 1918. Sire's dams average 37.76 butter 7 days, 145.98 lbs. butter 30 days, testing 5.52% 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 tuberculin tested annually.

BOARDMAN FARMS Jackson, 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 Pietertie, 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.

HOLSTEINS OF QUALITY. Two nearest dams of herd sire are both above 33 lbs. butter in 7 days, average 700 lbs. milk. E. A. Hardy, Rochester, Mich.

EG. 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 HOLSTEINS

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. O. L. HULETT & SON, Okemos, Mich.

FOR SALE Five or six good large Rog. Holstein cows, just bred to a 81.61 lb, bull.
Paul Steinacker, Howell, Mich.

CHOICE REGISTERED STOCK

PERCHERONS. HOLSTEINS. SHROPSHIRES

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



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. Write to-day! BREEDERS' DIRECTORY, MICHIGAN BUSINESS FARMING, Mt. Clemens, Michigan.

JERSEY

The Wildwood Jersey Farm

Breeders of Majesty strain Jersey Cat-tle. Herd Bulls, Majesty's Oxford Fox 134214; Eminent Lady's Majesty 150834. Herd tuberculin-tested, Bull calves for sale out of R. of M. Majesty dams, Alvin Balden, Capac, Michigan.

GUERNSEY

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

Registered COMBASHY 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 ocean. Write for price list, of the 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

SHORTHORNS For Sale at reasonable prices. The prize-winning Scotch Bull, Master Model 576147, in many states at head of herd of 50 good type Shorthorns.

E. M. Parkhurst, Reed City, Michigan

MILKING SHORTHORNS

Maplelane Laddie No. 504725, a Grandson of General Clay 255920, at head of herd. Young stock of both sexes for sale. Can spare a few cows.

A. W. Therne, Fife Lake, Michigan

OAKWOOD FARM SHORTHORNS
Bull calves of Bates Breeding.
COLLAR BROS., R. No. 2, Conklin, Mich.
FOR SALE—SHORTHORNS
Of Quality, Scotch and Scotch topped.
Maxwalton Monarch 2nd & Maxwalton
Jupiter in service.
John Schmidt & Son, Reed City, Mich.

SHORTHORNS and POLAND CHINAS all sold out. None for sale at pres-ent. F. M. l'iggott & Son, Fowler, Mich FOR SALEREG, SHORTHORN BULL, mos. old, of best Bates breeding. W. S. Huber, Gladwin, Mich.

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

Shorthorns 100 head to select from Write me your wants. Prices reasonable. Wm. J. Bell, Rose City, Michigan.

FOR SALE Shorthorn Dur-Bates
Strain and good individuals. One 3 years
old, one 6 months.
Geo. W. Arnold, Bates, Mich.

Geo. W. Arnold, Bates, Mich.

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.

FOR SALE—Reg. Shorthorn bull, 14
mos. old, color red, white marks. Bates
breeding. Will crate and ship, satisfaction guaranteed or money refunded.
Could use Liberty bond in part payment.
Wm. D. McMullen, R. No. 1, Adrian, Mich.

HORSES

SHETLAND PONIES

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

HOGS

POLAND CHINA FOR 25 YEARS

This establishment has been head quarters for Big Type Poland Chinas. We have a nice lot of boars and sows of strictly big type breeding at very low price. Let me know what you want Bell phone.

JNO. C. BUTLER - Portland, Mich.

FAIL 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.

BIG TYPE P. C., 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. 6. BOARS, all ages, the kind that make good. Meet me at the fairs. E. R. Leonard, St. Louis, Mich.

Large Type Poland China Hogs

All sold out now, none to offer at present, 68 head sold Nov. 29 at auction for \$4,440.50. Thanks for your patronage and you'll always be welcome. Wm. J. Clarke, R. No. 7, Mason, Mich.

B IG TYPE POLAND CHINAS. Two big boned boar pigs farrowed in June, sire Michigan Buster. Gilts bred to Bob-O-Link, Gerstdale Superior and Gerstdale Lad. O. L. Wright, Jonesville, Michigan.

THREE Registered Big Type Poland-China pigs, Sept. farrow. One boar, two sows, \$70.00 takes the trio, \$25.00 each. Certificates free. M. E. Hess, 111 N. Johnson Ave., Pontiac, Michigan.

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

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

WALNUT ALLEY BIG TYPE. Glits Keep watch of 1919 crop sired by Arts Senator and Orange Price. I thank my cusformers 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.

BIG TYPE P. C. Choice bred sows from big bone prollific kind with size and qual-ity. Elmer Mathewson, Burr Oak, Mich.

O. I. C.

O. I. C. GOOD 125-lb. BOAR PIG. \$30. Parks Barred Rock Eggs, \$1.50 per setting
- Dike C. Miller, 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.

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.

DUROC

DUROC BRED SOWS

and growthy big type last fall boars. State Fair champions and winners. Orion's Fancy King 83857 heads herd. Newton Barnhart, St. Johns, 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.

Durroc Jersey Gilts Weighing from 1bs.

JOS SCHUELLER, Weidman, Michigan.

DUROC-JERSEY SWINE

We have some choice big sows and gilts for March, April and May farrow to offer, also fall pigs, both sexes, and two spring boars. Write for pedigree, description and prices, or come and see them. Will skip on approval.

Thos. Underhill & Son, Prop, Salem, Mich.

PEACH HILL FAPL.

PEACH HILL FARM

We are now offering Registered Duroo Jersey fall pigs, either sex. We can furnish you unrelated pairs or tries. Write to us. Our prices are very reasonable.

Inwood Bros. Romeo, Mich.

DUROCS SPRING GILTS and brood son of Panama Special. Newton & Blank, Hill Crest Farms, Perrinton, Mich. Farm miles s. of Middleton, Gratiet county.

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

G REGORY FARM BERKSHIRES for Profit. Choice stock for sale. Write W. S. CORSA, - White Hall, Ill.

HAMPSHIRE

HAMPSHIRES
Bred Gilts all sold. Spring Boars only for sale at 18 cents per lb.
John W. Snyder, St. Johns, Mich., R.4.

CHESTER WHITES

CHESTER WHITES—Gilts bred for Mar., Apr., and May farrow, of the large growthy type. Priced right. F. W. Alexander, Vassar, Michigan.

A FEW SPRING BOARS and bred gilts of Joe Orion and Defender Breeding at a bargain. Write for prices.

John W. Esch, R.F.D. No. 1, Honor, Mich.

SHEEP

SHROPSHIRES

SHALL BE ABLE to furnish for seas-on of 1919 anything needed in Regis-tered Shropshire Sheep of the same High Quality that have given satisfac-tion in many States since 1890. C. LEMEN, Dexter, Michigan,



POULTRY

HOMESTEAD FARMS

A Federation of Interests

After a long delay our new illustrated catalog is ready. In it we explain the development of the Homestead Farms

Pure Breed Practical Poultry

Every farmer poultryman and poultrywoman in the State should have a copy of this Catalog; te explains pure breed poultry stock that is practicable for the farmer. If you are interested in poultry, send for a copy.

Day Old Chicks

Everything indicates that there will be more orders for Chicks this year than can be filled. Orders are already booked for future delivery; those who want to be sure of Chicks should order now and have them shipped later when you will want them. Our breeds are:

Barred, W. and Buff Plymouth Bocks.

R. C. and S. C. Rhode Island Beds.
White and Silver Laced Wyandottes.
Black and White Orpingtons.
Single Comb Black Minoreas.
S. C. and B. C. Brown Leghorns.
S. C. and B. C. Brown Leghorns.
Single Comb Buff Orpingtons.
Single Comb Buff Orpingtons.
Single Comb Anconas.
White Pekin Ducks.

EGGS FOR HATCHING
Eggs from any of the foregoing breeds

EGGS FOR HATCHING

Eggs from any of the foregoing breeds
for sittings or in quantities for incubators,
Special price for 1,000 eggs during season; and for eggs for early Brollers.

Eggs from White Pekin Ducks, Gray
Toulouse and Embden White Geese.

Hares—Belgians and Flemish Giants,
If you really want poultry stock this
season, especially Day Old Chicks, you
should order now; stock can be shipped
later.

BLOOMINGDALE FARMS ASSOCIATION Bloomingdale, Mich.

BARRED ROOK JOHN'S BIG BEAUTIFUL Barred Rocks are hen hatched quick growers, good layers, sold on approval \$4 to \$8. Circulars, photos. John Northon, Clare, Mich.

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

For Sale Thoroughbred Barred Rock males and females, also eggs for hatching after Feb. 1st. Bradley Strain Bred-to-lay. H. E. Hough, Hartford, Mich.

BARRED ROCKS. Winners at Chica-Brook Propulets layed 950 Eggs in one year. Eggs, \$3.00 for 15; \$5.00 for 30. W. C. Coffman, Benton, Harbor, Michigan, R. F. D. No. 3.

THOROUGHBRED BARRED ROCK Cockerels and females, Vigorous stock; good layers; eggs for hatching. Satisfaction guaranteed. Robert Bowman, Jr., R. No. 1, Pigeon, Michigan.

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.

LEGHORN

P ROFITABLE BUFF LEGHORNS—We Single Comb Buffs that are not only mated for exhibition but, above all, for profitable egg production. Eggs at very reasonable prices. Our list will interest you—please ask for it. Village Farms, Grass Lake, Michigan.

SINGLE COMB WHITE LEGHOENS.
Bred to lay. English strain.
Large healthy, vigorous stock, farm range.
Hatching eggs and day-old chicks. Satisfaction guaranteed. Bruce W. Brown,
R. R. No. 3, Mayville, Michigan.

S. C. White Leghorn Cockerels from Fer-old Chicks April and May \$15.00 per 100, Herbert Hammons, Williamston, Mich.

CHICKS

CHICKS We ship thousands each season, different varieties, booklet and testimonials, stamp appreciated. Freeport Hatchery, Box 10, Freeport, Michigan.



This Is March!—And History Repeats Itself

- SPRING IS ALREADY HERE! We are a little late with our regular annual hurry-up message.
- ALWAYS AT THIS PERIOD we find it necessary to warn tardy or indecisive buyers that only those who place their orders early—which means at once—can hope to get Reos for Spring delivery.
- REALLY, WE MIGHT save the trouble of writing a new advertisement each year—the same copy would fit just as well one year as another.
- THE SAME STORY might be told in the same way—so consistent and so persistent is the year-after-year demand for Reos.
- FOR, NEVER SINCE THE DAY the first Reo left the Lansing factory and went into the hands of its delighted owner—never since that time has it been possible to make enough automobiles to supply all who wanted Reos.
- ORDINARILY—and to a normal degree—that is from the factory standpoint, an ideal condition.
- BUT IN MARCH of each year the condition becomes aggravated by an excessive over-demand that is at times discouraging to say the least.
- CERTAINLY WE COULD build twice or four times—or ten times—as many Reos per annum as we do.
- BUT THE REO POLICY has never been to build the most automobiles—only the best.
- WE MAKE ONLY AS MANY Reos as we can make and make every Reo as good as the best Reo that ever came out of the factory.
- THAT'S THE REASON for the tremendous demand that always exists for Reos. Reo quality—Reo low upkeep—due to a strict adherence to that Reo policy.
- REO IS FIRST CHOICE of discriminating buyers. That's the kind of folk for whom we design and build Reos.

- THEY ARE THE KIND of buyers a manufacturer and a dealer appreciates and therefore most dislikes to disappoint or to offer substitutes.
- AND WHILE OCCASIONALLY a dealer who also handles some other line will try to sell a customer his Second Choice, because he can't get enough Reos to supply his local demand, he never really likes to do so.
- ALL DEALERS PREFER to sell Reos—because they stay sold. And every Reo sold sells several more.
- THEN THERE ARE the repeat orders from present Reo owners.
- ALWAYS THESE HAVE constituted a large percentage of the Reo demand. They are getting to be a larger percentage from year to year because of the larger number of Reos that have been many years in service. Longer than any other comparable car.
- OF COURSE a Reo owner always wants another Reo the percentage of re-sales to Reo owners is amazing and a matter of which we are most proud.
- TO ALL SUCH, THEN, we issue the usual March warning—see your Reo dealer at once and place your order.
- MAKE IT DEFINITE by paying him a deposit and specifying a date for delivery. Else he cannot, in fairness to other buyers, reserve a Reo for you.
- THEN REST SECURE in the knowledge that you will be one of the "lucky ones" to get a Reo this season.
- THERE WON'T BE—cannot be made—enough to go round. That is now as certain as the same thing always has been certain in all previous years since the inception of Reo.
- SO DON'T DELAY. Decide now. Order at once.
- TODAY won't be a minute too soon.

Reo Motor Car Company, Lansing, Michigan

HE SEAMENDED AND THE SEA OF THE S