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LAW-MAKERS MEET IN 1919 SESSION

Agriculture Well Represented in Both Houses of Legislature and Farmers Are Given Positions on Many Important Committees

Lieutenant Governor Dickinson, farmer and banker, started the 1919 session of the Michigan senate off with a bang, in a speech on primary campaign practices that sent a shiver down the spines of certain well-known politicians and brought a nod of approval from the legislators who frown upon the illegal use of money in political campaigns. Mr. Dickinson mentioned no names, but his plain and forceful language in denouncing the "buying of offices" at "public auction" left no room for doubt as to whom he had in mind. Mr. Dickinson's remarks upon the purity of elections and his plea for a corrupt practices act that would give the poor man an equal chance with the rich are worthy of a place among the state's documents. The full text of his address appears elsewhere in this issue.

Speaker Thomas Reed, a Shelby attorney, and an active Newberry worker, told the House that he had no apologies to make for his support of Mr. Newberry. He carefully avoided all mention of the money that was expended by the Newberry campaign committee, and thought the state of Michigan might well be proud of its senator-elect.

Aside from these verbal fireworks, the initial session of both houses passed off quietly.

The farming interests scored a signal victory in the election of Chas. B. Scully of Almont as president pro tem of the senate. There was a hot contest on between Sen. Scully and Sen. Condon of Detroit, but the

agricultural fellows pulled hard for Mr. Scully and won out.

Another tribute to agriculture was the appointment of Senator Herbert F. Baker of Cheboygan as a member of the judiciary committee, the first time in the history of the senate that a farmer has sat upon that committee.

Frank H. Vandenboom, who comes to the senate tagged as a farmer, was chosen chairman of the taxation committee. Mr. Van-

denboom's home is in the mining district of the upper peninsula, and he is reputed to be very friendly to the mining interests. Time will tell, and very shortly, whether Mr. Vandenboom is a gentleman farmer or a gentleman and a farmer.

Sen. Merle DeFoe of Mr. Dickinson's home town, Charlotte, was named chairman of the important elections committee. Mr. DeFoe is a newspaper man, of broad sympathies, and although a staunch republican, did not countenance the Newberry expenditures and said to in his newspaper. It is known that Mr. Our Good Old World

The green world, the clean world-It's mighty good, my boy! And if we only look for it The world is full of joy. Sad enough—and glad enough In almost every spot-So let us make the best of this, The good old world we've got.

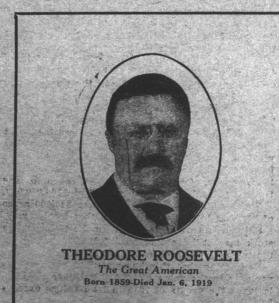
The green world, the clean world-The world we're living on, Has every night a lucky star And every day a dawn. Everywhere are smiles to spare
And everywhere a song—
Our good old world can run itself And keep from going wrong.

The green world, the clean world, It swings along its way-The finest place that we have lived, And better every day. Smiles are here for every tear So let us not be vext-But let us build up happiness To treasure in the next.

The clean world, the green world-It's good to you and me. It holds for us our heart's desire If we can only see. Sing and smile most all the while And roll the griefs away— The happy world, the friendly world, The world we have today!

DeFoe is strongly in favor of primary reform. In Mr. DeFoe the farmers of the state may feel that they have a friend.

It would be quite impossible to discuss the personnel of both the senate and house committees, but a careful review of them shows that agriculture has fared well in nearly all instances. While, so far as known, there is little legislation directly affecting the farmers in contemplation, there will be a number of very important measures having to do with bonding proposals, taxation, elections, etc., in which farmers are interested. (Cont. on pg. 4)



POTATO PRICES ARE TENDING UPWARDS

Prediction of M. B. F. That Potato Prices Would be Higher is Verified by Recent Developments and Attitude of Growers and Dealers

In normal times it is hazardous to predict the future trend of any market, but in abnormal times like these, it is almost suicidal. However, there are certain well-known marketing principles and economic influences which may be safely used as a guide in studying marketing conditions and if care and judgment be used, certain definite conclusions may be arrived at.

Several months ago Michigan Business Farming began a study of the potato situation in comparison with that of a year ago. The crop was 50,000,000 bushels short of a year ago, but despite this fact farmers everywhere rushed their potatoes to market in the early fall. Notwithstanding an unprecedented movement; potato prices did not greatly decline, and we soon came to the conclusion that the first of the year would see the low point of the market and that thereafter prices would tend upward. This conclusion was strengthened by the report of the Bureau of Markets, showing that two-thirds of the crop had been sold in the three months of October, November, December, with six months left in which to dispose of the balance.

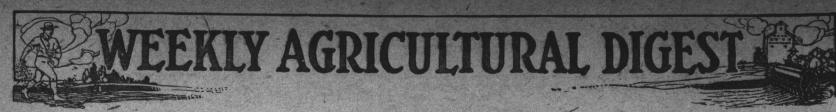
We have therefore, urged farmers not to sell all their potatoes on a declining market; we have pointed out the desirability of feeding the market gradually, so that primary points might not become congested. Our advice in this connection seems to have been pretty well followed, for we find many farmers who still retain a part of their erop, with a few here and there who have sold no pota-

toes whatever.
When the holiday season passed with no lowering of prices, it became more certain than ever that the potato-situation was sound and for the past two weeks both growers and dealers in all states have talked higher prices.

The executive committee of the Michigan Potato Growers' Exchange, one of the largest potato marketing organizations in the United States, in session at Cadillac recently predicted higher potato prices, if we may believe the following report which was published in the daily press

"Cadillac, Michigan, January 2nd, 1919:—Potatoes are going up in price this winter but the increase will be gradual and will not reach the height of two years ago, officers of the Michigan Potato Growers' exchange, here for a state conference, declared today. Farmers are not ananticipating any difficulty this year in disposing of their potato crop as about one-half already has been sold. Almost twice as many potatoes have been shipped as last year at this time, they said. "The association is composed of managers of 45 co-operative potato growers' associations representing 6,000 farmers principally in Northwestern Michigan. The disbanding of the food administration has left nobody for the enforcement of the notato grading rules so the producers are forced the height of two years ago, officers of the Michi-

potato grading rules so the producers are forced to go to court now to force buyers to live up to their contracts. Some means of obviating this trouble is sought by the (Continued on page 21)



SEC'Y HOUSTON URGES STRONG STATE DEP'TS OF AGRICULTURE

In addressing the National Association of Agriculture at Baltimore, Hon. D. F. Houston, Secretary of Agriculture, spoke earnestly in favor of strong state departments of agriculture to co-operate with the federal department of agriculture in regulatory activities concerning animal and plant diseases in the same way that the federal department now co-operates with the state agricultural colleges in educational and research work.

The Secretary related the difficulties that the department has encountered in many of the states due to the lack of well-equipped state departments or other regulatory agencies with sufficient legal powers and funds. He explained also the method of co-operation and joint support between the federal department and the states under the Smith-Lever agricultural extension act and the federal aid road act, and contrasted these effective methods of co-operation with the lack of co-operation in respect to regulatory measures. He said:

"Now the matter stands in a different situation. Two great state organizations, your own and the association of land-grant colleges, have had the matter under advisement and have arrived essentially at a common mind. I am informed that the thoughts of the two bodies is that a great gain would result if the states adopted the policy, in general of confining the agricultural colleges to investigational and educational work, both in the colleges and in the field, and the commissioners or boards of agriculture to administrative and regulatory matters, heading up under such commissioners of boards all the appropriate administrative and regulatory activities affecting agriculture, thus providing in each state two great, strong, central agencies for the betterment of agriculture and rural life.

"This course, it seems to me, would be eminently wise. It would remove possibilities of duplication of work, of wasted energies, of jealousy and friction, and make it possible for the two great state establishments to work with a common purpose and with united forces. It would also very greatly facilitate the work of the Department of Agriculture, much of which must be carried on of necessity in co-operation with state officers. The department would then be in position to co-operate untrammeled with the colleges of agriculture in investigational and educational work and with the state departments of agriculture in all matters involving regulation, such as quarantines, the control of animal diseases, orchard and nursery inspection, seed inspection, feed and fertilizer control, statistical inquiries, and the highly important tasks of aiding the farmer in the promotion of better rural finance and in the distribution and marketing of his products. If this is the plan of the two bodies, I shall be very glad in all appropriate ways to give it such support as I can, and to aid in securing its acceptance in any state where action may be needed. I know that there will be difficulties and that the problem will have to be dealt with in each state in the light of local conditions. may be that no given plan would be feasible for every state; but I take the liberty of suggesting, for your own consideration the desirability of developing and presenting a tentative model law."

HOOVER THINKS FARMERS' MAR-GIN OF PROFIT IS SMALL

Mr. Hoover in Europe just before Christmas is reported to have said:

"As I view the world's food assets this moment I am convinced that the extra marginal surplus from the United States is of priceless value to the immensity of human life at stake between now and next harvest. I am sure that to sacrifice the margin of American production, upon which the allies must peace out existence, by reducing the American farm price 10 per cent-which would be 6 per cent when it reached the English consumer-would be the rankest kind of folly,

"In a broad view, I am certain that our agricultural margins are so low that a 10 per cent reduction in prices to our farmers would stifle our production to the extinction of our consequential export surpluses.

"It is certain that with 10 per cent lower prices we could provide our own home necessities, so that this margin of 10% is the price our own and

your consumers pay for stimulation of product HOW FARMERS MAY SAVE MONEY In every individual food commodity 85 per cent of our American people are consumers and only 15 per cent are producers, and these consumers rightfully but cheerfully feel that we are taking from them this extra 10 per cent in prices in order that we may take our part in carrying this world burden.

The American farmer at present receives 69s per qr. (\$1.98% per bu.), as compared with 31s pre-European war average, a war increase of 38s (\$1.15%).

"I keenly realize how hard the present price levels bear on all consumers, and more especially upon the Allied peoples whose economic wage plane is much below that in the United States. So far as the United States is concerned, it is not a matter of profiteering, but is one of deep complexity of economic forces and provision for world necessities," etc.

THE PUBLIC DOMAIN COMMISSION BRINGS MANY SHEEP TO STATE

Some details of the work of the Public Domain commission of which August C. Carton is secretary, are shown below:

Examined for trespass, 18,425,000 acres.

From the Morning's Mail

Am sending \$1 for renewal to your paper for one year and as a word of appreciation will say that you have a class 1 farm paper, which should be in the home of every intelligent farmer. You have met the big problems as well as the smaller ones, and solved them from a farmer's standpoint. You have proven yourselves worthy of our con-fidence from your attitude and manner of meeting attacks of politicians and corporations upon questions of vital interest to farmers. Thanking you for the vigorous and honest stand you have taken in our behalf, Iam.—Chas. F. Summers, Ingham county.

You will find enclosed my check for \$5 to renew my subscription fo r10 years. ter reading your paper for one years. Arter reading your paper for one year this renewal will certainly assure you of my appreciation of your valuable paper. Your correct market reports, also estimates you give on different commodities in number of bushels, tons, etc., enables us farmers to sell intelligently at all times, not having to take the middleman's word for what enor-mous crops are in the adjoining county, or state, thus trying to force the price down, which they could easily do before M. B.F. came to our rescue and gave true estimates. Keep the good work going on; all we ask is a fair deal. No fair-minded man can ask differently.—Albert Hagley, Arenac Co.

Exchanged between U.S. and individuals and Michigan, 2,050,000 acres.

Examined for dead and down timber, 702,500

Appraised, 1,015,000 acres.

Timber classifications, 1,360,000 acres. Examined for water power, 357,500 acres. Land examined for homesteads, 1,032,500 acres.

In addition, the commission has stationed a trespass agent on St. Clair flats, looking after the sand and gravel taken from the lake bottom lands, who has collected for the state \$17,300.23.

Trees have been planted on 825 acres of land, 46 miles of fire line has been built and 290 lbs. of tree seeds have been sown in the nursery and reared 5,000,000 seedlings.

One of the activities of the commission has been to induce sheep-raisers to come to Michigan. This campaign, conducted in co-operation with the Upper Peninsula Development association, has resulted in sheep valued at \$520,000,000 being brought from western states since the first last January. Cattle from the west taken to the Upper Peninsula have been valued at \$166,000,000.

Western grazers in 1918 took over 324,000 acres of hitherto idle cut-over land in that territory.

Shipments from that region to the Chicago live stock market have increased 2,000,000 pounds of mutton and 2,000,000 of fat beef.

Estimating that this has added only fifty cents per acre to the value of available Upper Peninsula lands the profits of 1918 in land values exceeds \$3,500,000.

BY CO-OPERATIVE BUYING

Farmers of Dukes and Nantucket Islands, lying off the Massachusetts coast, saved more than \$150 on each of four 20-ton cars of feed purchased cooperatively. The islands, each of which constitutes a separate county and has a farm bureau co-operating with the Massachusetts agricultural college and the United States Department of Agriculture, use about three cars of feed a month. The county agent who covers both counties, called attention to the advantage of co-operative buying, and the farm bureau officers arranged with local bank officials for the purchase of feed in car lots. The farmers deposit their orders at the bank on the first of every month. When orders aggregating a carload have been deposited the bank buys the feed, pays for it upon arrival, and notifies the farmers when it is ready for delivery. Each farmer makes terms with the bank, either paying cash or giving his note bearing 6 per cent interest, and is given an approval slip. Upon presentation of this slip the attendant at the car delivers the grain.

NEW COMMERCIAL ORCHARD PROP-OSITION FOR ALLEGAN COUNTY

Two partnerships have been formed in the last few days for the launching of commercial orchard propositions at Pullman, Allegan county. One is the partnership of George K. Taylor of Kalamazoo and Otto J. Gibson of Pullman, who are now preparing ground for setting out 65 acres immediately adjoining the village on the northwest and the other is Joseph Mort of Pullman in connection with Mr. Taylor, who will set out 35 acres adjoining Pullman on the south.

The West Casco fruit growers have formed a branch of the Fennville Fruit exchange and are making arrangements to commence the erection of packing and loading houses at Pullman. buildings will cost \$3,000 this spring and will be added to as the business justifies. Stock in the new company is all subscribed,

FARM LOANS APPLIED FOR, AP-PROVED AND CLOSED IN NOV.

As indicative of the progress being made under the federal farm loan system, the Federal Farm Loan Board announces that during the month of November a total of \$8,079,605 were loaned to far mers, making the total farm loans to date \$147,452,861.

Since the organization of the farm loan banks, 162,294 farmers have applied for loans aggregating \$406,542,109. During the month of November aggregate applications were 5385 for \$17,259,878. During this month 143 Michigan farmers applied for \$341,700, and 97 Michigan loans aggregating \$168,500 were actually closed. Altogether Michigan farmers have applied for \$9,192,980, and have been loaned \$2,987,800.

The Federal Land Bank of Spokane leads in amount of loans closed, \$1,246,800, with the Federal Land Bank of St. Paul running slightly behind in amount, \$1,232,100. The other ten banks closed loans in November as follows: Houston, \$1,040,082; Wichita, \$711,100; New Orleans, \$600,-650; Louisville, \$565,400; Omaha, \$529,000; St. Louis, \$522,623; Berkeley, \$506,600; Columbia, \$422,230; Springfield, \$395,420; and \$307,600.

COUNTY FARM BUREAUS TO UNITE: STATE ASSOCIATIONS PLANNED

One of the results of the conference at M. A. C. in February of officers of the farm bureaus of Michigan's 82 counties is expected to be the formation of a state-wide farm bureau association. The aim of the new body, it is announced, will be to foster and encourage all that is beneficial to country life and the farming industry within the

The president and secretary of each of Michigan's 82 farm bureaus, it is reported, will be in attendance at the meeting in February. This session, which will be conducted from February 3 to 7, will take place in conjunction with the many other meetings scheduled during farmers' and housewives' week at the college.

NEW YORKER EXPECTS HIGHER SPUD PRICES

Daniel Dean, Well-Known Eastern Potato Authority, Says He Has Sold Only Several Hundred Bushels Out of Crop of 7,000 Bushels

Sometime ago we wrote Mr. Daniel Dean, former president of the New York Potato Growers' Association, for his opinion on the potato situation.—Mr. Dean is recognized from coast to coast as a potato authority, and what he says carries occiderable weight. We present Mr. Dean's letter below:

Regret that I have been unable to furnish you with opinion on potato prospects, owing to usual rush of fall work to be done before cold weather. Labor situation is still very bad, and the worst part of it is that it never can be any better until farmers get a price for food products which will enable them to compete with city industries for labor. City industries have tariff duties to prevent foreign competition and the government has declared that city laborers must be given minimum wages with increased pay for all overtime. Farmers must produce food under the "free dinner-pail tariff" in competition with the lowest pauper labor all over the world and with a food administration to set maximum prices on practically every food product raised on the farm. Sometimes this is done directly, as with wheat, and more often indirectly, as with eggs, hides or dairy products, and sometimes as with potatoes in starting rumors which may hamper prices. Michigan potato growers had a dose of that last year when a wonderful surplus of potatoes was told of, which later disappeared as mysteriously as it came, after it had done its work in driving down prices to the grower. Farmers must work together, must unite, and must vote for their rights or they will suffer for the next fifty years, as they did in the fifty years following the Civil

The potato crop of 1918 is going into consumption very fast, though estimated at 10 per cent smaller than in 1917. Up to Dec. 16th the Bureau of Markets reported that 64,510 carloads had been shipped from the principal potato growing states, against only 49,210 cars during the same period of 1917, though as was well known to distributors city consumers had stocked up much heavier than usual that fall. The total shipments for the season of 1917-18 were 102,218 cars. This year the crop will, on the same basis of shipment as last year, ship 94,144 cars,

This leaves only 29,634 cars to ship as against the 53,008 cars shipped after Dec. 16th, 1917, from the potato-shipping states. Also cars have been loaded much heavier this year. This may be offset as prices go up in the spring by the fact that farmers ship the crop out much closer in spring when prices are high, feeding less to stock as well. We do not know how much city voters will succeed in their efforts to hammer down the price of farm produce while holding up the price of labor and everything else the city has to sell to the farmer. The potato-shipping season for the late or main crop is from September to June, nine months. More than two-thirds of the crop has been shipped in less than four months. The answer, as Dean sees it, is that out of his crop of 7,712 bushels only 600 bushels have been sold, of which 200 went to a hospital at \$1.75 per bushel and 220 for seed at \$1.70 for fall and \$2.00 for spring delivery.

Am considering attending meeting at Washington Jan. 7th and 8th. Would like your plain opinion as to whether it would do one of the common or garden variety of farmers any good to go. Have heard rumors that the Gompers and Wilson crowd are getting control of farm organizations through politics. Do not like to waste my time by going to a meeting like the Potato Association meeting at Washington a year ago where I was the only member to vote "no" on a resolution urging potato growers to sell potatoes fast enough to drive the price down to a point satisfactory to city consumers.—Daniel Dean, Nichols, N. Y.

NEW YORK DAIRYMEN ARE AGAIN HAVING THEIR TROUBLES

The first of January, members of the Dairymen's League of New York went on a "strike" to force the distributors to pay them a fair price for their milk. The farmers claim that the \$4.00 they received for December milk barely paid the cost of production, and when the distributors an-

nounced they would pay only \$3.60 for January milk, there was trouble right away.

The curtailment of the milk supply caused great suffering for a few days, and as usual the farmers were bitterly criticised by the press and the consumers. Always of course, it is the farmers fault, and in nine cases out of ten the distributors take advantage of this prejudiced public opinion to force the price of milk down.

Hearings have been conducted and testimony submitted. As usual, in such cases, the court of inquiry was entirely prejudiced against the farmer, so it is not to be expected that he will get the consideration to which he is entitled.

The farmers claim that the entire fault rests upon the shoulders of the distributors, who charge more for the service of delivering the milk than the farmers get for producing it. The situation is being thoroly aired and if the investigation follows the same course as has the Chicago investigation, the farmers will get little satisfaction. Some happy day, the farmers everywhere will get tired and disgusted with the eternal strife between themselves and the distributors and will either quit the business or take over the machinery of distribution.

LIME VALUE SHOWN IN NEW YORK STATE EXPERIMENTS

Fields treated with lime produced an average of 1½ tons of cured hay an acre more than unlimited fields in tests of ground limestone, burned lime, and hydrated lime, conducted by the farm bureau through the county agent in Chemung county, N. Y. A farmer who used 1 ton of ground limestone to the acre secured 4,840 pounds of cured hay, compared to 1,208 pounds on an unlimed acre. Another, who applied 700 pounds of hydrated lime to an acre, obtained 6,292 pounds against 1,461 pounds on an unlimed acre. A third farmer used 1 ton of burned lime to the acre and obtained 3,400 pounds, compared to 1,040 pounds on unlimed land

GENESEE FARMERS ORGANIZE LIVE STOCK SHIPPING ASS'N

Farmers' co-operative live stock shipping associations are rapidly putting the independent local shippers out of business. Scarcely a week passes that an association is not organized in some section of the state, and with very few exceptions, they have been successful.

A couple weeks ago the farmers of Vienna township, Genesee county, organized a shipping association and have already made their initial shipment. Speaking of the association, the Clio Messenger says:

The plan is to have every farmer who has live stock to sell communicate with the manager of the shipping association, and as soon as a carload can be arranged for to ship it to Buffalo, where it will be sold, and after paying the costs of handling and transportation, the owner of the stock will get the full proceeds of the sale. A detailed statement of all expenses will accompany each check sent in payment for stock, so that patrons will know all about the big markets and about what they are entitled to receive. Austin Cummings, of Clio, was elected manager of the association and it is proposed to make the first shipment as soon as a carload can be arranged for. H. D. Gage is president of the new association, Harley Jennings, secretary-treasurer, and the directors are I. R. Acheson, Chas. Montague, Oscar Sears, A. J. Brabazon and F. A. Runnells. This plan for the shipment of stock from the points where there were no regular shippers, as at Clio, has been tried out in different parts of the state with a great deal of success. At Davison, particularly, the farmers have found the plan very profitable and have shipped hundreds of carloads of stock. The personnel of the men who are behind the movement in this vicinity gives assurance that it will be ably and honorably conducted."

Montcalm County Farmer Expresses Himself on Developments in U. S. Potato Grading Fiasco

Mr. Forrest A. Lord, Editor: It is nearing a year since I met you at the memorable meeting of five hundred potato growers in the city of Greenville, when you designated me as one of a committee of five to investigate and formulate various phases and propaganda concerning potato grading.

I am informed you have done heroic service ever since, to make headway against the follies and injustices of this particular sraft that cuts both ways into the producer and consumer, to the great satisfaction of the big schemers in distribution.

In the discharge of my services upon that committee, I published my opinion that it mattered not what growers and consumers did or said or pleaded, the grafters had the "pull" upon federal sympathies, and no changes would be made until the proposed policies had run their full course. That they might eventually be succeeded by somethins worse, as I did not say it then, I will say it now. Thus far my estimate has been justified. Did I hear an echo? Oh, the Michigan Potato Growers' Association demanded and secured a change (?) Yes, and it is truly quite amusing. I suppose the thing to say is "It is psychologic."

The pestifferous little brat pecked away at the skirts of its federal guardian until that guardian said something like "If I don't do something to still that noisy brat it will squeal until the neighbors, organized labor, organized consumers, and organized politicians, will call in the humane agent and interfere with my plans altogether." Hence the change off goes an infinitesimal fraction of size of Grade No. I, and minor percentages of diffused grades were changed, "so scientifically."

When the other day I asked a buyer (hired to buy) if old Boggs got a rake-off for a new sized riddle belt under the new order of things, he replied, "Yes, but so far as I can see the changes in grades is too infinitesimal to appreciate." Just so, the results upon the grade are imperceptible, but the "psychologic" influence is to still the brat into contemplation of its great (?) achievement. Do not mistake my illustration for disrespect of the Michigan Potato Growers' Association, it is not, rather it is complimentary of the association's discretion upon experiencing the futility of getting more service out of an intractable jackass, it turned its attention to steeds of likelier antecedents.

We are being told that growers are now generally satisfied. Of just the nature of that satisfaction I am not advised. The fact remains paramount that the really objectionable feature in the grading system has never been changed, and

neither the grower or the consumer has been benefited by the grading. Let the speculating grafter speak for himself. The hired buyer and the sorter have no sympathy with the system.

Not long since a mere lad of my acquaintance happened on the buying market. A farmer turned in a load of fine quality but below grade in size. There were 15 bushels of No. 2. The dealer would buy them at a very few cents per hundred pounds. The farmer declined. The bystanding boy asked what the farmer would take per bushel of 60 lbs. The price was named, 30 cents. The boy bought, loaded them on his auto and ran them direct to a near-by retail market and sold them for \$1.25 per bushel, netting \$14.25, or nearly \$1 per bushel profit. The consumer paid \$2 per bushel for the potatoes, the producer received 30c. But once at least the farmer boy beat the grafter to it, and the consumer paid the some old graft. This must needs lead to two conclusions: The man who believes farmers are better satisfied than they were ten months ago is deceiving himself to the limit of danger, and so long as the double-size standard of potatoes of equal culinary value is maintained the consumer will pay the hig graft, and eventually the poor consumer must go without, for similar reasons that the poor consumer goes without milk and his babies die for want of milk and milk products, and a similar responsibility will rest upon a similar set of scientific (?) blanked sap-heads of federal and municipal character, who have thrown around the industry such regulations as to bring the expense of production above receipts for product. Then producers cut their activities to home consumption limits. It is inevitable and will soon assert the custom of potato growers, limiting their acreage to what they can fertilize and till to the limit of high production in sizable No. 1's, he will refuse to sell good No. 2's at a smaller price than No. 1's. This every farmer can do of his own volition. sooner or later he will recognize this as the sure way to "beat the same."

You may recall at the Greenville meeting, I said I suspected out of the grade system might evolve something of especial value and benefit to the farmer. I am still of that opinion, but it will not come as the "scientific assistants" planned it. I believe firmly in a fair grading of potatoes, but I do not believe a choice baking potato should bring a lesser price than a good boiling potato. It is the double standard, and not the size of either grade that lets in the graft. As matters stand now, the speculator will come out grandly, the farmer will be a close second, but God help the consumer.—J. E. Taylor, Belding, Michigan.

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LIEUT.-GOV. DICKINSON RAPS VIOLATION OF PRIMARY LAW

Since the adjournment of the last Senate among the most important pages of history have been written; the greatest nation in war or peace has been stamped above the name United States of America; and changes not thought possible a few years ago have taken place in our own state. The greatest of all wars has been won by the forces, for righteousness, while empires and kingdoms have been wrecked and democracies are being established on their ruins; the United States has been acknowledged as the deciding factor in these great changes and conceded to be the nation to which the world can look in the future for advanced ideas on charitable, moral, industrial, social, political, legislative and democratic lines; the women of Michigan have at last been granted the inexcusably delayed right of suffrage and the saloon, the direct or indirect cause of so much crime, insanity, business wrecks, social degradation, etc., has been eliminated from within our borders. There is not a man before me who would dare say that these world, national and state chan-



LUREN D. DICKINSON

without the faith in, the the prayers to and the aid of Almighty God. "History is divided into epochs. closing of this great war with us is the beginning of a new one. The last one was to America one of so surpassingly wonderful advances in all lines, the application of which at such dreamy heights and fabulous distances away from the Divinely appointed mission of the truly patriotic

ges could have

been wrought

that the war with all its horrors to us as Americans was the only agency potent enough to point out to the true citizen the proper use of our wonderful resources and privileges if we were to merit Divine approbation and escape future chastise-

"The war has emphasized safe democracy, eliminated caste and brought together the millionaire and the laborer, made economy the watchword of the present and the future, opened to the public pages of crime, infidelity, disease, degeneracy and other demoralizing influences, all the products of the saloon, that menace the welfare of a state or

"Thus with these world changes, the advent of woman suffrage in Michigan, and various other commonwealth matters, we enter the new epoch as one of the great states of the union obligated to dedicate our energy, wealth, intellect and talent of whatever nature to purer democracy, cleaner politics, more elevating legislation , stricter econcrry, better business methods, higher morals, justice to all whether in factory, store, office, or on farm and whenever opportunity offers be ever ready to reward the boys who sacrificed so much to bring about these great changes. These demands make this session of the Michigan legis lature, I believe, the most important of any of the state's history.

"We are an all republican body. From past experience I know party strings, local or personal interests and other selfish influences may pull hard and we at times are tempted to be unduly influenced thereby. But let us remember that we now are, not the senate of the republican party alone, but the senate of all the people and justice to all means strength and admiration for the republican party as well as pleasanter state relations in which to live. (Continued on page 7)

The Governor Recommends



Inaugurated Jan. 1st, Gover-nor of Michigan, Second Term

ate action on report of budget commis-

Abolition of any language except English in the first eight schools, both public and parochial.

3. Vesting powers of state highway de-partment in commission of three men in-stead of one.

4. Appropriation of \$200,-000 for contin-

uing campaign against venereal diseases. 5. Better county health organization to combat "flu" and other epidemics.

Regulation of commercial fishing so that citizens of state may buy direct from

fishing grounds,
7. Immediate ratification of national prohibition amendment.

8. Law to prevent anyone becoming a candidate for office on more than one party

ticket.

9. Making state constabulary a permanent police force.

Important Senate Committees

Agriculture-Senators Stoddard, Miller, Vanderbloom, Davis and Clark.

Banks and Corporations-Senators For-rester, Hayes, Miller, Millen and Stoddard. Drainage—Senators Amon, McNaughton, Bierd, Holmes and Henry.

Elections—Senators DeFoe, McRae, Scully Baker and Condon.

Finance and Appropriations — Senators DeLand, Holmes, Bryant, Wood, Clark, Smith and Vandenbloom.

Highways — Senators Bryant, Connelly, Penny, Deland and Baker.

Insurance—Senators Scully, McRae, Hayes Watkins, Millen, Connelly and Smith. Labor-Senators Connelly, Baker, Wilcox,

Rowe and Stoddard. Michigan Agricultural College-Senators

Henry, Lemire and Bierd. Prohibition - Senators Hicks, Harvey,

Amon, Millen and Miller. Railroads-Senators Smith, Henry, Rowe and Lemire.

Taxation—Senators Vandenbloom, Henry, Harvey, Scully, DeFoe, Brennan and Amon.

MICHIGAN LAWMAKERS MEET IN 1919 SESSION

(Continued from page 1) It will be our endeavor to keep the farmers advised of the progress of all legislation, and will assist them in every way possible to make known their attitude on legislative of the continued of the cont tive affairs.

SEN. DAVIS WANTS LAW TO GIVE FARMERS FAIR CREAM TEST

Senator Davis of Lawton is drawing up a bill which will be introduced at the present session of the legislature, designed to settle once and for all the vexatious difficulties between farmers and creameries over the cream test. This is a subject that has been discussed to some extent in these columns. It is well-known to all farmers who sell cream that frequently, without apparent reason, the butterfat content of their cream will vary widely from day to day. As a result of this farmers are always suspicious of the test, and hard feelings invariably follow. Sen. Davis believes a law could be enacted which would make the county agent the official tester of the county and act as a mediator when differences arise. Mr. Davis is very anxious to get the farmer's opinion upon the variations in the cream test and their suggestions as to how the situation may be remedied. M. B. F. will welcome any letters upon the subject and will see that they are placed in Mr. Davis' hands.

"HERB" BAKER WOULD LICENSE ALL HANDLERS OF FOODSTUFFS

Sen. Herbert F. Baker of Cheboygan believes that the licensing of dealers in foodstuffs during the period of the war was a good thing and ought to be perpetuated. He thinks the Michigan legislature should pass a law to license the operations of creameries, elevators, potato buyers, and all others dealing in foodstuffs, either directly or indirectly, revocation of the license to follow any attempt to profiteer, to engage in unfair competitive tactics, etc.

"Take around my home town," says Mr. Baker, "We've got a farmers' co-operative potato association that buys potatoes in competition with a firm that owns a chain of warehouses. In order to get business away from us, they'll boost their prices in Cheboygan and lower their prices in places where they have no competition in order to meet their loss in Cheboygan. That is absolutely unfair and a violation of honest trade rules.

MICHIGAN LEGISLATURE RATIFIES NAT'L PROHIBITION AMENDMENT

On January 2nd, the Michigan legislature ratified the amendment to the federal constitution providing for national prohibition. Michigan was thus the 16th state to declare for the amend-

In the Senate the vote was unanimous. In the House there were three dissenting votes, cast by Rep. White of Detroit; Daprato, Iron Mountain; John Holland, Bessemer.

Both houses also unanimously passed a resolution calling upon the congress of the United States to pass the federal woman suffrage amend-

Senator "Herb" Baker will keep Tab on Legislative Matters for Readers of Michigan Business Farming



Herbert F. Baker

Senator Herbert F. and is heart and soul with the farmers. Baker, farmer-member in Michigan Business FARMING the "doin's" in both houses of the legislature.

"Herb" Baker doesn't need much of an introduction to the farmers of Michigan. He has been a prominent figure in Michigan politics and agriculture for a number of years. He gets his living from the soil. He has owned and operated a farm at Weadock in Cheboygan county for many years

Mr. Baker is chairman of the governing board from the 29th district, of the Farmers' National Headquarters and is atwill report each week tending an executive session of the board at Washington this week. He is also president of the Cheboygan Co-operative Marketing Ass'n; was a member of the executive committee of the Michigan State Grange, and is actively identified with numerous other agricultural organizations.

Mr. Baker was a member of the legislatures of 1907, 1909 and 1911, and was speaker of the house during the session of 1911. In 1912 Mr. Baker espoused the cause of the Progressive party, and made a remarkable run for the office of Auditor General, for which office he was defeated by Oramel B. Fuller by only about 7,000 votes

Mr. Baker is one of the most popular men in the legislature. He has a wide acquaintanceship and is respected and admired for his aggressiveness and progressiveness.

Secretary Reed Airs Troubles of Michigan Milk

With our view of the field the problems of the producer, the problems of the distributor, and the problems of that very exceptional body of individuals, the Detroit Milk Commission, which has served us so faithfully and well, is before me at all times, and the thing for which they have striven more than anything else is a fair and equitable adjustment without hardship or oppres-

First, the Milk Commission: We have said so many times, and yet there seems to be a misunderstanding about the origin, authority, and compensation of this body. The Michigan Commission was appointed by the Governor of the state at the request of the president and secretary of the Michigan Milk Producers' Association. The Detroit members, which go with the Michigan Commission to make up the Detroit Area Commission, were selected by the Board of Commerce, representing the financial interests, the federation of women's clubs, representing the homes; and the federation of labor representing the laborers of that city. These were appointed at the request of your secretary. These individuals, outstanding in their respective fields of private endeavor, many of them men of large financial interests, have given much of their time and their very best thought, without one cent compensation for the sake of the service that they see they are able to give to this, the most vital food industry in the city of Detroit. Every milk producer and distributor, and consumer, is under great obligation to this body of broad-minded men and women for their conscientious, painstaking endeavor to so stabilize and protect this industry, first, that Detroit may have a sufficient supply of milk at a reasonable price. Second, that the distributor and producer shall have a price that they are entitled to, namely, cost of production and distribution, plus a legitimate profit. These propositions have ever been before this Commission and to reach a proper and equitable adjustment of this we know has been their most sincere desire, and this one thought and purpose is what has caused them to make the severe sacrifice they have of time and energy at our request.

A Profitable Market

To the average individual this may not seem vital to your success, but it is absolutely so. The only way to bring any industry a stable and equitable business is in some way to provide a good market, and a market is never good unless there is a profit in it to the buyer. So we are concerned about our market. We want the Detroit distributors to have a fair and equitable price. We are bound to see to it, however, that they do not have more than this. They cannot have less; if they do they will not stand by the organized movement.

Your secretary has now a notice served on him thirty days ago by the distributors' organization that they would no longer co-operate with us. It has been our great aim and desire that the differences should be adjusted, the wrinkles ironed out, and no open clash made as a result of this determination. To this end we have worked most earnestly. Conference after conference has been held with the Detroit buyers; winning one and another back to us until we felt we were warranted again in calling the Commission together, which has so long been delayed.

After this most earnest endeavor and adjustment the Commission was called and convened Friday, January 3rd, at the Board of Commerce. The distributors convinced the Commission that they had been conducting their business during the past month absolutely without profit, and some of them at such a loss as imperiled their future prespects. Added to this was the attitude of some of the buyers-some reliable and some unreliable who were offering more than the Commission price for milk in an endeavor to disturb and destroy the business of their competitors. Con-sequently, for the past month we have been facing a condition which bordered on piracy in the Detroit milk area, and one little act of indiscretion; one little spark to ignite the fires already kindled, would have brought on a disturbance and rbance and a loss which might have cost all the principles for which we have been contending, and hundreds of thousands of dollars to the distributor and producer of the Detroit area.

We are thankful, however, to say that it seems now that this matter has been taken care of and that we are to go on in the year to come in a harmonious, constructive endeavor.

Profitable Production

In all of our endeavor of the past our contention has been not for a price but for a principle. Underlying these things, first, is the fact that the farmer, the producer of food products, is entitled

Producers

Developments in Dairy Situation

1. A few weeks ago, Detroit distributors notified producers they would no longer cooperate with them thru the Milk Commission. Producers' executive board patches up differences, and distributors agree to continue present arrangement, but refused to advance the price of milk to consumer in order to meet producers' demands.

2. Producers agree to accept price for balance of winter months which means a loss to them, in hopes of sufficiently high prices in spring and summer to compensate them for loss.

3. Commission fixes January milk price at \$3.88 for 4 per cent milk, with a variance of 4 cents per point for milk above or below that test.

4. Secretary Reed calls upon producers to abide by decision of commission, believing that the problem will be eventually solved to the satisfaction of all.

to the same consideration in the business world as the producer of any other product. He is entitled to a voice in fixing the price of the commodity he is putting on the market. Second, he is entitled to a price for that product that equals the cost of production plus a profit. Our milk commission has had this always in mind; and the president and secretary of your organization have in every instance voiced this thought and this principle before the Commission.

But, in order that we may have a successful business, certain business principles must be adhered to which are fundamental to any business success. Your secretary has in his possession a list of 64 Detroit distributors who have been forced out of business in the last two years, while others have succeeded. What is the difference? The latter was careful about his business methods; the other, possibly had no business methods. This applies with equal force to the producers of milk. No one concern is more quoted in all we hear than the Detroit Creamery Company and its profits; and yet we are about to give you the history of one milk producer which is comparable to any profits of the Detroit Creamery Company. We have the figures of one herd of nine cows that, in the year 1918, sold 118,575 pounds of milk, bringing in \$3,481.75. The owner of this herd has a farm of seventy acres, with no unpaid help available. The oldest of seven children is less than nine years of age, and we will concede that the wife has quite enough to do without assisting with the cows. We don't know what the cost of feeds has been, but we do know something about this man's methods. Limited in every way ten years ago, with no personal asset but a determination and a business sense to apply to milk production, on a rented seventy-acre farm, he has gone forward until he owns the farm he then rented; he has also acquired a splendid herd of pure-

WESTERN UNION TELEGRAM

Jan. 8th, 1919

U. S. Food Administration, Washington, D. C.

Contrary to expectations Food Administration prices of both flour and wheat feeds have advanced since removing milling restriction. Thirty days ago bran sold in Detroit at \$36.50 and middlings at \$38.50. Today both are quoted at \$50, an advance of nearly 40 per cent. Somebody is profiteering. It is not the farmer. The latter is forced to sell wheat at government price, but must buy feed for cattle at prices established by supply and demand. We insist that present situation is discriminatory to farmer, who is facing unprecedented costs of production on one hand and on the other organized opposition to his demand for profitable prices. We respectfully petition you to employ powers of your department to either re-establish former "fair" prices on bran and middlings, or impose punishment upon those who are taking excessive profits.
MICHIGAN BUSINESS FARMING.

bred cattle, and has today in his barn sufficient feeds to carry his cattle thru until next fall; these feeds bought at a time when he could take advantage of the market, to have on hand as the occasion required.

These are just simple business methods applied to the dairy industry. We believe this individual has made a greater profit on his dairy overturn than has any distributor in the Detroit area. What he has done can be and should be duplicated by hundreds of men who think their only prospect of success is in getting a better price—when they would be a failure with milk at any price. Is this a strong assertion? Is this true?

Let me tell you what your association has been trying to do. We have been trying to bring to our members dairy feeds purchased in large quantities at the lowest possible price. We have negotiated with many feed concerns; finally settled to one proposition with one feed that stood the state requirement, and guaranteed pure from every adulterant, and we have been offering this feed absolutely without profit to the Association at a price that was from \$5 to \$11 per ton less than was asked for the same quality of feed from the retail stores in small quantities. Your association has spent over \$200 in the salary and traveling expenses of a man, trying to give to you the benefit of this one business move. We failed absolutely in this endeavor; not selling one single carload of feed until the price went up \$20 per ton on bran, and today we are deluged with orders by letter and word of mouth, wanting to take our feed. You had the opportunity to avail yourself of this business advantage. This has gone by for the present, while the poor boy to whom I referred has his granary stocked with feeds at the cheaper price, and his production is at a profit anyhow. When will our people get onto a business basis of action? When will the farmer stop asking the people to give him something and when will he apply business methods that will obtain success?

The milk commission has met; it was long delayed because of the uncertain conditions surrounding the proposition of co-operation between the producer and distributor. As indicated above, the distributors convinced the Commission of the jeopardy in which their business was placed by the price for December, and with true business instinct the Commission sought a way to relieve this strain and loss and not ask producers to suffer.

The Price and Future Prospects The Commission recognized the injustice asking the producer to accept a less price in the face of advancing feed cost and this was obviated by the way of determinations which follow: The price for January milk is \$3.88, less the regular railway freight rate from the point of shipment; with the understanding that in March and April the price would be sufficient to compensate the producer for the loss sustained by the January reduction. This is on 3.5 milk, with 4c a point instead of 5c a point above or below. Last month's experience showed that the great majority of milk coming into Detroit tested below 3.5. Consequently, an increased percentage price, while it helped on the small amount of milk testing above 3.5, was an injury to the producers whose milk tested below this point, and as the greatest good to the greatest number was sought, it was decided

Another matter of vital importance, and one which we think may inaugurate a new era, was the arrangement made whereby the distributors agreed to abide by the decision of the Commission to pay for the months of July, August, September and October possibly as high a price as milk has ever reached—provided commercial conditions in the city of Detroit remained as they are at the present time. Consequently, we are anticipating, under normal conditions, \$4.00 milk for the months above named.

to leave it at the former figure of 4c a point above

We feel that we would be derelict of duty if we did not call your attention to one item in this already too long article. With a proposition where better than nine millions of dollars worth of property is sold, it seems to us that we should recognize the dominating mind and business instinct that could handle so well this proposition, and we want to call attention to the services rendered the milk producers by President N. P. Hull, who is not only willing but competent and has brought from his business knowledge a stabilizing influence and a financial return which can never be realized or appreciated.

We trust for your co-operation, for your support, that this great endeavor may continue for years to come.—R. C. Reed.

FARMERS SERVICE BUREAU

(A clearing department for farmers' everyday troubs. Frompt and careful attention given to all combinits or requests for information addressed to this partment. We are here to serve you. Call upon us.)

INVEST IN LIBERTY BONDS; THEY ARE THE BEST BUY WE KNOW OF

I am writing to you to see if you can't stir up the bean buyers here and make them pay \$8 per is buying in Le Roy and all he will pay is \$7.50. I told him the bean jobbers guared the farmers \$8 for their beans; he said he couldn't pay it. We are just threshing in this locality; they are going from three to five bushels per acre. I had in 12 acres and got 35 bushels.

Could you advise me of some good, safe securities I could invest my money in when I sell? I am in love with your paper; it hits the nail square on the head. Go to it, boys. If we farmers don't get a little more of a square deal in the future than we have had in the past. Russia won't be able to hold a candle to us when we get started.— C. C., Le Roy, Michigan.

The Bean Jobbers' Ass'n has already been advised of the Le Roy situation, and we are of the opinion that your local buyer will change his mind. If he doesn't, let us know.

There are at present many speculative "securities" on the market which look gilt-edged, but on the inside are only "tinsel." Leave them alone. Don't invest your money at this time in motor stocks, rail stocks, or western gold and oil mines. There are all kinds of good bonds available municipal, state, federal farm loan, Liberty bonds,-all of which are absolutely safe and pay fair rates of interest. At present Liberty bonds can be bought below par. A week ago they were sold on the N. T. exchange at 94. Anyone with money to invest cannot do better than to buy these bonds.

POSTMASTER REFUSES TO BUY W. S. S. WHAT SHALL I DO?

In September my husband signed up for some War Savings Stamps, of course, expecting to keep them, but understanding that he could sell them by giving ten days' notice at post office. Beans and cloverseed did not turn out as well as expected, hence need the money, but when we talk with the postmaster at Breckenridge he says he has no such instructions, also talked with one of the carriers from Wheeler without any success. Do you need a printed form? If so where can you get them? Or can't we get the money at all? Even the certificate says it can be cashed on ten days' notice.-Mrs. F. J., Wheeler, Mich.

As you will see from the enclosed post office circular No. 3348, holders of Savings Stamps are entitled to redemption of their certificates by giving ten days' notice in writing to the postmaster. If the stamps are registered, they are redeemable only at the post office of registry and to the person in whose name they were registered. If they were not registered, they are redeemable at any money order postoffice.

While the redemption of Savings Stamps is a privilege accorded by law, we wish to point out that these stamps represent a means by which patriotic American citizens are extending financial aid to their government. Although the actual fighting of the war is ended, the enormous expenses resulting from it will have to be met for many months and the government is depending upon investments in War Savings to meet these expenses at this time.

The Government has no desire to enforce any hardships upon individuals whose circumstances are such as to make redemption necessary and we would suggest that your subscriber point out to his postmaster the paragraphs in the enclosed circular which give the later exact directions for redeeming savings stamps.

It is a pleasure to be of service to you in this connection and if at any time you desire further information, please do not hesitate to call upon us.—Harry R. Strenger, Savings Division War Loans Organization.

CAN A SCHOOL BOARD EXCEED AP-PROPRIATION VOTED BY PATRONS:

Last spring the people of this district appropriated \$9,000 for the erection of a new schoolpriated \$9,000 for the erection of a new school-house. They have exceeded this by several thousand dollars and it has resulted in the people of this district being taxed beyond their means. The school tax alone is \$14 on the thousand valuation, which is caused by the excess over-appropriation. What can be done? Are there no laws to protect the taxpayers from such as this? Do the state laws enforce the installing of furnaces in modern school buildings in rural districts? Can the taxpayers be compelled to pay taxes on anything over the money appropriated?—A Subscriber.

It is my opinion that the district board could not exceed the amount of the appropriation made by the school district. The information is so brief that I have hesitated to express an opinion in regard to the matter. Act 17 of the Public Acts of 1915 makes the following requirements for plans for schoolhouses: "Sec. 5874. Sec. 1. No school house shall hereafter be erected in any school district in this state and no addition to a school building in any such district shall hereafter erected, the cost of either of which shall exceed \$300 until the plans and specifications for the same shall have been submitted to the superintendent of public instruction and his approval indorsed thereon. Such plans and specifications shall be submitted in duplicate and shall show in detail the ventilation, heating and lighting: Provided, That the said superintendent of public instruction shall have authority to inspect such building or buildings during the process of construction in order to determine that the provisions of this act are being complied with."-W. E. Brown, Legal Editor.

CLINTON CO. FARMER WANTS AD-VICE ON CO-OPERATIVE THRESHING

want to ask a question and will also answer W. P. H. of Walkerville in regard to the square The first silos in this part of the country that I remember were square and very unsatisthat I remember were square and very unsatisfactory. As I remember the silage did not settle in the corners, and being square it was hard to build them strong enough. Round is the best shape. A round one requires less material to build a given capacity, and can be easily made strong. Colon C. Lillie says any material will make a good silo if built right. I think he is right, but I prefer the cement block. I have two on my farm, one 12x30, the other 14x30, both giving perfect satisfaction. Were built four and six years ago. I bought a second-hand block machine for \$7. My farm help made the blocks and I did for \$7. My farm help made the blocks and I did all the rest except the plastering. If Mr. W. P. H. lived near here he could use my machine, make his

own blocks and get a good silo very cheap.

Now my question is in regard to a thresher association, or whatever it may be called. A number of farmers here are not satisfied with the way our threshing is done, so we are talking of going in together and buying a rig. How many out to take in? How should the business be managed? Will some one who has had experience answer?—E. A. C. Clinton county.

QUESTION OF SUPERVISORS' RIGHT TO DONATE TO THE RED CROSS

I do not call to mind any decision of the courts in regard to public appropriations for the Red Cross. I would be of the opinion that the Board of Supervisors would have no authority to donate or give the public fund to the Red Cross. I would suggest, however, that it is probably the fact in all such cases as you cite that a contract was made by the Board of Supervisors with the Red Cross to do some particular thing like the care or attention of the poor and to pay the Red Cross a specific sum for the doing of the act for which the Board of Supervisors would have authority to contract. There would be the possibility that for the act for which the contract was made there might be the necessity of letting the contract by public notice and to the lowest bidder. But without the full information concerning each specific arrangement, I would hesitate to say that a Board of Supervisors had no authority to pay the sum of \$14,000 to the Red Cross as I understand it the work of the Red Cross there are many things that they do, that the Board of Supervisors would have authority to contract with them for and to pay them the contract price. Before, however, I could pass upon the legality of the appropriation it would be necessary to have all the facts and the resolution and records of the Board of Supervisors.-W. E. Brown, Legal Editor.

HOW ERROR IN FARM ASSESS-MENT MAY BE CORRECTED

I am very glad I subscribed for your paper. Now 1 would like a little legal advice regarding my taxes. This summer the state tax commission was around appraising the value of our farms and he raised the cash value on my farm to \$7,500.00, which is about \$1,000 more than I figure \$7,500.00, which is about \$1,000 more than I figure it is worth if it was for sale. In the spring I sent in an application to the Federal Loan bank and the same men that appraised the value for the state came as federal land appraisers and when I got my notice from the bank, as to how much I was to be allowed on my application it much I was to be allowed on my application it was \$500 less than one-half of what he appraised it at while state tax commissioner. The local land appraisers were also here and they told me they could recommend a loan for what I asked. The federal man said just before he drove away that he could recommend a loan of \$3,300, which is what the notice also stated. Now, what I would like to know is if it would do any good to protest this, and how to go about it. My taxes are about a third higher than last year. I have enquired of other farmers and I can find no one who has been raised according to mine.—B. M. G. Sherman, Mich.

In 1913 the legislature passed a law which provided for the review of assessments under the condition and in the manner provided by the law. This review by the state tax commission was intended to equalize the assessment over the whole state. After the review by the State Tax Commission it was provided in the law as follows:

The action of said board or members as provided in this act shall be final. When any property has been reviewed, assessed and valued by said board as herein authorized such property shall not be assessed or valued at a lower figure within a period of three years, where the property remains substantially the same, without the written consent of said board."

The appraisal by the Federal Land bank, or by its appraisers, has no effect upon and nothing to do with the valuation which, for the taxation purposes is fixed by the state board of Tax Commis-

If a wrong has been done in fixing the valuation by the state board of tax commissioners it would be necessary to appeal to them directly and upon the proper showing that a wrong had been done I have no doubt but what the State Tax Commission would remedy the error upon such application.-W. E. Brown, Legal Editor.

REMINDS US OF DARIUS GREEN AND HIS FLYING MACHINE

I have a patent on a flying machine, and would like to get the address of some good motor con-cerns and some factories or larse shops that would be able to build a model of it for me.—R. E. F., Rogers, Michigan.

This isn't exactly in our line but we'll give you the best information we have available. are three Detroit concerns that might be interested in your proposition: Lincoln Motors, Henry Ford, Fisher Body Corporation. The Aeroplane Company at Dayton, Ohio, might also be interested. All of the above concerns manufacture various parts of airplanes. The Rex Machine & Tool Company, 1084 Gratiot Avenue, Detroit, do special experimental machine work.

DO YOU KNOW OF ANYONE RAIS-*ING SUFFOLK PIGS?

Do you know of anyone that raises the suffolk pig? They are a chunky, white pig. We used to call them the grass pig, for they were always fat on grass.—F. H., Cooks, Michigan.

We know of no breeder of the suffolk breed. The development of this breed of swine has been very slow and largely confined to the Mississippi valley. Perhaps our readers can advise this subscriber of someone who is raising suffolk pigs.

INFORMATION THAT MAY BE OF INTEREST TO ALL READERS

I saw in your paper about the farm loan act.

To whom should I apply for a loan?

Also, where can I send sample of ground where
I can have it tested to find out how much fertilizer to use per acre for corn, oats, potatoes and

Also, can you tell me where to write to find out about homestead land in the upper peninsula?—

A letter addressed to the Federal Land Bank, St. Paul, Minn., will bring you complete information about the federal farm loan act. Reference to our farm loan map does not show that there is a single farm loan association in Leelanau county. Perhaps you can be instrumental in interesting your neighbors in forming one.

For soils and fertilizer information write Soils Department M. A. C., East Lansing, Mich.

Augustus C. Caton, Public Domain Commissioner, Lansing, Mich., should be able to give you the desired information concerning homestead and cut-over lands of the upper peninsula.

Repetriation bill introduced in New Zealand parliament provides scheme for re-employment, land settlement and vocational training for returned soldiers. It is proposed to make toans up to \$1,500 to soldiers to establish them in business.

War Department plans to retain proving ground at Aberdeen, Md., covering some 36,000 acres and will gradually develop ordnance plant at Neville Island, Pa., to the full scope of the plans laid for it during the war, involving expenditure of

Shall we Starve or Farm on Business Bas

ET US pick up any issue of any live local agricultural paper and scan the headlines. For example, I have before me MICHIGAN BUSINESS FARMING dated

July 13th, 1913. The several headlines read, "Organize to Solve Potato Problems," "President to Veto \$2.40 Wheat Bill," "Depletion of Soil Will be a Serious Problem," "Rosen Rye and the World's Bread Supply," "Michigan Potato Acrease Shows Big Decrease." In later issues we read of the invasion of the pinto bean and finally the forceful article "Why Farming as a Business Does Not Pay."

Each article in itself is food for much thought, but taken collectively they should make us cry



out in alarm-or do something. Potato growers are well aware that the profits are as elusive as the proverbial snowbalf in Hades. No less a person than our President tells us that we cannot raise an average crop of wheat or we would not complain. We are asked to raise rye instead. Another in high position tells us we are not fit to raise beans. Other states can grow them much cheaper. Undoubtedly our soils will soon be depleted and undeniably

Mr. Stanley Warner farming as a business does

not pay. Poor old Michigan!

Someone has said, "A wise man moves with the shade, while a fool sits still and complains of the heat," and many have thought him wise. They have flitted around in the business world, until they found temporary shade. Some acquired quick wealth by easy and tricky methods and others found still shadier places and are greater burdens to society, supported by the state in prisons, asylums, and in many public offices. The man who by conscientious endeavor enlarges legitimate little business to legitimate big business is not to be included with these for his growth is slow and substantial and he prospers in the open sunlight. No matter what he grows or manufactures, if he combines efficiency and economy with brain power and honesty he will benefit humanity. His product will be an aid to other men who work in the open.

We have it from good authority if we have not realized it ourselves, that our state is becoming worthless for many of the staple crops which it grew well for our fathers and grandfathers, who so recently cleared it. Our soil, like most of the shallow soils on and around glacial moraines is already woefully lacking in many essential plant foods. Shall we abandon it for the more fertile deposit lands? Shall we hunt for shade in commercial life? Shall we stay and eventually starve, or shall we put farming on a business basis?

The shade of the old apple tree is very conducive to health and prosperity, but it is a hard pull from diversified farming to fruit growing , with many pests to fight. I am an orchard inspector, but I cannot inspect any other man's orchard until I first cut down my own, and I am one man in two hundred acres with much else that must be done. Yet we must cut these orchards and cease planting them until we can arrange to grow fruit preperly. I think this is what we are all coming o-the utilization of the subsoil unless farming is immediately put on a profitable basis without ruining the soil. According to present standards mining is a very legitimate business and yet there an be no doubt that it is the practice of absolute mining of the deep fertile deposit lands and new lands of our nation that is whipping us who live on shallower soils. They do not complain. They can grow corn and wheat year after year without rotation or fertilization and without noticing the loss of plant food. On top of this add three successive years of drought, frost and war, and I say Michigan has responded nobly. I tried to "do my bit," but how will I pay for my Liberty bonds and W. S. S., of which I am pledged to buy practically one hundred per cent of my present valuation? My interest in the eighty acres I am buying of my father will soon be of little value to the government if I am compelled to mine it as it has been mined, and as we have always had to mine our soils.

I claim to have average intelligence and I am unashamed to admit that I find farming a losing game. My crops average well for the land and see older men and intelligent men looking worried over the prospect, and yet they will expect their sons to be farmers. The "successful farmers," who generally have a money-making side-

Stanley Warner, president of Barry County Swine Breeders; build our silos to greater fertility than when first plowed. Our soils Association, asks some Pertinent Questions on Future

of Farming Industry

"You are doing a wonderful work with your paper. Keep the fight clean and I am here to help. My article is based on and stimulated by articles I have read in M. B. Every issue has been excellent. have brot to light enemies of the public which I could feel but could not see. are gaining an army of admirers which hope will support you in the fights which are now necessary for the farmer. I talked with several farmers today who think it an outrage on the part of the Government to lift the restrictions on wheat and products at this time.—Stanley Warner, Doster, Mich.

issue, extraordinary intelligence, or excessive soil fertility, must help make average farming profitable. The city man must help in order that he achieve his dream and own a well-kept farm, which only the rich can now afford. We hear much about the city luring our young people to destruction, yet under existing conditions this does not cause one-half the suffering that the lures of the soil and land agent cause middle-aged city people who are led to sink their savings in some worn-out farm. They usually fail and return to the city broken-spirited and ill-fitted for their job, if they are lucky enough to regain it. The fact that our young people go to the city and stay is proof conclusive that they are better off. A real live prodigal son is like the real live Indian or bison-nearly a thing of the past. It is only with very careful and honest treatment that they will survive. The mere open air of the country has not been able to combat its enemies, viz.; overwork on the farm, commercialized vice in the city, wantonness and wastefulness as a nation, and a host of smaller foes which are the offspring of these. Germany's strength was due largely to concentrated and intensive agriculture. Her weakness was the permitted arrogance of her rulers. If we wish to continue as an agricultural nation, and that is the only nation that will finally survive, we must not only make farming, but rebuild farming profitably, that we may populate our nation with healthy, happy people and meet the required needs. If, before the war we had been able to feed the impoverished-immigrants for a month as guests of our nation before asking them to work, their would have been no war. The mere fact that we did not wish it would have been sufficient law among nations. The people of other nations would have known of our generosity and would have compelled their rulers to respect our wishes if we had had food to be generous with instead of to gamble with. A soil tiller becomes naturally generous with his food if permitted by circumstances to be.

I believe it is understood today that plant food is not destroyed to sustain animal life. Certain solids and liquids merely need redistribution. The air does a wonderful job with the rest. Let those with a surplus of fertility mine their soils, but make it profitable to return the solid and liquid refuse (the sewage and garbage of the cities) to the barren places. First give us help to distribute what accumulations of fertility we have and to eradicate weeds, then let us have ever increasing help to grow more and better food. To do this we must make farming more pleasant and profitable for our children and the children of the cities. If the consuming public cannot see the wisdom of a profitable agriculture we can attack the problem from the rear and pass a national law requiring a high percentage of plant food to be returned to the soil, the percentage to be increased as methods are devised to save the sewage and garbage wastes of the cities. This would prevent the absolute mining of the deep, rich soils and allow the continued use of shallow

If the consuming public will not swallow the dose, "higher prices for farm products," they undoubtedly would assist in administering to the farmer (the butt of the Nation, on whom all others rest) the injection, or law, which would kill or cure. If cured, we would have plentiful and profitable production, for by profitable production I simply mean a profit which will allow for the necessary fertilization of our land. We can then leave it to the next generation to make farming the ideal life that it should be.

Under some such plan as this we might hope to remain productive. We might even hope to rewere undoubtedly improving before ou rarrival and man's position is to aid and not to hinder either plant or animal growth.

If we must kill animals let us at least keep the number good and make each generation stronger and better able to care for itself. Let us till the land carefully and make each generation of plants more productive and hardy. Let us co-operate not only with farmers, but with the city and nation, and with other nations as a civilized world. We might soon have "Peace on earth and good will toward man." Otherwise on with the bol-sheviki nightmare.—Stanley Warner, Doster, Mich.

LIEUT.-GOV. DICKINSON RAPS VIOLATION OF PRIMARY LAW

(Continued from page 4) Millions of lives were sacrificed to start the world on newer, higher, better, nobler lines. It must not stop with the war's end. It is the beginning for us as a senate of a great state on new legislative lines. Legislationmust be thorough, clean, right, just. Legislative action must be above suspicion. We must know a change for better things is at hand. 'Tis to be an epoch on higher lines and this means elevating legislation. This says your responsibilities are great. Before and since the election many subjects for legislation have been suggested to me to bring before you. Among these are those made prominent by the war, by the enfranchisement of our women and by the elimination of the saloon. in the main they are old questions to be dealt with under the responsibilities of the new epochquestions of taxation, appropriations, highways, insurance, railroads, public health, budget system, returned soldiers, temperance, and primary elections. The first four suggest nothing drastic. Because of the return of millions from war activities the labor problem may be one of the most perplexing of the session. Satisfactory labor conditions mean prosperity, better moral and social relations, safer government and truer patriotism. This question may try you as much as any of the session. The release by the government from the control of the railroads may bring to you another equally perplexing matter. The epidemic of Spanish influenza, causing thousands of deaths, and the exposing of venereal disease conditions by the war boards make the recommendations from the public health department among the most serious for your consideration. The suggestion of doing everything possible for the soldier boys, I know, will be carefully and favorably considered. The temperance question, because of the elimination of the saloon from our state and the resultant manifold benefits on every hand, is looked upon by many as settled. But a law does not enforce itself. The state constabulary must be given power enough to make the bootlegger and his kind understand they are criminals and that the state has a police force alert and strong enough to enforce the state's law to the last letter. The ratification of the prohibition amendment to the federal constitution will doubtless be advertised more than any other act of this legis-It will be gratifying if this can be done as early as possible because of its influence on other states and the police force of this state and also as a notice to the spring re-submissionists that we are in a newer and cleaner epoch with no patience to consider a move, the success of which, means the wrecking of business, homes, health and character and the making of criminals, insane paupers and degenerates.

"Governor Sleeper appointed a budget commission conceded to be made up of men among the best qualified for such work that could have been selected. They have put in months of careful investigation from the unprejudiced standpoint. Radical, if not startling, changes in various lines of the state's activities are recommended with ap parently cold facts gathered from within our state or from other states substantiating such recommendations. This report should be considered that of thorough and expert investigation and its recommendations studied long and searchingly from the standpoint of new conditions. No misconduct seems to be charged anywhere but the matter of useless duplication and surplusage is strongly emphasized and radical eliminations urged in the interest of economy. To effect this may try you as much as any act of the session. It may deprive some of your friends of patronage influence. It may deprive others of jobs. (Continued next week)

BUSINESS FARMERS' PRODUCTION PROBLEMS

How to Get Rid of Grasshoppers

AST YEAR grasshoppers cost the farmers of Michigan several million dollars. One farmer, reciting his experience to the writer, said, "I had the finest looking field of wheat this year I ever had. The heads were all nicely filled out, and it looked like a bumper crop. All at once the grasshoppers began to put in their work and within a week's time, a third of the grain was destroyed." And this was typical of the experiences of many.

So great was the damage from grasshoppers last year that a number of the counties have made special appropriations for combatting the ravages of the pest next year. In order to aid the movement along M. B. F. has secured some valuable information upon the subject of grasshopper control and eradication, and presents below a description of some of the methods that have been found by actual use to be the most effective. We suggest to our readers in counties where the grasshopper has become a menace to crops that they clip this article and save it for future reference, and that the subject matter be brought to the attention of their neighbors and county agent. Only organized and systematic efforts can successfully combat this pest:

There are going to be lots of grasshoppers during the summer of 1919 in the grasshopper belt, according to indications found by entomologists of the department of agriculture and the state agricultural colleges. Farmers are urged to start a clean-up campaign against them right away. Plowing to a depth of six inches and subsequent harrowing during the fall and winter, at any event not later than April 10, will cover the eggs so deep that the young will not be able to escape. When grasshopers make their appearance they can be destroyed by the common poisoned bait method.

But there is antoher way of getting rid of grass-hoppers that makes the pests pay for the trouble of killing and catching them. This method consists of driving a grasshoper catcher through an infested field, catching all the grasshoppers that hop, and then feeding the insects to chickens. They can be dumped into sacks and hung up to dry and fed as dry grasshoppers, or, if it is preferred to feed the grasshoppers alive, the machine can be hauled to the poultry yard and placed so that the front will face the light. The insects will find their way out but not too fast for an ordinary flock of chickens. Thus the grasshopper catcher becomes a poultry self-feeder.

catcher becomes a poultry self-feeder.

An analysis of grasshoppers shows them to be high in protein and therefore good chicken feed. It is known that chickens are more productive when insects are a part of their ration and grasshoppers when dried can be used with other feeds during the winter.

Where it is not practical to plow infested fields, such as ground in clover or alfalfa, they should be the south of the so

harrowed early in March of the following year. In Indiana clover and alfalfa fields are among the best breeding places for grasshoppers.

The poisoned bait recommended consists of bran or sawdust made tasty and attractive by the addition of molasses and fruit and treated with arsenical poison. The following formula is recommended: Bran (half and half bran and hardwood sawdust, or sawdust alone), 25 pounds; paris green or crude arsenious oxide, 1 pound, or white arsenic 1½ pounds; molasses (cheap feeding grade), 2 quarts; lemons, bananas or oranges, 6 fruits, or 1 ounce of cheap lemon extract; water, about 2 to 4 gallons.

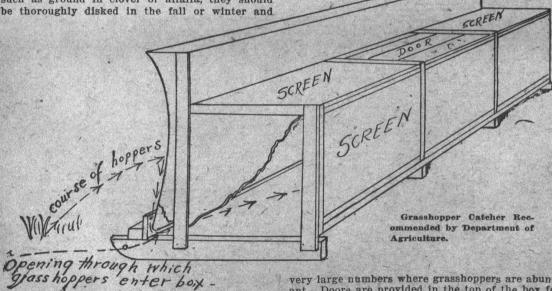
The poison should be thoroughly mixed with the bran. The water, molasses and finely chopped fruit or extract are then mixed and added. The mixture should be wet so that it molds in the hands but is not "soppy." The bait should be scattered broadcast at the rate of 7 to 10 pounds to the acre, applications being made in the early morning.

In clover or alfalfa much material and labor can be saved by first cutting around the field until there remains a small central uncut area where the grasshoppers will have gathered and may be quickly and cheaply destroyed by the poisoned bait. If the grasshoppers are feeding in corn or young trees more water or, better, more molasses and water, should be added and the mixture thrown forcefully so that the particles will adhere to the crops to be protected.

The grasshopper catcher, which has an advantage over the old style hopperdozer, in that the insects can be utilized for chicken feed, is about 16 feet long with an upright but curved piece of tin in front and so arranged that the grasshoppers will strike it as they hop up, falling to the bottom and back through a narrow trap opening into a box behind. The tin front does not extend quite to the bottom, where just in front of the tin shield is a strip of tin placed so that there is an opening about $1\frac{1}{2}$ or 2 inches wide. This front strip or lip may be made by using a 16-foot length of gutter, one side of which is flattened outward. The back and top of the box in the rear is covered with wire screen and the top should be so hinged that it can easily be opened and the accumulated grasshoppers shoveled out as needed.

A horse is hitched to the extended beam at

A horse is hitched to the extended beam at each end and the catcher dragged through the infested area, beginning at the sides and working toward the center of the field. A boy riding on each horse can handle the machine nicely. A heavy rope attached to the hames so that it drags a few feet in front of the shield, is an advantage in that it stirs up, just before the catcher passes, the hoppers not otherwise disturbed.



It will be understood that the catcher consists first of a screen, preferably constructed of sheet metal, approximately 12 to 14 feet in width and 3 to 4 feet in height, built so as to present a concave surface to the insects which strike it as it is dragged across the field. At the bottom of the screen is left an opening partially screened by a transverse plank placed in such manner as to make a narrow groove into which the insects fall from the screen. At the back of the screen a box or cage is constructed, the back of which consists of ordinary fly screening. When the insects fall into the groove, they are attracted by the light transmitted from the screen at the back of the trap and enter the box where they accumulate in

very large numbers where grasshoppers are abundant. Doors are provided in the top of the box for the purpose of removing the accumulations of live grasshoppers. The sketch presents a fairly forrect representation of these traps with the exception of the fact that the cross timbers, to which the whiffletrees are attached, projects for a foot or so beyond the runners so a sto place the horses at the extreme edges of the trap and out of the track of the trap itself. It will, of course, be appreciated that these traps can not be used economically or successfully on rough land nor in fields where the crop has attained any considerable height, but nevertheless, they have proven to be of great advantag under favorable conditions.—W. R. Walton, Entomologist in Charge, Cereal and Forage Insect Investigations.

CANADIAN FARMER GIVES EXPERI-ENCE IN WINTERING HORSES

As I have been handling horses for a good many years, I am going to give my method of wintering them.

I generally keep five or six horses, but at the present time I have five. Two of these are used together and the other three in a three-horse team. I have found that these can do all the teaming that I require on 125 acres of land. In the fall, when the rush of work is done, I begin to gradually reduce the grain ration, but I feed hay until about the last of December, then I feed straw instead, except the team which I use for work in the winter, they get hay and a little grain all the time. The other three horses, which are getting straw, are then given a little grain along with it, preferably chopped oats and wheat bran in about equal parts, and at the rate of two quarts per horse, morning and evening.

When the weather is fine in winter, we turn them out in the daytime for exercise, bringing them in at night. If the weather is not fit to turn them out all day, I hitch them up and drive them for exercise. We have always had our horses come out fine by handling them in this way. We give them plenty of bedding when in the stable to keep them reasonably clean and comfortable, as I think that comfort is as important to the horse as the kind of feed given him. I never feed any silage to my horses and no roots, except carrots and potatoes. I think the latter is the best of any if you have warm stables and do not feed too many at a time, about four quarts a day is about what I have found safe. We feed them in this way until the weather begins to turn warm in the spring, then we begin to fit them for the spring work.

I do not think it pays to sell the coarse grain off the farm if you have the stock to which you can feed it, at least, that has been by experience. Sell your wheat and feed your oats and barley and all other coarse grain.—A. K., in Canadian Countryman.

HOW SHALL I FEED OAT STRAW TO HORSES AND CATTLE?

We have seen in yours and other farm papers about horses and cows doing well on oat straw. Now, we have the best of oat straw and nothing seems to care for it, and we would like you to tell us how to feed it, that is, what do you feed with it?—Subscriber.

Neither horses nor cows would do well on oat straw as the only food. That would be practically impossible. They might live through one winter but you would be unable to make any gains, or to get any yield of milk to amount to anything, neither could your horses perform very much labor on oat straw. The food nutriments are not there. But oat straw can be used as a roughage where hay is scarce if the proper amount of grain is fed in connection with it. No animal will do well on grain alone; the food is too concentrated. Nature demands that a certain amount of bulk be combined in a food in order to get the proper action of the bowels, hence you could use oat straw as a filler or bulky part of the ration, and of course, it contains a reasonable amount of food nutriments but a larger part of it is fiber and is indigestible.

If you have out straw only as a roughage in the ration and want to feed milch cows, it will be necessary to feed-quite liberally of grains or concentrates, containing a good per cent of protein.

A ground oat and wheat bran, equal parts, by weight, may be used as the major part of the grain ration, but you should also have a concentrate like oil meal, rich in protein. I would suggest that you feed three pounds of oil meal per day to each cow, 11/2 lbs. night and morning, and then feed a sufficient amount of ground oats and wheat bran to give the cow a pound of grain per day for every four pounds of milk she produces. If the milk tests less than 4 per cent, and one pound of grain per day for every three pounds of milk she produces if the milk tests more than 4 per cent, and one pound of grain per day for every three pounds of milk she produces if the milk tests more than 4 per cent. With this combina-tion of grains, I am positive that if you have good oat straw that your cows will consume a liberal quantity of it.

Horses can be very nicely wintered on oat straw in place of hay if you will feed in addition corn meal and bran mixed, equal parts by weight. Idle horses, or horses doing very little work do not require as much protein as cows producing a liberal flow of milk.—Colon C. Lillie.

Louis Dubois, French deputy, estimates 250,000 French homes razed by Germans. In Rheims alone, 12,000 out of 14,000 were destroyed.

Grain Weevil Their Prevention and Control

By Don B. Whelan

HERE is hardly a farmer but who has at some time in his experience had his stored grain infested by "weevil." This grain is liable to attack by several species of insects that, unless checked or killed before too late, will destroy or seriously injure the grain in which they are working. Wheat is probably the most frequently attacked by these pests, although they are often found devouring corn, barley and oats. Ground feed such as cereals, bran, chicken-feed and flour are also subject to their attacks.

The chief insect mauraders of the farmers' grain bin are granary and rice weevil, saw-toothed grainbeetle, confused flour-beetle, cadelle and a few others, to say nothing of the rats and mice. Collectively these are spoken of as "weevil" and are all very small in size, none of them exceeding five-eighth of an inch in length, and most of them being less than one-fourth of an inch long. Their color is reddish-brown or black but fortunately it matters not what their color is nor what their size and species is, for all succumb to the same

Nature of Their Work

The weevil begins by eating a small hole in the grain of wheat in which it deposits a small white egg, after which the cavity is closed and to all appearances no damage has been done. But soon this egg hatches and the little white footless grub starts in to satisfy its enormous appetite. The inside of the grain is eaten, leaving practically nothing but the outer shell. As the insect develops, holes appear in the grains which are used by the adult weevil in emerging. As the season advances and the demand for wheat is better, the quality and quantity of the grain generally becomes reduced.

Preventive Measures

The observance of two general rules will do more to protect the farmers grain, against these pests, than any other methods, and if faithfully carried out fumigation will, in most cases be unnecessary. First, never put new grain on old grain in the bins. Second, clean the bins of the granary thoroughly each year before putting in new grain. If at threshing time there is any old wheat left in the bins it should be placed in a bin by itself, even if the presence of insects has not been noticed. If the new wheat covers the old in the bin it will be a greater attraction to the in-sects which are sure to be present there, if anywhere, in the granary. In many cases the in-sects are already in the old wheat when the new is added and they are ready to begin feeding at once. The work of these insects causes the new wheat to heat, which renders it more favorable for their development. If they once set a good start they will overrun everything around the granary. If one suspects the presence of insects in the bin just previous to filling it with the new crop he should clean out all the grain taking care to get it out of the corners, cracks and crevices. This should be swept up and destroyed. If necessary a good fumigation should be done at this time as it will cost less and be more thoroughly done than would be possible if the bin were full of grain. On the other hand if no insects are present a good sweeping will be sufficient and at the same time any holes or large cracks should be closed. It is very seldom that these insects are brought into the granary from the threshing machine. They are either there to start with or find it soon afterwards.

Control Measures

Probably the best and most universal method of controlling these grain-destroying insects is by the use of carbon bisulphide. This, when of good quality, is clear almost colorless liquid, which on being exposed to air is rapidly converted into gas. The gas being heavier than air rapidly settles through the grain and becomes strongest near the floor of the bin where the insects themselves are the thickest. This fluid can probably be purchased at any local drug store or through them. Almost any wholesale drug company sell it and one can get it direct from them.

To apply, the bin to be fumigated must first be measured to find the number of cubic feet. This can be done by multiplying the width by the length and then multiply this result by the height of the bin. For every one hundred cubic feet in the bin use one pound of the carbon bisulphide. If a good grade of this material is used it can be poured directly on the grain by sprinkling it evenly over the surface. It will not injure the wheat, either for seed purposes or for food, after it has been thoroughly aired. Probably a more general method of applying this fluid is to place several shallow pans or plates on the surface of the grain

and into these the bisulphide is poured. Evaporation will be a little slower but just as effective. If the grain, to be fumisated, is four or five feet, or deeper, it is advisable to get the fluid deeper in the grain. This can readily be done by means of a short piece of gas-pipe, in which is fitted a stick, longer than the pipe itself. The pipe with the stick in place is thrust down in the center of the grain, the stick withdrawn and the bisulphide poured down through the pipe. The stick merely prevents the pipe from becoming filled when the pipe is thrust into place. If the bin covers quite an area the above operation should be repeated in several places. As soon as the operation is finished, no matter which method you employ, quickly cover the surface with blankets or canvass and leave for-twenty-four to fortyeight hours when it can be opened up and aired. The gas mixes very readily with air so that within an hour or so little odor, if any can be detected. Shoveling over the grain will hasten the airing. Do not take a lantern or lamp of any kind near the bin that is being fumigated as the gas is highly inflamable and explodes when ignited and would be likely to cause a serious fire. If properly handled, keeping any light and animals from the gas, no danger need be feared. Rats and mice as well as insects will be killed by this treatment.

Heat is another method of controlling insects but in most cases it is impractical for general farm use. Where possible, any infested grain that is heated up to 130 degrees for a period of a few hours will kill all of the insects present .-

Don B. Whelan.

TON OF PHOSPHATE PER ACRE IS NOT A "COVERING"

"No, we haven't covered any of our land with raw rock phosphate, though we have applied 20 tons or so to the ground," is the way S. J. Haight of La Salle county, Ill., answered a question about the acrease he had covered with phosphate in Prairie Farming.

"When our farm has had five tons of phosphate rock applied per acre. I will begin to think of calling it covered," Haight says. "That will just about double the content of phosphorus in the soil and make it possible to raise crops far in excess of what we now do."

In the last two or three years Haight has made a fine start in permanent soil building. Practically all of his 624 acres is sour and quite deficient in limestone, so Haight is covering it with limestone as fast as he can get it hauled. This goes on at the rate of two or three tons per acre. The principal effect of this is to increase the clover crop and to allow clover to grow where it had refused to grow before.

As the clover sod is plowed under, Haight puts on phosphate rock. At first he used one ton per acre, though this year one field got a dose of two tons per acre.

"Soil improvement has just begun on this place," Haight told me. "I expect to apply a ton or more per acre of phosphate every time clover sod is plowed under and limestone will be used as needed."

Not many men have the courage of their convictions along the lines of permanent soil improvement as does Haight. He is not waiting to see what sort of returns he will get from his limestone-clover-phosphate combination, as he knows that in a few years the increased crops will pay for the soil treatment and more, too. He knew this because other farmers are securing such results under similar conditions on the same soil type. In the meantime he is going ahead with big plans for the future.

DO ANY OF OUR READERS

USE SELF FEEDERS?

It takes good management to keep the hogs gaining when they come out of the cornfield. The best way to do it is to put them on selffeeders, with shelled corn in one self-feeder and tankage in another. If there is plenty of skimmilk or buttermilk available the tankage can be dispensed with. Pigs that have gotten a good start in the cornfield can be finished quickly and economically on self-feeders, and without any set-back.

We should be glad to get the experiences of our readers with self-feeders.

Hark back to Days when Snakes were thicker'n Grass and every Native had a "Champeen" Snake Story

The old New England story teller was a jolly old soul. Good humor oozed out of every seam and wrinkle of the aged face that reminded you of some rugged shagbark hickory. At least his face-furrows were all plowed the riht way.

Three things could be honestly said of his tales they were clean, they were harmless, and they were original. He never befouled his mouth, or his soul, with vile stories. The neighbors claimed that he sat up nights to invent his tales, but then neighbors say many things when the days are long, and farm work not too pressing.

He reveled in snake stories; the old Blue Hills were fertile ground for them. There were just enough copperheads-or chunkheads, as we called them-to keep his imagination working. "Narrow escape I had yesterday," he remarked one day to a neighbor.

"What was that?" responded the neighbor, with an expectant air, and listening ears.

"I started to go up to my mountain woodlot yesterday," said the old story teller, as the wrinkles deepened and broadened on his face; "my! but I had a narrow escape from being bitten by a chunkhead! It was this way: I came to Pine brook, and the rain of last week had swelled it considerably, and it was a fairly good jump if a man wanted dry feet. I took a good start and into the air I went. Just as I was over the middle of the brook I'll be consarned if I didn't see a whopper of a chunkhead coiled just where I would land. Gee whillikens! But my hair stood up straight."

"Did you land on the chunkhead?" said his hurry-up listener.

"Land on him!" said the story teller, indisnantly, "did you ever know me to commit suicide?" No, sir, I just whisked around in the air and landed exactly on my starting place!"

His story of the chunkheads of his Blue hills medder was the most popular among the farmers. Here is the story as he told it:

'Chunkheads was unusual thick that summer. When I went up to the Blue hills to mow that medder of mine I did a lot of thinkin, on the way. I always sorter calculated that brains was made to use, same as scythes, so I cut quite a swath with my brains before I made a lick with the scythe. Well, here is what I did:

"I took grass and wound it 'round and 'round my less to my knees, and tied it securely. 'Better be safe than sorry,' I said to myself. Then I began to mow and such a safe and comfortable feeling came over me that I clean forgot about chunkheads. Well, I mowed along, comfortable like, but my legs began to feel queer, they seemed to just drag along 'stead of following the scythe promptly. I didn't understand it but I mowed on to the end of my swath. Then I looked down, and I vum! I nearly jumped clean off the whole Blue hills at one jump."

"What was the trouble?" asked his breathless

"Trouble? there want no trouble, but it was mighty lucky for me that it wasn't a funeral, "said the story teller;" why, there was six chunkheads dragging along back of me. All unknowin' to me they had struck at me, and tangled their fangs in the grass. No wonder my legs was heavy."

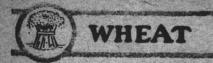
The old story teller never tired of telling the story of Smith's cow. Here it is as he first

"When neighbor Smith went to California he took a fine Jersey of his along. You know she was a-prize milker, and Smith was sorter attached to her. Well, the cow was getting 'climated when a strange thing happened. You see Smith raised a big lot of pop corn on his ranch that season, and he stored it in his old rickety barna reg'lar fire-trap. One night a hobo crept into the barn, and when he smoked, the old barn said, I'll make it trumps,' and down it burned to the ground.

"Well, that prize cow was down in the pasture. Bein' woke up out of a sound sleep is exciting to the imagination of a cow. As the barn burned the corn began to pop, and as the wind was just right it floated down in clouds over that imaginative creetur, who thought it was snow. The poor animal grew colder and colder until she lay down and died."

"Say," said one of his group of listeners, "did Smith make corned beef of that cow,"

The old story-teller is no more but the old farmers still repeat his stories to dull the edge of care and rest their toil-worn backs.



GRADE No. 2 Red	Detroit 2.30	Chicago 2.30 1-2	New York
No. 3 Red No. 2 White	2.26	2.28	2.32 2.34 1-2
No. 2 Mixed		2.27	2.33

There is no change in the wheat situation and none anticipated in the immediate future. Local shortages of the grain for milling purposes are slowly being supplied. Flour has recovered from its set-back of a couple weeks ago and is now quoted at almost exactly the same price fixed by the government. Thus is the theory of the Food Administration that the removal of milling restriction would removal of milling restriction would lower flour prices, knocked into a cocked hat. It merely took the hand-cuffs off the market gamblers and they are right back in the same old game they played before the war. Bran and middlings are still at \$50, but dealers look for further advances, "to offset the loss" (?) millers are meeting on flour at present prices meeting on flour at present prices.

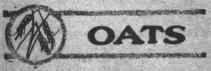
MICHIGAN BUSINESS FARMING has
wired the Food Administration asking that something be done to prevent further advances in prices of bran and middlings.

There is still much speculation about how much the guaranteed price on wheat is going to cost the nation. The Price Current Grain Reporter has it all figured out that the loss will average about \$15 a head for every man, woman and child in the United States. There will be a lot of surprised people all right, if the Food Administration succeeds in placing the enormous 1919 crop without loss, as it is predicted by some they will do. It is reported that prices 20 cents over the guaranteed basic price have been paid at some terminal markets.



GRADE	Detroit	Chicago	New York
No. 2 Yellow No. 3 Yellow No. 4 Yellow	1.58	1.53	1.71
No. 4 Yellow	1.53	1.49	1.60

The corn market is in healthy con-There hasn't been much doing on the Detroit market since the holidays. There are few buyers and the supplies are very light. In Chicago, however, the demand has been good and altho the season is now rapidly approaching when the crest of the corn movement is normally reached, the market is well sustained and has an upward tendency. There is some talk of the importation of corn from Argentine, the freight rate having been reduced sufficiently to make it a profitable venture, but even the maximum amount that is liable to be introduced into this country will cut little figure with the demand and prices on the domestic crop.



GRADE	Detroit	Chicago	New York
Standard	73	.74	.81 1-2
No. 3 White	72 1-2	.73	.80
No 4 White	71 1-2	71	78

Oats, which have suffered declines for the past three weeks, are again showing a little strength. Both demand and supplies are light. An abundance of oats for immediate delivery on almost any market would send the price down right now. What the future of oats is to be nobody can guess. That the allies will need an enormous amount of oats before their next harvest is firmly believed, but they have so far shown no great eag-erness to buy in large quantities.

DETROIT,—Potatoes higher; hay firm; beans inactive; poultry firm; firm and higher. Grain in fair demand. CHICAGO.—Stronger tone in potatoes. Other vegetables quiet. NEW YORK.—Hay lower; potatoes steady; beans inactive; onions inactive, PITTSBURG.—Potatoes firm and higher.



Rye is showing no activity. Prices remain practically stationary with an occasional advance or drop of a cent a bushel. Detroit quotes rye at \$1.62. Barley is showing a little more strength, the best grades having ad-vanced from \$1.95 a week ago to \$2. Perhaps the action of the distillers in pledging a fund of a billion dollars to defeat the wishes of the people on prohibition is having a bullish effect



GKAD.	Vetroit	Chicago	New York
C. H.P.	9.00	9.25	10.50
Prime	8.00	8.50	9.75
Red Kidneys	12.00	12.00	12.75

Beans are holding their own and that's about all. Were it not for the efforts of the bean jobbers to hold them at \$8 per cwt., we are very much afraid that prices would go lower. The demand is very slow, the government is doing enough of the buying to maintain the price at present levels, but should the government drop out we hesitate to say what would happen to the market. We believe that farmers will be able to dispose of the balance of their holdings for \$8 per cwt. if they feed the market slowly. The bean jobbers are living up to their promise to see that the growers get \$8 and are investigating every case referred to them where a member of their association accents beans at less than that figure accepts beans at less than that figure. We are still getting numerous complaints about the bean pick. The situation is not as bad as a year ago, because the beans are of much better quality, but it is bad enough in some sections to warrant an investi-gation. Some farmers declare that they will get less than \$3 a bushel for their beans after the elevators get thru "picking" them.

Some of our readers are wondering

what happened to the resolution adopted by the bean growers at their annual session calling for an investi-gation into bean picking practices. We are advised by Pres. A. B. Cook that the matter was taken up with the interstate commerce commission who advised that it did not come within their jurisdiction. We see no reason, however, for dropping the matter and would respectfully sug-gest to the bean growers' organization that the legislature be called upon to enact a law that will give farmers some protection from bean elevators who rob them on the "pick."



Markets		Standard Timothy	
Detroit Chicago Cincimnati Fittsburgh New York Richmond	28 50 29 00 30 00 32 00	27 50 28 00 29 00 30 00 28 50 29 60 28 50 29 50	26 50 27 00 28 00 29 00 27 75 28 25 27 50 28 50
Markets Detroit Chicago Cincinnati Pittsburgh New York Richmand	Light Mixed 27 50 28 00 28 00 30 00 26 25 27 25 27 50 28 50	No. 1 Clever Mixed 23 50 24 00 28 00 29 00 25 25 26 25 27 50 28 50 23 00 26 00	Clover 22 50 23 00 16 00 25 00 24 25 25 25

Detroit has been a good hay market for a couple of weeks. While prices have gradually declined at eastern markets, the Detroit market has been well-sustained and demand has read-ily taken care of rather light supplies. Now that snow has come to most of the hay regions and the movement is bound to be more or less interrupted, it is not believed that hay prices will go lower. Cold weather usually betters the demand, as everybody is afraid supplies are going to be curtailed and hurry to lay in supplies. The Hay Trade Journal gives the following excellent report of the hay trade conditions the past week:

"Slack holiday trading is the fea-ture of the eastern markets but the principal Western centers have shown a good demand and rule firm or higher. Snow and storms have reduced the arrivals and at the same time increased the feeding demand; in consequence these markets are well clean-

ed up and offerings are promptly tak-en. In the east, although the arriv-als are smaller, there is still a considerable accumulation and buying has been slack. With the opening of the New Year there is expected to be a resumption of business, but the fact a resumption of business, but the fact that the government is practically out of the market has created a pessimistic feeling among dealers that is not offset by the possibility of increased new year's business. A considerable quantity of Government hay has been resold in the east and this is coming into competition with the regular supply at some of the seaboard markets. There will probably not be a general There will probably not be a general resale of government held stocks, rumors to the contrary notwithstanding, for by the time the army is demobilized and the unnecessary horses and males said the unnecessary horses. and mules sold, the supply of hay at camps will have been consumed and possibly more purchased. The government hay that was sold last week was stock held outside of the actual consuming areas and does not constitute.

consuming areas and does not constitute an over-supply except locally.

The following table shows the highest prices, also the prices for No. 3 timothy in the markets this week:

	Choice	No. 3
New York	\$31.00	\$25.00
Boston	33.00	20.00
Philadelphia	33.00	26.00
Baltimore	29.50	26.00
Pittsburgh	30.50	24.00
Pittsburgh prairie	17.50	
Chicago	31.50	26.00
Chicago prairie	26.00	4克里里克山
St. Louis	30.50	
Richmond	32.00	28.00
Duluth	28.00	2.8
Detroit	29.00	24.00
Kansas City	28.50	23.50
Kansas City prairie		
Minneapolis	26 50 *	24.00
Minneapolis prairie	26.00	122
St. Paul	28.25	20.75
St. Paul prairie	26.75	
San Francisco	26.00	
Jacksonville	35.50	7



Marketa	Choice round white-sacked	Round White Bulk
Detroit Chicago	2.00 cwt. 1.85	1.90 cwt,
Cincinnati New York	2.00 2.10	1.90 2.00
Pittsburgh	2.05	1.95

Potatoes advanced 20 cents a hundred on the Detroit market from Jan. 1st to Jan. 7th. Nearly all other markets report an advance. Supplies are meagre, and while the demand is not particularly active yet, following the holidays, there is a feeling of confidence on the part of both growers and dealers, that demand will become more active and prices will continue to advance. Any advance in the potato market at this season of the year is usually followed by decreased shipments, as growers and dealers alike hold back supplies. This is what will undoubtedly happen during the next few weeks in all the potato growing states. It is significant that the executive committee of the Michigan Potato Growers' Exchange, which has marketed several thousand care. has marketed several thousand carloads of potatoes this year and knows
marketing conditions pretty well,
should publicly predict higher prices.
Just how high prices may go before
the next crop is a matter no one
cares to discuss. Of course, it is safe
to say that prices will not go as high to say that prices will not go as high as they did two years ago, but they don't need to go that high to enable farmers to realize a profit. We hope our readers will watch this market very closely, for after the unfortunate experiences of a year ago, they ought to make some money on their 1918 crop.

THE WEATHER FOR THE WEEK As forecasted by W. T. Foster for Michigan Business Farmer

WASHINGTON, D. C.,

16 to 20. With usual fluctuations temperature averages will progress upward till about Jan. 22. Not much precipitation. Force or intensity of the storms will increase near Jan. 13. General weather conditions of balance of January about normal; that is, about a ten-year average.

Next warm wave will reach Vancouver about Jan. 19. and temperatures will rise on all the Pacific slope; that is, on all that part of North America that lies west of the Rockies by close of Jan. 20, plains sections 21, meridian 90, great lakes, middle Guif states and Ohio-Tennessee valleys 22, eastern sections 23, reaching vicinity of Newfoundland about Jan. 24. Storm wave will follow about one day behind warm wave and cool wave about one day behind storm wave

In front of this storm as it moves eastward, temperatures will reach the top for January. These warm waves, with low temperatures near Jan. 7 and 30, are dreaded by those, who have sown winter grain. They will be repeated till late in the spring of 1919. Not much snow is expected during winter and these conditions may damage winter grain that had too rank a growth during the fall of 1918. It is too early for the government to be alarmed about having to pay the farmers a billion dollars bonus on the 1919 wheat crop. Let Australia and South America sell their grain at low prices. I advise American farmers to hold their products for the present. I believe that before the 1919 crops are matured we will have the greatest demand ever known in this country for farm products, particularly for grain and cotton.

I believe that much of the winter grain crop, new in excellent condition, will be plowed up in the spring and farmers should begin to think it over as to what spring crops should be planted and sown where the winter grain crop will have been killed. That question, of course, will dpend on the cropweather following May 1, 1919.

W. Foste



The only hope now held out to on-ion growers for a better market is

that an export demand may develop, which is not an immediate prospect, nor yet a remote possibility. The onion market shows no change for the better. Prices average from \$1.25 on ordinary stock to \$1.75 per ewt. on fancy stock.



New York, Jan. 3.—The apple market firmed up again this week. Business was active and buyers were taking all the fruit they could get at puctations. However, it was reported here that prices were higher at loading stations throughout New York state than they were on the docks. Receivers say this will tend to draw the fruit away from New York city, cause a scarcity here and an ultimate advance in values. Cold storage Baldwins were bringing \$5.50 to \$6.75 and Greenings \$5 to \$7. McIntosh and Northern Spies were selling at \$5 to \$8.00, and York Imperials at \$5 to \$7.50. Common storage Baldwins were bringing \$4.50 to \$6 but the outside figure was extreme.

Fancy western boxed apples were in good demand and values were firm. Rome Beauties were selling at \$2.25 to \$3 and Delicious at \$3.50 to \$4.25

m good demand and values were nrm. Rome Beauties were selling at \$2.25 to \$3 and Delicious at \$3.50 to \$4.25. Winesaps were bringing \$2 to \$2.35. Stayman Winesaps \$2.25 to \$3, and Spitzenbergs \$2.50 to \$3.75.

The export demand continues urgent but steamship space is scarce.

Spitzenbergs \$2.50 to \$3.75.

The export demand continues urgent but steamship space is scarce just at the moment. There was no way of getting a line on what the exports were this week but they were much lighter than any week since shipments abroad were resumed. All apples on the other side are bringing maximum prices, irrespective of quality and grade. The maximum price on barrelled fruit is about \$17 and on boxed apples \$4.75.

Wayne M. French of the Simons, Shuttleworth & French Co., said on Thursday that he had heard a report that the limit on the weight of boxes and barrels had been taken off. So far, the British government has allowed boxes to be sold at 38 pounds and barrels at 130 pounds net and if they weighed any more the extra amount of fruit could not be collected for. Mr. French said that the report had not been verified but if it were true boxes and barrels could be sold by weight at 12c per pound net. He looks for a heavy movement abroad the latter part of January when many of the boats that have been going over will be in port and ready to sail again for Europe. Steamship space will be more plentiful then.—Chicago Packer.



Altho there has been many up and down movements in the egg market since a couple weeks before the holidays, many are still predicting \$1.00 eggs before spring. At once we were foolish enough to think that eggs might go that high, but we have come to the conclusion that the American people, despite abnormally high food prices, will never pay that much for eggs. We may be wrong, but the manner in which the egg market has acted the past month enables us to make no other conclusion. Fresh firsts are quoted this week in Detroit at 62 to 63c.



New York Butter Letter

first two days of the week witnessed no activity in the market, Thursday and Friday proved to be pleasant surprises. The increase in business on prises. The increase in business on those days was partially to be expected as butter dealers had been allowing their stocks to run low in order that they might be cleaned up at the beginning of the new year. However another factor entered to increase the demand for available butter. That was a sirile among the freight handlers on North River which has held up the arrival of large quantities of butter that is known to be in transit. The danger of a shortage in supply has caused many who would buy more

conservatively to make haste to get butter while there was some supply available. Naturally the interference with arrival of shipments has caused a change in price and up until the close on Friday an advance of 1½c has resulted. A further rise in price is expected if the strike continues,

A very easy feeling developed on Monday and extras fell to 68c. On Tuesday, while the market gained some strength, there was no change in Monday's quotations. Wednesday being a holiday no business was transacted but Thursday witnessed an increase in quotation of a full cent. That was followed by a half cent gain on Friday. Because of the shortage caused by the freight handler's strike considerable quantities of accumulation of firsts and seconds were moved at considerable quantities of accumulat-ed firsts and seconds were moved at better prices. Centralized butter has better prices. Centralized butter has been movins in considerable quantities during the week at prices ranging from three to five cents under the quotation for extras. Several cars of California butter in boxes has arrived and has moved at prices anywhere from the quotation on extras to where from the quotation on extras to four and five cents below, depending upon the quality of the butter. At the close yesterday established quotations were as follows: Extras, 69½c; higher scoring than extras, 70 to 70½c; firsts, 64½ to 68½c, and seconds, 60 to 63½c to 631/2c.



All poultry with the exception of All poultry with the exception of turkeys is in good demand. The turkey is essentially a Christmas bird and after the holidays the demand is very light. Prices paid on other kinds of poultry this week in Detroit are: No. 1 springs, 31 to 32c; small springs, 28 to 30c; hens, 32 to 33c; small hens and leghorns, 28 to 30c; roosters, 20 to 21c; geese, 30 to 31c; ducks, 35 to 36c; turkeys, 35 to 36c per lb.

Chicago Livestock Letter

Union Stock Yards, Chicago, Jan. 6.

Live stock trade opened this week as it closed last week, in healthy condition in all departments, this despite material increases in supplies over the light Christmas week marketing. Receipts today were estimated at 25,000 cattle, 44,000 hogs and 21,000 sheep. The cattle run was lighter than has been generally expected in view of the fact that the market closed last week at advances ranging from \$1.50 to \$2 per cwt. over the depressed period just before Christmas. The hog movement has been effectively limited to packers' killing capacity by the car allotment plan explained in these columns last week. Were the bars let down the marketward movement of swine would doubtless again overtax killing facilities. In the live mutton trade the feeling in general that the big runs of the fall and early winter are a thing of the past, as Iowa cornfeds have been drawn on heavily, the movement direct from the range is over and supplies to come are daily getting into stronger hands. fact that the market closed last week ting Into stronger hands.

The fat cattle market is showing the highest January levels in trade history. No strictly prime longfed bullocks are coming but choice, heavy cat-tle have sold as high as \$19.75 during the past week and the bulk of the medium and good short fed steers are now cashing at \$14 to \$17.50, prices that

(Continued on page 18)

what is a more natural combination

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McBain Chronicle, McBain	2.00	1.50
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Sanilac County Republican, Sandusky	2.00	1.50
Sanilac County Times, Peck	2.50	1.75
Sparta Sentinel-Leader Sparta	2.50	2.00
Waldron Recorder, Waldron	2.50	1.60

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SATURDAY, JANUARY 11, 1919

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LATE ISSUES—We are anxious to have this weekly in the hands of every subscriber for Sunday reading, which means it must reach you on before Saturday. Once in awhile late trains or other unavoidable delays make this impossible, but if your copy arrives regularly on Monday or Tuesday, write us and we will do our best to find where the trouble lies.

When the Governor Reads His Message

HE SENATE is in session. The hour is 2 p. m., January 2nd. A smattering of resolutions, petitions and bills are presented. The clerk reads the titles in a monotone. Lieut. Governor Dickinson, presiding, gravely and with business-like dispatch calls for the vote or orders the sundry matters referred to the proper committees.

The door opens, and a delegation from the House is announced, who formally "invites" the Senate to meet in joint convention with the House. The Senate, anticipating invitation," immediately accepts it. The Senate, anticipating the

The scene changes to the representative hall. The advancing senators are announced and the house and visitors rise to their feet and applaud while the senators march in and take their seats.

Another stir at the door and the state officers are announced. The Senate, the House and the visitors all rise to their feet and applaud while the state officers gravely march in and take their seats.

What, more visitors! So it would seem. This time the members of the Supreme Court are at the door. The state officers, the Senate, the House and the visitors rise to their feet and applaud while Michigan's highest judicial body is seated.

But not even the presence of the supreme court seems to satisfy that attitude of expectancy. There is still another commotion at the door. Ah, the Governor and his staff are about to enter. The members of the Supreme Court, the state officers, the Senate, the House and the visitors rise to their feet and vigorously applaud as Mr. Sleeper and his retinue marches down the aisle and take their places on the forum back of the speaker's desk

But why all this ceremony and coming together of the state's legislature, administrative and judiciary heads? Why, don't you know? The Governor is to read his message. 'Tis an occasion for ceremony.

There is prayer, a few choice preliminary words by Lieut.-Gov. Dickinson, moderately perfumed with customary bouquets directed at the Governor, then,—the message!

Fully half of Mr. Sleeper's message consisted of a review of Mr. Sleeper's various official and semi-official acts as a "war governor." The message proper contained no surprises, for the surmises that had been made as to what Mr. Sleeper would or would

not recommend were substantiated almost without exception. Public and press discussions had already paved the way for a favorable reception of practically everything the Governor suggested, so Mr. Sleeper will not lie awake nights worrying how the people and the legislature received his message

We do not understand why Mr. Sleeper passed over the problems of agriculture so lightly. Does he, too, have the opinion that popularly prevails that agriculture has no problems amenable to state legislation? Mr. Sleeper is certainly cognizant of the weakness in the state's banking law, particularly as affect the taking of usurious rates of interest from farmers, for we have time and again pointed them out to him, both personally and editorially. We greatly regret that Mr. Sleeper did not make some mention of the difficulties lying in the way of developing the cut-over lands, principal of which is the lack of capital and credit. Dodge it as you may, the fact remains that the state of Michigan holds within its hands the key to the solution of the problem of idle lands and struggling farmers. This is a proposition that the Governor and the legislature ought to get behind at once. How about it, Mr. Sleeper?

Roosevelt

R OOSEVELT is dead. In the tranquility of sleep his vigorous and tempestuous career came to an end.

The world has lost a great man. Big in heart, big in mind, big in everything he said and did, Theodore Roosevelt swayed the opinion of all classes as few men of either ancient or modern times have been able to sway it. His will was indomitable; his courage like steel; his convictions as fixed as Gibraltar. By the sheer force of his personality he conquered where others failed. He never compromised with his own convictions. Though the world said he was wrong, Roosevelt was the type of man who would prove that he was right and the world was wrong.

Roosevelt's popularity was entirely of his own making. He depended upon no political machines, no secret promises, nothing of the usual tactics of the office-seeking man to curtail favor with the people and those who sway the people. He preached his doctrines, and rested his case upon them.

Michigan was a particular friend of Mr. Roosevelt. It stood by him thru thick and thin; he was a popular idol among factory workers and farm owners alike who remained steadfast and loyal to the day of his death.

Mr. Roosevelt's earthly career is over; but the influence of his deeds and his preachments will live on and on. His mistakes, like the mistakes of all great men, are entirely obliterated by the effulgence of his wonderful attainments and accomplishments, and we bow our heads in reverential respect to his mem-

"Yep, Farmers Can Grow Potatoes for 15 Cents a Bushel."

T IS truly surprising how much the city folks know about the farming business. Go anywhere you please these days, office, shop, store, railway coach or hotel lobby, and you will find the popular topics of conversation to be food and the farmer. I have learned more astonishing things about the farming business thru recent chance conversation with city people than I have from all other sources.

A few days ago I went into a Detroit store which advertised itself as a co-operative store. The clerk, not knowing my occupation, proceeded to enlighten me on the transcendant pleasures and profits of farming. I let him

"This company," he said, "owns 3,000 acres of land, and we sell shares to people. We raise almost every kind of vegetables and we sell these direct to the consumer."

"You see," he added rather confidentially, we can sell much cheaper than the other fellows and still make good profits, because we cut out the middleman. Take potatoes, for instance; a farmer makes lots of money on potatoes at 75 cents a bushel. You know it costs only 15 cents a bushel to grow them."

And so he rambled. After a bit I ventured to say that I couldn't grow potatots for 15 cents a bushel.

"Well, you ought to; you ought to," he spoke with authority, "government figures show it can be done, and if it's costing you any more than that your methods aren't efficient."

I could easily see that that was no place for me. I was plainly out of my element in the presence of that oracular gentleman, so I "beat it." But as I went out of the door I cculdn't help but wonder how many other ignorant fellows like myself had carried away that white-aproned clerk's "confidential" assurance that potatoes can be grown for 15 cents a bushel.

A State Income Tax

A N INCOME TAX to supplement the real and personal property tax is proposed by the State Tax Commission in its annual report to the Governor.

This is a wise suggestion and should receive the favorable attention of the legislature. Men of large incomes do not pay their proportionate share of the taxes, and it has been long so recognized. The federal income tax uncovered much "unseen" wealth that would otherwise have escaped the burdens of war and which should without a doubt continue to pay taxes.

A state income tax would be a great boon to the farmers of the state. Present methods of taxation have always borne heavily upon agriculture. Nearly every year farmers are forced to sell certain crops or live stock under most unfavorable marketing conditions in order to raise money with which to pay their taxes. At the same time people whose incomes were largely from "invisible" investments, such as stocks and bonds have gotten off easy. Moreover, there are thousands of people living in cities who have incomes from \$3,000 to \$5,000 a year and own nothing but the clothes on their backs, who enjoy all the privileges of the organized community without contributing one cent toward its support.

It is high time that those receiving comfortable salaries or incomes from investments pay a part of the expense in maintaining the state government, and we look for the 1919 legislature to enact such laws as will distribute the tax burden more equitably.

The Governor and his political advisers want a law passed that would prevent a man from becoming a candidate for an office on more than one "ticket." Looking at the proposition purely from the standpoint of the people's interests, we don't exactly get the "p'int." If the people want to nominate the same man on two or ten tickets, whose business is it, but the people's? We vote for men now-a-days and not for obsolete "party" planks. Let's hope the legislature of Michigan doesn't add another disgrace to Michigan's political history by enacting any such law to curtail the privileges of democracy.

The politicians are after Mr. Dickinson's "goat," merely because he wants a primary law enacted that will give a poor man a chance to hold office. But the politicians forget that the lieutenant governor is elected by the people. Mr. Dickinson is more popular today with the people of Michigan than ever before, and he may safely laugh at the threats of his enemies.

The Lansing State Journal, in a highly flattering article upon the new president protem of the senate, Sen. Chas. B. Scully, pridefully announces that Mr. Scully was one of the few who boldly took a stand against the Non-Partisan League. We have a feeling that the less publicity Mr. Scully gives to that fact, the better for his political fortunes.

Governor Sleeper is to be commended for his courageous championship of national prohibition. It was undoubtedly partly due to the governor's insistence that so large a vote was cast by the legislature in its favor.



SYM'THY AN' SWIFT

I've been readin' consider'ble lately of the great an' wonderful things that is bein' done by one Swift & Co. of Chicago, -of how this great packin' firm has helped the farmers an' the consumer, an' everybody else, an' done it so cheerfully, an' at so small a margin of profit that it's not worth mentionin' at all, to let 'em tell it; in fact, accordin' to their story their profits are so darned small it almost amounts to a loss, don't you know, an' yet this poor company is diggin' right down into their pockets an' spendin' hundreds of thousands of dollars jest to let folks know they ain't makin' any money to speak of, an' are only doin' a little business jest to keep their help busy durin' the slack time while the war was on, an' by gosh, we don't see how they can afford to throw their money away like that when they're almost runnin' behind anyway

Now I know a feller who used to work for a newspaper once, an' he says it costs like the dickens to buy space in some of the large daily papers, an' as Swift & Co. is buyin' space in purty dum nigh all of 'em it must amount to quite a tidy sum-taken all together.

Now, I admire a writer of sad things, 'cause I write a good deal of sad stuff myself, an' I know how it pulls onto the heart-strings to do it, an' so I feel like weepin' with Swift & Co: every time I read the articles written by their great writer equalled only by Lydia Pinkham, an' Teddy Roosevelt. An' I often wonder why they spend their hard-earned money so foolishly.

It can't be possible that Swift & Co. is prevaricatin' can it? 'Course they wouldn't do that? They can't be afraid the government will get after 'em 'cause the government has never harmed 'em any yet tho it's promised ever since I can remember to get after the meat packers an' resulate some of 'em but of course, Swift & Co. wasn't meant 'cause they're doin' business such a small margin of profit nobody could find fault with them. Why, they admit that themselves; an' so I can't understand why they keep spendin' their good money tryin' to make folks see that they are only a benevolent institution, an 'jest doin' business for the fun of it, jest 'cause they like to see blood runnin' and hair flyin', so to speak.

Now, sometimes after readin' one of their wonderful articles, the thought jest natcherly comes to me that maybe they're a tryin' to pull the wool over somebody's eyes, an' that mebbe they are makin' a little somethin' after all-maybe a good deal more than they ought to make, an' that they have all that twaddle printed so the consumer an' the producer won't howl quite so loud when they do find out that Swift & Co. have made millions of dollars an' that both the producer an' consumer are a payin' of the bills for advertisin' an' for a lot of other things as well.

Swift & Co. have but little to fear from the government as long as they can keep the peepul quiet, for who has ever known of any rich an' powerful corporation sufferin' any great hardship at the hands of the government? To be sure the Standard Oil Company was once fined the tidy sum of twenty-nine million dollars or so, may be a few cents over that; but did they ever pay it? Not by a dumsite, altho they did use it for an excuse to boost the price of oil and gasoline a few cents, but now they don't wait for any such proceedin', they boost 'er up without any excuse whatever, an', b'gosh the dear peepul have got so used to it they never make a whimper any more, jest pay the price an' say nothin'.

An' so, it kinder looks to me that if Swift & Co. was to do business on the small margin of

profit they brag about in their fairy tales, written by a paid writer, an' printed an' charged for at advertisin' rates, they wouldn't have to tell of it. 'Cause the peepul would see the difference in the price of meats an' would not complain. Either Swift & Co. is makin' too much profit or the retailer is an' the farmer is the loser anyway .-

From Presque Isle County Rancher

While I am no longer engaged in farm husbandry, nevertheless I feel, as a liberal educa-tion, I can ill afford to be without a magazine as unerringly devoted to the welfare of the industry directly connected with the soil, as the M. B. F..
The farmers of Presque Isle county are grad-

ually awakening to the importance of team work, co-operation, so profitably adopted by manufact-urers and middlemen—and even the boot-blacks are organizing.

By and by most farmers will shed their prejudices and jealousies, which is only another name for ignorance—and come to a realization of the immense power of co-operation; and then farming will be worth while, and not until then. I am enclosing check for \$1 for year's subscription to include all December numbers.—John G. Krauth, Millersburg, Michigan.

Opposes State Constabulary Expense

Is it not about time we began to ask ourselves where we are at and what this all means? Taxes going up yearly by leaps and bounds, and now a move on foot to create a permanently Constabu-lary which consists of state mounted police with headquarters at Lansing, for the benefit of who, God only knows, unless it might be for the careful protection of the Capital City of Lansing. If so, let them pay it.

It is claimed the world is getting better and I think it is. Our county officers are all crying

How M. B. F. Serves

An up-state elevator had been farmers \$2.00 for No. 2 red wheat. paying A subscriber thought it ought to pay more; we knew it. We asked the Grain Corporation to intercede. Monday we received the following letter:

UNITED STATES FOOD ADMINISTRATION Food Administration Grain Corporation Philadelphia, Dec. 28, 1918 MICHIGAN BUSINESS FARMING

Mount Clemens, Michigan. Gentlemen: Referring to your favor of 19th. We are writing the Elevator stating they should pay \$2.08 for cleaned No. 2 red wheat bought from the farmers.

Yours truly,
Food Administration Grain Corporation, H. D. Irwin, 2d Vice President. By F. Graff.

because they cannot make a living without being put on a salary basis, where heretofore they worked on mileage, percentage, etc.

I do not know the cost of maintaining this state constabulary, but I do know it means a bill of expense for the tax-payers of Michigan.

They tell me they have fallen in line in other states and we should do the same. If other states vote a big tax on themselves is it any reason we

Now Gentlemen, if you are not in favor of a State Constabulary, get busy and get up petitions, send same to your representatives and senators and tell them where you stand and commence

cutting corners at once.

I have no axe to grind. My interests are all with the tax-payers of Michigan now and all of the time.-Ino. J. Bale.

One thousand Americans working in two abandoned Scotch distilleries, made 60,000 mines, which were laid in the North Sea between Orkney Islands and Norwegian coast.

apanese investments in securities of allies were \$597,500,000 at end of 1917. Her exports in 1917 were \$901,500,000, increase of \$237,760000 and imports \$517,900,000, increase of \$139,000,000.



The young man slipped into the jeweler's shop with a furtive air. He handed the jeweler a ring with the stammered statement that he wished it marked "with some names."

"What names do you wish?" inquired the jeweler in a sympathetic tone.

"From Henry to Clara," the young man blushingly whispered.

The jeweler looked from the ring to the young man and said, in a fatherly manner, "Take my advice, young man, and have it engraved simply 'From Henry.'"

WHAT HAPPENED TO THE GOVERNOR?

The Governor of a western state determined not to be interrupted by so many callers, instructed his negro doorman to say to all callers that "the Governor is not in."

"But if they say they have an appointment with you, Governor?" asked the doorman.

"Just say 'They all say that,' " ordered the Gov-

All went well until the next day, when a lady called, and when she was told that the Governor was not in she replied:

"I know better than that. You tell the Governor

his wife is here to take him to the theatre."
"Oh," said the doorman, "they all say that."

SUPERFLUOUS

Upon the recent death in a western town of a politician, who at one time served his country in a very high legislative place, a number of newspaper men were collaborating on an obituary no-

"What shall we say of the former Senator?" asked one.

"Oh, just put down that he was always faithful

to his trust."
"And," queried a third, "shall we mention the name of the trust?"

THIS IS MY DUTY

To use what gifts I have as best I may; To help some weaker brother where I can To be as blameless at the close of day As when the duties of the day began; To do without complaint what must be done; To grant my rival all that may be just; To win through kindness all that may be won, To fight with knightly valor when I must.

FAITH AND WORDS

One Monday morning two little girls, aged seven and nine, were on their way to school. Fearing they would be tardy, the seven-year-old said to the nine-year-old: "Let's kneel down and pray that we won't be late."

The 9-year-old said to the 7-year-old: "Let's keep on hiking and pray as we hike."

AND THEN NO ONE SPOKE

"Pa," said little Willie, "what's an echo?" "An echo, my son," answered pa, casting a side glance at little Willie's ma, "is the only thing on earth that can cheat woman out of the last word."

"Another definition of an echo, Willie," observed

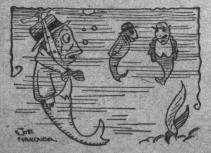
ma, "is a man who goes to old patent medicine almanacs for his alleged wit."

VERY STRANGE

"I'm very sorry, mum, I 'aven't been able to paper your two top bedrooms," said the decorator when the lady of the house returned from her summer vacation. "They took away my last man a week ago for the army. Seems to me they think more of this war than they do of paper 'anging.

Little Harold, having climbed to the pinnacle of the roof of a very steep shed, lost his footing and began to slide with terrifying swiftness toward that point where the roof swept gracefully off into space.

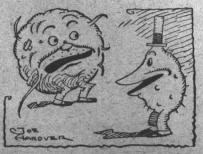
"O Lord, save me!" he prayed. "O, Lord, save met O, Lord Never mind. I've caught on a nail."



TO BE SURE

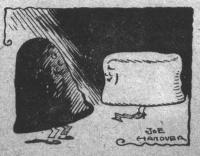
"Who's that sickly looking per-

"Why that's Mr. Weakfish to be



TOO MUCH FOR HIM Germ-What's wrong

2nd Germ-Oh heavens; ohe of those Infernal Cooties has gotten on



WELL SUITED

Mr. Chocolate Drop-I. am very partial to blondes.

Miss Marshmallow-And I Just adore dark men.



LUCKY

Mr. Mouse-Yes, Indeed I am lucky-we've moved right next door to a cheese factory.



We Need More Rural Clubs

O YOU know that Michigan is one of the leading states in the number of its rural women's clubs? Clubs are of inestimable value to communities. They promote community interest, lend variety to the oftimes monotony of rural life, and give women of the country an opportunity to study and discuss the events of the great outside world. I would like to see more clubs established in Michigan rural communities, and would be pleased to assist any of my readers in such movements. The opportunities of such clubs are many, and below is given an account of what clubs have accomplished in other sections:

Through baby-welfare conferences and contests arranged by clubs, mothers study the development of their children and have the opportunity of securing instruction on health subjects from the competent physicians whose services for this purpose can be secured without expense. The civic committees of the Montgomery County Federation in Maryland arranged for such welfare conference at the county fair. Twenty-five children were examined, of whom many were found to be subnormal, the physician reporting malnutrition as one of the main causes of the trouble. Mothers could remedy this to some extent by planning a better balanced diet for their children. Several national organizations of women are encouraging the celebration of baby week, which is already observed yearly by hundreds of farm women's clubs. A club of country women living near Renwick, Iowa, celebrated baby week by cooperating with two other local women's clubs in holding a baby contest in Renwick. The State Agricultural College, through its extension service, detailed a physician to make a mental and physical examination, and a specialist to speak on child welfare, and local physicians volunteered their assistance. The rural women were notified by telephone, notices were published in the local paper, and prizes of five-dollar savings deposits were offered for the boy and girl between the ages of six months and three years found to be in the best physical condition. To defray incidental expenses each member of the club voluntarily contributed 30 cents. The prizes, equipment, and rooms for examination, as well as the services of doctors and nurses, were donated. Such contests are promoted by a single club or several co-operating, but are most successful when open to all mothers and children in the township or county, regardless of club affiliation.

The study of food at club meetings raises the standard of family health and tends to remove physical defects caused by malnutrition. The woman's club is often the only channel open to the married woman through which to continue the study of such subjects. The Troy Culture Club, of Eagle Grove, Iowa, was organized for this purpose in 1910. Meetings were held every other week in the farm homes. The committee for the day prepared the food and looked up scientific facts to be discussed. Various methods of preparing different egetables were shown in seas on. The leavening value of beaten eggs in omelets and in cake was studied in comparison with yeast and baking powder. Types of food constituting a balanced ration for the family were studied. These clubs form at present the most direct channel through which to promote the conservation of wheat and the use of war breads and meat substitutes.

More varied diet in many farm homes has been made possible through canning clubs, which are to be found in every state of the union and which are especially successful in the south. Vegetables of all kinds, fruits, and even meats, are canned for home use.

The promotion of penny savings by women's organizations has done much to encourage thrift in farm homes. Labor-saving devices have been installed in many homes and new ideas of household efficiency developed through club work.

Clubs organized for purely social purposes often become instrumental in interesting the members in home economics and community work.

Caring for Baby in Winter

AY I put in a word for the baby? Now that the cold winter is at hand, thought perhaps a suggestion on caring for the baby might help some mother who has her hands full. Highchairs and buggies are very unsafe to leave an active baby in them, a baby old enough to be on the floor, yet who cannot be because said floor is

Communications for this page should be addressed to Penelope, Farm Home Department, Mt. Clemens, Mich.

too cold or draughty; besides they will be backward in walking if kept from exercising during the long winter months.

This is what I have used for my last three babies: a box 16 inches deep, 16 to 18 inches wide and 26 to 28 inches long. Smooth of all slivers along the top; take two pieces of 2x4 as long as the box is wide and 4 hallbearing bed casters or trunk casters; fit casters on the 2x4's, nailing these on bottom of box at each end. This makes it easy to take baby from room to room.

Fold something easily washed and put in the bottom, but if baby is just beginning to walk, the cloth will bother and just the plain box is better. Put toys in the box or on a chair by the box. When in the box, baby is off the floor, can stand or sit or even walk a little, has a change and is free and happy; can be near the fire and won't get burned. So now the mother can go to work, may go outdoors and know that baby will be safe.

Of course, one can make the box as elaborate as one desires, by painting first, pasting bright pictures around the sides, then varnishing; also a tray may be fastened on one side for toys. Mine

The Value of a Smile

THE thing that goes the farthest toward making life worth while.
That costs the least and does the most, is just a pleasant smile.
The smile that bubbles from the heart that

loves its fellowmer Will drive away the couds of gloom and

coax the sun again.

It's full of worth, and goodness, too, with human kindness blent—

It's worth a million dollars, and it doesn't cost a cent.

There is no room for sadness where we see a cheery smile; It always has the same good look—it's never

out of style-It nerves us on to try again when failure

makes us blue; The dimples of encouragement are good for

me and you. It pays a higher interest, for it is merely

lent-It's worth a million dollars and it doesn't

A smile comes easily enough, a twinkle in

the eye Is natural—and does more good than any long-drawn sigh; touches- on the heartstrings till they quiver blithe and long.

And always leaves an echo that is very like a song-

So smile away! Folks understand what by a smile is meant; It's worth a million dollars and it doesn't

cost a cent.

along without it as my baby is not walking but trying very hard. I put her in the box and I know she is safe while I go and do chores or any-

is just plain but I would not know how to get

thing necessary while the good man is away. The only precaution necessary is to see that there is nothing put into the box by other children that baby can climb onto and thus fall out.

Puzzles the Male Mind

EMBERS of the English house of commons stand self-accused, and women are beginning to understand why there was so much opposition on the question of their being allowed to sit in parliament.

"The house of Commons is not a fit and proper Hedworth Meux, making a speech in regard to the proposal. "I propose this resolution," he continued, "not because I do not love the female sex, but because I adore women. But is it a proper thing for women to be sitting here until 11 o'clock at night? When we sit until 2 and 3 in the morning the historic cry of 'Who goes home?' will become 'Who will take me home?' "

Many amusing queries are being put to perplexed politicians. The concentrated wisdom of a thousand years had made rules, and the rules have been for men only. One thing that becomes a problem is the eliquette of the hat. A rule in this connection is that if a member wishes to address

the house he must remain "uncovered." members now have visions of the new member standing up to remove her latest Paris creation. Of necessity she must have a mirror to arrange her dishevelled locks.

These, and many other similar problems are vexing political etiquette. What is going to happen in parliament if all the formalities and rules are to be swept away in a tempestuous whirl of petticoats? The honorable male members don't know-but the women declare that the time thus saved will be spent in making common-sense laws for the good of mankind.—Grain Growers' Guide.



Child's Knitted Cap - one to Two Years THIS CAP is made of light weight wool and knitted after the fashion of the tops of men's stockings using the same needles. It is very simple. Cast on 96 stitches; 32 stitches on each of three needles. Knit two and purl two, two inches. Knit plain seven inches; change to steel needles No. 12, knit one and one-half inches. Cut off the wool leaving a length of six or more inches. With a sewing needle pull the wool through all the stitches. Draw the top together tightly and fasten. For the pom-pom wind the wool around a three inch card 80 times. Slip the wool off and tie tightly in the center. Shear threads evenly until a nice, round pom-pom is formed. Sew to top of cap.—Edith M. Owen.

Some Good Recipes

POTATO DOUGHNUTS

Two cups hot mashed potatoes, 1 cup milk, 5 level teaspoons baking powder, flour, 2 cups sugar, 2 tablespoons butter, 1 teaspoon vanilla.

Mix as usual, add flour enough to make a soft dough. Roll out one-half inch thick, fry in hot fat. The potatoes keep the doughnuts soft. These keep moist longer than doughnuts made with eggs.

POTATO CROQUETTES

One quart mashed potatoes, 1 teaspoon sait, pepper buffer size of an egg, 1 egg, 1 cup milk or cream.

Mix, mold into small balls and fry in very hot fr

APPLE FOAM

This makes a very delicious dessert after a hearty dinner.

Tart apples, sugar, egg whites, lemon juice, whipped

cream.

Core and bake, or stew fine flavored tart apples, rub through a sieve. To each half cup of apple pulp allow one egg white and sugar to taste. A little lemon juice improves the flavor although this is not necessary. Chill the mixture and serve in sherbert glasses with a little whipped cream on top. If you have any canned cherries cut one in petals, tulip fashion, for the top of each glass. Serve very cold.

CHOCOLATE RAISIN PUDDING

1½ cups finely rolled cracker crumbs, 1-3 cup molasses, 1 egg, 2 squares chocolate, 2½ cups milk, ¼ teaspoon salt, 1 cup raisins, 1 teaspoon vanilla. Soak the cracker crumbs in the milk, then add the molasses, the egg, raisins, melted chocolate and vanilla. Turn into a well-buttered pudding mold and steam four hours. Serve hot with liquid or whipped cream sauce

STEWED BEEF EN CASSEROLE

If one has no proper casserole take a five-pound butter crock and cover it. It makes a very good casserole indeed. The only difficulty is the contents must be removed to another dish before serving.

Two lbs. stewing beef, 2 onions, 4 slices of turnip, 1 pint of stock, or 1 pint of water and one oxo cube, salt and pepper, a little suet, 3 carrots, 1 teaspoon vinegar.

salt and pepper, a little suct, a carros, reasponding egar.

Out the steak in small pieces, sprinkle with pepper and salt. Fry the suct until the fat is extracted, then put in the pieces of meat, and fry until browned. When brown, add hot water or stock, and thicken it with a little flour, add the vegetables out in cubes, the vinegar, season with pepper and salt, put in casserole, cover closely and cook in a very slow oven for two and one-half hours.

2569—Ladies House Dress, Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a 38-inch size, 6½ yards of 36-inch material. The dress measures about 2½ yards at the foot. Price 10 cents. With the approaching long winter months during which every housewife plans to do her spring sewing. The fashfon plates are all showing styles of the practical, necessary articles of clothing. This reversible house dress will appeal to many, being loose and comfortable for working, yet having stylish, graceful lines which make it suitable for an afternoon spring dress. The double breasted fronts are made the same and may be reversed by slitting the belt thru the opposite slit in the panel. The deep roll collar is always an improvement in the appearance of the ordinary style of house dresses.

2711—A practical Apron. Just the simple bungalow style, but a pattern no home sewer should be without. They are the most economical from stand-point of material required, and also time and labor in making and are as suitable for sister of eight or ten as for mother, aunt and grandmother. This style serves both as apron and as a morning house dress in one. 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 3½ yards of 36 inch material. Price 10 cents.

2486—Boy's Suit. Cut in 4 sizes: 3, 4, 5 and 6 years. Size 4 requires 2½ yard of 40-inch material. Price 10 cents. For brothers more dressy suit shows a full blouse, smocked at each shoulder, buttoning down the front, with straight line, well shaped, knee trousers.

2732—Girls Dress, Cut in 5 sizes: 2,

cents. With plain fitted yoke, and kilted skirt.

2724-2734—Ladies' Costume. Waist 2724 cut in 7 sizes; 34, 36, 38, 40, 42, 44 and 46 buches but measure. Skirt 2734 cut in 7 sizes; 22, 24, 26, 28, 36, 32 and 34 inches waist measure. To make the dress for a medium size will require 6% yards of 36 inch material for the entire costume. The skirt measures 1½ yards at the foot. TWO seperate patterns 10 cents FOR EACH pattern. A most attractive model for the one-piece frock. The plain shirt waist with fancy shaped collar and sleeves finished with a deep cuff is shown, gathered to the normal waist line and attached to the straight gathered skirt. The skirt is cut with panels on the sides in tunic length and showing the deep hip pocket. A crush sirelle of velvet finishes the dress.

No. 2722.—Girls' Dress. Cut in sizes 6, 8, 10, 12 and 14 years. Size 10 will require 3½ yards of 44 inch material. Military lines are the popular effects of today and are most becoming to the young miss of 12 or 14 years. A plain serge made in the simple, girlish style and trimmed with a military braid and buttons makes a frock suitable for any occasion. High or low neck may be used; the little lady will be charming in a wool chalais or figured voile. The yoke is especially adapted to wear for winter, being high in the neck and worn with long sleeves. Note the collarless neck so popular in women's blouses.

No. 2729.—Ladles' Costume. Cut in sizes 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 44 inch material. Width of skirt at lower edge is about 1½ yard. The long straight lines of waist and skirt are particularly adapted to the stout figure and especially the blouse, showing the deep peplum. The blouse is fitted smoothly across the hust, a slight fullness gathered in at each side front, giving a military effect, which is also emphasized by the

toward the hem, gathered slightly all around to the normal waistline.

No. 2719.—Girls' Dress. Cut in four sizes, 4, 6, 8 and 10 years. Size 8 requires 334 yards of 27 inch material. Could anything be more attractive than this little Quaker model of heavy wool tweed in blue, grey or tan, with white broadcloth round collars and cuffs? The front is a double, box plait, stitched to the line of the empire skirt, and from there hangs loose, adding fullness to the skirt. The dress buttons in the back and the yoke is semi-fitted.

SOME SWEETS FROM THE ORCHARD

Apples Cooked in Cider.—For a dish that needs neither sugar nor spice, try apples or pears cooked until clear in boiled sweet cider. Serve hot in large portions with meat.

Apples and Raisins.—Simmer raisins in the water in which they were soaked overnight; add quartered apples and simmer together until done.

Apples and Bananas.—Quarter fruit and place in a baking pan; dot each layer with butter and chopped nuts; bake in a quick oven basting frequently with a sauce made of a half-cup of

water, a tablespoon of white syrup and a little lemon juice.

__Baked Pears.—On baking days, try baked pears. Place pears in deep baking dish; cover closely and bake slowly until pears are a deep reu.

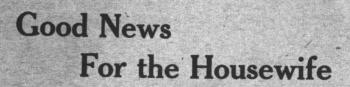
Steamed Pears.—Steam pears until tender with a little water and a table.

tender with a little water and a table-spoon of white syrup.

Candied Yams.—Slice boiled potatoes into a baking pan; sprinkle each layer with sugar, cinnamon and bits of butter; add a few cloves and a half-cup of hot water; brown in the oven. Sugar may be omitted and a table spoon of white syrup added to the hot water. This rich dish usually accompanies the Sunday chicken in the South, In the Tropics plaintains or bananas, cooked in somewhat the same style, are serve'l with chicken. Sauash in Ramekins.—For this dish

Squash in Ramekins.—For this dish use pumpkin, hubbard squash or crookneck squash. Boil, drain and mash smooth; add butter, lemon juice, cinnamon, and a little syrup; bake in ramekins or baking pan. Pass rame-kins hot from the oven after the plates have been served.

Last season 1,000,000 tons of soy beans were imported from Manchuria and Japan and several months were consumed in moving the consignment. The shortage of the domestic crop and the high market prices were responsible for the big import. Importers are somewhat skeptical about market futures for soy oriental beans. American crops have improved. The probable size of imports from Manchuria will he difficult to forecast. It is not probable that the output through Puget Sound will be as large as last



Wartime Flour is a relic of the past!

Delicious, Nutritious, Wholesome White Bread is again on the menu.

How good it tastes!

And how easy it is to make good bread from good flour compared with the effort required to produce just ordinary bread from War Flour.

Of course, we were all perfectly willing to use war flour as a wartime necessity. It helped our boys over there gain the Glorious Victory.

But everybody is delighted to have it all over and mighty proud of the amazing record our own precious America has made. It is also good news to the particular housewife to know she may again obtain the good old fashioned, high quality

"The Flour the best Cooks Use"

for no better flour has ever been made or sold than LILY WHITE.

No flour has ever given the housewife better satisfaction for either bread or pastry baking than LILY WHITE.

There have been mighty few flours that even equalled it.

We are making LILY WHITE in the same old way, exercising just as much care in the selection of grain, being just as particular to see that exactly the right blend of the different varieties of wheat is secured to produce the best flour it is possible to make.

Your dealer will cheerfully refund the purchase price if you do not like LILY WHITE FLOUR as well OR BETTER than any flour you have ever used for either bread or pastry baking; in other words, if LILY WHITE does not completely satisfy you for every requirement of home

Be certain to specify you do not want war flour, but the real old ume high quality LILY WHITE FLOUR now on sale.

VALLEY CITY MILLING COMPANY

Grand Rapids, Mich.



Pattern No. Size

Pattern No. Size Be sure to give number and size. Send orders for patterns to Farm Home De-Mt. Clemens, Mich. Be sure to sign your



An Hour With Our Boys and Girls

Address all Letters to Aunt Penelope, care Michigan Business Farming, Mt. Clemens, Mich.

DID YOU GET YOUR THRIFT STAMPS?

EAR CHILDREN: To every boy and girl who sent in a Christmas story I have mailed a Thrift Stamp certificate. I want to be sure every one received his or her stamp and if you did not, you should write at once and tell me so that I may find the reason.

I guess some of my boys and girls have forgotten that Christmas is over, for I am still receiving Christmas stories. Of course, we can't publish Christmas stories after Christmas, so we'll have to hold them until another Christmas. I want you to write me stories, though, upon any subject you please, and we will be glad to print them.

In this issue of the paper we are continuing the story of the Giants of Lilliputania. There are only two more chapters to this interesting tale, which explain what finally happened to the Chief of Police and the others who drank of the milk containing the magic food. We are still receiving orders from children for the toy city of Lilliputania. Over three hundred of these attractive toys have been given away and if any of you boys and girls want to get one, you will have to hurry with your subscriptions for we have only a few left.

Next week we are going to add an interesting department for the older boys, those who can handle a saw and hammer. It will tell how boys can make useful things for father and

mother, and will give drawings of the plans. I am sure the older boys will appreciate this new feature, and if you do I want you to write and

With love, from AUNT PENFLOPE.

The Giants of Lilliputania

THE CHIEFS TO THE RESCUE

CHIEF PUFF of the Fire Department and Police Chief Dulin, who had responded to the 4-11 alarm with the entire department, dashed up Main Street in Chief Puff's auto and caught a glimpse of "Bell Boy" as they reached Capital Avenue about four blocks from Main Street bridge and stopped. Both men were brave and always quick to act. But here was something so unusual to Lilliputania that it was frightful—a great big beast running wild through great big beast running wird through their streets, crashing into houses and knocking off roofs. What should they do? What could be done? No one recognized this terrifying creature as "Bell Boy," the timid little pussy that lived at the General's house.

Chief Puff was the first to recover is senses. "Chief Dulin," said he, Circus due to arrive in town?"

"I think so," replied Chief Dulin.

"Well, jump into my auto and drive tive the wind down to the railroad station. Come to think of K, I remember hearing the whistle of the engine as I left the fire house. We must get Snarkenbeck's animal trainer," continued Chief Puff. "He has caught elephants and lots of wild animals, and he will tell us what to do."

"Fine," shouted Chief Dulin. "I'm glad you thought of him; he is just the man to help us."

It was indeed fortunate for Lilliputania that Mr. Big Hed had planned to reach Capital City that night. The engine of "Snarbenbeck's Z-H-C Special" was just puffing over the viaduct as the chief's automobile dashed up the incline on Railroad Row leading to the station. Henry A. Bull, the butcher's son, and Mary Dough, the baker's daughter, who were waiting with Mr. Bull to see the giraffes, elephants, camels and horses unloaded, were almost run over in the excitement.

Chief Dulin jumped out of the auto and signaled the engineer to stop. The engineer quickly threw on the brakes and almost jarred Mr. Big Hed out of his bunk. Before the train came to a standstill, the Chief rushed aboard the train, shouting, "Quick, your animal trainer; where is he?"

"What da matter Chief?" asked Mr.

"What da matter, Chief?" asked Mr. Spaget, the organ grinder, who always followed the circus with Joco, his little monkey.

"Out of the way, Mr. Spaget; we have no time for monkey trainers," rudely yelled Chief Dulin excitedly. "Where is your elephant man?"

"Here I am," answered Mr. Big Hed, who was now wide awake ready to see that the entire circus was properly

"Please come with me right away," begged Chief Dulin; "there is no time

Chief Dulin rushed Mr. Big Hed out to Chief Puff's auto and away they raced up Main Street until the fright-ened Lilliputanians shouted, "Don't go any farther; the big animal is coming down State Street." On the way up the Chief had hurriedly explained to Mr. Big Hed what the trouble was and how helpless they were in their inexperience and fear.

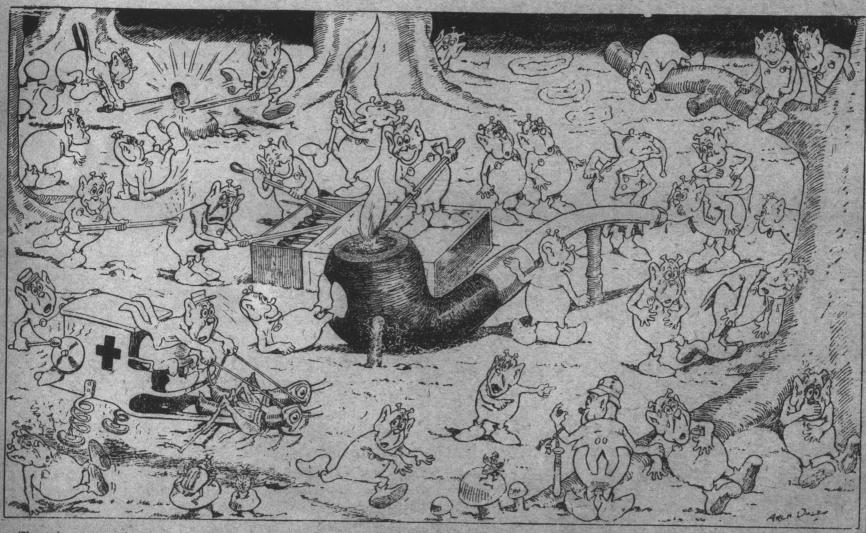
Mr. Big Hed was as cool as you would naturally expect a man with such a large head as his to be. As soon as he caught sight of "Bell Boy" he actually shouted with joy. It was the only animal of its kind that he had ever seen. He had often wished to capture a tiger for his show, and here was his chance, for this certainly looked like an immense tiger.

"Chief Dulin," said he, "follow my orders and everything will be all right. Command every man, woman and child to quickly collect all of the sticky fly paper, rope, twine and glue that they can lay their hands on and bring it to the City Hall Square as fast as possible." Next he directed that the fire department report to the fire station

"Now, Chief Puff, let you and I run to Dave Dough's bakery." Down Main Street, over the bridge, under the viaduct clang-clanged the Chief's auto. In a few minutes they were at Dave's-bakery and found that worthy man with his hands full of dough, mak ing bread for his next day's custom-

"Tell him to roll out every barrel of flour he has," ordered Mr. Big Hed, "and send a hundred men down to the warehouse for more, for we will need a good many barrels."
"Dave," yelled Chief Puff, "if we

want to save Lilliputania there's no time to be lost-roll every barrel of flour you've got down to City Hall Square as quickly as you can." Square as quickly as you can."
"Friends," he called to the crowds who were gathered around with blanched faces, "pitch in and help Dave."



There is great excitement among the Doo Dads. The artist, who, to tell the truth is a hard smoker, lost his pipe and match box on one of his trips to the Wonderland of Doc. When he went back to look for them this is what he found. The Doo Dads had discovered them first and their curiosity to find out what there was in the pipe that gave the artist such enjoyment prompted them to

The Doo Dads Firtd the Artist's Pipe and Matches

They propped it up and with great difficulty got the matches alight. Then they took turns at smoking with the same result as happens to bad little boys when they steal a smoke. See those poor little fellows around the tree. They

wish they had never seen the old pipe. But here comes the Red Cross Ambulance to take them to the hospital, though the policeman, who is feeling one little fellow's pulse is afraid it will not get him there soon enough. That proud little ras-

cal who is blowing the rings will not be feeling so fine in a few minutes. The Doo Dads who have struck a match with a mallet are scared out of their wits. They think they must have gotten hold of a German bomb. The Doo Dads should pass a resolution that no tobacco will ever be sold in the Wonderland of The Chief and Mr. Big Hed then rushed to the City Hall, where Mayor Frickleschnitz was trying to pacify the populace. As they hove in sight the people shouted with joy. "Here's the rope!" "Here's the fly paper!"—everyone had something. The lookouts on top of the Woman's Temple had telephoned the Mayor that the big beast was coming down State Street, headed for the river. Mr. Big Hed immediately ordered all those having sticky fly paper to lay the same sticky side up, along the wharves and streets on the south side water front. Those with ropes and twine were to hold themselves in readiness to act instantly at his command and be prepared to sacrifice their lives for Lilliputania, if necessary. Meanwhile Fire Chief Puff, et Mr. Big Hed's disease. necessary. Meanwhile Fire Chief Puff, at Mr. Big Hed's direction, had ordered all available hose coupled and every fire engine going full blast. The heads of Dave Dough's flour barrels were hastily knocked out and the flour dumped into the big vacant lot on Front Street. When this was piled up Chief Puff ordered Company No. 37 to play the hose on the mountain of flour until it was a mass of soft dough. You until it was a mass of soft dough. You have probably noticed that cats do not like water or anything wet and sticky and you have no doubt wondered why, but after reading "Bell Boy's experience you will understand. Mr. Big Hed knew this and that is why he felt sure he could capture "Bell Boy."

(To be continued)

Dear Aunt Penelope:—I hope you are well. I certainly am, tho I am liable to come down with the "fiu" any day as our neighborhood is just peppered with it, but it is not so bad as it was. I have written a letter before but did not get it sent. I am ten years old and live on a 50-acre farm. I have three brothers who are very noisy; I can't hardly stand them, particularly one of them whose name is Myron, but my pet is Robert, who is 3 years old. Another brother 13 years old who is very rough and noisy, but all boys are, I suppose. We have about 40 hens. I have 8 roosters which I am going to sell for Christmas money. We have 5 cows, 3 horses, 6 pigs. I can drive our driving horse as well as Walter can. I wish I could send a subscription for the M. B. F. so I could get the Lilliputania city, but papa sent for it two years last year.—Beulah Kipp, St. Louis, Michigan.

Dear Aunt Penelope:—I have been reading the letters in the M. B. F. and enjoy them very much. I am a girl 12 years old and in the seventh grade. I live on an 80-acre farm, which has some woods, and I enjoy roaming thru them. I leve to read about the Doo Dads and would like them every month; they are wonderful little men. My pets are cats, a little calf and some rabbits. My cat's name is Tamey, and the little calf's name is Lady Pandora. We have two rabbits who have the names of Nellie and Jimmie. But we have 12 rabbits and ten of them have no names.—Emily Kase, Scottville, Michigan.

Dear Aunt Penelope:—This is the first time I have written to you. My father takes the M. B. F. and I love to read the letters. I have two brothers and their names are Louis and Charles. For pets I have a dog, his name is Cute, and he weighs 12 pounds. Louis has a dog, too, and his name is Smart, and he weighs 10½ pounds, and Charles has a cat for a pet and his name is Chum, and he weighs 11 pounds. We live on a farm of 40 acres. We have two horses and their names are Doll and Bob, and two cows and one calf, their names are Cherry and Rose, and the calf's name is Mabel; and one hog and nine pigs. I am 13 years old and in the seventh grade. I will close for this time.—Lorena Bell Pulver, Williamsburg, Michigan.

Dear Aunt Penelope:—My father takes the M. B. F. and I like to read the letters from other boys and girls. I have written one or two letters before but have not sent them out. I have two sisters and one brother. My sisters names are Eulance and Electa; Eulance is 13 years old and Electa is 11 weeks old. My brother's name is Rex Burr, he is 4 years old. I am 11 years old but will be 12 the 25th of December. Eulance and I are in the seventh grade. We go to the Hardscrabble school. My teacher's name is Mabel Bowlus. I like her very well. We live on a farm of 80 acres. Papa works grandfather's farm. We have three herses, their names are Frank, Rock and Lady. Four cows, their names are Blackie, Rosa, Mabel and Nell; four calves, Fanny, Topsy, Beauty and Johnny. For pets we have two cats, Billie and Peter and a bantum, his name is Red Wing. We have some War Saving Stamps. Rex has one and so has Eulance and I. Mamma wants to get Electa one but has not.—Esther Livingston, one but has not.—Esther Shiloh, Michigan. Livingston,

Dear Aunt Penelope:—I wrote once before and thought I would write again. You wanted us boys and girls to tell you what we had to be thankful for. I am thankful that I have a father and mother to take care of me. We are going to have a nice Thanksgiving dinner. I wish one of the soldier boys could be theretoo. I liked that story of the two raindrops. I go to school every day. I like to go to school. We have a nice war map on our blackboard. My teacher's name is Miss Dewey. Next time I am going to tell a story. My papa gave me a dollar last night and I am going to buy Thrift Stamps with it. We are going to have a Thanksgiving program. I did not go out on Hallowe'en night because it was too wet.—Nina Drost, Charlevoix, Michigan.

Stars, and 3 horses, Billy, Barney and May.—Donna Morton, Dowagiac, Mich.

Dear Aunt Penelope—I have been reading the story in the paper and like to read them. I live in Kalamazoo, but I am staying out to my grandma's because my mother is sick in the hospital. My father is a traveling man so I can not stay home with him. I am having a good time out here. I helped grandpa carry in the wood last night. My uncellives just across the road and he has six horses and nine cows, some pigs and 3 cats. I like to play with the cats and they like to play, too. I am in the 4th grade. My teacher's name is Miss Brown and I like her very much. The name of the school I go to is Vine Street school. Last year in school we knit a blanket for the soldiers, and I knit 13 squares for it. I knit a sweater for the French babies. My uncle is building a chicken coop, but it rained this afternoon so he could not work. I belong to the Red Cross. My father has a Fourth Liberty bond. I have 8 War Savings Stamps and five Thrift Stamps. I am sure glad that the war is over and I think everybody is besides me. I told you that my mother was in the hospital. She had the grip and we couldn't find anyone to take care of her so she went to the hospital. She was so weak when she went that she couldn't sit up. We got a letter from Daddy and he said she sat up long enough to have her hair combed and she thought she could write me a card. Grandma washed this morning and now she is ironing. Grandpa went to town to take a calf to sell and some chickens, too. I am crocheting a wash rag for my doll; I am just learning how.—Maxine Stowell, 8 years old. Kalamazoo, Michigan.

Dear Aunt Penelope:—I have never written before so I thought I would write. I live on a farm of 140 acres. We have six horses, their names are Ned, Queen, old Fred, Snip, Beauty and Elaine. We have two mules, Jan and Net; four colts, Cinderela, Bobby, Flora and June. We have seven cows, all registered but two; sixteen hogs and fifteen pigs. I hope that none of my girl and boy friends have the "flu," I haven't. I am eleven years old and in the sixth grade. My teacher's name is Miss Marian Barnes. I like her very well. I have three War Savings stamps that I earned myself. I will draw a picture of a Christmas wreath. I guess this is all.—Doris Butles, Portland, Mich.

Dear Aunt Penelope:—I have been reading the letters in the M. B. F. and like them very much. My father takes the M. B. F.. I have a brother 8 years old, his name is Basil, and I have a sister 5 years old, her name is Gladys. I am 11 years old and in the 8th grade. We live on a forty-acre farm and have two horses, two cows, two calves, and one hog. Our pets are a cat and a French Poodle dog. I had a half acre of potatoes in last season and took the money and bought a cow, her name is Rose. I had three-quarters of an acre of potatoes and my brother one-quarter of an acre this season. Haven't sold them yet, but when we do we expect to put the money into Thrift Stamps. I have a mile and a quarter to walk to school. Ellen Deibert is my teacher. Will close for this time.—Arden Deibert, Fife Lake, Michigan.

You sound like a most prosperous young man, Arden, and it pleases me greatly to know my boys are taking an interest in their homes and the work on the farm. I hope you may get a good price for your potatoes, and I believe you will a little later in the season.—Aunt Penelope.

Dear Aunt Penelope:—I have read many of the stories in the M. B. F. and like them very much. I am ten years old and in the fifth grade.—I have a mile and a half to walk to school. I have a patriotic fund. I live on an 80-acre farm. We have six cows and four calves; the cows' names are Dutchess, Spots, Belle, Beauty, Minnie and Kittle; the calves' names are Queen, Lady, Princess and Pauline. We have three horses, Dick, Maud and Nigger, for pets I have four rabbits, two kittens, John and Belle; three bantams, one rooster and two hens, their names are Mr. Jiggs and Margaret and Frances. Have written you quite a long letter.—Amelia Bensch, Atkins, Mich.

Dear Aunt Penelope:—This is the first time I have written to you. I am a girl 11 years old. I have been reading the letters in the M. B. F. and enjoy them very much. For pets I have a dog and a hen. The dog's name is Bingo, and the hen is Banty. We have eight calves, their names are Blossom, Ebony, Hoover, Woodrow Pansy, Star, Liddy and Budgeon. This horses names are Bob, Ned and Charlie. We live on a farm of 360 acres. I have three brothers and one sister. Well, I must close for this time. —Emma Keck, Wolverine, Michigan.

Dear Aunt Penelope:—I am a little boy 9 years old. I am in the 3rd grade this year. I have one sister and one brother. My sister is 11 years old and my brother is 7. his birthday is the 22nd of November. We have 100 chickens and 12 cows, their names are Stop, Nellie, Daisy, Slowpoke, Pinhead, Minnie. Kerry, Cherry, Pansy, Mary, Dan, Nan, We have 21 turkeys, some died but we have 21 left.—Edward Willison, Morley, Mich.

Dear Aunt Penelope.

Dear Aunt Penelope: — I was 7 years old the 22nd of November. We have 6 horses, their names are Betty, Pollyanna, Mag. Pet. Snip and Mike. We have 27 turkeys and 100 chickens. I have a sister and a brother. My sister's name is Lucile, she is 11 years old and in the 5th grade. My brother's name is Edward. He is 9 years old and in the 3rd grade.—Orill Willison, Morley, Mich.

Dear Aunt Penelope:—I am a girl 13 years old. I am in the sixth grade. I have two sisters and three brothers. We all like the M. B. F. and I am glad that you have a page for the boys and girls. I like the Doo Dads the best and wish they were in every week. I like riddles, too. I have some Thrift Stamps. What has one eye and can't see? Answer, a needle. What is round at both ends and high in the middle? Answer, Ohio. We live on quite a big farm. I will close now.—Teresa Nithol, Manton, Michigan.

Those riddles are fine. Teresa, Can't

Those riddles are fine, Teresa. Can't you send us a favorite story now?

—Aunt Penelope.

Dear Aunt Penelope:—I have written to you once before but will write again. I go to school now, but there isn't any now because of influenza. Harry, my brother, is in Newport News, Virginia. The war will soon be over; I hope so anyway. We got a letter from him the other day. He said he was well. I help my mother quite a little now because she has a cold. We washed and ironed today; I did most of the ironing. I saw the story about the two little raindrops; a very nice story I think for a little girl. It is pretty near winter now, I hope so, anyway, so we can skate. I like the M. B. F. very much. Will close for this time.—Hazel E. Parshall, Fenton, Michigan in the good old U.S. A.

Dear Aunt Penelope:—I have been reading the letters in the M. B. F. and I thought I would like to write. I am a boy 9 years old. I have three sheep. I live on a 60-acre farm. I go to school every day. I am in the fifth grade. We have five cows and four yearlings. We have four horses, their names are Dave, Lulu, Stubb and Dolly.—Max Streeter, Lawton, Michigan.

Dear Aunt Penelope:—I am a girl 8 years old. I have blue eyes and light brown hair and am four feet three inches tall and in the third grade at school. We live on a 60-acre farm. We have two horses, five cows, eight calves and seven pigs. There was a "Set-a-Hen" club in this county this summer. Everyone who wished to set one hen and give the chickens to the Red Cross could do so. We gave eight chickens. Our unit made over \$100.—Dorothea Mary Snowden, Spruce, Michigan.

Dear Aunt Penelope:—Oh, how I liked the Christmas stories the girls wrote in the M. B. F. I have a litle sister named Phyllis. She is sixteen months old. She has light hair and blue eyes and I have dark hair and dark eyes. I am seven years old. I have a white Persian cat named Teddy; he is big and has long hair. One morning when there wasn't anyone in the kitchen Phyllis got the can of cocoa off the table and she was rubbing it on the white cat when we found her. My, he looked funny. I wrote this letter on my father's typewriter. Don't you think I did well?—Virginia Dean Jewett, Mason, Michigan.

Dear Aunt Penelope:—I have never written for our page before so thought I would now. I like to read other letters that other children write. I am a girl 10 years old and in the fourth grade. I have a sister seven years old in the first grade, her name is Hazel. I like to go to school very much. My teacher's name is Mrs. Margaret Scott. I have a pet dog, his name is Wag. We have one cat, two horses, their names are Dan and Prince. We have one calf, his name is Bunt. We have three cows, their names are Nīgger, Jeff and Mully., I have one War Saving stamp. I have an uncle in the service; he is a sergeant in France. My letter is getting quite long, so will close.—Helen Glass, Kingsley, Mich.

the lady of the house will appreciate this

A guaranteed waterproof apron that is made to represent the finest quality of checked gingham

Fully appropriate not only in the kitchen but for all uses to which an apron is usually put in the home.

LASTS AS LONG AS THREE ORDINARY APRONS

Protects the clothing from dirt, grease, dish water, canning stains, or cooking stains, and keeps clean much longer than an ordinary apron. Can be washed thoroughly and quickly with soap or cleaned to look as good as new with gasoline without injury of any sort to fabric or color.

The Apron is 30 inches long and 28 inches wide with bib 91/2 x 10 inches. The illustration shows its exact appearance.

COLORS

Made in light blue and white, and pink and white. GUARANTEE

Every one of these Aprons is fully guaranteed to give the wear you have a right to expect. If any apron proves defective in workmanship or material, the manufacturers replace same free of

You would not again do without this apron after you had once used it-and

Ladies, we want every one of you to have one!

And it will not be a difficult matter to get it. Simply tell two of your neighbors who do not now subscribe to MICHIGAN BUSINESS FARM-ING what your household finds in it that is of interest and profit. They would find it helpful too, and will readily subscribe. After they have each handed you \$1 for 52 weekly numbers, fill out the coupon and the apron will be sent you all charges prepaid. (The only condition is that subscribers must be NEW ones.

MICHIGAN BUSINESS FARMING, Mt. Clemens, Michigan. I am enclosing \$2 for 2 new yearly subscriptions to NESS FARMING, for which you are to send me, all c waterproof Apron advertised.	
Name of 1st new subscriber	
P. 0.	R.F.D. No
County	Michigan
Name of 2nd new subscriber	
County	
Send me waterproof Apron, all charges prepaid. (Und you wish) Blue and White — or — Pink and Whi	lerline which color
To (your name)	
P. O.	R.F.D. No
County	Michigan

HOW DID MR. FORD BECOME RICH? AN EXAMPLE FOR YOU TO FOLLOW

One of the blg problems today with everyone is how to conduct a bustness, paying the high prices demanded for all commodities, so there will be a profit from the finished product. Mr. Henry Ford invested in machinery to save labor, which is one of the first objects in business. Next there is nothing goes to waste about his plant; every old scrap is used. And he is saving more every day by investing in saving devices.

Saving-is the main road to success. Are you doing this? Here is one way that you can save. Pick up some old boards around the place; tear up those old chicken coops and build a brooder that will save the chickens, labor and feed. Also it will save the use of the hens for a few weeks. They will rest a few days after hatching and then start laying those 60 cent eggs again.

One brooder will take the place of a dozen hens and all can be cared for easier and quicker than one hen with chickens. It will be a pleasure if you have a proper brooder, built right at home from material on hand. This makes it inexpensive.

This country is short of eggs and chickens. Other countries are looking to the United States for these supplies, so why not increase your output to enjoy some of the profits. That was the idea in the mind of E. O. Perry, of Detroit, in perfecting a brooder that could be built by any person right at home. The idea and plan was so new and unique that the government has granted a patent covering same, yet it costs only a fraction of what a manufacturer would charge. Any bright boy would be delighted to build one for his mother. Such a brooder will

improve the looks of any front yard, at the same time make money.

The Perry Brooder is easy to build; also easy to clean and operate. It has been tested. It is the most successful brooder on the market at any price. There has not been a failure to my knowledge, and if there has I would like to know so that it can be made right. There is no crowding of chicks. This is what one man says about the Perry brooder:

Mr. E. O. Perry,

Mr. E. O. Ferry,
37 Henry St. Detroit.
Dear Sir:—I have had the very best of success with the brooder, plans of which I received from you. To sum it up, I say it is all right. None better.
THEO. STOCUM.
You don't have to have an incubator to make a brooder profitable. Hatch with hens if you wish. The saving in feed alone at present prices will pay many times the cost in one season.

will pay many times the cost in one season.

In order that every chicken raiser may have one of these brooders I am selling the right to build for YOUR OWN USE. You will have most or all of the lumber. The heater will cost but little. Send me a One Dollar bill and your address plainly written. By return mail you will receive full instructions and drawings as to building the Perry brooder, with full instructions as to operating and copy of the government patents. Build during the winter pick up the lumber now. Let the boys tackle the job and have it all ready for the coming season.

son.

Don't delay, but write today.

E. O. Perry,

37 Henry St., Detroit.

MARKET FLASHES

(Continued from page 11)

are without precedent, dressing figures being taken into consideration. It is evident from the manner in which the moderate supplies of the past week have been gobbled up that beef is being absorbed in enormous volume and that killers are on a hand to mouth hairs. The supply of heavy volume and that killers are on a hand to mouth basis. The supply of heavy cattle on feed is generally considered to be far below normal and the future of the trade seems assured. Butcher cattle and canning material are selling relatively as high as steers. Only shelly old canner cows have sold within the past week below \$7.50, good cutter grades are worth \$8.25 to \$8.50 and bulk of the medium and good fat cows and heifers are making \$9 to \$11.50.

An occasional small lot of choice Kosher cows lands up around \$13 and ripe drylot heifers are quotable at \$15

ripe drylot heifers are quotable at \$15 and better. In the bull trade it is a shelly class that now sell below \$8.50, good heavy bolognas are worth \$9.50 and choice cornfed bulls sell upward to \$12.50 and better. Veal calves have kept up with the sharp upward to \$12.50 and prices shown on process. revision of prices shown on more matured cattle and are about \$2 per cwt. above the pre-Christmas low spot. choice vealers commanding \$16.50. Cold weather has temporarily depressed stock cattle market but with killers absorbing cannery light steers around \$8.50 no bargains are to be found. Bulk of the stock and feeding steers sold here today at \$9.50 to \$11.50, and choice feeder steers averaging 1,000 pounds or better were not to be had below \$13.

After showing an \$18 top and a general average ranging from 25 to above the government minimum of \$17.50 at the inception of the new year, the hog market weakened under year the hog market weakened under an increasing supply late last week and closed Saturday with a \$17.85 top and general average of \$17.60. To-day, however, an active 5 to 10c high-er market was had and the top quota-tion was shoved back to \$17.95. The range in prices is comparatively narrow, practically no hogs weighing above 150 pounds selling in load lots below \$17 and the bulk of the mixed and packing grades going at \$17.35 to \$17.70, and butcher hogs from \$17.75 to \$17.90. Pigs of good and choice class found a good demand at \$15.50 to \$17. A meeting is to be held in Washington on Wednesday of this week at which the workings of the stabilization plan are to be discussed. stabilization plan are to be discussed and action probably taken relative to the maintenance of a set price during February.

Fat lambs sold at Chicago today at advances of from \$2.25 to \$2.50 over the depressed market just prior to the holiday season. Matured muttons meanwhile have gained \$1.50 to \$2.00 Dressed trade conditions are show ing much improvement and the trade regards any reaction from this vance that may occur within the near future as of temporary nature, feeling being general that prices are scheduled to work still higher. Choice and prime lambs sold today at \$17 to \$17.25 and little of decent quality un \$17.25 and little of decent quality unless showing excessive weight dropped below \$16. Michigan feeders were in the market and expressed a willingness to pay up to \$15 for choice feeding lambs but supply was limited and nothing of that kind available. Matured wethers sold up to \$12 and handyweight yearlings to \$14.25 while matured ewes at \$10.25 and \$10.50 would not have been eligible to showing honors.

East Buffalo Live Stock Letter

East Buffalo, N. Y., Jan. 6. - Receipts of cattle Monday, 160 cars. The market opened 15 to 25c lower on medium weight and weighty steer cat-tle which were in very light supply; butcher steers and handy weight steers were in very light supply, sold steady; fat cows and heifers were in light supply, sold steady; bulls of all classes were in moderate supply, sold steady to 10c higher; canners and cutters were in moderate supply, sold steady; fresh cows and springers were in very light supply, sold steady; stockers and feeders were in light supply, sold steady; yearlings were in very light supply, sold 15 to 25c higher.

Receipts of hogs Monday were 15, 000. The market was generally 35c lower, all grades selling at \$18.15; roughs, \$15.50; stags, \$10.00 to \$13.00.

Receipts of sheep and lambs Monday were about 11,000. The market opened 25c lower than last week's close on choice lambs which sold from ply, sold steady; bulls of all classes

\$17.25 to \$17.50; culls, \$15 to \$16 yearlings, \$14 to \$15; wethers, \$10.5 yearlings, \$14 to \$15; wethers, \$10.50 to \$11.50; which is 50c higher; ewes, \$9 to \$10; and a few fancy ewes sold up to \$10.50. A good clearance was made. With 1,600 calves on sale Monday, choice yeals sold from \$21 to \$21.50, which was 50c lower than last week's close.

Receipts of cattle Tuesday were 15 cars, and the market was strong on all

grades.

Receipts of sheep and lambs Tuesday were called about 1,000 head. The market opened strong on most all classes of stuff. Best lambs sold from \$17.75 to \$18, which was 25 to 50c higher than Monday; cull lambs, \$16 to \$16.50; yearlings were quoted 50c higher than Monday, best yearlings \$14.50 to \$15.50; wethers were also quoted 50c higher, best wethers, \$11.50 to \$12; ewes, \$9.50 to \$10.50. With 125 calves on sale Tuesday, best yeals sold at \$22. veals sold at \$22.

The supply of hogs Tuesday totaled about 2,500 head, and our market opened 25c higher, with the bulk of the hogs selling at \$18.40; lights, \$18.40; pigs, very slow sale, selling from \$17.50 to \$18, as to weight.

Choice to prime weighty steers, \$17 to \$17.50; medium to good weighty steers, \$15.25 to \$16; plain and coarse weighty steers, \$15.25 to \$16; plain and coarse weighty steers, \$12.50 to \$13; choice to prime handy weight and medium weight steers, \$12.50 to \$13; choice to prime handy weight and medium weight steers, \$12.50 to \$13; choice to prime yearlings, \$15 to \$13; choice to prime yearlings, \$15 to \$15.50; fair to good yearlings, \$15 to \$15.50; fair to good yearlings, \$13.50 to \$14; medium to good butcher steers, \$11 to \$11.50; fair to medium butcher steers, \$10 to \$10.50; good butcher heifers, \$10 to \$10.50; fair to medium butcher heifers, \$9 to \$9.50; good to choice fat cows, \$10 to \$10.50; medium to good fat cows, \$8.50 to \$9; fair to good medium fat cows, \$7.50 to \$8; cutters and common butcher cows, \$6.75 to \$7.25; canners, \$6 to \$6.50; good to choice fat bulls, \$10.50 to \$11; medium to good fat bulls, \$9.50 to \$10; good wt. sausage bulls, \$8.50 to \$9; light and thin bulls, \$7 to \$7.50; good to best stock and feeding steers, \$9.50 to \$10; medium grades of stock and feeding steers, \$8.50 to \$9; common Choice to prime weighty steers, \$17 to \$10; medium grades of stock and feeding steers, \$8.50 to \$9; common to fair stock and feeding steers, \$7.50 to \$8; good to choice fresh cows and springers, \$90 to \$120; medium to good fresh cows and springers, \$75 to \$30.00.

HATCH EARLY
Early hatched chicks get a better
start than late hatched chicks and are therefore stronger and better able to withstand the attacks of lice and disease. If you will notice a flock of growing chicks which are lice infested you will find that it is the smaller, weaker chicks which are suffering most. Observation will also show that the lice are more troublesome during the warm weather than during the cooler weather of early spring, so that the chicks hatched early are not subjected to such severe attacks of lice while still very young as are the late hatched chicks. This of course, dres not mean that if the chicks are early hatched the matter of lice should be neglected. By all means examine them for lice, and if found, take measures to free the chicks from the pests.

It does mean, however, that not so much trouble from lice will be experienced and that they will be easier to control and will interfere less with the growth of the chicks.

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It is usually the smaller, weaker chicks in the flock which are attacked by disease. The older chicks are stronger and larger and are more resistant to disease. This is true during the entire growing season, but is perhaps most evident in the fall and At this time immature fowls seem to be much more likely to develop colds. Pullets immature when put in winter quarters are a menace to the whole flock, for not only are they more likely to develop colds, but are liable to be the means of spreading the colds throughout the entire flock. It is important, therefore, to have the pullets reasonably well matured when they are put in winter quarters, and the way to secure mature pullets is to hatch early.

Early hatching means early matur-ing pullets that become broody earlier the following spring.

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We have paid over \$17,000 in death losses since we began business July 5th, 1917.

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Your animals are well and sound today but tomorrow some of them are dead. INSURE THEM BEFORE IT IS TOO LATE!

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Send for our valuable free book, "The Home Cow Doctor." It gives directions for the use of Kow-Kure in each disease—also contains a wealth of general information valuable to any cow owner.

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DAIRY ASSOCIATION CO. Lyndonville, Vermont



FINIS FOR WOMORISTS

By ALBERT L. CLOUGH, Motor Editor, Review of Reviews Copyright, 1918, by The International Syndicate.

Gasoline Substitutes—(Continued)

Don't Waste Time and Money "Doping" Your Gasoline

A S TO THE POSSIBILITY of anything being invented as a gasoline substitute, which can be produced for a few cents per gallon, as periodically claimed by promoters, one should not deny its existence, but these facts should be kept in mind: High as the current price of gasoline seems there are hardly any liquids except water and kerosene which are cheaper. There is no available heat energy in the former and the properties of the latter are well known. No one can put heat units into a liquid by waving a magic wand over it or by putting anything into it, unless there are heat units in the things put in. Adding explosives to Gasoline is of no use, as heat energy in explosives is enormously costly, relatively speaking, and it is quantity of heat rather than suddenness of liberation of heat that is required. It can be taken as assured that the cost of motor fuel will depend upon the cost of production of hydrocarbons, alcohols, ethers and other well-known materials, and that no amount of "messing" with chemical mixture will produce a cheap fuel, for there are no cheap materials to compound, which carry available heat energy. In connection with substitute fuels, mention may be made of gasoline which is "doped" or doctored upon the premises by the addition of tablets or minute doses of occult liquids. The moth balls had much better be applied to their legitimate purpose and the camphor saved to fight the "fu" and it may also be remarked that high test gasoline and high test cylinder oil can be bought much more cheaply as such than under fancy names. Is it not reasonable to suppose that if there were any "seasoning" that could profitably be added to gasoline, it would be added "at the source?" Fortunately motorists as a rule are too sensible to bother with doctoring gasoline by the tankful, at least for any length of time. Probably the history of gasoline substitutes in the future will be similar to that in the past. We shall read of miraculous fuels but never burn them but, when the oil companies find a real fuel improv let them fill our tanks.
DESIRABILITY OF PIT IN PRIVATE

GARAGE

I am planning to build a garage and should like your opinion as to whether it will pay me to provide it with a pit?—M. J. M.

If you are building quite a roomy garage and not trying to keep the outlay down to the limit, it would be well for you to install a pit, with suitable drainage, in some portion of the floor space where it would be unobjectionable. We should, however, more strongly recommend the expenditure of the-same amount of money for a chain falls or auto-hoist, by means of which the front or the rear end of a car could be lifted sufficiently to permit work to be conveniently performed beneath it. The hoisting device would be useful in many ways, while the pit would have but one function, but if both could be installed it would be very desirable. Even an inclined plane of timbers up which one end of a car can be run and then rested upon horses makes a fair substitute for a pit and is not very expensive.

What is the best preparation to use on a so-called leather top, which has begun to crack and show signs of leakage?-E. G.

There are top dressings upon the market which are doubtless well adapted to this purpose. Any good carriage trimmer can recommend one to you. Boiled linseed oil is good as a waterproof dressing and good results are obtained by brushing over the top material with it, allowing it to air dry and then applying a second coat. RUBBER JUNK PRICES

How much ought I to be able to get for discarded casings and inner tubes? -A. C. L.

Prices on rubber junk vary in different localities and at different times, Your local tire repair man can probably give you the market price more accurately than we can. Tubes sell much higher than casings, on account of the greater proportion of rubber in them. They ought to bring something like 11 cents per pound and casings in the vicinity of 5 cents or 51/2 cents per pound.

Questions of general interest to motorists will be answered in this column, space permitting. Address Albert L. Clough, care of this office.

SNAKE-HOLDING A BOULD-ER WITH DYNAMITE

The accompanying pictures, while not very good, will show the results of a "run-in" between dynamite and a "regular" Michigan monument left to its own memory by the great glacier which one time swept over Cheboygan county. The boulder is extremely hard and will hardly break at all. The farmer on whose land the boulder was found had tried to break it with dynamite and all other means and failed. The county agent, Mr. C. H. Knopf and the writer were given an opportunity to try our hands at it. It probably weighed about ten tons or even more.

First we placed three pounds of 20 per cent dynamite underneath one side in a deep hele. The boulder was turn ed out on top of the ground. The first picture shows this charge being placed. The other picture shows the poulder after being completely broken up by a charge of three cartridges of 50 per cent straight nitroglycerine dynamite placed in a slight depression on top of the boulder and fired. This charge was placed and the naked dynamite directly against the rock, the papers having been removed. About twelve inches of good stiff red clay mud being piled over the charge and thoroughly pressed down and then wet

all over from a bucket of water. Ordinary sandstone found in other sections would not require nearly so much dynamite for the mud-cap.

A great many farmers in this section of Michigan can get rid of these

Exploding the Charge





very troublesome boulders with dynamite and there is none of them that cannot be broken up if the explosive is properly used .- Guy G. Means.

Plant Guaranteed Seeds For The Victory Crop

-Seeds that Must be Right or You Get Your Money Back

With the coming of Victory America needs great crops. Millions of hungry mouths in war-torn Europe look to America to feed them. It means American farmers must produce the biggest crops in history, and big crops mean many extra dollars in profit for the grower. He will get high prices and help will be plentiful. There must be no "Slacker Acres;" no crop failures, if human effort can preno "Slacker Acres;" no crop failures, if human effort can prevent it. Good seed is of first importance—proper planting and proper care next. To be sure of the seed you plant—get



They give you the very best that money can buy at prices that save you money. 40 years' experience goes into Isbell's Seeds. Ceaseless experiments, careful selection and testing has produced the most hardy, big-yielding varieties. Only the cleanest, purest seed ever reaches an Isbell customer—seeds you can "bank on" being good, full of life and will grow. Every ounce is Guaranteed. You can have your money back if your own tests do not prove satisfactory. This fair and square Isbell policy has made more than 250,000 satisfied buyers of Isbell's seeds.

It's Money in Your Pocket to Investigate

It means money saved to buy at Isbell's fair prices and money made by growing bigger and better crops. Never has care in the selection of seed been more important. Isbell's modern methods of preparing seeds for market in its new modern plant and Isbell's "proven value," Michigan grown varieties are as near crop-insurance as you can get.

Isbell's 1919 Seed **Annual Now Ready**

It's a true guide for growing a Victory Crop. It shows how quality seeds are selected, cleaned and tested. It's written by men who have years of experience, and shows how to take the guesswork out of planting. With this book we'll send you your choice of any field seeds you may want to test. Simply send name and address—the book and sample seeds are Free. Do it today. A post-card will do.

FREE Samples

Ask for free samples of Northern grown farm seeds. Here are three leaders.

Wolverine Oats

Wonderful new heaviest yielding variety, measured bushels weighing 45 to 48 lbs.

Michigan Alfalfa

Can double the value of every acre on your farm. The hardiest, surest strain

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Matures quicker and surer than any other White Dent. Makes corn growing a certain profit.



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Seeds Wanted

Red Clover, Alsike, Sweet Clover, Rye and Vetch mixed, Ear Corn, Peas, Sweet Corn, White Kidney Beans, some varieties of Garden Beans, etc. Write us stating what you have, send sample, with prices, or we will make offers. Our 1919 Garden and Field Seed Book will be ready to mail about Jan, 1st. A request will bring you one,

you one, THE C. E. DE PUY CO., Pontiac, Mich.

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We have Salted Herring, Frozen Herring, Trout, Perch, Whitefish

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130 CRATES PICKETT seed corn. 300 ates Michigan Hybrid Dent, for sale, rite for prices. Alfred T. Halsted, ashington, Michigan.

MAMMOTH BRONZE TURKEYS— Strictly thoroughbred, for sale. Gob-blers 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, Michigan.

FOR SALE GRANT Bronze Turkeys, Golden Glow seed corn in the ear, Wolverine and Worthy seed oats, Wisconsin Pedigree barley and one extra good Reg. English Berkshire spring boar. Robt. P. Reavey & Son, Caro, Mich., R. D. No. 1.

POR SALE: — Pure bred Mammoth
Bronze heavy boned turkeys, Mammoth Pekin Ducks and Barred Rock
Cockerels; none better,
Lewis Hess, Ceresco, Michigan

B ELGIAN HARES for sale from pedigreed stock. Claude Greenwood, St. Johns, Michigan, R. 10.



St. Clair (East)—Farmers are cutting foss and wood. Soil frozen solid. Not selling much. Roads in terrible condition. No snow here. Lots of fall plowing done here but not much of it will be for beans. The reason is uncertain crop, no help-and the dealers away off—whole hog or none. The following prices were quoted at Smith's Creek this week: Wheat, \$2.10; oats, 70; rye, \$1.50; hay, \$18 to \$20; rye straw, \$5.50; beans, \$8; apples, \$1 to \$2; potatoes, \$1 to \$1.50; onions, \$1.50; hens, 22; springers, 24; ducks, 24; geese, 20; turkeys, 26; butter, 60; ergs 60; sheep, 7 to 10; lambs, 12; hogs, 16 to 17; beef steers, 7 to 9; beef cows, 5 to 7; veal calves, 16.—I. J., Smith's Creek, Jan. 6. plowing done here but not much of it Creek, Jan. 6.

Mecosta (North)—Farmers are not very busy these days, except those who have timber to handle. Some are cutting wood. The weather is getting colder, the ground is covered with snow. Roads are very bad on account of so much wet weather. Selling beans and a few potatoes. The following prices were paid at Hersey this week: Wheat, \$2.10; corn, \$1.30; oats, 62; rye, \$1.45; hay, \$22 to \$25; beans, \$8; potatoes, \$1.25 cwt.; butter, 50; butterfat, 68; eggs, 50.—L. M. Hersey, Jan. 1.

Manistee (N.E.)—Farmers are not doing much except buzzing wood and doing chores. Weather cooler. Getting more snow.—H. A., Bear Lake, Dec. 30.

Wexford (West)—A little snow, but not enough for sleighing. The weather is mild and nice; couldn't kick on the "old man" this time. I see some camps have the gall to cut wages \$5 month. The convertions are that camps have the gall to cut wages \$5 a month. The corporations see that the soldiers are coming home and they think they can set them for a song. That looks very patriotic(?) but the prices at the stores don't drop; they still go higher. They get the same old prices for their material. It looks to a man up a tree like a skin game. Anyone, in our mind, who could do the like should be taken for highway the like should be taken for highway robbery in the first degree. Talk about Mr. Hohenzollern, late of Germany, we have plenty of them right in the United States. If you don't believe it search the records of Ludlow, Col., two or three years ago; that will show you. The following prices were quoted at Cadillac last week: Wheat, \$2.07 to \$2.08; corn, \$3.25 per cwt.; oats, 90; rye, \$1.45; hay, \$30; beans, \$7.75; potatoes, 60; onions, \$1 per bu; butter, 60; butterfat, 73; eggs, 75.—S. H. S., Harrietta, Dec. 27.

**Kent (N.W.)—Roads are bad; neith

Kent (N.W.)—Roads are bad; neither wheeling nor sleighing; deep snow banks in some places. A few farmers are drawing potatoes to Greenville. A good many have sold their entire crop; some trucks are still moving potatoes and apples to Grand Rapids. Lots of hand-picked apples are being made into cider at mill in Grand Rap-ids. Cider brings from 35c to 50c per

gallon so that the apples bring \$1.00 and upwards per bushel. Your cor-respondent who stated in the last M. respondent who stated in the last M. B. F. that farmers were trucking field run potatoes to Grand Rapids to get away from grading, made it too strons. My observation has been that all were sorted reasonably good, as they ought to be, and if he trucks field run potatoes down there he ought to be arrested, as he is doing other farmers who believe in a square deal, a great deal of harm. The following prices were quoted at Green. lowing prices were quoted at Green-ville this week: Wheat, \$2.15; corn, shelled, \$1.50; oats, 65; rye, \$1.50; beans, \$8; potatoes, \$1.60 cwt.; onions, 65; hens, 20; springers, 20; butter, 53; eggs, 55; sheep, 10; lambs, 15; hogs, 15½; beef steers, 8; beef cows, 6; veal calves, 9 to 11.—G. M. W., Greenville, Dec. 28.

Newaygo (East)—Again we have sleighing. Some stock being shipped from our local market. Potatoes about from our local market. Potatoes about all sold that will go to market. Again the highway commissioners are graveling state award roads. Farmers did but little shopping and visiting this Christmas time on account of the influenza. The following prices quoted at Big Rapids this week: Wheat, \$2.13; shelled corn, \$1; oats, 70; rye, \$1.45; hay. \$28; beans, \$8; red kidney beans. \$9; potatoes, \$1.30 cwt.; onions, \$2; butter, 50; eggs, 50; beef cows 4; apples 75.—F. S., Big Rapids. January 2.

Kent (N.W.)—Nothing doing on the

Kent (N.W.)-Nothing doing on the farm these days, except wood cutting. Snow has spoiled the roads for either wheeling or sleighing. Not much produce being moved to market. Feed produce being moved to market. Feed is very scarce and high. Lots of old horses have gone to the tankage works in Grand Rapids. in consequence of which there is going to be a scarcity of horses this spring. There is some inquiry already for horses. O. A. Rasmussen, auctioneer, sold a team this week for \$491 at an auction sale north of Greenville. Farmers are holding potatoes for more loney. The following prices were paid at Greenville-this week: Wheat, \$2.14; corn, \$1.50; oats, 65; rye, \$1.50; beans, \$8;

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1.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.

SUDAN GRASS seed, Northern grown, free from Johnson grass, 20c per lb., bags free, postage, express or freight extra. White Sweet Clover, sacrificed, 30c. Alfalfa \$8.00 per bu, and up. Order early. Supply short. Quality guaranteed satisfactory. Henry Field, Shenandoah, Iowa.

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

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

I think it is a good farm paper and worth the money.—Charles Smith, Mont-calm county.

What are You in the Market for? Use this coupon!

Every reader of M. B. F. will be in need of one or more of the following items before spring. The next few months is the time you will do your buying for the coming season. Check below the items you are interested in, mall it to us and we will ask dependable manufacturers to send you their literature and lowest prices free and without any obligation on your part

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Address State R. F. D. State

MICHIGAN BUSINESS FARMING Service Bureau, Mt. Clemens, Michigan

potatoes, \$1.60 cwt.; onions, 65; hens, 20; springers, 20; butter, 55; butterfat, 70; esgs, 52; sheep 10; lambs, 15; hogs, 18 to 19; beef steers, 8; beef cows, 7; yeal calves, 9 to 11.—G. M. W., Greenville, Jan. 3.

Monroe (Bast)—The new year came in soft, but caught cold. There is no snow to protect and therefore it is rather hard on wheat, but most all wheat and rye have a good top. What is the matter with our bran and middings prices? On Dec. 19 I paid \$1.67 for bran in bulk and middlings \$1.77; the same on Dec. 31, bran, \$2.25 in bulk and middlings \$2.25 in bulk per cwt; and wheat has gone from \$2.15 to \$2.20 per bu. Has the government given up centrol of price, or what is to blame? Corn is not listed on the market here but they told me on Dec. 31 that they paid \$1.90 per cwt. The following prices were paid at Monroe this week: Wheat, \$2.18; oats, 70; rye, \$1.50; cabbage, 2c lb.; hens, 20 to 22; springers, 22 to 25; butter, 55; eggs, 55 to 57; sheep, 8 to 9; lambs, 12.50; hogs, live, 14 to 16.25; dressed, 20 to 21; beef cows, 6 to 12; veal calves, live, 16 to 17; dressed, 22 to 23; apples, 1.75.—E. H. M., Monroe, Jan. 3.

Calhoun (West)—Farmers are cut-

Calhoun (West)—Farmers are cutting wood and doing chores. Weather much colder; some snow. Not much moving now. The quotations at Battle Creek are as follows: Wheat, \$2.18; oats, 68; rye, \$1.50; hay, \$28 to \$30; potatoes, \$1; onions, \$1; hens, 23; springers, 25; ducks, 28; geese, 28; turkeys, 30; butter, 60; eggs, 69; hogs, 16; lambs, 14; beef steers, 8; beef cows, 7; veal calves, 14.—C. E. B., Battle Creek, Jan. 3.

Mecosta (S.E.)—There is nothing to report here as everything is closed up tight on account of influenza. We have had a fine winter so far; on our farm we plowed until the day before Christmas. Farmers are buzzing wood. About 25 per cent of the potatoes are in the farmers' hands. The following prices were offered at Millbrook this week: Wheat, \$2.07 to \$2.09; spring wheat, \$2.09 to \$2.12; oats, 64; rye, \$1.43; beans, \$8; potatoes, \$1.35; hens, 17 to 19; springers, 20 to 21; ducks, 20; butter, 50; butterfat, 67; eggs, 55; hogs, 15; beef cows, 5½.—F. M. E., Millbrook, Dec. 31.

Grand Traverse (S.W.)—Not much

Grand Traverse (S.W.)—Not much doing; some cutting wood. Trains are again running on the M. & N. E. R.R., after a 2-weeks' tie-up on account of a strike. It made a bad affair for us, not getting our mail or any freight or express. The weather is getting quite cold, 10 below this morning and we are getting quite a lot of snow. The following prices were paid at Karlin this week: Wheat, \$2; oats, 70; corn. \$1.40; rye. \$1.35; hay. \$24 to \$25; rye straw. \$10; wheat- oat straw. \$10; beans, \$7.50; potatoes. \$1.25; butter, 55; butterfat, 69; eggs. 60.—W. W. C. Karlin, Jan. 3.

60.—W. W. C., Karlin, Jan. 3.

Wexford (N.E.)—Ten inches snow and still snowing; getting quite cold nights, 12 below last night and just as cold tonight. Some of the farmers are working in the woods and some are cutting wood. Plenty of snow for good sleighing. The following prices quoted at Cadillac this week: Wheat, \$2.07 to \$2.09; corn, \$3.25; oats, 71; rye, \$1.45; hay, \$30; beans, \$7.75; potatoes, 50c bu; onions, \$1.50 bu; butter, 60; butterfat, 74; eggs. 60.—S. H. S., Harrietta, Jan. 3.

Calhoun (N.C.) - Plenty of sharp weather for two or three days. Wheat

County-

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isva. od of is not faring as well as it was. Lots of influenza. The following prices paid at Olivet this week: Wheat, \$2.13; corn, \$1.65; oats, 63; rye, \$1.48; hay, \$24; beans, \$8; hens, 18; springers, 23; butter, 55; butterfat, 66; eggs, 54; sheep, 4 to 8; lambs, 10 to 13; hogs, 15 to 16.50; beef steers, 9; beef cows, 5; veal calves, 15.—G. R., Olivet, Jan. 4.

Ionia (West)—Zero weather struck here at last; some snow but neither good sleighting nor wheeling. Some autos are running. Farmers are selling grain and stock to meet their taxes and some are complaining that they are so high. In some sections the flu is much better owing to strict quarantine, while some districts have many cases. Some farmers are feeding stock but not as much as usual. Dairy products are high, butterfat is 70c.—A. W. G., Saranac, Jan. 3.

Jackson (South)—Weather moderating somewhat; has been very cold for a few days. Many farmers selling their rye. Roads have been rough but are getting smooth again. Few cattle fed on the farms this winter, price of cattle and feed too high to take the risk. Potatoes somewhat higher and better demand. Some think there is going to be scarcity by spring. Some hard coal mixed with coke has been sold in this vicinity lately but not very good quality; a great many farmers using wood. An old resident of this section lost his health recently. He was in great distress both day and night, and on consulting a physician was told that he was suffering from kidney trouble. As he did not improve he went to another doctor who diagnosed his case as blood disorder, and prescribed accordingly. As he grew much worse a third doctor was called, who, after a thorough examination said. "There is nothing at all the matter with you. You've got lice, genuine cooties, not the common American breed." The man recovered. Farmers, take notice, forwarned is forearmed. The doctors all belong to the union and their fees are very high.—G. S., Hanover, Jan. 6.

POTATO PRICES ARE TENDING UPWARD

(Continued from page 1)

Association. It is also common practice with some buyers to refuse ship ments when the market is declining because the potatoes are "not up to grade." The association wants some means adopted whereby the potatoes not up to grade can be sorted out and a deduction made without the entire shipment being turned back or sold at an arbitrary price. The association is also advocating better quality of seed.

tion is also advocating better quality of seed.

"The association believes that the farmer should get \$1.67 per cwt. for his potatoes where as now most potato growers are being paid around \$1.40. The association will market about 2,500 carloads of potatoes this season. The officers of the association are: President, Dorr E. Buell, Elmira; vice president, Henry Curtis, Jennings: secretary, Charles A. Wood, Kingsley."

I have been speaking good words for your good farm paper.—Geo. F. Long, Berrien county.

We admire your stand for the farmer.

R. L. Ruedger, Montcalm county.

Your paper has proven a necessity in our home.—Henry A. Denton.—Clare Co.

The Fairfield Stock Farm

will offer at Public Auction at the farm 2 3-4 miles southeast of Elsie, Mich., on

Wednesday, Jan. 15, 1919 "Rain or Shine"

6 - Percheron Mares - 6

Everyone a good one and a great chance to get seed stock from imported stock.

1 - Percheron Stallion - 1

Coming 2 years old, color grey, a real drafter, and nicely made.

40 -- Oxford Ewes -- 40

18 are ewe lambs, balance bred ewes. One of Michigan's leading Pure Bred Flocks.

3 -- Shorthorn Bulls -- 3

Two roans and one red-of rare breeding and individuality.

Hogs A few early fall Poland China Gilts and two Boars.

This sale is called on account of shortage of feed room and labor. Will positively sell everything.

H. B. PETERS, Prop.
P. O. Carland, R. R. Elsie

ANDY ADAMS, Auct.

-has had inquiries for live-stock from Superior to Ohio and Indiana!

You breeders of pure-bred stock who are still wondering whether or not it pays to advertise in M. B. F. read this letter from Gratiot county's leading breeders:

I find it wise to put in name of county because your ads. go so far that they can't find a small place like Perinton on the map. Have had inquiries from U. P. in the north and Ohio and Ind. in the south. Here's to the most useful farm journal in the Northwest,

Sincerely yours,

Newton & Black

Newton & Blank, Perrinton, Mich.

whether it pays to advertise in M. B. F? Our readers are the kind of business men who want to know where they can get pure-bred stock at the right prices. Treat them right, tell them what you have to sell and keep your name before them regularly and it will pay and pay big! Our present Breeders' Directory rates are so low that no breeder in Michigan can afford to have an issue of this weekly go to press without his ad. The weeks are slipping, are you letting this opportunity pass? Simply write us what you have to offer, let us set it up in type and mail you a proof with our price for 13, 26 or 52 issues. If you want inquiries "from Upper Peninsula to Ohio and Indiana," if you want to make your name known to real buyers, advertise in

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

When you write any advertiser in our weekly will you mention the fact that you are a reader of Michigan Business Farming? They are friends of our paper, too!

KEEP M. B. F. COMING—USE THIS COUPON

MICHIGAN BUSINESS FARMING, MT. CLEMENS, MICH.

Send your weekly for one year for which I

Enclose a dollar bill herewith or () mark

I will send \$1 by Mar. 1, 1919 () which

RENEWALS—If you are a subscriber, look on the front cover at your yellow address label, if it reads any date before Feb. 18, clip it out, pin to this coupon a dollar bill and send it in right away so you will not miss any important issues. If renewal mark an X here

___ State_

HOG CHOLERA LOSSES STEADILY DECREASING

Losses from hog cholera declinedgreatly in the four years 1914 to 1917 and a further reduction is expected for 1918 says a letter from the Secretary of Agriculture to Addison T. Smith, a member of the House of Representatives.

The Secretary calls attention to the necessity for state co-operation in the Federal Gov't's campaign against this destructive animal disease.

The losses for 1914 totaled 6,304,300 animals, which, valued at \$10.40 a head, made a monetary loss of \$67,697,461; for 1917, 2,952,144 animals, valued at \$11.73 a head, a monetary loss of \$32,475,190. During the four years the number of animals taken by the disease was 18,835,901, representing a value of \$188,448,643.

"Estimates obtained from state authorities during November, and reports from our inspectors in charge of chorela control work," says the Secretary, "indicate that there will be a further reduction of losses from the disease during the present year (1918) except in New York, Pennsylvania, and Washington, where no co-operative work is being conducted by the department. The monetary loss, however, will still be great owing to the increased value of this class of farm animals over that of previous years.

"A recent article in which conditions in Iowa are discussed, indicates that the number of hogs lost in that state from cholera in 1914 was approximately 3,000,000 while the losses for 1917 amounted to less than 200,000. Conditions in fowa, however, have been more favorable to the efforts of the co-operative forces engaged in hog cholera control work in that state during the last two years than pre-

"The reduction of losses has been less in certain other states due largely to circumstances which have handicapped our efforts in controlling the disease. We can not hope to be successful in states where hogs have access to open ranges as in localities where herds are restricted to the premises of the owner and kept away from sources of contamination."



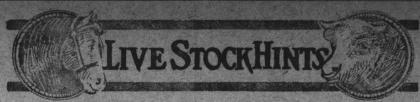
Prize Fowls of Douglas Bow, Saginaw.

Veterinary Department

Being a new subscriber, I do not like to start from the beginning by asking for a lot of information, but being a case of necessity, I am compelled to, since I know practically nothing about stock, for I moved on this farm a few months ago from the

nothing about stock, for I moved on this farm a few months are from the city and the place was stocked.

Now, the information I am seeking is regarding one of the cows. She was bred, I understand, last June, and has been, apparently, in the best of condition until a week or so ago I noticed a protusion on the lateral aspect of the left side, located, as close as I could determine, over the last three ribs, or floating ribs. Now, of course, I paid little heed to this, thinking it was possibly due to the fact that she was carrying a calf. Yesterday this protusion burst open and a caseous excretion came from it, the bursting, no doubt, being due to her lying on her side. From all appearances it now looks as the this is a caseous abscess, due to a constitutional disorder, for it hardly seems



The bursting thru the skin is the best thing that could have happened, I believe, for it allows a means of draining of all the formation, but there is no doubt a cause for the formation of it, and that is what I want to get at, so I would like to know if it is a lack of something in the food, or too much of certain kinds of elements in the food. Their food consists of corn silage twice daily, and soft mash once a day, consisting of middlings and salt lick in the manger at all times. So if you will write and let me know what the cause of this is, and how to treat it generally, or constitutionally, as well as locally, that is what to do for it, I will appreciate it greatly and return the compliment in another way.

I have also noticed recently that said cow is very restless in the stanchion, seems to want to get up against something to scratch herself.

I am enclosing a stamp for your con-

I am enclosing a stamp for your convenience, so that you can answer me post-haste, for I must get right down to treating her for this at the earliest possible time. Thanking you in advance and awaiting an early reply, I remain—Mr. E. V., Paw Paw. Mich.

The swelling to which you refer was

The swelling to which you refer was either caused by a bruise or the entrance of some instrument, stick, needle or something of the sort, however, the condition is a local condition and shold have a good dependent opening at the lower portion to allow free drainage. Syringe the wound out thoroughly morning and night with

other friends, was looking over the

Hampshire swine exhibit at the Chi-

cago International, he gave utterance

to this remark, "There is a breed of

a one in one-thousand solution of Creolin after which bathe the entire swelling with a strong creolin solution, ¼ part creolin. The most important part in treating any wound is to see to it that a good opening is made and kept open to permit granulation and healing from the bottom. Your animal is in a good healthy condition and requires no constitutional treatment so far as the wound is concerned.

WHERE CAN THIS READER BUY MUSCOVY DUCKS?

Do you know of anyone who raises Muscovy ducks?, As I have lost my drake would like to know where I can get another, as I have three ducks and no drake. Please let me know thru the M. B. F. We like the paper very much. I understand someone near Howell raises the Muscovy ducks but I cannot find out his name.

—Mrs. Myron Elnell, LeRoy, Mich.

The College will be able to furnish you one drake at \$4. The Muscovy is not common in Michigan. We only have the white ones.—C. H. Burgess, Proj. of Poultry Husbandry.

HOW TO USE FOWLER'S SOLUTION OF ARSENIC

Can you tell me if Fowler's Solution can be used and for what allment; and how much as a dose?—J.

T. C., Port Austin, Mich.

Fowler's Solution of Arsenic, to which I presume you refer, is used as an alterative and general tonic in wasting and chronic diseases. Given to horses and cattle in from ¼ to ½ ounce doses, twice daily; for sheep and swine in teaspoonful doses, twice daily.

As arsenic is an accumulative drug when administered internally it is best to prescribe it for a period covering a week or ten days, to discontinue it for an equal period to again repeat as before. Arsenic may, if desired in the form of Fowler's Solution be given with other general tonics.—R. P. Lyman, Dean Veterinary of Medicine M. A. C.

The Story of the Hampshire Hog

(Continued from last week)

The most fashionable hog in England at that time was about 150 lbs. Most of the breeds in England would easily attain 100 lbs., and there seemed to stop. Hampshire blood was/introduced in order to bring them up to 150 to 200 lbs. weight, which were the best sellers and best killers for their particular market. Professor David Lowe says that in 1842 there were very few herds of this old English breed in their pure-bred state, although they had been kept so in the Hampshire district of England from which this noted breed in America gets its name. He speaks of their superior flavor of meat, of their most excellent bacon quality and of their extreme great size; and on account of their extreme size, they were not kept in their pure state of breeding after about 1840, but during the time from 1825 to 1835 they were kept in their pure-bred state in very large numbers and in some districts were called Hampshire hogs, such a title being given to them on account of their being more prominent in Hampshire than in any other section of the country. It was in 1830 that a large drove of these hogs were imported to America, being imported into Massachusetts by Mr. McKay. They spread through Ontario, Canada, and south and west in Pennsylvania. Major Joel Garnett had seen and heard of them in England, and as soon as he learned they had been imported to America he sent his agent to buy them. He purchased a large herd. They were driven through Pennsylvania on foot; through some of the mountain country they were hauled in wagons and driven by turns. They were loaded on flat boats at Pittsburg and sent down the Ohio river to Boone county, a point ten or fifteen miles below Cincinnati. These hogs were kept pure-bred by John H. Aylor; our late president, J. E. Rouse and before his day, by his father, George Rouse; F. M. Hallett; E. H. Blankenbarker; J. M. Craven and a few others who were prominent in pure bred hog breeding in Boone county, Kentucky.

The Hampshire Record was organized in 1893 but on account of the easy-living, Boone county habits, there was not very much ambition put into the Record association in order to get classification at the different fairs, which is the best means of presenting livestock to the public. It was in 1903 when the present secretary was elected and having a slight acquaintance with the Secretary of Agriculture James Wilson, who had visited the Chicago International in 1901 and saw the first champion five Hampshire barrows that had ever been exhibited to the public, asked Secretary Wilson for a classification for Hampshire hogs as a national breed. The request was granted. When Honorable James Wilson, in company with the late Chas. F. Mills, and a few

hogs which has come to revolutionize swine husbandry in America." But few of us could realize at that time that this statement, coming from so great and so well-informed a man, could so suddenly come true and vindicate his statement. At the time he made this statement, there were less than a dozen owners of Hampshires, registered or eligible to register, in America. As we write this article in December of 1918, we find about 35,000 well established herds of Hampshire breeding stock in America and on this day, December 17th, 1918, the U.S. government has lifted the embargo from Portugal so that Hampshire breeding stock may be exported from the United States to Lisbon, Portugal. This is a record which has never been attained by any other association or any other breed during these days of war times and readjustment after war. The Hampshire hog will be the first hog to leave America after the embargo is lifted. He has been the first hog in the hands of those who have handled him for the past foursteen or fifteen years.

The present secretary has kept very close record of the doings of all Hampshire breeders and this sad bit of history is a record in these days of Spanish influenza,-we have lost more breeders by death in a period of one month out of the Hampshire ranks than we have lost from all other causes, including death, dissatisfaction and unpopularity of the breed, in its history. It is a matter of present-day history that whenever a man takes up with the Hampshire breed of hogs, he has taken up with something which he became very fond of and stays with. In looking over history of men who have tried this breed, we find that a large percent of them today own the farms which they rented when they commenced with the Hampshire hogs.

(To be continued next week)

BREEDERS NOTES

We have just had a good call for registered Jersey cattle, having sold several head at good prices, and have several head of cows and heifers left. We are getting 72c for butterfat. Will send pictures of cattle. We have some of the best registered Jerseys and young stuff for sale at all times. Michigan Business Farming sure hits the nail on the head, and it looks like the farmer was coming into his own, having been the goat long enough.—C. A. Bristol, Fenton, Mich.

E. C. Foreman, extension specialist in poultry for the Michigan Agricultural College, spent a day in Saginaw county and visited Douglas V. Bow's farm in Kochville township, Saginaw, W. S., R. No. 3, and went through his flock of Barred Plymouth Rocks. He found sevenhens which would not lay at a profit. He also helped Mr. Bow mate up his breeding pens for the coming season, and also gave him some good advice on better ventilation. Mr. Bow has been breeding for high egg production for the past six years. His laying house is 22x30 ft., and he has one hundred and twenty-five of the best hens and pullets he has ever raised. Mr. Bow is aiming to some time in the near future enter a pen at one of the egg-laying contests.



Registered Jersey Cattle of C. A. Bristol, Fenton, Michigan,

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CATTLE

Two Young Bulls

for Sale, Ready for Service
One from a 25 lb. cow and one from a
22 lb. four year old. Write for pedigrees
and prices. 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. es and further information. Musolf Bros., South Lyons, Michigan.

MICHIGAN BUSINESS FARMING has sold two different lots of cattle I have offered. I now offer heifer calves from heavy milking dams for \$100 each, and the same kind of bull calves for \$35.

ROBIN CARR FOWLERVILLE, MICHIGAN

Clover Dairy Farm offers a 10 months of Hengerveld De Kol sired by Johan Hengerveld Lad 61 A.R.O. daughters, eleven from 25 to 31 lbs. 19 others from 20 to 25 lbs. Dam is a granddaughter of King Segis who has a 32 lb. 4 yr. old sister. This calf is a splendid individual, well marked and well grown, price \$100 f.o.b. Flint. Write for extended pedigree and description. L. C. Ketzler, Flint, Mich.

Wolverine Stock Farm

Offers two sons about 1 yr. old, sired by Judge Walker Pletertje. These calves are nicely marked and light in color and are fine individuals. Write for prices and pedigrees: Fattle Creek, Mich. R. 2.

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 Boy and by a son of King Segls 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 46 lbs. and sires' dams up to 46 lbs. Write for pedigrees and prices. Fred J. Lange, Sebewaing, Michigan.

HOLSTEIN BULL CALVES
Sires dams average 37.76 hs. butter 7 das. 145.93 lbs. 30 das. testing
5.52 hat. Dams good A. R. backing.
Calves nice straight fellows 3 white.
Price \$65.00 each while they last.
Herd tuberculin tested annually.
Boardman Farms, Jackson, Michigan.

Holstein-Friesian Cattle-

Under the present labor conditions
I feel the necessity of reducing my
herd. Would sell a few bred females
or a few to freshen this spring. These
cows are all with calf to a 30-pound
bull. J. Fred Smith, Byron, Michigan

SUNNY PLAINS HOLSTEINS

Type, Quality. A few bull calves from A. R. O. dams for sale. ARWIN KILLINGER,
Fowlerville, Michigan.

CHOICE REGISTERED STOCK

PERCHERONS, HOLSTEINS, SHROPSHIRES,

ANGUS.

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

WOLVERINE STOCK FARM

I want to tell you about our Junior lerd Sire, "King Pontiac Lunde Kornyke Segis," a son of King of the Pontics, his dam is Queen Segis of Brookside, daughter of Pontiac Clothilde De Koind and Prince Segis Korndyke, a great ombination of breeding.

We are breeding this young sire to be daughters of Judge Walker Pietertje, ur Senior Herd sire whose first five ams each have records above 30 lbs, he iso has two 30 lb. sisters. How can ou go wrong by buying a bull calf of his popular line of breeding?

T. W. Sprague, Battle Creek, Mich.



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.

We Sell at Breeders' Sale

at College, Feb. 6th, Good Foundation cow, A.R.O. record as 3-year-old, 40½ 1bs. of milk 18.77 of butter. 30 lb. sister, bred to 30 lb. bull.

C. L. Hulett & Son, Okemos, Mich.

JERSEY

JERSEY BULLS ready for service for sale. Sired by Majesty's Oxford Fox, and out of R. of M. Dams by Majesty's Wonder. Herd tuberculin tested and tree from abortion. Our aim is size with good type, and production. Wildwood Jersey Farm, Alvin Balden, Capac, Mich.

For Sale Reg. Jersey bull 14 months old St. Lambert breeding.
J. E. MORRIS, - Farmington, Mich.

GUERNSEY

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

ABERDEEN-ANGUS

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

SHORTHORN

OAKWOOD SHORTHORNS. . Three bulls from Bates cows, 10 to 13 mos. old. Collar Bros., R. No. 2, Conklin., Michigan.

FOR SALE—SHORTHORNS
Of Quality, Scotch and Scotch topped.
Maxwalton Monarch 2nd & Maxwalton
Jupiter in service.
John Schmidt & Son, Reed City, Mich.

For Sale standard bred Polled Durham Short horn Bull Calves, ealved May 2nd and June 4th. Paul Quack, Sault Ste. Marie, Michigan, R. No. 2, Box 70.

SHORTHORNS and POLAND CHINAS. Bulls, heifers and spring pigs, either sex, for sale, at farmers' prices, F. M. Piggott & Son, Fowler. Michigan.

SHORTHORNS have been kept upon Maple Ridge Farm since 1867 and are Bates bred. Two red heifers for sale; 1 bull, 10 mos. old.

J. E. Tanswell. Mason, Michigan.

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.

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

O. I. C. pigs. Five young bulls, 7 to 9 months. \$125 to \$180 each. Ray Warner, R. No. 3, Almont, Michigan.

FOR SALEREG. SHORTHORN BULL, breeding. W. S. Huber, Gladwin, Mich.

HEREFORDS

HEREFORDS Herd headed by Bob Fair-you with males or females, Polled or horned. Write for prices. Earl C. Mc-Carty, Bad Axe, Mich., Sec. Mich. H. B. Association.

HORSES

SHETLAND PONIES

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

HOGS

O. I. C.

8LARGE TYPE O. I. C.

Spring boars. Also 2nd prize Jr. yr. boar Mich. State Fair, 1918. CLOVEB LEAF STOCK FARM Monroe, Mich.

O. I. C.'S Two last spring boars, a good bred for next spring farrow. Also last fall pigs not akin. All good thrifty stock. Otto B. Schulze, Nashville, Michigan. Citizens' Phone, 124.

Bred Gilts 0 Serviceable Boars J. Carl Jewett, Mason, Mich.

DUROC

DUROC JERSEYS

Bred sow and gilts, Special price on bred sow and big growthy fall boar, not related to sow or litter, Newton Barnhart, St. Johns, Michigan.

PLEASANT VIEW DUROCS

Three choice bred gilts priced at \$60 each for quick sale.
W. C. Burlinghame, Marshall, Michigan.

Peach Hill Farm

Start the New Year right. Buy a registered Duroc Jersey Boar from
PEACH HILL FARM
Inwood Bros., Remee, Mich.

DUROC BOARS, GILTS
We are offering some fine. Big type, tall and spring Boars and Gilts. At Parmers' Petices.
F. E. EAGER and Son
HOWELL, MICHIGAN

DUROC JERSEYSWINE. Boars, Sows, for sale. Choice spring boar, sired by Brookwater Tippy Orion No. 55421. This is an unusually good bunch to select from. Come and see them or I will ship on approval. Fall pigs \$18 each, either sex. Home Farm, Thos. Underhill, & Son, Props., Salem, 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.

POLAND CHINA

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.

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

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.

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.

WALLNUT ALLEY BIG TYPE Poland China Gilts. Sired by Arts Big Bob. Will be bred to a son of Giant Senator for April farrow. If you are looking for the best of breeding and the kind that gets big and has quality here is the place to find it. Please give me a chance to tell you more about them. A. D. Gregory, Ionia, Michigan.

BIG TYPE P. C.. The best lot of big, bodied, heavy-boned boars; the prolific kind; litters averaged better than 10 the past 3 years.

H. O. Swartz, Schoolcraft, Michigan.

BIG TYPE P. C. BOARS, Rambouillet and Hampshire rams and ewes for sale.

A. A. Wood & Son, Saline, Michigan.

BIG Type Poland Chinas. Spring boars for sale. Booking orders for bred gilts. Inspection invited. L. L. CHAMBERLAIN, Marcellus, Mich.

Poland China Hogs
Oxford Sheep C
Toulas Geese
White Wyandotte & Barred Roct. Chickens
MILL CREEK STOCK FARM
S. J. Lambkin, Prop., Avoca, Michigan.

HAMPSHIRE

H AMPSHIRE SPRING BOARS now at a big bargain, bred gilts now ready to ship. John W. Snyder, R.F.F. No. 4, St. Johns, Michigan.

SHEEP

SHROPSHIRES

Registered Shropshires A few large well fleeced three and four-year-old ewes bred to high class ram to lamb in Mar. and April. Flock established 1890.

C. LEMEN, Dexter, Michigan.

DELAINES, bred on same farm for 50 years. Size, quality prepotent; rams for sale delivered. Write S. H. Sanders, R. No. 2, Ashtabula, Ohio.



POULTRY

HOMESTEAD FARMS

A Federation of Interests

Day Old Chicks

We are now at the beginning of another hatching season. Our new poultry Catalog, with illustrations and full description of each breed, will be ready for distribution about January 15.

If you want to buy Day Old Chicks this spring, write to us so that you may learn something of our Pure Bred Practical Poultry; each breed in a colony entirely separate from every other colony, a free farm-range stock.

Breeds for the Season are:

Barred Plymouth Rocks, White Plymouth Rocks, Buff Plymouth Rocks, R. C. Rhode Island Reds, S. C. Rhode Island Reds, White Wyandottes, Silver Laced Wyandottes, S. C. Black Minorcas, S. C. White Leghorns, R. C. White Leghorns, S. C. Brown Leghorns, R. C. Brown Leghorns, R. C. Brown Leghorns, R. C. Stellian Butter Cups.

Eggs for Hatching

Eggs from the foregoing breeds in quantities for incubators and also in single sittings. We would appreciate correspondence with any person who will need incubator eggs this spring.

Plymouth Rock Eggs for Early Broilers also in quantities and at lower prices.

Cockerels.—A few Cockerels of nearly all the foregoing breeds.

We will send you illustrated catalogue and price list; ready about January 15. HOMESTEAD FARMS ASSOCIATION, Desk B Bloomingdale, Michigan.

WYANDOTTE

Silver Laced, Golden and White Wyandottes of quality. Breeding stock after Oct. 1st. Engage it early. Clarence Browning, R. 2, Portland, Mich.

LEGHORN

PROFITABLE BUFF LEGHORNS—We have twenty pens of especially mated 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.

ORPINGTON.

For Sale WHITE ORPINGTON COCK-erels \$3 and \$5 each. White African guineas \$2 each. Odell Arnold, Coleman, Michigan.

BARRED ROCK

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

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

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

CHICKS

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



64 BREEDS Most Profitable chickusble new 112 page book and catalog free. R.F.NEUBERT Co., Bex 841 Mankate, Minn

DOGS

DOGS FOR SALE
2 thoroughbred English Fox hound
Pups, 8 months old; females.
W. G. Rice, Springvale, Michigan.



A Special Proposition to Lime Users During January and February

You remember that last year Solvay Pulverized Limestone was in such big demand that some farm owners had to plant their crops without it, in acid soil.

That was because many Michigan and Indiana farmers waited until they wanted to spread their lime before they lordered Solvay. Orders came in masses, naturally, and everyone could not be supplied at once.

This year, to make sure of getting your lime, order in advance, and we will co-operate with you.

> Place your order for Solvay Limestone for January or February delivery now, and we will date your invoice April 1st and extend you our usual terms of 3% for cash if received before April 10th or ninety days net.

By this method you can order your lime now-get it now-haul it during the winter, when hauling will not interfere with other work-store it in safety, for any shed with good roof will keep bulk lime in good shape-we provide air-tight wrappings for the smaller quantities-and pay for it when you use it.

Why Farmers Choose Solvay

It is not necessary these days to tell the modern farmer the benefits to be derived from the proper use of land lime. Everyone knows them-the bigger yield and in contact with the soil-works on it-

improved crops land lime develops. Your county agent knows your soil. He knows just what improve ments limestone will work in it, and he will gladly discuss the matter with you.

The big thing to be sure of, however, is that you are getting the best land lime you can buy-for only the best will give full returns.

The demand for Solvay Pulverized Limestone is sufficient proof of its quality.

Solvay lime is so finely pulverized that 95% of it-will pass thru a 50-mesh screen. This means that every particle of it comes

removes the acids—makes the soil sweet.

Another reason for the better results Solvay produces is the fact that we guarantee 94% carbonates.

All Solvay Limestone is furnace dried. It is shipped in bulk in box cars or in 100 lb. dry,

air-tight paper sacks in box cars. Remember that to make sure of getting your Solvay Limestone this year you should order it early!

SOLVAY PROCESS COMPANY 2097 JEFFERSON AVE., DETROIT, MICH.

Ask your county agent about the value of land lime.

