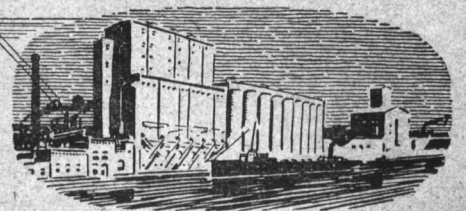


The Michigan **BUSINESS FARMER**



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Farmer's Weekly Owned and
Edited in Michigan



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NOTHING BUT RINGERS

ANOTHER WOOL POOL

THE Michigan State Farm Bureau is planning a third or 1922 wool pool. With the marketing of the 1921 pool almost completed and work on closing the pool books quite close on hand, the State Farm Bureau executive committee on January 10, instructed Clark L. Brody, general manager of the State Farm Bureau, to begin preparing plans for a 1922 wool pool.

Wool marketing conditions are improving steadily in the United States. This year Michigan wool pooling farmers sold their wool on a rising market, a market which in May offered 18 cents for 3-8 clothing wool, 23 cents for 3-8 combing and 22 cents for 1-4 combing. In January 1922 the market paid 30 cents for 3-8 clothing, and 30 cents for 1-4 combing wool. A corresponding increase in price was noted in other grades. The foregoing figures were taken from the very first sale of 1921 wool—a small block in May and a January 1922 sale. The Farm Bureau began the real movement of 1921 wool in late August.

The State Farm Bureau wool pool is declared to have made remarkable progress in the past two years in reducing an untried phase of co-operative marketing to efficient methods of procedure. Experience has improved some of the early pooling methods and there is yet a con-



Current Agricultural News

stant effort to better the service and to reduce the cost, says the Farm Bureau.

THE LAST REMAINING PUBLIC TIMBER LANDS IN DANGER

By P. L. Buttrick,
Forestry Department, Michigan Agricultural College.

IN 1905 CONGRESS took from the hands of the Department of the Interior the management of the National Forests and placed them in the hands of the Department of Agriculture. It did so for the protection of some 150,000,000 acres of public timber land, this being almost the last public owned timber land in the country. The public ownership of this land is essential for the protection of the agricultural interests in the regions where the forests occur, as well as for the perpetuation of our timber supply since they furnish water for irrigation and protect the farm lands from landslides.

With the increasing scarcity of lumber cut from private holdings and its consequent rise of prices which is bound to continue despite temporary set backs, we shall need this public timber which can be

marketed at reasonable prices and thus serve to check the unreasonable prices which private owners will ask.

The transfer from the Interior to the Agricultural Department was made necessary by the inefficient and corrupt management of the Interior Department, which permitted the forests without relation to the public welfare. Under the management of the Agricultural Department the handling of the forests has been honest and progressive. For years the interests opposed to the forests have attacked them but now they are too well entrenched in popular approval to fear a direct attack. So the plan of transferring them back to the Interior Department with its political, reactionary and capitalistic viewpoint, under the guise of needed administrative reorganization, has been hit upon. Such a change would pave the way for just what the farmers don't want—private control of our last timber resources. Since the Interior Department holds officially to the view that land and timber should pass into private ownership rather than remain as public property.

The so-called King Bill S 2740 is

designed to put this transfer over. Request your representatives in congress to oppose it.

(Editor's note: The executive committee of the Michigan State Farm Bureau has already vigorously denounced this proposed transfer, and readers will do well to act upon Prof. Buttrick's suggestion along that line.)

TO HOLD HEARINGS ON TAX PROBLEMS

THE MICHIGAN State Farm Bureau has a farm bureau tax committee considering state taxation problems from an agricultural point of view. Findings are to be presented to the state board of delegates at the fourth annual meeting of the State Farm Bureau at the Michigan Agricultural College, Feb. 2 and 3, according to present plans. The committee may present the farm bureau point of view at a taxation hearing at Lansing, January 25, called by the Michigan Commission of Inquiry into taxation.

The Commission of Inquiry into Taxation, headed by Representative George Lord, is engaged in making an investigation and study of tax conditions in Michigan for the purpose of submitting a bill embodying constructive recommendations to the next regular session of the legislature.

In order to get the views of the taxpayers relative to changes the commission is holding a series of conferences to which representatives of various property interests are being invited. Agricultural interests of the state are to have a hearing January 25. The Farm Bureau, Gleaners, Grange and Farmers Clubs have been invited as representatives.

Several interests have been heard—among them the state assessing officers who went on record as favoring a state income tax, an annual tax of one-half of one per cent on all intangible property, repeal of the Covert road act, utmost economy in compiling the state budget, and that the mill tax appropriations for the University of Michigan and the Michigan Agricultural College be hereafter based on the state equalization for the year preceding the year in which the legislature meets.

Manufacturers, corporations, railroads and others were scheduled to meet the Commission of Inquiry.

ANNUAL MEETING OF BEET GROWERS

THE MICHIGAN Sugar Beet Growers' Association will hold its annual meeting and elect officers at the Eastside Auditorium at Saginaw, January 23rd, at 1:30 P. M. Speakers for the afternoon will be John Doelle, member State Board of Agriculture; James Nicol, president State Farm Bureau; A. B. Cook, master State Grange; D. Waid, Ohio State Farm Bureau Vegetable Marketing Department, and Frank Dickman, Illinois Agricultural Association.

SHORT COURSES AT M. A. C.

SHORT courses in agriculture at M. A. C., particularly those in horticulture and dairy management and manufacturing, are proving very popular this year and the enrollment on January 2, the opening day for part of them, showed that more men are taking the special courses than at any time since the winter short courses were started. In the special eight-weeks course in horticulture, 35 men are signed up, 31 in the eight-weeks course in dairy production, 23 in the eight-weeks course in dairy manufactures, and 13 in the four-weeks course in poultry, besides 51 in the general courses in agriculture.

In commenting on the increased attendance in the short courses in horticulture and dairy work, Director of Short Courses Berridge attributed the increase to the fact that there has been money in fruit and dairy production this year. Also an increased interest in dairying has been created by the Milk and Alfalfa campaigns put on by the extension department of the college in co-operation with the county agents. On the other hand general farming has not paid as well and this condition is reflected in a decreased attendance in the short courses in general agriculture.

(Continued on page 17)

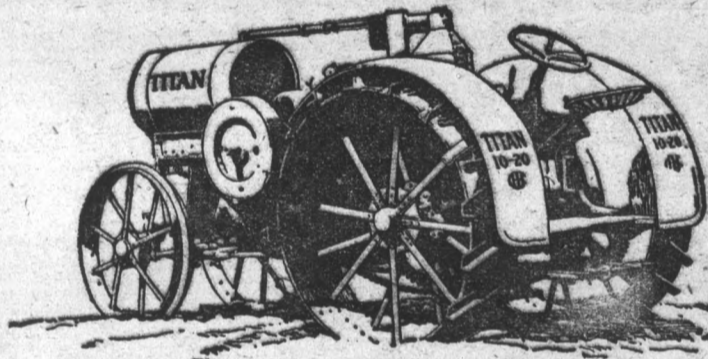
These International Machines, Requiring Power at Drawbar or Belt, are Built to Work Right with Tractors:

BELT

Threshers
Baling Presses
Feed Grinders
Corn Shellers
Ensilage Cutters
Huskors and Shredders
Huskors and Silo Fillers
Cane Mills
Stone Burr Mills

DRAWBAR

Grain Binders
Harvester-Threshers
Headers
Push Binders
Mowers
Grain Drills
Corn Binders
Corn Pickers
Plows
Disk Harrows
Spring-Tooth Harrows
Peg-Tooth Harrows
Field Cultivators
Culti-Packers
Manure Spreaders
Wagons



Why Are the Most Successful Farmers Using International Harvester Equipment?

MORE than 100,000 farmers who have decided in favor of International Harvester tractors have been guided by the same impulses.

They knew that, because of its 90-year contact with farming problems, the International Harvester Company was in better position than any other company to design and build long-lived, practical farm tractors.

They knew that in the International Harvester line they could find both tractors and machines which were designed to work together as field units.

They were absolutely sure that the most practical and helpful service would be quickly and easily and forever available to them. Many years' experience with the International Harvester Company had convinced them that nowhere else could they find a line of power farming equipment so closely backed by satisfactory service.

They knew that these factors would guarantee their investments for years of usefulness. Year after year the wisdom of Titan-International Tractor ownership grows more apparent.

Let the judgment of these 100,000 farmers help you. For belt work now and for drawbar work in the spring, follow their advice. Use International equipment. Remember that both Titan 10-20 and International 8-16 now sell for \$900—lowest prices ever quoted on these tractors with their present equipment.

INTERNATIONAL HARVESTER COMPANY

CHICAGO

OF AMERICA

USA

92 Branches and 15,000 Dealers in the United States

State Banking Dept. Assures Farmers' Credit Aid

Banking Commissioner McPherson and Governor Groesbeck Pledge Assistance in Present Emergency

By THE EDITOR

FREQUENT attention has been called in these columns to the fact that while the War Finance Corporation has loaned millions of dollars in every important state west of the Mississippi, not a single dollar has found its way into Michigan. For some weeks the Business Farmer has been engaged in an investigation of the reasons for this situation. This investigation has led to a limited survey of local credit conditions, to interviews with representatives of implement manufacturers, to sessions of the war loan agency for Michigan, and finally to the State Banking Department, at Lansing.

Facts established by the investigation show:

1. That Michigan as a whole does not need the money of the War Finance Corporation as badly as other agricultural states. In the south, western and lower eastern portions of the state most banks are having little difficulty in taking care of the farmer's needs at the legal rate of interest.

2. That in the north central, northwestern, northeastern, and extreme northern sections of the state, as well as in the more northerly sections of the Thumb districts there are localities where farmers are being pressed for payment of their loans, upon various pretexts ranging from the alleged scarcity of money to insufficiency of security. Moreover, in these same sections thousands of farmers are being charged the equivalent of 12 per cent or more on loans of \$100 and upwards.

3. That many bankers are not familiar with the War Finance Corporation, or else for reasons which can only be surmised, do not want to avail themselves of its funds.

4. That the war loan agency is not particularly keen on "selling" country bankers on the idea of going to the corporation for funds. It believes that having acquainted the bankers of the state with the provisions of the law, it has done its duty. Perhaps it has.

5. That the State Banking Department discourages country banks from borrowing from this corporation to re-lend to farmers.

In justice to Mr. Hugh McPherson, the banking commissioner, an explanation of his attitude is in order.

The country is passing through a severe crisis. Many banking institutions in other states have over-extended their loans and failed. There has not been a single bank failure in Michigan, because our bankers have been cautious. Many of them are loaned to the limit, and the

GIVE THE BUSINESS FARMER THE FOLLOWING FACTS:

1. Name and address of bank with which you do business.
2. Length of time you have lived in the community.
3. Past relations with banker (friendly or unfriendly).
4. Present obligations, and how secured (mortgage, endorser, etc.)
5. Present needs. State if bank is pressing you for payment, and reason given by bank. **THIS IS IMPORTANT.** Are you in need of additional funds? For what purpose? Has your banker refused to accommodate you, and why? What security have you to offer? How soon do you think you can pay your loan?
6. What interest is charged on sums of \$100 or more for ninety days and more? Is this the prevailing rate of interest charged to farmers in your locality?

*Note: It is recognized legitimate practice for a bank to charge more than 7 per cent on small loans running up to a hundred dollars perhaps for short periods of time. No one objects to paying \$1, for instance, for a loan of \$100 for 30 days. Be sure to discriminate between the two cases.

state banking department cannot pursue a policy of encouraging loaning at this time. Mr. McPherson believes that to approve of Michigan banks going to the War Finance Corporation might be construed as permission to resume loaning upon an extravagant and dangerous scale.

Banks must endorse all notes which they re-discount through the War Finance Corporation. Technically then every bank which borrows from the War Finance Corporation increases its liabilities by the amount it borrows. That is the position which Mr. McPherson takes, and perhaps rightly. The Business Farmer holds, however, that actually and practically the bank does not increase its obligations. The security offered by the farmer must be adequate, so that no matter who finally holds the note he is amply protected. The only risk which the bank takes is being called upon by the corporation to pay the note before the farmer is able to take it up. It

is, however, quite unthinkable, and the banking commissioner and members of the war loan agency so admit, that the War Finance Corporation, being a subsidized branch of the United States government should pursue any policy which would jeopardize the country banks. The law provides for the liquidation of all loans within three years from date made, but it is generally believed that this time limit will be extended from time to time to accommodate the banks and their farmer patrons.

Banking Commissioner McPherson is himself a farmer and comes from a line of farmers. He assures the Business Farmer and the Business Farmer believes him, that he does not want to see any pressure brought to bear upon farmers at this time to pay their loans if they are unable to do so. He believes that the banks of the state are able to extend farmer paper without assistance from the War Finance Corporation. But if not his department wishes to know about it and will act accordingly.

WHAT FARMERS SHOULD DO

So the situation as it stands today is this: No farmer who must have money for actual farming purposes, and can offer adequate security, need be denied. No farmer whose security is adequate need be pressed for payment of his loans if it is not convenient for him to pay them now. No farmer need pay more than the legal rate of interest for large and long-time loans. It may take a little time to actually bring about this condition, but this is the policy of the banking department and will be put into effect as soon as possible.

The Business Farmer does not believe that it is good business for the farmer to borrow now to buy high-priced luxuries or make investments outside of his farming business. But it does believe that he should be given every reasonable chance to continue his farming operations with the least possible loss and sacrifice of crops. And the Business Farmer would extend its best efforts to assisting farmers in need of money to secure that money through the regular banking channels at fair rates of interest. Therefore, every farmer who is having any difficulty securing needed loans, or extending loans already made, at moderate interest rates, is urgently requested to report the full facts in his case to the editor of the Business Farmer.

Interests of Michigan Beet Growers Involved in Tariff Fight

THE WELL-KNOWN Dick Fletcher is greatly worried over what may happen to Michigan sugar beet growers providing the present congress does not see fit to give the beet sugar industry the protection which it needs from cheap Cuban cane. In a letter to Sen. Townsend he nearly weeps over the plight in which he alleges the farmers will find themselves if Michigan sugar factories are put out of business by cheap foreign competition. "For," says Dick, "the beet farmer has an assured market for his crop in the fall, at a guaranteed price that yields a fair profit, and he is paid in cash. The sugar companies finance the farmer all through the crop raising season for his seed and labor."

We have a "sneaking suspicion" that Dick is talking once for the farmer and twice for the manufacturers as is usually the case when those known to sympathize with the upper dog begin to plead for the under-dog. However, it is not the purpose of this article to impugn Mr. Fletcher's motives or to make light of the danger which impends to the domestic beet sugar industry. But we have become so plumb disgusted with the crocodile tears that have been shed over the farmer by those who wouldn't turn their hand over to actually help him get anywhere that we become grouchy, and pessimistic whenever the subject is broached.

For some reason we find it hard to sympathize with the stockholders of Michigan sugar beet factories in their present predicament. If pro-

BEET GROWERS TO MEET

JUST AS we go to press announcement is received from Mr. R. P. Reavey, sec'y-treas., of the Michigan Sugar Beet Growers' Ass'n., that there will be an important meeting of beet growers at the Saginaw Armory, Monday, Jan. 23rd, at 1:30 P. M., when a number of agricultural leaders, in this and other states, will be present to discuss the problems before the industry. Every farmer and beet grower is urged to attend this meeting.

tection is not given from Cuban competition the property cannot be sold for enough money to buy gunpowder to blow them up. Of course, that means that the farmer can grow no more beets, but if he must grow beets at \$3, \$4 or even \$5 per ton, which is the present prospect, it will be perhaps just as well that he turns to other crops. No one interested in Michigan agriculture or industry wants to see this happen. They want to see the farmer continue to grow beets if he can get a fair price for them, and they want to see the factories continue to prosper if they will pay the farmers a fair share of their profits. But it must be conceded that the impending calamity would hit the factories worse than the farms.

The manufacturers of the state have been invited, cajoled and threatened into meeting with farmer representatives for the purpose of negotiating the prices and conditions of sugar beet contracts. But fortified as they thought by a never-ending demand for their product, and having confidence in their ability, to continue forever to secure their acreage from the individual and unorganized farmer, they spurned all advances, hoed their own row, and are gamely trying to take their medicine. Had the sugar companies established a precedent several years back when prices were high of dealing friendly and openly with the organized producers, they would not have to eat crow now. They insisted on going it alone when prices were high. So why not let them continue the practice now that prices are low.

As this publication has pointed out many, many times, the making of a contract between producer and manufacturer cannot be fairly, nor wisely, nor safely, dictated by one party. It must be a matter of negotiation, taking into consideration all the factors surrounding both the production and the finishing of the product and all the factors which govern or may govern the selling price. Neither party can, without due regard for the rights of the other, continue for any length of time to make large profits at the expense of the other, and conversely. The farmers do not want to "hog" all the profits of the industry. Neither (Continued on page 17)

Surplus Milk Keeps Dairy Prices at Low Ebb

Fluid Milk, Cheese and Butter Prices all Suffer from Excess of Supply over Demand

WE NAMED last week certain primary causes for low dairy prices, as follows: Public opinion, over-production, loss of foreign markets, competition of foreign dairy products, profiteering resulting from present marketing system, and seasonable surplus. We discussed in detail the precise effects which the first four of the above factors have had upon dairy prices.

TOO GREAT A SPREAD

A review of the dairy situation is not complete without some reference to the present system of marketing. That it costs too much to get milk and its products from the cow to the consumer is a fact admitted by nearly all, including many who are partially responsible for the large cost. This spread varies considerably in different sections depending upon the extent of the competition. It is least where strong farmers' organizations hold sway and own a part of the machinery of distribution. It is greater where the farmers are unorganized or where farm organizations seek to influence marketing practices and cost without effective means for so doing.

Speaking before a group of producers not so very long ago, W. J. Kennedy, the big man in the Detroit milk distributing business, said:

"We know it costs too much to distribute milk. We don't like it any better than you do to have to compete with 40 or 50 other companies and make the same rounds as they do. But what are we going to do about it. If we keep the business we've got to sell milk to all who come. It is costly, I'll admit, for a score or more milk routes of as many different companies crossing and re-crossing each other."

It cannot be denied that had the producers of milk secured strong control of the marketing end in the early days of their industry they never would have permitted such a situation to develop as is apparent in every large city where it costs two to three times as much to deliver milk as it does to produce it. But having contributed through negligence to this condition, it is foolish to argue that there is no remedy and that it should be allowed to go from bad to worse.

FUTURE UNCERTAIN

There are some milk producers' associations which are fully aware of the insecure situation in which the dairyman finds himself as a result of the dominating position held by the manufacturer and distributor. Proof of this fact is offered in a warning which Mr. A. H. Dexter, vice-president of the Twin City Milk Producers' Ass'n., sounded at the annual meeting. Mr. Dexter said:

"Our secretary's report stated that our new contracts with the distributors provide that either we or they can cancel our contracts by giving thirty days' notice. Our relations with the distributors are more friendly than they have been at any time during our history and we sincerely hope and expect this to continue. However, there is always a possibility that we shall not be able to agree on prices and selling conditions, and in order to be prepared for any such emergencies, such a possibility must be considered. In case any group of large distributors should decide to cancel their contracts by giving us thirty days' notice, there is no question but that they can secure all the milk necessary to continue their business without buying from our association, as we realize fully that our mem-

OUR DAIRY SURVEY

FROM every section of the United States the M. B. F. is receiving information about the progressive steps which milk producers' associations are taking to overcome the obstacles in their business. It reveals a decided tendency to enter the marketing end of the business and millions are being spent in the purchase and erection of plants for the utilization of milk in various forms. The complete results of this survey will be published in an early issue.—Editor.

bers do not produce but a small part of the milk tributary to these cities.

"If the distributors should cancel their contracts, the only way that we could continue to sell milk on this market, would be to sell it direct to the consumer. In order to do this, we would have to take over several of the large distributors' plants, or build similar plants of our own. The very least which we would have to do in such a case would be to raise our capital stock to \$1,000,000, and our limit of indebtedness to the same amount. I believe that it would be good insurance for us to be *** prepared ** so that if such an emergency should arise we could act quickly *** and immediately take over the necessary plants and equipment. The fact that we are prepared to do this may prevent this emergency arising."

A far-seeing man, moved to speak his convictions by precisely the very same conditions which exist in the dairy sections of Michigan and which may result at any time in just such an emergency as the Twin City producers are urged to prepare against. But what are the organized farmers of Michigan doing to meet a situation which is bound to develop sooner or later as surely as night follows day?

A questionnaire which the Business Farmer has sent out to all milk producers' associations in the United States is bringing in a good deal of valuable information along this line. The most striking thing about these questionnaires is that in nearly all cases they show the price to the farmer to be the lowest in sections where farm organizations own no distributing or surplus plants and highest in sections where they do. In many localities farm organizations rest content with merely negotiating with distributors as formerly in the Detroit area, and in such cases the price to the farmer is generally low and the spread between his price and the consumer's price generally high, showing that there is a fundamental error in attempting to adjudicate prices based on cost of production where there are no effective means for enforcing them.

How dairymen can hope to secure adequate prices for their product when the determination of those prices is entirely within the hands of corporate bodies whose selfish interests improve as the price of milk goes down, is something which this publication cannot understand. Many farm organizations have recognized long ago the futility and absurdity of trying to "arbitrate" prices with distributors and manufacturers, and have given up in disgust and gone into the busi-

ness themselves. The dairyman can never hope to insure for himself a profitable price until he is in a position to say something about the marketing and the final selling price of his profitable price until he is in a position to say something about the marketing and the final selling price of his product.

THE SURPLUS PUZZLE

In our preceding article we discussed the causes for year-to-year fluctuations in the demand and supply of milk products. But the factor or factors which cause seasonal surpluses have fully as great an influence upon prices. And the practice of turning this surplus over to the retail distributor to do with it as he pleases only complicates the problem. Whether or not the purchaser of this surplus turns it to a profit or he uses it as a perpetual excuse for keeping down prices to the producer.

Due to a perfectly logical system of breeding we have seasons of large surpluses and seasons of shortage. How to induce enough milk producers to change their breeding customs in order to distribute the flow of milk more evenly throughout the year has been a matter to which many of the best minds of the industry have given considerable thought. As a rule the suggestion is not taken seriously by the producers themselves. The Twin City Milk Producers' Association, of Minnesota, is taking the matter seriously, however, and has announced a plan to encourage the farmer to breed for a more uniform milk flow. The plan is briefly as follows, as described in a recent issue of the official bulletin of the organization:

"The months of September, October and November will be taken as a base, and each member will be allowed the average amount of milk produced in these months, and 20 per cent more," and for all over this amount he shall be paid a surplus price to be determined by the board of directors, depending upon the actual surplus."

In other words, the above months being the months of normally lowest production and highest prices, "the member who produces a fairly uniform amount of milk the year around is going to receive more for it than the one who produces five or six times as much in June as in September, October and November."

Further upon the subject, the official bulletin says:

"Right now is the time to plan to increase your production next fall: Of course, we do not expect to get all our milk changed over, so that we get more in these months than in other months of the year, and it is practically impossible to do this. Arrange to have just as many as possible of your cows freshen early next fall. Prices at this season of the year are always high, and there is every indication that for several years they will be extremely low during the summer season."

Would it be out of order to suggest that the milk producers' association of this state take this surplus matter under serious advisement? Milk prices look low now, but what will they be when May and June roll around? We may yet see milk selling for a cent a quart in parts of Michigan before another year. If we do it will be very largely the result of a surplus which ought never to have been produced, but having been produced is permitted to enter the channels of trade and demoralize markets and prices.

Dates for Farmers' Big Annual "Get-Together" are Drawing Near

RECENT ANNOUNCEMENTS of the speakers who will appear on the annual Farmers' Week program at M. A. C. give added assurance of one of the best series of meetings of this kind ever held in the middle west. G. C. Creelman has assured the committee in charge that he will be in East Lansing and will speak at one of the meetings. Mr. Creelman was formerly president of the Ontario Agricultural College and for the past few months has been in England serving on an important agricultural commission. He will be able to give the guests at Farmers' Week a good idea of the condition of agriculture in Europe.

The American Farm Bureau Federation will also be well represented on the program. President J. R. Howard and Director of Livestock H. W. Mumford, will have prominent places on the program. The annual meeting of the State Farm Bureau will be held during Farmers' Week. Among other speakers secured for the

TOP-NOTCHERS ON FARMERS WEEK PROGRAM

J. R. Howard, president American Farm Bureau Federation.

H. W. Mumford, director of live stock, A. F. B. F.

Dr. Marion Leroy Burton, president U. of M.

Dr. David Friday, president-elect, M. A. C.

Mr. G. I. Christie, director Purdue Experiment Station.

Mr. G. C. Creelman, former president Ontario Agricultural College.

And many other speakers of prominence and ability.

big round-up are G. I. Christie, director of the Purdue Experiment Station and Major John Barnett, chairman of the Soldiers' Land Settle-

ment Board of Canada. With the soldiers' bonus question a live issue in congress now, Major Barnett's story of Canada's solution of this problem will be of more than ordinary interest.

Speakers for the women's section of the big week are of national reputation. Prominent among them are Dr. Caroline Hedger, of the Elizabeth McCormick Memorial hospital; Professor Barbara Bartlett, director of Public Health Nursing; Miss Martha Phillips, of the American Dye Corporation, and Dr. R. W. Bunting, president of the Michigan Dental Association, who will discuss the care of the children's teeth.

Special arrangements are being made to take care of the children which must necessarily be brought along if the wives are to have the chance to enjoy and benefit by the big meetings held for them. The babies may be checked at the Women's building and will be under the care of competent instructors. (Continued on page 17)

Story of Michigan's Largest Farming Enterprise

Prairie Farm in Saginaw County one of the Largest Producers of Pedigreed Stock and Seeds in the World

By H. H. MACK

COMPARATIVELY few people realize that there is located in Michigan, one of the most important agricultural enterprises in the world. Down in Saginaw county, south and west of the city of Saginaw and near the junction of the Shiawassee and the Flint rivers, is located the largest farm in Michigan; the tract includes nearly 10,000 acres of very rich, alluvial soil, surrounded by dikes which range from seven to ten feet in height. On the inside and at the foot of the dikes are drainage canals, ranging from 30 to 50 feet wide, which were made when the dikes were built. Thru these dikes, at regular intervals, are sewer-pipe sluices, the outside ends of which are kept closed whenever there is danger of the water rising on the outside of the dikes. In the season of high water, pumps are working night and day keeping canal levels down.

This tract of land is called the "Prairie Farm" and is owned and operated by the Owosso Sugar Co., which has sugar factories at Owosso and Lansing. Upon this farm are produced Royal Belgian draft horses, pure-bred Hereford cattle, pure-bred Duroc hogs, black top merino sheep and selected farm seeds. The manager and chief moving spirit in this important enterprise is Jacob DeGeus.

Upon the Prairie farm has been constructed a large number of convenient farm buildings, the accompanying illustration showing a group of horse barns. A large number of residence and cottages, a store building in which is located a postoffice, a farm office building, a clubhouse, a building in which is operated a motion picture show, a blacksmith shop, a battery of



A Group of Pure-Bred Belgian Mares and Their Foals on Prairie Farm

tool-houses and garages, a building in which is located an electric lighting plant and a pumping station, a two-room school house and other buildings too numerous to mention; this growing young town is called Alicia.

The population of Alicia is migratory, coming and going according to the needs of the farm work. The largest number of men ever on the company's pay-roll being 366; when the writer was on the farm, the other day 82 men were on the roll. There are 65 pupils in the school. Mr. and Mrs. DeGeus have seven children, five boys and two girls. Two of the sons assist their father in the management of the farm. While the principal crop raised on the farm is sugar beets, crops of corn, oats, barley and hay are also grown. The number of acres devoted to sugar beets, varies greatly with the seasons, the largest crop ever raised being 1,200 acres.

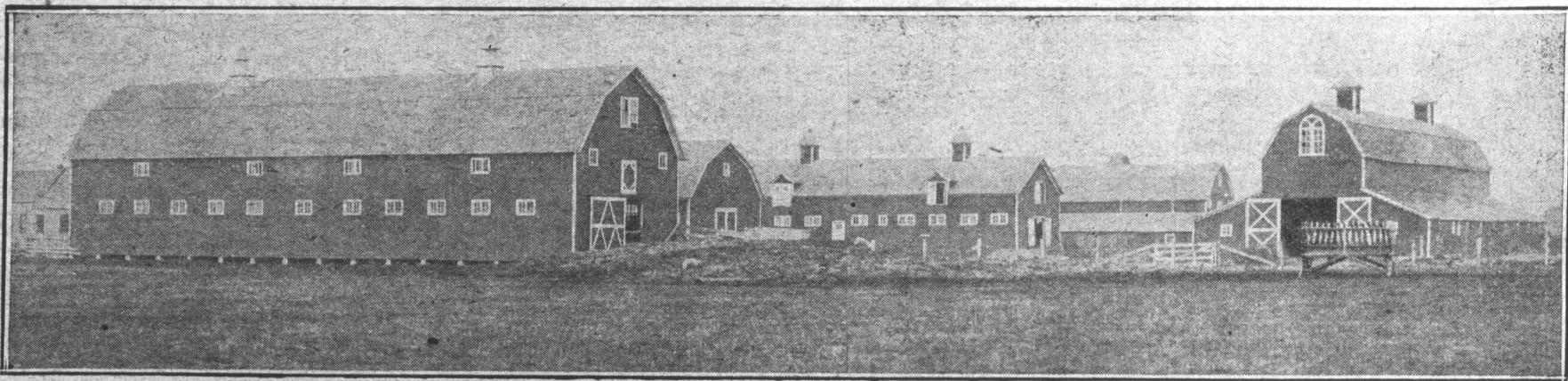
Early in 1919, Mr. DeGeus visited Belgium

and, before he returned, purchased twenty pure-bred Belgian mares and a pure-bred stallion. Colts have been raised from all of the available females each year; since the beginning of the enterprise, 26 pure-bred horses have been sold and there are now on the farm 82 head of pure-breds. On the occasion of a recent visit to this Prairie Farm, the writer saw some of the best draft horses that he has ever seen; in the pedigrees which tell the story of their wonderful ancestry, appear the names of the famous horses, Reve de'Or, Indigene du Fosteau and Brin de'Or. Prairie Farm horses have won championships, reserve championships, junior championships,

ribbons and gold medals galore at the International at Chicago and at the Michigan State Fair. Upon the farm at the present time are 20 pure-bred young draft teams, all in foal and broken ready to work.

Mr. DeGeus is a member of the State Fair board and one of the largest exhibitors of pure-bred live stock in the state. The Owosso Sugar Company's Belgian horses are one of the fair's most interesting attractions. American-bred horses, from the Prairie Farm, have frequently gone into the ring and won prizes from imported animals.

It was a cold, disagreeable day, recently, when the writer of this story visited the Prairie Farm but all discomfort was forgotten when the enthusiastic farm manager began to lead out some of the splendid samples of equine perfection for which this enterprise is noted. The lover of good horses, who desires to spend a "perfect day" among them, should visit Prairie Farm.



Prairie Farms Horse Barns. A Few of the Many Buildings Employed in This Great Farming Enterprise.

Farm Records and Accounts Reveal the Weak Spots in Your Farming

AN AGRICULTURAL extension worker of Montana one night found himself bunking with a rough and ready cow-puncher, a "true son of the west."

"What is your job?" asked the cowboy.

"I am the Farm Management Demonstrator," replied the college-trained easterner.

"Never mind about your title. I want to know what your job is."

"Why, I am here to teach the farmers and ranchmen how to keep accounts."

"Ug!" grunted the cowboy, "What the hell good is that going to do the farmers?"

The usefulness of farm accounts is hard to explain to a hot-headed cow-puncher, who begrudgingly sees the plains giving way to the corn fields and long-horned cattle being replaced by dairy cows and herefords. Nevertheless, in Michigan more than five thousand progressive farmers are keeping account books, which are sold for fifty cents each by the Michigan Agricultural college, while a few thousand more are keeping records of one kind or another.

"Absolutely accurate or universally applicable cost of production figures do not exist," says F. W. Peck, former farm economist of the U. S. Department of agriculture, and now extension director in Minnesota. "This is apparent with farm products because of the many joint costs involved in the production of most of the staple productions, and the necessarily more or less ar-

By H. B. KILLOUGH
Farm Management Demonstrator at M. A. C.

A NEW SERIES OF ARTICLES

H. B. KILLOUGH, farm management demonstrator at M. A. C., has agreed to write a series of plain, practical articles for M. B. F. folks on farm records and accounts. Mr. Killough comes from the "wild and woolly" southwest and talks a language which every farmer can understand. He is a graduate of the Texas A. & M. college where he was employed in extension work for a time. Later he did extension work for the Wisconsin Agricultural college, and came to the M. A. C. last spring as farm management demonstrator. Any questions which readers desire to ask Mr. Killough concerning the keeping of farm records and accounts will be cheerfully answered.—Editor.

bitrary allocation of some of the cost factors. However, the value of the results of careful studies of cost is not impaired by the fact, for what the farmer needs in the reorganization of the farm business is figures which show the comparative profitableness of competing enterprises."

The purpose of an account book is to simplify

the keeping of farm records and still retain sufficient data to determine:

1. Amount of capital invested; 2, increase or decrease of capital; 3, annual farm income; 4, returns from each farm enterprise.

The records necessary to keep are: 1, inventory; 2, financial record; 3, crop yield record; 4, feed records; 5, live stock production records.

The inventory is one of the most vital parts of a system of farm accounts even though it is taken only once a year and requires but a few hours work. Yearly increase or decrease in the property is determined in this way.

The Financial Record is a daily account of all cash transactions of the year that belong to the farm business. Receipts should be entered daily; expenses may be kept track of on the stubs of a check book, or by filing cancelled checks.

A summary of the inventory and financial transactions will show annual income. Probably the average Michigan farmer does not have to figure long to know that he is losing money this year.

ARE YOU MAKING OR LOSING MONEY?

Many farmers do no more with their accounting than to take an inventory, keep expenses and receipts, and summarize these into an income statement at the end of the year. Others go a step further by checking up production and feed from time to time to find which are the boarder cows.

(Continued on Page 20)

LET US TAN YOUR HIDE.

Horse or Cow hide, Calf or other skins with hair or fur on, and make them into coats (for men and women), robes, rugs or gloves when so ordered, or we can make your hides into Oak Tanned Harness Leather, making it into work harness when so ordered; or make Slaughter Sole Leather.

We can tan your cat skins into Shoe Leather, giving them an elegant grain finish in Gun Metal, Mahogany Russet or lighter shade.

Your goods will cost you less than to buy them and be worth more.

Our illustrated catalog gives a lot of information. It tells how to take off and care for hides; how and when we pay the freight both ways; about our safe dyeing process on cow and horse hide, calf and other skins; about the fur goods and game trophies we sell, taxidermy, etc.

Our Fashion Book, which heretofore has been a separate affair, has been incorporated in and made a part of our regular catalogue. It has Fashion plates of muffs, neckwear and other fine fur garments; also remodeling and repairing, together with prices and estimates. In ordering catalog, write name and address plain.

The Crosby Frisian Fur Company.

571 E. 11th Ave., Rochester, N. Y.



Farmers Service Bureau



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

UP TO HIGHWAY COMMISSIONER

If a certain sum is raised by the voters of the township for a specified piece of road and the highway commissioner uses only a part of said sum without finishing the road, can he be compelled to use the rest of that money in finishing said road? There is about 10 roads of bad sand at the foot of this hill that greatly lessens the value of what he did do. I thank you.—S. L. McEl, Lowell, Mich.

The statute does not permit the using of these funds for the repairing of any other particular road but leaves the matter of repairing this road up to the township highway commissioner and the township board, so that if the commissioner refuses or neglects to make the repairs, in accordance with the vote of the people as expressed when raising the fund for that particular purpose, the matter should be placed with the township board who undoubtedly will order the repairs in accordance with the wishes of the people.—Harry H. Partlow, Legal Adviser, Michigan State Highway Department.

LIABLE FOR VALUE OF STOCK

How can a farmer's club be organized and managed so that it can buy land, build a clubhouse and contract some debts, if necessary, and then if the club fails be so that none of the members will be liable for the debts of the club to an extent beyond \$20 each?—M. F., Michigan.

You can incorporate under the statute and be liable only for the value of your stock in the corporation.—Legal Editor.

ANOTHER "FOX" ENTERPRISE

Mr. A. S. Fox, who has dictated "personal" circular letters to hundreds of farmers, as president of the "Franklin Tire & Rubber Co." and the "Simplex Tire & Rubber Co.," is in a new role. His latest "personal dictation" is in the capacity of president of the Regal Tire & Rubber Co. His specialty seems to be "personally dictated" letters, and "guaranteed" "special racing and heavy duty aeroplane tires." From what we are able to learn of the activities of Mr. Fox we warn our readers against patronizing any concern with which he may be connected.—Editor.

SECOND HUSBAND HAS NO INTEREST IN ESTATE

Husband and wife have a joint deed to a farm. Husband dies, their farm goes to the widow. She marries again, then she dies. Can the second husband claim any of her property by law? She has children by first husband but none by second.—M. H., Allegan, Mich.

Upon the death of the first husband the entire real estate becomes the absolute property of the widow. Her marriage again does not change the title in any way and upon her death the entire real estate goes to the children of the wife, the husband takes no interest therein.—Legal Editor.

EX-SERVICE MAN NEEDS CASH

I wish to ask if state banks have the right to charge a bonus on a note besides the 7 per cent interest they get? Also, I am ex-service man and in need of some money. Can you advise me where I can find out more about it? My banker claims it is left to the board. We have property worth enough to cover the full amount and more than we should want to borrow.—Reader.

The banks have no right to charge more than 7 per cent interest, either in the form of bonus, discount or other method. The second part of your question is not clear. We know of no government provision for loaning government funds to ex-service men. Some states, like Michigan, have passed bonus laws, and the government offers vocational training, but we know of no other government benefits open to the ex-soldier. It is a pity and a shame that you boys who have fought our country's battles have to pay usury in order to get back on your feet, but for the time being there is no remedy. Usury in Michigan must be stopped and the

next session of the legislature will be asked to consider ways and means for doing it.—Editor.

ANOTHER "LOST" RELATIVE

G.W. Craig of Osseo, Mich., requests the co-operation of Business Farmer readers to help him locate his brother, Al. Craig, last heard from at Muskegon in May, 1888. Said brother is described as being 63 years of age and when last seen had dark curly hair. In his youth he was a log driver in the Michigan lumber districts. The last word received by Mr. Craig from his brother was that he was about to leave Muskegon to take a carload of horses to Washington. Anyone having information concerning the past or present whereabouts of this man should communicate with us or our subscriber.—Editor.

SEE LOCAL ATTORNEY

I have had some trouble about a rented farm. I rented this farm last spring in the month of April, from a man that bought the farm a year ago on a contract. Now this man can't hold the farm and it goes back to the former owner. Could the former owner put me off before spring?—H. B. M., St. Louis, Mich.

The tenant takes the rented farm subject to the any rights that may exist against the man who rented to him. You are entitled to notice to quit and notice of termination of the contract of sale and it may be the contract signed by your landlord will be of such a nature that a three months' notice will be required. This can only be told by an examination of the contract. You had better state the facts to some local attorney and obtain his assistance should there be an effort to move you before spring.—Legal Editor.

COMPANY REFUSES TO SETTLE

On the second day of last August I drove my car to Indiana, and between South Bend and Mishawaka a man ran into the rear of my machine with a truck. The truck belonged to the South Bend Creamery Co. I called at the office and they promised to settle my claim of \$12.60 for gas tank and tail light, but they have not yet done so, and refuse to answer my letters. I would like your advice on what to do.—R. S., Fremont, Mich.

We wrote the South Bend Creamery Co., on your behalf but have been unable to receive any satisfaction. The manager disclaims all responsibility on the part of his driver. There is nothing, so far as I can see, that you can do. The amount involved is so small and the company is located so far away that it would not pay to sue. Mark your loss up to experience and forget it.—Editor.

THE AUTO KNITTER

DESPITE the fact that numerous articles have been published in this department from time to time concerning the widely advertised sock knitting machines, such as the Auto Knitter, we continue to receive many inquiries of this nature. To all we must say that we have no personal knowledge of the operation of these machines. The majority of opinions as expressed in these columns by those who have used these machines seems to be unable to receive any satisfactory. Occasionally a user reports that she is able to do what the makers claim for the machine, but in the greater majority of cases, purchasers of these machines have met with indifferent success. Whether the varying results are due to variations in the machines or to the skill of the operators we cannot say. All we can say is that some succeed with the machine while others fail. Persons desirous to purchase one of these machines for the purpose of adding to their income should buy them on a trial basis if possible, but in view of the experience of others it would seem unwise to pay out \$50 or \$60 cash for a machine the success with which is open to serious question.—Editor.

SOY BEANS

Reading that soy beans are good feed for hogs, would like to know if they can be fed ground or if they should be boiled, and where soy beans may be bought and, also, what is the average yield per acre.—F. L. K., Swartz Creek.

Soy beans are a very good feed for hogs, especially so, when being used as a forage crop or when sown with corn which is to be hogged off by the pigs. The soy bean, as a grain, when used as a protein supplement to corn or barley, is not as valuable as tankage or linseed oil meal.

Experiments conducted at the Ohio and Indiana stations indicate that more grain is required to produce 100 pounds of pork where ground soy beans are used as a supplement to corn than is the case where either tankage or linseed oil meal is used as a supplement. The pigs do not seem to relish the soy beans and when the self-feeder is used as it was in the above experiments not enough soy beans are used to properly balance the ration. Further, when the ground soy beans are mixed with the corn in proper proportion to form a balanced ration, not as good results are obtained as is the case with either tankage or linseed meal and corn. The soy bean oilmeal or residue after the oil has been extracted is of considerably greater value than the ground soy bean. The soy bean may be fed either ground or boiled without grinding. The average yield of soy beans in Michigan is in the neighborhood of 15 bushels with some yields as high as from 20 to 25 bushels under favorable conditions. I believe you could purchase soy beans as feed through the seed department of the Michigan State Farm Bureau.—Geo. A. Brown, Professor of Animal Husbandry, M. A. Q.

SECURING TAX EXEMPTION

I bought a piece of wild land in Gladwin county and would like to know if I cleared and planted a certain number of acres each year for five years without living on the place, would I be exempt of taxes or do the parties have to live on same?—S. K., Highland Park, Mich.

The exemption you refer to is governed by Act No. 208 of the public Acts of 1913. The following provision appears in Section 1:

"The exemption herein provided for shall not be operative in any case, unless the purchaser, either upon contract or otherwise, actually resides upon and improves at least two acres thereof each and every year of the said five years in a manner to subject the same to cultivation."

From this you will see that the exemption cannot be allowed unless the purchaser actually resides upon the property.—Board of State Tax Commissioners.

ASK THE CHICKEN

A and B have an argument. A cuts a chicken's head off with an ax. B sees it and calls it inhuman and says shooting the head off with a gun would be more human. B claims head lives 30 seconds after being cut off with an ax. A claims when head is off it has no feeling.—T. S., Benton Harbor, Mich.

I have often been a "goose" and a "poor fish," but never a chicken. Particularly a decapitated chicken. So I cannot speak with absolute authority. It is popularly believed that life becomes extinct the instant the head is severed, regardless of the weapon used. Yet, it is said, that when the executioner struck the head of Charlotte Corday, the French revolutionist, as he lifted it from the guillotine, the countenance was seen to blush as if with indignation. A pleasant thought, is it not? Personally I would prefer to have my head removed with an ax than blown to pieces with a gun. The wound is cleaner and it doesn't mess up the premises so much. I cannot speak for the chicken.—Editor.

Lyman's Genuine Grimm Alfalfa

Produces immense yields year after year without replanting in spite of cold weather and droughts. Requires 40% less seed than ordinary varieties. All seed scarified to assure about 90% germination and certified to be from original, registered, pedigreed stock. Send for FREE booklet and sample package.

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SEED—HAY—STRAW

I have 45 tons of nice June clover hay, all nice. Almost 15 tons of oats and barley straw, 8 tons of millet straw, 5 tons of June clover straw, 100 bushel of millet seed, 500 bushel of new oat seed. Write for prices or come and see. Cash must accompany all orders. For reference, Rosebush State Bank.

P. C. LARRANCE

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On Trial. Easy running, easily cleaned. Skims warm or cold milk. Whether dairy is large or small, get handsome catalogue and easy monthly payment offer. Address AMERICAN SEPARATOR CO., Box 5067, Bainbridge, N.Y.

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Big in SIZE—Big in YIELD. If you wish to know real strawberry satisfaction you must grow our new variety Cooper, the greatest strawberry ever introduced. Our new catalog tells you all about the Cooper. Don't buy a plant until you get our catalog; we can save you money on standard and everbearing varieties of strawberries, also on raspberry, blackberry, grape, and other fruit plants. Big cash price offer. Send for catalog. STEVENSVILLE NURSERIES, Box 95, Stevensville, Michigan.

MENTION THE MICHIGAN BUSINESS FARMER WHEN WRITING TO ADVERTISERS

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Right on the farm there are great money-making opportunities for men who know autos, trucks, tractors farm lighting plants, engines, etc. Many farms employ experienced, trained-men at big pay to care for repairs and operate farm machinery. Many men who know the trade go into business for themselves—start a garage—care for own machinery—repair their neighbor's machines. There are certain profits—certain big money-making future in business of this sort, and any man mechanically inclined, with ambition to better his lot, can learn the business thoroughly and quickly by factory-endorsed, guaranteed methods.



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Practical Training for Farm Boys on the M. S. A. S. Tractor Farm



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That's what a training in the Michigan State Auto School—a Detroit training in the heart of the automotive industry, will do for you. The M. S. A. S. is the only school training by factory-endorsed and factory-outlined methods. **No previous experience is necessary.** Make a start. Here in a few short weeks, under guaranteed, quality-training, you can become a first-class, all-round, practical auto, truck and tractor mechanic, capable of filling any job at big-pay. You can go into business, or back on the farm better fitted to make more money.



Money-back Guarantee

We guarantee that a course of training in this school, the Michigan State Auto School, will qualify you for a position as repair man, demonstrator, auto electrician, garage man, automobile dealer, tractor mechanic and operator, chauffeur or farm lighting expert; or refund your money. A similar guarantee is made with all courses. Each course includes Life Membership with privilege of our service without charge at any time.

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Learn Everything About Autos and Tractors

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Knowing why, as well as knowing how is important to success—that's M. S. A. S. head and hand training. In Detroit, in the heart of the automotive industry under factory-endorsed methods is the logical place to learn. What's worth doing is worth doing well, and nothing on the part of the M. S. A. S. is sacrificed to turn out men who know. That's why the great percentage of M. S. A. S. graduates succeed. Free—catalog shows letters from scores of men now making big money, who grasped this opportunity. Manufacturers cooperate, supply equipment, cars, trucks, tractors, engines, transmissions, axles, electrical equipment, etc.—everything is complete to give quality-training only.

Pick Any Job You Want

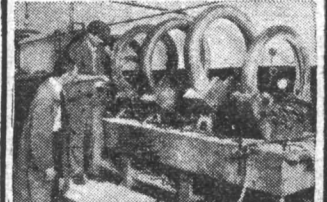
Detroit-trained men get the best jobs and the highest pay wherever autos, trucks and tractors are used. M. S. A. S. graduates are always in demand—they are preferred, because employers know M. S. A. S. quality training makes efficient men and worth the money. In business for yourself Detroit-training is an asset that brings trade. Decide to start now. Classes always open. Stay as long as you like to get the training thoroughly. Your enrollment entitles you to Life Membership in the School, with consulting privileges, or, privilege of returning at any time to brush up on new automotive equipment, without extra cost.



MOTOR REPAIRING



WELDING



TIRE REPAIRING



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THE INTERNATIONAL HARVESTER COMPANY, SAYS:—"Knowing your methods of training, we will gladly cooperate with the Michigan State Auto School through any of our ninety branches in the United States".

W. B. DEYO, Fordson dealer in Detroit, says:—"I have hired several graduates of the M. S. A. S. and find them energetic and the best mechanics. It is certainly a wonderful opportunity you are offering to young men".

BYRON MATTHEWS, State Distributor for La Crosse tractor, says: "We urge every farmer we meet to send their boys to you for training. It's what every farm boy needs and there is no better school".

THE CADILLAC MOTOR CAR COMPANY, SAYS: "We believe you have the best and most complete school of its kind in the country".

ELECTRIC AUTO-LITE CORPORATION, Toledo, manufacturers of Willys Farm Light and Power plants, writes us: "You are doing a splendid work in offering to those who desire it, an opportunity to secure mechanical education which will lead them into a profitable business".

PACKARD MOTOR CAR COMPANY, says: "We have no hesitancy in recommending M. S. A. S. in every particular".

What Students Have To Say—

WENDELL E. THOMPSON, in charge of 11 tractors on the Anna Dean farm of 5,200 acres, at Barberton, Ohio, writes: "Before going to your school I had a very crude knowledge of farm tractors. From the time I received my diploma I have never been in want of a position. At present I have good offers to work at any of the following—driving, repairing autos, or selling the same, driving tractors, repairing or selling tractors".

CHARLES CHAMBERS, of Oakton Ky., is farming 3000 acres of land, says it would be impossible to farm without tractors and other motor equipment and that his M. S. A. S. training saves him many hundreds of dollars each season.

We will supply on request, names of our graduates in your vicinity, perhaps right in your town. Any M. S. A. S. graduate will gladly tell you what Quality Training has meant to him.

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2 Packets of Seeds

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\$1000.00

Or 14 Other Big Cash Prizes



Send No Money

Just your name and your solution to the Presidents' Name Puzzle below. The seeds are absolutely free and will be sent to every person, young or old, who sends in an answer to this puzzle. It doesn't matter whether you solve the puzzle correctly or not, you get the seeds free for simply making the effort to solve it.

But if you can solve this Presidents' Name Puzzle you may win \$1,000 in cash first prize; second prize, \$500; third, \$200; fourth, \$100; fifth, \$75; sixth, \$60; seventh, \$40; eighth, \$30; ninth, \$20; or six prizes, \$10 each. Look at the new Presidents' Name Puzzle below—there are nine names of Presidents with letters of each all mixed up. Can you rearrange the "scrambled letters" and get these nine names of Presidents all correct?

For example—one is President Harding—and in each case the two black letters shown are the first two letters of Presidents' names. To solve this puzzle write down the names of the Presidents on a sheet of paper. You receive one hundred points for each correct name.

\$2085.00 CASH

FOR SOLVING PRESIDENTS' NAME PUZZLE

If you get all nine names correct you will get 900 points. It requires only 1,000 points to win the \$1,000 cash prize—second highest gets \$500 cash, and so on with the fifteen cash prizes. In the event of a tie for any particular prize, the full amount of that prize will be awarded to each contestant affected.

\$5 more points can be secured by showing our Bargain List to five of your neighbors. Proof of this by affidavit or a \$5 order is required. This Bargain Seed List we will send you on receipt of your answer to this puzzle.

This makes a total of 985 points—only 15 less than are necessary for the \$1,000 prize. These 15 points will cost you nothing. They will be awarded for the largest list of words spelled with the 18 first two letters of the nine Presidents' surnames. But don't send word list now—get Free Seeds and Bargain List first.

That would make 1,000 points in all—easy to get and don't cost you a cent for anything but a postage stamp to send in your answers to the puzzle.

Start right in—now. Get the whole family to help. Refer to history or library or teachers for names of presidents or maybe you remember them all. You get 100 points for each correct name or 900 points if all are correct. Write your answer plainly, watch spelling, write on one side of the paper only, put your name and address plainly in upper right hand corner of first page. Do your best and you may win. Just think, \$1,000 cash first prize, \$500 cash second prize, and 13 more big cash prizes. Who will get these?

THE TWO SEED PACKETS

of finest Astors and earliest Tomatoes will be sent free just as soon as your answer of Presidents' Name Puzzle reaches us. Win that \$1,000. Contest closes April 15, 1922.

AMERICAN HORTICULTURE CO.
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What the Neighbors Say

A COUNTRY GIRL'S VIEW OF THE CONSOLIDATED SCHOOLS

As a reader of the Business Farmer, I would like to say a few words in regard to a little story in your issue of Dec. 3, by the honorable taxpayer of Genesee county, who is a little backward about giving his name.

I live in a consolidated school district and I am proud of it, as I have a free ride in a Ford motor bus which arrives at our farm about eight o'clock each morning. Before our school was consolidated my two sisters and I were compelled to walk a mile and a half to school through mud and snow.

Probably most people sometime in their lives have picked out a nice red apple to eat which had a worm hole in it, but by cutting out that small defect that apple was a nice treat to anyone. Well that is the way with the outside fellows looking at the consolidated school system. They see that small defect but fail to look into the improved opportunities that the new system is giving to the boys and girls of the country.

The gentleman asks, "Where are the young men who go to college?" Would he have them back on the farm after completing their professional course and being able to go out and make their own mark in the world? How many farmers today are in a financial position to set their sons up in business on farms of their own after completing their common school education? I want to say that the consolidated school system prepares the boys and girls to take a much shorter course to complete their work at college.

I believe the gentleman has the Gaines and Swartz Creek school tax rate a little bit high. The present tax rate of Gaines school district is higher than the average for the reason that they have improved their school building, purchased additional school property and are paying off an old debt of several thousand dollars. If the gentleman will look at his tax receipts he will find that all improvements have cost considerable more money compared with improvements five or even two years ago. I believe that he who shouts most pays the least.—Evelyn Cooney, Genesee County, Mich.

The above is one of scores of letters received the last couple of weeks on the consolidated school question. Some of them have been in favor of consolidation but most of 'em ag'in it. As time and space permits other letters upon the subject will be published, preference being given to letters from taxpayers in districts which have already consolidated.—Editor.

SURPLUS PRODUCTS

BROTHER J. E. TAYLOR, Montcalm county, tells me, a fruit-grower, to "dump my surplus (berries) on the soil as fertilizer." J. E., you're just another good fellow gone wrong on that foolish fertilizer dope. Who pays harvesting bills for grain dumped as fertilizer up in Montcalm county? Certainly not the highly protected manufacturer who soaked 'em \$300 for their last binders. Instead of this "100 per cent American" robber tariff rubbish, let's talk of the Bureau and other farm organizations making farm tools in winter, marketing fruits and vegetables in summer and our idle army working at least four hours per day on goods roads to harden their muscles and keep 'em out of devilry.—C. H. Merrifield, Van Buren County, Mich.

That's a good sized program, too. Who'll tackle the job and lead it to success?—Editor.

A COLORADO READER SAYS:

I WANT your farmer readers to distinctly understand that the Chicago cash price of wheat will be at least \$1.50 per bushel on or before April 1st, 1922, and will not sell below that price for three years. Why do I think so? Last year the speculators did not want wheat until they got the price down and so encouraged the country banks to have the farmers hold the grain that they (the speculators) would not have

so much interest to pay. This year the banks have forced every farmer to sell everything so fast as he could get it into merchantable condition and sent the money to the Federal Reserve banks to be loaned to the speculators at 6 per cent interest. Now the speculators have the wheat. What did they do to farmers last year? What will they do to consumers next year? Look over the situation and think! Reason it out.—A. A. Weston, Julesburg, Colo.

Glad to hear from you, old western subscriber. We, too, look for \$1.50 wheat by or shortly after April 1st, but we can't see as high prices for the next three years. The price will advance slowly we think until another harvest and will decline again thereafter providing the harvest is anywhere near normal. The world is again producing a lot of wheat and we haven't yet reached the low point which the reaction to greater production will surely bring about. However, if all the farmers had your confidence and were financially able to hold wheat until they got ready to sell the price might easily be kept at \$1.50 for a limited period of time.—Editor.

THROUGH THE EYES OF YOUTH

WE ARE readers of the M. B. F. and like it very much. Father likes to read about the different ideas which the farmers have about government, capitalism, railroads, labor and such likes. Father thinks that if some of the big farmers would reduce their acreage they could reduce their expenses and have less kick coming about our government and otherwise. We all know a large harvest means low prices.

Yes, the farm loans are for the benefit of the stock feeders, not for a man who wants to make a home. The country is loaded down with stock now.

I am in my 17th year. My father and I handled 262 acres of land this year. We bought a tractor last spring which I operate myself. My father would rather handle horses. We did our farming much better, easier and faster than before, although we were caught in that cyclone about the fifth of July. The lightning struck our barn, burning four horses, harness, car and what grain, hay and small tools there were in it. We had a bad set-back.

We know what those long days mean from daylight to dark, but we are going to stay with farming till better things are accomplished.

I read Miss J. E. M.'s scripture about the white collared men. It's all right, but I could never earn a farm if I had to furnish a wife with those silk socks rolled up at the top, and otherwise.—H. L. R., somewhere in Michigan.

Your philosophy is all right, my 17-year-old farmer friend. Stick to the plain, homely truths and customs of life and you'll win out. The man who would succeed on the farm or anywhere else must get along for a while without silk shirts and his wife without silk stockings, rolled or otherwise. Glad you're going to stick to farming. There's money in farming if you learn how to get it out, and the farmer of tomorrow will not have so hard a row to hoe as the farmer of yesterday. When you are riding that tractor dreaming of the days when you will be lord and master over many rolling acres of your own and get to thinking about things, get your thoughts down on paper and send them to this department. I like farmers who think and aren't afraid to tell their thoughts. Thinking develops brain power and brain power is needed as much as brawn on the twentieth century farm.—Editor.

INTEREST RATES

"A BOLISH interest rates," says comrade Wm. R. Smalley of Wexford county. I have read many and many a copy of different farm papers and the few brilliant words by friend Smalley contain more sense and logic and all of more importance to the farmer than all the agricultural publications combined that I have ever read.

You good neighbors who would like to start a discussion on taxes in the M. B. F. take notice what Mr. Smalley says in the current issue of the 17th inst. and you will realize why we must toil and sweat from five to eight and longer to support a lot of parasites.

Come again, Brother Smalley, but be careful, there are good men in (Continued on next page)

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FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

NOTES AND COMMENTS

THE INDICATIONS are that there will be a large planting of grape vines this year. In the Michigan grape district the vineyard area will be considerably enlarged, but more significant is the quantity of nursery stock grown for the demand in other localities. It seems as though \$10 a ton for grapes has made people crazy.

There is no need to say that "go slow" is good advice just now. Who will heed? Not those who should. The wise ones shake their heads. Very well for those who are able to take the chances, but those who are planting a vineyard to pay off the mortgage had best think twice. The demand for the fruit has been greatly increased during the past two years, but will it keep up with the production three years hence, when these new vines come into training? That is something to think about.

Michigan takes the lead in the production of small fruits, but even at that there is not enough to supply the demand. Strawberries, raspberries, blackberries, grapes. Those who recall the difficulty to get them last summer need not be told that there was a shortage. It was not altogether the unfavorable season that was to blame. A full crop would not have sufficed. Now while so many are planning to set out grapes, would it not be wise to give more attention to the other small fruits? The automobile has revolutionized the marketing of such products. Fifty miles are as nothing for the city man with an auto, when the roads are good. But the drive makes him hungry. It makes the family hungry. The whole load, from the grandmother to the baby, is ready to gobble anything edible in the shape of fruit. Set out a bushel of strawberries along one of the leading highways and see how long it will remain! So it goes from spring 'till fall. Many in the cities now get a large portion of their fruit direct from the producers and the number is on the increase. So they are solving the problem of the middleman to the profit and satisfaction of both producer and consumer.

Why are there so few currants grown? There is no serious difficulty in growing them. They are easily cultivated and the currant worm, the most bothersome enemy, can be controlled by a little spraying. Currants are productive and are nearly always in demand. The bushes soon come to a bearing age and with cultivation should be good for many years. The fruit is not in favor for dessert on account of the acid, but what is better for jelly, except, perhaps the crab apple? Then, too, it puts an edge on milder fruits when mixed with them for pies. "Where can I get currants?" How many times the question was asked last summer. How often the answer was, "I don't know." Those who are planning to grow fruit might well consider the currant.

There are not many varieties of the currant. The large red kinds are most in demand, though some of the smaller varieties are the best in flavor. White currants are milder than red. When the two are mixed they make a pretty table dish. The old red Dutch is small, but very productive and has no superior for jelly. It's size is against it for market, but those who know what good fruit is, do not refuse the red Dutch. For the home garden the Dutch, both red and white, have many friends, since their quality comes before size.

ANSWERS TO CORRESPONDENTS

Can the Business Farmer tell us what to do with our plum trees? They blossom full enough, but when the fruit is about as large as a bean it drops off. The result is few plums or none at all.—R. P. F., Redford, Mich.

A satisfactory answer to this question would require considerable more data than is given here. There might be several reasons for such behavior.

One reason why fruit drops pre-

maturely is weak or imperfect pollination. Some of the American varieties are poor self-pollinizers, while the Japs are mostly self-sterile. The Burbank is the Japanese variety that has been most extensively planted of any during recent years, and has probably been the cause of more disappointment than have all other kinds added together. It should be planted with some other variety near it, the abundance is good for the purpose, but any kind that blossoms with it will do. Perhaps some branches of wild plums, stood in a barrel of water near the trees when in blossom, will serve the purpose.

Lack of fertility might be a reason for the failure in the crop, but in that case there would probably be few blossoms. An abundance of bloom would indicate that the trees were not starving.

While the soil may be fertile the available food may not be well balanced. Too much nitrogen would cause a growth of top at the expense of fruit. Horse manure alone may injure plums and peaches. Hen manure is strong in nitrogen, but it is balanced with potash, so is excellent for plums.

Possibly there are not bees enough to work on the blossoms, in which case the pollination might be weak or imperfect. In many localities bees have become scarce and fruit trees suffered in consequence.

Is the ground where the trees stand lower than the surrounding area, so as to form a little pocket? In that case the late spring frosts may have done the mischief, when trees near by on higher land have escaped.

The curello can be trusted to do its share of mischief, but its work is more in evidence later in the season. This insect is out early and at first eats the leaves. Spraying with arsenate of lead, one pound of powder to 50 gallons of water, applied just before the blossoms open and again after the petals have fallen, will kill most of the beetles before they have laid their eggs.

SEEDLING

I have a black sweet cherry which bears fruit of unusual size and quality. Can I graft some little seedling sweet cherry trees from this tree, and when should it be done?—D. M. N., Washington, Mich.

Possibly a sweet cherry can be grafted, but we have yet to find the man who has succeeded at it. Cherries are propagated by budding on seedling stock, mostly a wild tree called Mahaleb, through another called Mazzard, is also used. Nurserymen frequently grow trees for a customer from buds which he furnishes.

Am sending \$3.00 for five-year subscription to the M. B. F. being a continuation of my subscription to the best farmers' paper in the U. S. Trusting the managers will be long spared to fight the good fight for the farmers, and in doing this they benefit mankind.—James Bell, Alcona County, Mich.

I wish to say that you are the farmer's best friend and that you sure fight his battles fearlessly, and my wish is that every one of our six million farmers could see the light and send in a year's subscription. It would sure be the best investment they ever made. Keep up the good work.—J. B. Train, Newaygo County, Mich.

INTEREST RATES

(Continued from page 8)

jails and penitentiaries who have spoken true words like yours. Wall Street will get you if you don't watch out.

Congratulations to the Business Farmer on showing enough backbone to print said article. Look out or Wall Street will get you, too.—Norman Sauer, Livingston County, Michigan.

Nope, we aren't afraid of Wall Street. We believe in truth and facts and so long as we have them on our side, we'll keep plugging along without fear or favor. The thing that we and our readers ought always to be careful of is not to take a stand which we cannot defend from every legitimate and sensible standpoint. As long as we stick to moral principles and truths we are safe from the attacks of our enemies.—Editor.

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Nomads of the North

A STORY OF THE GREAT OUTDOORS

By **JAMES OLIVER CURWOOD**
Michigan's Own and America's Foremost Author of Wild Life Romance

(Continued from last week)
CHAPTER THIRTEEN

IN MANY years there had not been such a storm in all the Northland as that which followed swiftly in the trail of the first snows that had driven Neewa into his den—the late November storm of that year which will long be remembered as Kusketa Pippoon (the Black Year), the year of great and sudden cold, of starvation and of death.

It came a week after Miki had left the cavern wherein Neewa was sleeping so soundly. Preceding that, when all the forest world lay under its mantle of white, the sun shone day after day, and the moon and stars were as clear as golden fires in the night skies. The wind was out of the west. The rabbits were so numerous they made hard floors of the snow in thicket and swamp. Caribous and moose were plentiful, and the early cry of wolves on the hunt was like music in the ears of a thousand trappers in shack and teepee.

With appalling suddenness came the unexpected. There was no warning. The day had dawned with a clear sky, and a bright sun followed the dawn. Then the world darkened so swiftly that men on their traplines paused in amazement. With the deepening gloom came a strange moaning, and there was something in that sound that seemed like the rolling of a great drum—the knell of an impending doom. It was thunder. The warning was too late. Before men could turn back to safety, or build themselves shelters, the Big Storm was upon them. For three days and three nights it raged like a mad bull from out of the north. In the open barrens no living creature could stand upon its feet. The forests were broken, and all the earth was smothered. All things that breathed buried themselves—or died; for the snow that piled itself up in windrows and mountains was round and hard as leaden shot, and with it came an intense cold.

On the third day it was sixty degrees below zero in the country between the Shamattawa and Jackson's Knee. Not until the fourth day did living things begin to move. Moose and caribou heaved themselves up out of the thick covering of snow that had been their protection; smaller animals dug their way out of the heart of deep drifts and mounds; a half of the rabbits and birds were dead. But the most terrible toll was of men. Many of those who were caught out succeeded in keeping the life within their bodies, and dragged themselves back to teepee and shack. But there were also many who did not return—five hundred who died between Hudson Bay and the Athabasca in those three terrible days of the Kusketa Pippoon.

In the beginning of the Big Storm Miki found himself in the "burnt" country of Jackson's Knee, and instinct sent him quickly into deeper timber. Here he crawled into a windfall of tangled trunks and tree-tops, and during the three days he did not move. Buried in the heart of the storm, there came upon him an overwhelming desire to return to Neewa's den, and to snuggle up to him once more, even though Neewa lay as if dead. The strange comradeship that had now grown up between the two—their wanderings together all through the summer, the joys and hardships of the days and months in which they had fought and feasted like brothers—were memories as vivid in his brain as if it had all happened yesterday. And in the dark windfall, buried deeper and deeper under the snow, he dreamed.

He dreamed of Challenor, who had been his master in the days of his joyous puppyhood; he dreamed of the time when Neewa,

the motherless cub, was brought into camp, and of the happenings that had come to them afterward; the loss of his master, of their strange and thrilling adventures in the wilderness, and last of all of Neewa's denning up. He could not understand that. Awake, and listening to the storm, he wondered why it was that Neewa no longer hunted with him, but had curled himself up into a round ball, and slept a sleep from which he could not rouse him. Through the long hours of the three days and nights of storm it was loneliness more than hunger that ate at his vitals. When on the morning of the fourth day he came out from under the windfall his ribs were showing and there was a reddish film over his eyes. First of all he looked south and east, and whined.

Through twenty miles of snow he travelled back that day to the ridge where he had left Neewa. On this fourth day the sun shone like a dazzling fire. It was so bright that the glare of the snow pricked his eyes, and the reddish film grew redder. There was only a cold glow in the west when he came to the end of his journey. Dusk had already begun to settle over the roofs of the forests when he reached the ridge where Neewa had found the cavern. It was no longer a ridge. The wind had piled the snow up over it in grotesque and monstrous shapes. Rocks and bushes were obliterated. Where the mouth of the cavern should have been was a drift ten feet deep.

Cold and hungry, thinned by his days and nights of fasting, and with his last hope of comradeship shattered by the pitiless mountains of snow, Miki turned back over his trail. There was nothing left for him now but the old windfall, and his heart was no longer the heart of the joyous comrade and brother of Neewa, the bear. His feet were sore and bleeding, but still he went on. The stars came out; the night was ghostly white in their pale fire; and it was cold—terribly cold. The trees began to snap. Now and then there came a report like a pistol-shot as the frost snapped at the heart of timber. It was thirty degrees below zero. And it was growing colder. With the windfall as his only inspiration Miki drove himself on. Never had he tested his strength or his endurance as he strained them now. Older dogs would have fallen in the trail or have sought shelter or rest. But Miki was the true son of Hela, his giant Mackenzie hound father, and he would continue until he triumphed—or died.

But a strange thing happened. He had travelled twenty miles to the ridge, and fifteen of the twenty miles back, when a shelf of snow gave way under his feet and he was pitched suddenly downward. When he gathered his dazed wits and stood up on his half frozen legs he found himself in a curious place. He had rolled completely into a wigwam-shaped shelter of spruce boughs and sticks, and strong in his nostrils was the smell of meat. He found the meat not more than a foot from the end of his nose. It was a chunk of frozen caribou flesh transfixed on a stick, and without questioning the manner of its presence he gnawed at it ravenously. Only Jacques Le Beau who lived eight or ten miles to the east, could have explained the situation. Miki had rolled into one of his trap-houses, and it was the bait he was eating.

There was not much of it, but it fired Miki's blood with new life. There was smell in his nostrils now, and he began clawing in the snow. After a little his teeth struck something hard and cold. It was steel—a fisher trap. He dragged it up from under a foot of snow, and

with it came a huge rabbit. The snow had so protected the rabbit that, although several days dead, it was not frozen stiff. Not until the last bone of it was gone did Miki's feast end. He even devoured the head. Then he went on to the windfall, and in his warm nest slept until another day.

That day Jacques Le Beau—whom the Indians called "Muchtet-aao" (the One with an Evil Heart)—went over his trapline and rebuilt his snow-smothered houses and reset his traps.

It was in the afternoon that Miki, who was hunting, struck his trail in a swamp several miles from the windfall. No longer was his soul stirred by the wild yearning for a master. He sniffed, suspiciously, of Le Beau's snowshoe tracks and the crest along his spine trembled as he caught the wind, and listened. He followed cautiously, and a hundred yards farther on came to one of Le Beau's kekeks or trap-shelters. Here too, there was meat—fixed on a peg. Miki reached in. From under his forepaw came a vicious snap and the steel jaws of a trap flung sticks and snow into his face. He snarled, and for a few moments he waited, with his eyes on the trap. Then he stretched himself until he reached the meat, without advancing his feet. Thus he had discovered the hidden menace of the steel jaws, and instinct told him how to evade them.

For another third of a mile he followed Le Beau's tracks. He sensed the presence of a new and thrilling danger, and yet he did not turn off the trail. An impulse which he was powerless to resist drew him on. He came to a second trap, and this time he robbed the bait-peg without springing the thing which he knew was concealed close under it. His long fangs clicked as he went on. He was eager for a glimpse of the man-beast. But he did not hurry. A third, a fourth, and a fifth trap he robbed of their meat.

Then as the day ended, he swung westward and covered quickly the five miles between the swamp and his windfall.

Half an hour later Le Beau came back over the line. He saw the first empty kekek, and the tracks in the snow.

"Tonnerre! a wolf!" he exclaimed. "And in broad day!"

Then a slow look of amazement crept into his face, and he fell upon his knees and examined the tracks.

"Non!" he gasped. "It is a dog! A devil of a wild dog—robbing my traps!"

He rose to his feet, cursing. From the pocket of his coat he drew a small tin box, and from this box he took a round ball of fat. In the heart of the fat was a strychnine capsule. It was a poison bait, to be set for wolves and foxes.

Le Beau chuckled exultantly as he stuck the deadly lure on the end of the bait-peg.

"Ow, a wild dog," he growled. "I will teach him. To-morrow he will be dead."

On each of the five ravished bait-pegs he placed a strychnine capsule rolled in its inviting little ball of fat.

CHAPTER FOURTEEN

THE next morning Miki set out again for the trapline of Jacques Le Beau. It was not the thought of feed easily secured that tempted him. There would have been a greater thrill in killing for himself. It was the trail, with its smell of the man-beast, that drew him like a magnet. Where that smell was very strong he wanted to lie down, and wait. Yet with his desire there was also fear, and a steadily growing caution. He did not tamper with the first kekek nor with the second. At the third Le Beau had fumbled in the placing of his bait, and for that reason the little ball of fat was strong with the scent of his hands. A fox would have turned away from it quickly. Miki, however, drew it from the peg and dropped it in the snow between his forefeet. Then he looked about him, and listened for a full minute. After that he licked the ball of fat with his tongue. The scent of Le Beau's hands kept him from swallowing

it as he had swallowed the caribou meat. A little suspiciously he crushed it slowly between his jaws. The fat was sweet. He was about to gulp it down when he detected another and less pleasant taste, and what remained in his mouth he spat out upon the snow. But the acrid bite of the poison remained upon his tongue and in his throat. It crept deeper—and he caught up a mouthful of snow and swallowed it to put out the burning sensation that was crawling nearer to his vitals.

Had he devoured the ball of fat as he had eaten the other baits he would have been dead within a quarter of an hour, and Le Beau would not have gone far to find his body. As it was, he was beginning to turn sick at the end of the fifteen minutes. A premonition of the evil that was upon him drew him off the trail and in the direction of the windfall. He had gone only a short distance when suddenly his legs gave way under him and he fell. He began to shiver. Every muscle in his body trembled. His teeth clicked. His eyes grew wide, and it was impossible for him to move. And then, like a hand throttling him, there came a strange stiffness in the back of his neck, and his breath hissed chokingly out of his throat. The stiffness passed like a wave of fire through his body. Where his muscles had trembled and shivered a moment before they now became rigid and lifeless. The throttling grip of the poison at the base of his brain drew his head back until his muzzle was pointed straight up to the sky. Still he made no cry. For a space every nerve in his body was at the point of death.

Then came the change. As though a string had snapped, the horrible grip left the back of his neck; the stiffness shot out of his body in a flood of shivering cold, and in another moment he was twisting and tearing up the snow in mad convulsions. The spasm lasted for perhaps a minute. When it was over Miki was panting. Streams of saliva dripped from his jaws into the snow. But he was alive. Death had missed him by a hair, and after a little he staggered to his feet and continued on his way to the windfall.

Thereafter Jacques Le Beau might place a million poison capsules in his way and he would not touch them. Never again would he steal the meat from a bait-peg.

Two days later Le Beau saw where Miki had fought his fight with death in the snow and his heart was black with rage and disappointment. He began to follow the footprints of the dog. It was noon when he came to the windfall and saw the beaten path where Miki entered it. On his knees he peered into the cavernous depths—and saw nothing. But Miki, lying watchfully, saw the man, and he was like the black, bearded monster who had almost killed him with a club a long time ago. And in his heart, too, there was disappointment, for away back in his memory of things there was always the thought of Challoner—the master he had lost; and it was never Challoner whom he found when he came upon the man smell.

Le Beau heard his growl, and the man's blood leapt excitedly as he rose to his feet. He could not go in after the wild dog, and he could not lure him out. But there was another way. He would drive him out with fire!

Deep back in his fortress, Miki heard the crunch of Le Beau's feet in the snow. A few minutes later he saw the man-beast again peering into his lair.

"Bete, bete," he called half tauntingly, and again Miki growled.

Jacques was satisfied. The windfall was not more than thirty or forty feet in diameter, and about it the forest was open and clear of undergrowth. It would be impossible for the wild dog to get away from his rifle.

A second time he went around the piled-up mass of fallen timber. On three sides it was completely smothered under the deep snow. Only Where Miki's trail entered was it open.

(Continued next week)

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An Independent
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Edited in Michigan



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A Strange "Vindication"

THE FINAL seating of Mr. Newberry in the United States Senate has very little significance so far as the people of Michigan are concerned. Their estimate of Newberry methods was formed long before Mr. Newberry's trial and conviction at Grand Rapids and nothing has transpired in the interim to change it. The exclamations of approval which have emanated from some of the members of the old guard of the state over the seating of Newberry may help bolster up the Senator's courage but the country at large will make a mistake to accept them as the general sentiment of Michigan citizenry.

Mr. Newberry, we are told, hails the action of the senate as a "complete vindication." This is quite in harmony with the role which he has played from the start. His attitude has consistently been that of a child instead of a man of mature years. He denied all responsibility for the acts of his agents. He denied knowledge of the money spent and the methods employed to secure his nomination and election. While Michigan was seething in the hottest political campaign of years in which Mr. Newberry was one of the principals while the rest of the country looked on fully aware of the pork-barrel methods being employed, Mr. Newberry was running around with cotton in his ears and colored glasses over his eyes, quite oblivious of all that was taking place. According to his testimony he was nothing but an innocent, if willing victim, quite unused to political tactics, wax in the hands of his friends. We are led to marvel how shrewd business men and politicians could be induced, either by the bonds of friendship or the lure of money, to lend such enthusiastic support for so high a position to a man so unsophisticated and pliable as Mr. Newberry. has seemed to be throughout the entire course of his unfortunate political venture. His intelligence suffers still further in the minds of his constituents when he professes to find a single grain of comfort in the last chapter which has just been written. Though he may have convinced many that he was innocent of any wrong-doing in securing his seat he will have a more difficult task to convince them that he is qualified to occupy the seat now that it has been conceded to him.

A bigger and a shrewder man than Mr. Newberry would have long since silenced his critics and spared himself and family further humiliation by gracefully resigning his seat. But with his childlike persistency he has clung to his empty honors only to receive the severe censure of the body of which he is a part. In seating Mr. Newberry the United States Senate declared: "The expenditure of such excessive sums in behalf of a candidate, either with or without his know-

ledge or consent being contrary to sound public policy, harmful to the honor and dignity of the Senate, and dangerous to the perpetuity of a free government, such excessive expenditures are hereby severely condemned and disapproved."

It is not within the realm of reason that Mr. Newberry can ever acquire the dignity and influence which a member of the United States Senate ought to have, after such a stinging slap in the face. Michigan's senatorial representation has suffered long enough. Why perpetuate the farce for another three years? For the good of Michigan if not for himself, Mr. Newberry ought to resign and let the Governor appoint someone in his place who is free from the stigma of Newberryism.

Better Organization

THE MONROE County Farm Bureau has evolved a unique, and upon the surface what appears to be a most practical plan of organization. The plan is to have the executive committee made up of one representative from each co-operative association in the county.

Membership on the executive committee of the county farm bureau is commonly only incumbent upon one condition, that the committeeman be a member of the bureau in good standing. There are no requirements so far as business ability, experience and geographical location are concerned. Although care is usually taken to choose the members of the committee from different parts of the county, there is no set rule and it frequently happens that one section will be over-represented at the expense of another. The result is that difficulty is encountered in keeping the poorly represented sections interested in the affairs of the county organization. Under the plan adopted by the Monroe county bureau, every section of the county will be represented. More than that it will be represented by a man who is actually engaged in one of the primary activities for which the farm bureau came into existence.

A chain is no stronger than its weakest link. When weak co-operative units fail or lose money the whole body suffers in the public estimation. Co-operation in its highest sense means the protection and assistance of the weak. Therefore, every unit in the chain of co-operation should be interested in every other unit and contribute some of its own strength to fortify other, but weaker units. By bringing representatives of all co-operative units in a county together as the Monroe County Farm Bureau has done there is bound to be a mutual exchange of ideas which will be beneficial to all concerned. Co-operation has a tough road to travel the next few years and it is highly important that all co-operative units be closely welded by bonds of sympathy and mutual help. This is the aim, we take it, of the Monroe County Farm Bureau. The example is worthy of emulation in other counties.

Taxes

WAS THERE ever a year when a goodly majority of farmers did not kick about the size of their taxes? It's just as natural for some farmers to complain when they go to pay their taxes as it is for a rooster to crow when he gets up in the morning. Nature made them that way.

A WORD OF CHEER TO START THE NEW YEAR

FOR SOME unknown reason the December 31st issue of the Michigan Business Farmer did not come to me. I do not like to miss one issue of your splendid farm paper and if you have a paper of that date will be very thankful to you if you will please forward one to me. I have, in my life-time, taken several different farm papers but I'll hand it to you for putting out the best farm paper I've ever taken. Wishing you and yours a happy, healthy and prosperous New Year, I am, yours for success."—Chas. Rathbone, Kent County, Michigan.

There have been years when farmers had no reason to complain. There have been other years when their tax grievances have been fully justified in every respect. The last three years are typical of the years when farmers have paid more taxes than they could afford to pay and without getting value received.

In an organized society taxes are necessary. Every man who enjoys the protection of organized society should pay something for the benefits. But under existing tax systems a great many pay nothing at all, a great many more pay too little in proportion to their ability to pay, and the rest pay more than they can afford to pay or ought to pay. The farmer is included in the latter class. While in other years he may have complained of his taxes, he did not find it a hardship to pay them. But for two years back taxes have become an enormous burden and worry to him.

Time was when the reduction of public expenditures and taxes was a matter of official choice. Today it has become a matter of pressing necessity. Last year thousands of farmers could not pay their taxes when due. This year the number has doubled. In every county of the state are many farmers whose taxes run into the hundreds of dollars and who haven't a cent with which to pay them. If their credit is good, they will add another mortgage to the future, raise the money, and pay their taxes. If it isn't good,—well, the reader knows the rest.

Taxes on farm property must come down. Farmers can't pay them. To bring them down, township, county and state authorities must enter upon a rigid program of economy, and other systems of taxation must be devised. For the salvation of our farms and our homes the time has come when farmers and their champions must rise in their might and fight for a reduction in taxes. The Business Farmer has its coat off and its sleeves rolled up ready to take the lead. How many farmers are prepared to follow?

Grade Crossings To Go

SOME TIME ago the Business Farmer recommended editorially that all crossings on important highways be separated or protected by gates in order to lessen the terrific toll of deaths which result each year in this country from crossing accidents. It is gratifying to note that the bureau of public roads, of the U. S. Department of Agriculture, has embraced the same idea, and will wherever possible eliminate grade crossings on all highways built with federal aid.

An announcement from the Bureau says:

"Instead of grade crossings there will be constructed, wherever possible, in the future, either a bridge or an underpass where roadway and railway intersect. Important roads which now cross and recross railroad lines at grades hereafter will be located entirely on one side of the railroad, even though to do so may increase the cost of construction. The prime object of the department's policy to eliminate grade crossings on federal-aid roads is the saving of human lives. During the three years ending with 1920, according to the best records available to the department, 3,636 lives were lost at grade crossings in the United States and 10,644 persons were injured."

Pigs Is no Longer Pigs

ARMOUR & Company have announced that the method of determining hog values is undergoing a gradual but positive change. No longer will "any old kind of a hog" do. The preferences of the public will be given consideration and the hog breeder must produce an animal which will suit the public's fancy. The hog most in demand just now is that having the characteristics of the Berkshire, neither too fat nor too lean. Firmness of flesh, texture, intermingling of fat and lean, and the flavor are the four factors which determine quality. The first three essentials the hog breeder must provide. The packer will take care of the fourth. Adaptation of the breed to meet changing demands is no new idea. They do it in Denmark every little while. And the course of the Danish farmer is a pretty safe one to follow.

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Uncle Rube Spinach Saus:

AIN'T IT AWFUL?

EVERY ONCE'N a while or often-er, somebody busts loose in the papers about the awful prohibition laws, an' tells what a terrible thing it is to deprive men an' women of the drink their souls need, an' their appetites crave. An' 'cause M. B. A. kinda stands up for the law, some of the subscribers write sassy letters an' one or two has even quit takin' the paper 'cause it disagrees with their ideas—I came purty nigh sayin' their belief. Nobody, no man or woman in full possession of their senses, believes that liquor in any form is a good thing. Neither does any one in his or her right mind believe that more liquor is bein' consumed under prohibition than was consumed when saloons waz runnin' wild. If this wuz true you wouldn't hear a word about the turrible Volsted law an' when you trace it down to the man who writes such articles as we often read we find it comes from some one who is either interested in the liquor business or one who thinks he can't get along without his customary drink. They'll tell you what a curse the law is but fail to mention any partic'lar one who has been cursed.

They'll tell of deaths caused by drinkin' some of the stuff sold for whiskey an' of course it's true—there's been a good many of 'em but bless you friends, that ain't the fault of the law—it's the violation of the law that causes trouble! If everybody obeyed the law there wouldn't be a death from whiskey substitutes in a hundred years.

Of course we all know the law is bein' violated every day—sometimes by men appointed to enforce the law—many times by men from whom we expect better things. We also know that the law is against murder, robbery, adultery, gamblin', speedin' an' dozens of other things, are bein' violated every day, too, an' yet you don't hear anybody shoutin' to have these laws repealed—oh, no! Such laws are all right an' proper—it's only the prohibition law that's wrong—our right to get drunk an' make beasts of ourselves—our right to beat up our wives in a drunken frenzy, to deprive our children of the comforts of life? It takes away the source of untold profits from liquor makers and liquor sellers an' they whine an' holler like whipped pups, an' that's all the good it'll do 'em, too, 'cause the prohibition law is here to stay an' every effort to break it will only make it stronger.

It always makes me laugh to hear a man say there is more drunkenness now than when liquor was bein' sold openly, over the bar. In them days, not so long ago, right here in Battle Creek, you couldn't go a half a block on many of the streets, without meetin' from one to ten intoxicated men, an' you could meet some on any street. Now it's very seldom that an intoxicated man is seen anywhere in the city. There may be liquor sold here—I could not say there is not but if it is bein' sold in very large quantities it must have a purty mild kick to it or else people lock themselves in their cellars when they drink it an' stay there 'till the effects are gone.

Now I want to make a bargain with some of the guys that's hollerin' so loud about the prohibition law an' here is the offer—you fellows git together an' think of every good thing whiskey, light wines or beer, has ever done for the women an' children of this country—or what it has done for the man who has a family to support—or any other man outside of the men who made an' sold the stuff. Write it all down—don't fail to think of every good thing the damnable stuff has ever done—you'll need them all—then I'll jest think of a few things prohibition has done for women an' children—for the homes of this land an' for the men who has to provide for those homes, an' when we all get through thinkin' an' writin' it all down, then we'll get somebody to choose three or five judges an' let them decide which is best—saloons on every corner, sale of light wines an' beer, or strict prohibition thoroughly enforced. Cordially.—UNCLE RUBE.

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SALVATION

SALVATION, in its real sense, is a matter of the body, soul and spirit. It is the concern of the present hour as well as of a future eternity. If we wish to be saved let us be saved now. Let us begin today to enter upon that finer order of life that is in harmonious vibration with the higher forces.

Then when we withdraw from the mortal plane, we shall be better fitted for the next plane on which we enter.

By the very nature of the human organism, man is connected with the entire universe by an intricate system of vibrations of influences of waves in the ether, of an enormous array of the invisible.

Dean Inge, remarks that, "Eternal life is not something future—it is now! I believe," he continued, "that if we dwell on this aspect of eternal life—as a blessed state to be begun here and perfected hereafter—we should find the doctrine more fruitful to ourselves and more credible to those we wish to influence." There is the traditional supposition, that death introduces the individual to perfect happiness or the reverse, this is no more true nor consistent than that a given birthday introduces the person to unalloyed bliss or misery.

As all kinds of people live, so all kinds of people die and the mere fact of death is not in and of itself a transforming process spiritually. He who has not developed the faculties that lay hold on the ethereal life, who has lived within the imprisonment of the senses, not rising to the nobler intellectual state, is no more entirely detached from the alternations of sorrow and struggle than when here.

For the materialist, who has lived to self, a spiritual world, with an atmosphere strange and overpowering, with all that he clung to gone, with an environment that he has always turned from and a language he has never learned to speak, would be retribution enough."

Death is the portal thru which we pass to a condition more favorable to the nature of the spiritual powers and no more to be that of as a disaster than is the entrance on university study, or travel or any other gateway to new and enlarging interests.

From *The Adventure Beautiful* by Lilian Whiting—Little, Brown & Co., Pub.

CAPITAL PUNISHMENT

SINCE the affair at Marquette capital punishment is again being talked of. There are two sides to the question. First the protection of society, second the salvation of the criminal which sometimes, if not generally, seems an impossible thing; many are born with the criminal instinct and it can neither be educated nor punished out of them, certainly death will not make angels of them. In putting them out of the way we might be considered as shifting our responsibility, yet society should be protected. It is a knotty problem. What do you say?

WHEW!

HAVE JUST read your very interesting letter in the current number of "Pipp's Weekly." A few observations may not be unacceptable to you.

All questions concerning human life, that need to be settled, may be settled by consulting the word of God. This word was written, primarily, for the church, the elect, the redeemed, and then for those who are earnestly seeking the way, the truth, and the life. It was not written for pagans who prefer paganism to gospel light.

The thoughts, motives, deeds of the unbelieving world are, therefore, of no concern to the church.

Only a small minority of the women of America are Christians, the rest are, virtually, pagan.

A pagan mother, being destitute of spiritual understanding, can not "bring her children up in the nature and admonition of the Lord." neither is she capable of understanding her proper place in society.

As a result of this pagan upbringing the more theatres, dance halls and other questionable places



Edited by MRS. GRACE NELLIS JENNEY

Dear Friends: A number of our readers have written to me asking about the book called "The Adventure Beautiful", which is being so much talked of. I wrote to the publishers and asked their permission to quote from it here and there, which request they readily assented to. The philosophy will be somewhat new to many but shocking to none and is essentially happy and optimistic.—Editor.

of amusement are the nightly resorts of multitudes of American boys and girls in their early teens. A woman might better be at home taking care of her children than attending meetings of a political club, for if she is a pagan mother it doesn't make much difference where she is.

That the mothers of America have the training of the men of America is quite true, but, as I have said, the vast majority of American mothers are unfit to train their children.

Our godless homes and secularized schools produce crooked politicians and crooked politics—and we stand amazed!

May we not hope for a female, pagan president?—Thos. N. Shannon.

And my letter to Pipp's Weekly was a plea for moderation and modesty in women active in politics.—Editor.

HASTY ACTION

I'M VERY much interested in your paper, and certainly enjoy reading it, and have got many useful helps from it, as well as economical ones. I was employed as a housekeeper on a farm, tho, it was my first experience on a farm, I always looked after the house and expenses as tho they were my own, but I've a family of three children to support so sailing isn't as smooth. Their daddy passed away when my youngest was only six months old, but I've managed to keep them together now for four years. But I am interested in "Unfaithfulness" and especially in the writer who signed his name as "Sorry Husband."

I have had some experience, myself, but I can sympathize with him for being sorry for his actions, for I mistrusted only too soon, which put me where I am now.

Now my story is different, but as I stated before, I was a housekeeper, and met a man who seemed to be an ideal one, my folks thinking he was just as I did, but I only knew him a short time. When he proposed, I accepted, for a woman certainly has her experiences, acting as housekeepers, for so many are looking for so-called wives. This man furnished a 5-room bungalow two years ago, saying he was tired of rooming around, and oh, my but I was so happy. And he seemed also to be, and was good to to the children. When, after three months it seemed to me like I was having a dream, he told me he had

a position in a nearby town which was booming, tho I knew he had applied for the position, and he left, bidding us farewell, with the understanding he would send for us.

Now that was a year ago last April, and I have never heard direct from him since. When I didn't hear from him within 10 days, and on tracing his tool box, I found he went to another place, so on advice of others I swore out a warrant for him.

I wasn't in need of money and my rent was paid for a month. I had a good supply in, but on the other hand he never treated me right, by telling me a falsehood on his leaving. Then again why did I let others talk me into getting out the warrants, for when I was asked what complaint I had, all I could say was he never went where he told me he was going. We heard from a party who had been with him that he had nothing against me, but when the police got on his trail, it made him angry, after only being gone 10 days, intending to send for me his next pay day, and he also had a house spoken for, to surprise me.

My advice should be to know what you are doing, before mistrusting. I've got mysterious letters always referring to him, but I will not correspond with strangers. Whether he wants to become reconciled or wants grounds for a divorce, it is all a mystery to me. But people think I am so foolish for not condemning him, but there's no one I have ever seen can take his place with me, and my main wish is that he feels sorry for his actions, as the sorry husband.

You can publish what you want to of this, but really it seems a relief when I can write my thoughts, as I have no one out here and it does not pay to tire your employer with ones troubles. Thanking you with best wishes to the M. B. F.—Mrs. R. P.

By all means get into communication with him and see if you can get affairs straightened out. In a case like this friends may be very much mistaken and cause much mischief. Use your own judgment and do not delay.—Editor.

CANNING MEAT

IN CANNING a large quantity of meat by the cold pack process I made use of several recipes, any one of which is satisfactory. Since absolute cleanliness is essential it is well to begin directions with the

AWAY

I can not say, and I will not say
That he is dead—He is just away!

With a cheery smile, and a wave of the hand,
He has wandered into an unknown land.

And left us dreaming, how very fair
It needs must be—since he lingers there.

And you—O, you, who the wildest yearn
For the old time step and the glad return—

Think of him as faring on, as dear
In the love of There as the love of Here;

And loyal still as he gave the blows
Of his warrior-strength to his country's foes.

Think of him still as the same, I say;

He is not dead—he is just away!

—James Whitcomb Riley.

Mild and gentle as he was here—
When the sweetest love of his life he gave.

To simple things—where the violets grew
Pure as the eyes they were likened to,

The touches of his hands have strayed
As reverently as his lips have prayed.

When the little brown thrush that harshly cheered
Was dear to him as the mocking-bird;

And he pitied as much as a man in pain
A writhing honey bee wet with rain—

preparation of the utensils and jars to be used in the work.

For a family of two or three, the most economical containers are pint jars. I use ordinary glass fruit jars with screw tops and thick rubber rings. To insure perfect meat for summer use I buy new screw tops and can rubbers. Sterilization of the lids is accomplished by putting the clean tops into a kettle of clean, cold water, bringing the water to a boil and boiling about 15 minutes. They may boil longer if desired. Rubber rings should be washed and merely dipped into hot water. Boiling the rubber rings is not necessary.

To sterilize the jars I use a copper wash boiler with a tight cover. It should be carefully and perfectly clean. I place a clean wire rack in the bottom of the boiler and stack my jars in it laying them down on their sides; fill with cold well water to cover the jars, bring to a boil and boil about 30 minutes. In removing from this bath, first remove the boiler cover and allow the steam to pass off. I take out the jars one at a time with a long kitchen fork. They should be placed right side up on a folded towel rather than on the table, to avoid breaking. Put the sterilized lids on top of the jars at once and the jars are ready for the meat.

My first batch of meat is canned as follows: Cut the meat into pieces small enough to be easily packed into the jars, and at once put the raw meat into the jars, add a level (or scant) teaspoonful of salt. Fill all spaces with water, put on rubber, screw on lid, but do not seal. Place on the rack in the boiler in warm (not hot) water, allowing the water to come up to the neck of the jar, but not over the rubber; bring to a boil and boil steadily for five hours. It will be necessary to add boiling water to the boiler from time to time as the water boils away. But remove the boiler lid for this only when necessary, and replace as soon as possible. At the end of five hours, remove the boiler cover to allow the steam to escape and after a few minutes take out the jars, one at a time, using a folded towel to protect the hands. Set the jars down on a folded cloth and very gently screw the lid down to seal. Do not invert to test, as the rubbers are very soft.

To be certain as to whether the jars are properly sealed examine the lids after the meat has become cold. The perfectly sealed jars will have a greatly depressed lid. Where the lid has not drawn down there should be a new lid and rubber put on and the jar should be again sterilized for an hour or so.

When the first batch has begun boiling I begin my second, using my second recipe which is perhaps the best. Taking several skillets or frying pans I brown the pieces of meat before packing them in the jars. This gives a different flavor to the canned product. The seasoning and filling with water is as described in the first instance, but the jars may be kept hot and filled with boiling water just before placing in the cooker. No fat is used in the skillets as this would change the flavor.

In canning the meat which contains bones I use the third recipe. By this plan we may can soup or meat.

Brown the bony pieces, except those for soup, and place in large kettles for boiling (I use a large new dishpan), and, covering with boiling water (for soup use cold water), boil gently until the meat slips from the bones. Remove the bones and pack the meat in the (hot) jars, put on rubbers and lids as before, but here it is necessary to keep the jars in the water bath only three and one-half hours, because of the previous cooking. The filling of the jars after putting in the meat, is done, not with water, but with the broth in which the meat has been cooking. All of this broth can be canned and sterilized with the meat three and one-half hours.

Care in choosing the pieces to keep a good proportion of fat and lean is desirable, and this plan serves equally well with beef or with pork. I have been told that fish could be canned likewise, but I have never tried it.

There will always be a quantity

of fat which oozes out into the boiler during the long cooking. The water should be poured out into some container and allowed to cool as this fat will make excellent soap. The boiler should be washed and scalded between batches of meat. It is well to sterilize the jars one day and do the canning on the next. With one boiler two batches can be canned in a single day.—"Farmer's Wife."

ORIGIN OF ST. VALENTINE'S DAY

MRS. A. G. M. has requested the information and as it may be interesting to others I will publish it.

Saint Valentine was a bishop and martyr of the church. He was put to death at Rome in the year 279. Since that time a custom has grown up of choosing valentines on Feb. 14, the date of his death. This custom prevailed during the Roman Lupercalia, a festival at which each boy drew from a box a tablet inscribed with the name of a girl to whom he was to be devoted for one year. From that custom has grown the modern one of sending valentines.

Just what the connection is between the martyred bishop and the giving of the missives I was not able to determine.

It is an old belief that birds begin to mate on February 14, perhaps that is why they are so frequently used as a decoration.

CORRESPONDENTS' COLUMN

A lady writes and asks for the address of Miss Z. B. R., of Ohio, who had a letter in the issue of Dec. 24. The lady wishes to write to our correspondent. If the address is sent to me I will forward it.

Mrs. Wm. E. F.—Braiding in some simple design would be a pretty trimming for the pattern. One could even use a little hand stitching, darning or chais stitch. A black silk braid put on in even rows is today in very good style.

Mrs. B. R., of Fowlerville—Try Woman's Exchange, Adams Ave. E., or D. J. Healy Co., Woodward Ave., Detroit, Mich.

Mrs. J. E., Valley Center—Write

AIDS TO GOOD DRESSING

FOR APPEARANCE, COMFORT AND ECONOMY

Braids, buttons and bias folds of material form the popular trimming this winter and will also be good for spring.

The straight line from shoulder to hem and the long, loose waist line prevail; these, with the open neck and free ankle make for the most artistic and comfortable garments ever put before womankind. Let us see to it that no power on earth takes them away from us.

Men's clothes have been standardized for many years and are suitable and comfortable. Why can we not manicate ourselves from the worry and expense of perpetual change in fashions?



A Most Attractive Blouse

3835. Youthful and becoming is this dainty model. The wide sleeve is new, and will lend itself well to any of the soft fabrics now in vogue. This is a good style for contrasting materials. Crepe de chine and satin, georgette and satin, chiffon and velvet would be nice. The blouse could be of one material with a bit of lace or net for trimming. As here shown crepe de meteor was employed with applied trimming of chiffon and velvet.

The Pattern is cut in 7 sizes: 34, 36, 38, 40, 44 and 46 inches bust measure. A 38 inch size requires 2 3/4 yards of 36 inch material.



A New Straight Line Frock

3812. Charming simplicity is featured in this pleasing style. The panels add length and becoming fullness. The closing is invisible at the left side of the front panel. This is a good design for remodeling. Satin and serge, plain and figured silk could be here combined. As illustrated Canton crepe, in a new shade of brown, was used, with a decoration of novelty braid.

The Pattern is cut in 3 sizes: 16, 18 and 20 years. An 18 year size requires 4 3/4 yards of 27 inch material.

for the attachment you want to the Singer Sewing Machine Co., Adams Ave. West, Detroit, Mich.

Does anyone have the words and music of the song, "If Your Heart Keeps Right?"

To Remove Stain and Rust

In your issue of M. B. F. for Dec. 10th I noticed Mrs. G. W. P. wished to know how to remove iodine stain from linen. If she will mix starch and water fairly thick, and spread on the linen, and allow it to dry on the goods, then wash it in the usual way, I think she will find the stain has disappeared. Do not boil the starch. She also wishes to know how to remove rust stains. I use a preparation called "Iron Rust Soap." It may be obtained from Gartsides Iron the M. B. A. Rust Soap Co., Philadelphia, Pa. I think the M. B. F. is a very helpful paper.—E. B.

Dear Mrs. Jenney—We have taken the M. B. F. ever since it was printed, I believe. I enjoy the department for women very much. I saw in the issue of Dec. 10, 1921, Mrs. G. W. P. request for a remedy to remove iodine and rust stains. For iodine, wet spots with cold water and hang by stove where heat will strike it. (I hung my garment by oven door) if not all gone, repeat. For iron rust, cover spot with salt and moisten with lemon juice, place in sun. For mildew, wet goods and soap heavy with laundry soap, rub salt in and hang in sun. I have tried all of these and they do the work. My letter is so long I will close. Wishing you all a Happy New Year.—Mrs. M. L. B.

Will some one please send recipe for Dutch cake or coffee cake made from bread dough?—Mrs. K. B.

WHAT COLORS MEAN

Yellow symbolizes the rays of the sun, and tends to cheerfulness.

Red, brings to mind fire, blood, warmth. A little goes a long way. It is stimulating and therefore aggressive.

Blue, suggests cold, ice. Sometimes depressing, but desirable in warm surroundings, because it is cooling.

Green is noted for its freshness and restfulness.

Browns are warm, comforting, quieting, conducive to tranquillity of that, as a "brown study."

Gray is neutral and combines well with other colors.

Black is depressing and should be used sparingly.

—Courtesy of Klenflax Linen Rug Co., Duluth, Minn.

Being one of your steady readers and giving the Business Farmer a boost every chance I have, I am enclosing check to introduce my second new subscriber this month. I could not get along without this great business paper and look eagerly for it in the mail box each Saturday. J. C. McNamora, Van Buren County, Mich.



A New Straight Line Frock

3837. There are no boundaries to smart versions of this popular style. In this instance the model simulates attractive redingote lines. The effect is becoming to slender as well as mature figures. Aricotin and satin could be here combined, or velvet and satin. Velvet with braiding would be nice, or broad cloth, with bands of kimmer.

The Pattern is cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The width at the foot is about 2 yards. To make the dress for a 38 inch bust measure, will require 4 1/4 yards of 40 inch material.

A Neat Pocket Dress

2816. Even a tiny girl loves a dress with pockets, such as this model portrays. The lines are simple, and the making not difficult. Figured percale, or checked gingham may be selected for the dress, and pique or repp in a contrasting color for the trimming.

The Pattern is cut in 4 sizes: 2, 3, 4 and 5 years. A 3 year size requires 2 1/2 yards of 36 inch material. Collar, cuffs, belt and pockets of contrasting material requires 5/8 yard.



Which is Larger the Sun or a Cent?

"Why—the sun of course" you will say. But remember—you can hold the cent so close to your eye that you lose sight of the sun.

Some baking powders can be bought for a few pennies less than Calumet—but don't hold these cents too close to your eyes—you will not be able to see the quality—the purity—the dependability of

CALUMET BAKING POWDER

In other words, don't be deceived by a few pennies—the cheapest baking powder in price is often the most expensive.

When you buy Calumet you know that it will produce pure, sweet and wholesome bakings. You know that you use less because it contains more than the ordinary leavening strength.

Buy it—try it—be convinced.

A pound can of Calumet contains full 16 ounces. Some baking powders come in 12 ounce instead of 16 ounce cans. Be sure you get a pound when you want it.



EASY METHOD OF Sugar Curing and Smoking Meat

The easiest way for a farmer to save money is by sugar-curing and smoking his own meat. It's a good way to make money too because town people are always anxious to buy "country-cured" meat. Wright's Food Products make it a simple matter to cure meat at home.

Wright's Smoke

is made by condensing actual hickory smoke. Simply and easily applied with cloth or brush. Gives wonderfully delicious flavor—does away with old smoke house—saves 20 lbs. of meat out of every 100 lbs. A large \$1.25 bottle will smoke a barrel of meat. Guaranteed satisfactory or your money back. Your dealer has it.

Wright's Ham Pickle

is a scientific preparation for curing meat. Contains all the necessary ingredients except salt. Cures meat better, with less work and gives delicious flavor. Wright's Ham Pickle is sold by your druggist—guaranteed satisfactory or your money back.

Wright Food Products Are Guaranteed

Both Wright's Smoke and Ham Pickle are guaranteed to give absolute satisfaction or your money back. Be sure to get the Genuine Wright Food Products.

FREE Simply send your name for valuable, illustrated book on expert methods of curing meat. Also learn how to get a complete, highest-grade butchering set at lowest factory cost. Write today—a card will do.

E. H. WRIGHT COMPANY, Ltd.
862-H Broadway, Kansas City, Mo.



WRIGHT'S HAM PICKLE
Contents of large jar sugar cures barrel of meat. Simply mix with 27 lbs. of salt and rub on meat. Leave meat in salt or brine four to eight weeks. Always pack rind side uppermost. Complete directions and valuable information on curing and smoking meat with every bottle of Wright's Ham Pickle.



WRIGHT'S CONDENSED SMOKE
Simply apply Wright's Smoke to meat with cloth or brush. Cures meat better, with less work and gives delicious flavor. Wright's Smoke is a liquid made by condensing smoke from selected hickory. Directions and information on curing and smoking meat with every bottle of Wright's Smoke.

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We'll guarantee your Jaffe Radiator can't be hurt, no matter how hard it is frozen or how often. We will pay \$100 reward to anyone who can prove that the Jaffe Radiator can be damaged by freezing. You ought to have one of these radiators on your floor this winter.

Write us now for full information.

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"Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears, where they are invisible, soft, safe and comfortable. Write today for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials.

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FREE Samples of any field seeds to show quality sent on request with Isbell's 1922 Seed Annual. Big savings on sterling quality direct-from-grower seeds. Write today.

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EVERY BREEDER

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

What Have You to Offer?

The Children's Hour

DEAR CHILDREN: How swiftly time passes. Here it is past the middle of January, this month will soon be gone. Then will come February, the shortest month in the year. And after that March and spring. It will not be many weeks before you will go to school some morning and one of your playmates will call to you, "I saw a robin on my way to school this morning." Or, maybe you will be the first one in your school to see it.

Did you know that there are more robins in this country than any other species of birds? It is true. All bird censuses prove this. Robin Redbreast is known all over the United States, from coast to coast, and, while many people think he is a pest because he eats small fruits, he is not, as I told you some time ago. He eats enough worms, bugs, and other enemies of fruits and crops to amply pay for the fruit he eats. I have a secret that I am going to tell you. This bird we call a robin is not a robin at all. The real robin is a little red-breasted resident European bird about the size of a bluebird, and our robin is really a large migrating thrush. The Pilgrims found it here when they came to this country and it reminded them of the English robin so they named it robin in memory of the little feathered friend in their old home country. And the name has stuck.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned—Christmas is over and I suppose you had a good time. I spent a very enjoyable day. We just began to take the M. B. F. and I like it, and I enjoy mostly reading the Children's Hour. I am a girl 12 years old, my birthday is the first day of February, so I will soon be 13. Have I a twin brother or sister? I am in the eighth grade in school. I have gone to school every day and like it real well. I have one sister and she drives the transportation bus to and from school. I have four miles to go to school. For pets I have three cats and one dog. John Hann, I think the answer to your riddle is "Love." Will you please write to me and let me know if I am right? I would like to have some of the cousins of the M. B. F. write to me.—Grace R. Portzen, Norway, Mich., care Lee E. Ediet.

Dear Uncle Ned—I am a girl 16 years old and will be 17 the 25th of January. I wonder if I have a twin. I passed the eighth grade last year but I am not going to high school. I have one sister, Stella, age 14, and one brother, Adolphus, age 18. My mother is dead. She has been dead eight years and my sister and I keep house. We had a Christmas tree this Christmas and my brother took a picture of it. We are remodeling our house and are putting in a furnace and have our house wired for electric lights. We may have the lights in next summer.—Hilda Adolph, Yale, Mich.

Dear Uncle Ned—I am a girl 11 years old. My birthday is July 6. Have I a twin? I have one sister. We have a pond on our farm. We have lots of fun sliding on the ice. I have a pet lamb, her name is Mary. She goes everywhere I go. Santa Claus brought me a doll Christmas. I have lots of fun making dresses for her. From your niece.—Ruth Lance, Grand Ledge, Route 3, Mich.

Dear Uncle Ned—I am a boy 11 years old and am in the fifth grade at school. I live on a 200-acre farm. My papa thinks M. B. F. is the best farm paper he takes. For pets I have three Shetland ponies, one dog, rabbits and a cat. We also have cows, sheep, horses, hogs, turkeys, guineas and chickens. I would like to have some boys write to me.—Philip Watts, Tawas City, R. R. 2, Mich.

Dear Uncle Ned—I am a girl nine years old. I am in the second grade at school. We live on a 135-acre farm and we have 3 horses, 8 cows, 3 calves, 36 sheep and 30 hogs. We have a Ford car. I have two sisters and one brother. I like to go to school. I like the teacher. There are 38 children in our school.—Leah Amos, Route 8, Owosso, Mich.

Dear Uncle Ned—I am a boy in the sixth grade at school. I am 11 years old. I have a mile and a half to walk to school. I have a brother and sister. Your friend—Russel Hansen, McBride, Mich.

Dear Uncle Ned—How are you getting along? I am a farm girl. I live on a twenty-acre farm. For pets I have one cat. I have 3 sisters and one brother. I am seven years old. I was born on the 4th of February, 1915. Have I a twin? We live a mile and a half from school. Your friend—Maude Larvella, Bronson, Swartz Creek, Michigan.

Dear Uncle Ned—Having heard of the good luck of others writing to your club,

I thought I would write too and hope the cousins will write to me. I am thirteen years old. My favorite sport is swimming.—Clayton Pequet, Box 57, Sidnaw, Mich.

Dear Uncle Ned—I am a little girl 9 years old and my birthday is the 7th of September. I am in the 3rd and 4th grades at school. I am much interested in my school work. We have a splendid teacher. I live on a farm. I have a sister and a brother. We received the M. B. F. as a Christmas present. I enjoy reading the Children's Hour. Your chum.—Vivian Grey, R. 2, Greenville, Michigan.

Dear Uncle Ned—I am a girl 12 years old and in the seventh grade. I live on an 80-acre farm. I have one sister. She is 8 years old. We have 5 horses, 9 pigs and 12 head of cattle. For a pet I have 2 cats and 2 kittens. Your niece.—Cheryl Brownell, Rockford, Michigan.

Dear Uncle Ned—How are you? I am a boy 10 years old and in the 2nd grade. We have one cow and 2 horses. For pets I have a rabbit. My birthday is the 9th of February. I live on a twenty-acre farm. I have 4 sisters.—Mr. Robert A. Bronson, R. 1, Swartz Creek, Michigan.

Dear Uncle Ned—I am a boy 11 years old. My birthday is October 5. I am in the 4th grade. I live on a farm of 80 acres. We have 4 horses, one colt, 10 head of cattle, 2 cows and 300 chickens. We get 6 and 7 dozen eggs a day. I play a violin. My sister plays a piano. I would like to have some boys and girls write to me. I promise to answer all letters I receive.—Glenn Rykert, Williamston, Michigan.

Dear Uncle Ned—I am a farm girl. My birthday is the 10th of January. I will be 15 tomorrow. I would like to receive letters from the girls and boys. I will answer all letters.—Bessie McPherson, Akron, R. 3, Mich.

Dear Uncle Ned—I am a girl eight years old. I am in the fourth grade at school. I have blue eyes and my hair is light. I live on a 95-acre farm. For pets I have a cat and a kitten and a pair of hamsters. I hope you all had a merry Christmas.—Louise Gibson, R. 5, Lapeer, Mich.

Dear Uncle Ned—I am a farm girl 12 years of age and in the seventh grade at school. I have 11-2 miles to walk to school. I have one sister nine years old. She is in the fourth grade. My birthday is the 15th of January. I am 13 years old this month. I wish the Doo Dads would come back pretty soon. I think they are such funny people.—Cecelia Jelinek, Sutton's Bay, R. 1, Mich.

Dear Uncle Ned—There is a pond back of our school and every day we go skating and sleigh riding. We enjoy ourselves on the ice. The boys take us on their sleds and push us. We have lots of fun. We are joining the Red Cross in our school and also are going to join the Modern Health Crusaders and I am going to obey the rules. We have to do ten chores and also have to play thirty minutes.—Elzina Stosik, Kawkawlin, R. F. D., 2, Mich.

Dear Uncle Ned—I am a little girl nine years old and live on an 80-acre farm in Ida township, Monroe county. We have six cows, five horses, fourteen hogs and a nice flock of chickens. And for pets I have two dogs, Jack and Trixie, and a nice black kitty. I am in the fourth grade at school and like to go to school very much. I take lessons on the piano and play quite a few nice pieces. I have a little sister and her name is Netha May.—Nona E. West, Ida, R. R. 1, Mich.

Dear Uncle Ned—I am a girl ten years old. My birthday is the seventeenth of June. I go to school every day. I am in the fourth grade. I have seven sisters and one brother. For pets I have a rabbit, a cat and a dog. We have two horses, five cows and fifty chickens. I live on the banks of the largest inland lake of Michigan. I will close with a riddle: What is more afraid of a cock and a hen than it is of a dog and twenty men? Answer: Grasshopper. Your loving niece.—Edna Hanson, Houghton, Lake, Mich.

Dear Uncle Ned—Here I am back to my cousins and all again. How are you and all my cousins? I am fine. I go to school and like it fine. I am in the eighth grade and expect to write on examination in the spring. There is snow on the ground now and it is quite cold today. My two greatest sports are skating and skating, at which I have a very good time. I live about ten miles southeast of Big Rapids. I have read several letters from my friends in the M. B. F. I have received several letters from my cousins and would like to receive more as I will surely answer them all. My birthday is February 14th. I will be 14. Have I a twin? I hope the Doo Dads will soon be back. They are such funny little creatures. Wishing you and my cousins good luck and a very happy New Year. I remain, your loving niece.—Dorothy Scofield, Rodney, Mich.

OTHER LETTERS RECEIVED

Susie Mae Bronson, Swartz Creek; Estella Krause, Brighton; Florence Gleason, Sidney; Alberta Stowe, Conway; E. S., Kawkawlin, Mich.

Genuine

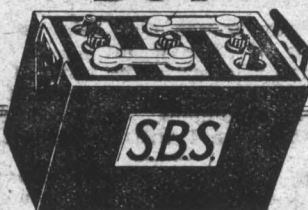


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BOYS AND GIRLS



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IT DOES NOT cost you one cent. Simply send in 4 yearly subscriptions to THE MICHIGAN BUSINESS FARMER at \$1.00 each (at least two of which must be new) and this dandy sled will come to you by prepaid parcel post.

THE MICHIGAN BUSINESS FARMER
"The Farmer's Friend"
Mt. Clemens Michigan

SHORT COURSES AT M. A. C.

(Continued from page 2)

Four-week tractor courses start January 9, February 6 and March 6. Work will be given on all the dozen makes of tractors owned by the college as well as with all types of gas engines used on the farm. These tractor courses are becoming more popular each year.—C. E. Johnson, M. A. C. Correspondent.

ANNUAL CROP IMPROVEMENT MEET

ARRANGEMENTS for the annual meeting and grain show of the Michigan Crop Improvement Association are rapidly shaping up and already promise to make the meeting during Farmers' Week at M. A. C., one of the best yet held. Dean G. L. Christie, director of the Purdue Experiment Station, has been secured as one of the speakers, which means a rare treat for Michigan farmers. Prof. A. C. Arny, of the University of Minnesota, will probably be chairman of the judging committee and scheduled as one of the speakers, also L. Whitney Watkins, president of the Crop Improvement Association and chairman of the State Board of Agriculture, will also appear on the program.

INTEREST OF BEET GROWERS IN TARIFF FIGHT

(Continued from page 2)

facturers. The farmers do not want to lose money year in and year out. Neither do they want the manufacturers. There is a common meeting place between the two, as we have often pointed out, where misunderstandings can be aired, where difficulties can be overcome and where the questions of prices and conditions can be adjusted to the satisfaction of all.

Great as are the investments in sugar factories in the United States they are not great enough to induce the United States congress to enact a tariff law which will put the price of sugar abnormally high to the American consumers. And the manufacturers know it. Their only hope at this time is the active support of the organized farmers who grow beets, and their farm journals. And if these help the manufacturers at this time to save their business, the latter will be ingrates and fools if they do not remember the farmers and seek their co-operation in the future instead of arousing their antagonism.

We cannot speak authoritatively upon what congress will do with the sugar tariff but it is the opinion of this journal that the beet sugar industry will get the protection which it seeks. To make doubly sure the Business Farmer will place the facts before congress and urge its readers whether they grow beets or beans or what not, to help preserve the Michigan sugar beet farmers and the Michigan sugar manufacturers from the ruinous competition of the great landlords of Cuba and the Philippines.

DATES FOR FARMERS' ANNUAL "GET-TOGETHER"

(Continued from page 4)

In the Home Economics department. All the large morning meetings for the women will be held in the auditorium of the People's Church on Grand avenue, opposite the Campus, because last year the women's meetings, during Farmers' Week, overflowed the lecture room in the Woman's building. These meetings will be held from 9:30 until 11:30. Only one speaker will appear on the program each morning so that there will be plenty of time after the speeches for questions and discussions and to make appointments for the conference hour each speaker is to hold later in the afternoon of the day she speaks.

Dr. Caroline Hedger, practicing physician and child welfare specialist for the Elizabeth McCormick memorial fund of Chicago, will give a talk on Child Care and Nutrition on Wednesday morning, February 1st.

Dr. Hedger was born on a Kansas farm, dishwashed her way through college, did relief work in Belgium during the war. She was on the government investigation of infant mortality and death of mothers at childbirth. Her talks will be illustrated with lantern slides. She is a very interesting speaker.

Miss Martha Phillips of the home service department of the North American Dye Corporation, will be the speaker Tuesday, January 31st. She will speak on the home use of dyes, illustrating her talk with material especially prepared for this Farmer's Week program.

Dr. Mitchell, of Battle Creek, will be here Thursday, February 2nd, and will

speak on the morning program. Her subject will be nutrition and diet. She will be here Thursday and Friday. She will bring with her an exhibition of rats used in experiments and will explain the problems that are being worked out with them. Among her groups are rats that have been fed on a diet lacking in vitamins, one on a diet lacking in iron, a group fed on a diet of incomplete protein, and two litters of rats born of mothers whose diets were lacking in calcium and phosphorus.

Mrs. Barbara Bartlett, head of the Public Health Nursing at the University of Michigan, will speak Thursday morning. Mrs. Bartlett has done much work in public health nursing in rural communities and was on the government investigation in Montana of causes of infant mortality and death of mothers at childbirth. She will give a popular talk on what Home Nursing means to the rural community.

Dr. R. W. Bunting, secretary of the Dental College of the University of Michigan and vice-president of the State Dental Association, will give a talk, illustrated with lantern slides on how to care for children's teeth. This talk will be given Thursday morning.

Every afternoon from 3:30 until 5 there will be:

1. Conference with Miss Mariel Hopkins of the extension department and Miss Rebekah Gibbons of the home economics department on nutrition.

2. A millinery clinic in charge of Miss Garrison.

3. A food demonstration or a demonstration of the clothing of children or high school girls.

4. A meat canning demonstration.

Miss Mariel Hopkins of the extension department and Miss Rebekah Gibbons, of the home economics department, have been conducting a series of dietary experiments with groups of rats. Three experiments are being conducted. Experiment 1. An experiment on infant feeding. Two rats are being fed on an adequate diet of milk, bread and orange juice. Two rats are being fed on an inadequate diet of bread and a proprietary infant food. Experiment 2, is an experiment to show that milk is an indispensable food in the diet of adults as well as children. Two rats are being fed a widely varied diet with milk, two are being fed the same diet without it. Milk is the factor of experiment 3, an experiment to show the need for calcium and phosphorus in the diet of the mother during pregnancy and lactation. The mother rat is being fed on a diet of corn bread, sugar, butter, apple and meat. Milk, green vegetables and cereals are lacking in the diet. These rats will be on exhibition.

Meat Canning Demonstration

Mr. Glenn Stewart, representative in Michigan of the Burpee Can Sealer Company and of the National Pressure Cooker Company, will give a series of demonstrations on the canning of meat and poultry.

Miss Anna Bayha, of the department of household arts will give a demonstration and hold a conference on clothing for children. A little boy and a little girl will be used as living models upon which to demonstrate good and bad features in children's dress. Miss Marion Tucker, of the household arts department, will have charge of the conference on appropriate dress for high school girls.

Hospitality

It is hoped that the women of Michigan will feel completely at home in the Women's building and the Home Economics department at M. A. C. Tea will be served every afternoon from 3:30 to 5 at the new Practice house which will be open to visitors. Dean Sweeney, Assistant-dean Kirby, and Mrs. Campbell, of the extension department, will be at the Practice house to meet Farmers' Week guests. Men, as well as women, will be most welcome to rest and visit there and to inspect the house and its equipment. Tea will be served every afternoon from 3:30 to 5 in the parlors of the Woman's building by the Dean of Women and the house mothers of the Women's dormitories. The parlors of the Woman's building will be at the disposal of Farmers' Week guests as a place to rest, visit, and meet friends. There will be a quiet room in the basement of the Woman's building where women may lie down and rest. There will also be a nursery where children may be left to be cared for during lectures and conferences. Miss Marion Tucker, of the home economics department, Miss Edna Smith of the extension service and Miss Laudenbach, of the physical education department, will be in the halls of the Woman's building to meet visitors and give them information and a group of senior girls will be prepared to show visitors over the building.

During Farmers' Week the Woman's league will serve meals in the first and second floor laboratories of the Woman's building under the supervision of Miss Sprague and Miss Nelson, who have charge of the Women's Commons.

FIFTIETH ANNUAL CATALOGUE

When one thinks of the vast business done by the great mail order houses in this country, it seems wonderful to think that the oldest of these great establishments has been in existence but 50 years. To celebrate this anniversary the Montgomery Ward Co. is issuing its fiftieth anniversary catalogue for the spring and summer of 1922. This golden jubilee catalogue is unusually complete and is filled with new merchandise with prices based on the new low cost of raw material. It weighs several pounds and each copy costs several dollars to produce.

However, the coupon attached to the ad on page 11, in this issue will, if mailed to Montgomery Ward & Co., entitle any reader of The Michigan Business Farmer to receive this catalogue without cost and postage prepaid.—Adv.

SUCCESSFUL YEAR
\$24,000 ADDED TO SURPLUS

The company has now finished its seventh season of success. It has paid, since organization, about one million dollars in claims and has always maintained a cash reserve large enough to pay every claim upon the day of its adjustment and has never borrowed a dollar. Assets January 1, cash, real estate and office equipment, as follows:

Cash in Banks	\$89,083.07
Office Building and Site	27,618.44
Office Furniture and Equipment	15,043.21
Total	\$122,730.72

The company has provided to comply with the request of the Michigan Insurance department that all mutual automobile insurance companies provide for a special liability reserve and will add \$2.00 to the rate for this purpose. This amount will be placed in the treasury without any expense as no agent will receive any commission on same. Many encouraging letters have been received at the home office for the splendid showing of the company and the effort made to create and maintain a sufficient surplus to meet all demands promptly. Automobile sales companies and garages as well as automobile owners are interested in dealing with a reliable company. Automobile owners realize that they also have a reputation to maintain as a safe risk.

Mr. Automobile Owner, if you are a careful and prudent driver, why not join this pioneer mutual that has stood the test for seven seasons? The company that owns its office building and equipment, has an organization of adjusters, agents and attorneys throughout the state to give you service in case of a serious liability claim, with an ample cash balance in the bank.

If not insured, call on our local agent, or write

THE CITIZENS' MUTUAL AUTOMOBILE INSURANCE CO
of Howell, Michigan



Only
\$1.00
DOWN

To the first person in each community who sends us \$1.00 with this coupon, we will send the wonderful 300 candle power SUNRAY Lamp with artistic decorated shade. A few cents worth of kerosene or gasoline keeps it in operation for 30 hours.

FREE Lantern!

We will also include, absolutely FREE, a 300 candle power SUNRAY Lantern. Lights up the yard and barn like a searchlight. You pay only for the Lamp when the postman delivers the Lantern is FREE. Think of it! A Sunray Lamp and Lantern for only \$1.00 down.

300 Candle Power

SUNRAY produces the whitest light known to science. Nothing to wear or get out of order—simple—safe—cheap to operate. Every home needs the SUNRAY. Better than gas or electricity. Absolute satisfaction guaranteed.

Mail This Coupon

Take advantage now of this great special offer. Send only \$1.00 with the coupon. When both are delivered pay the postman only \$9.65 for the Lamp—the Lantern worth \$3.50 is absolutely FREE. Let the SUNRAY bring light and cheer to your home. Act now!

Knight Light Co.
Dept. 3301 Chicago, Ill.



15 Days Trial

If you are not satisfied after 15 days' trial, your money will be promptly refunded.

 Knight Light Co., Dept. 3301 Chicago, Ill.
 Gentlemen: Enclosed find \$1.00. Please send me the SUNRAY Lamp. I agree to pay the postman \$9.65 for the lamp, also transportation charges when both are delivered. You agree to include the Lantern absolutely FREE and to refund my money if I am not satisfied after 15 days' trial.
 Name.....
 Address.....
 Send me Torch Lighter for Kerosene ☐
 Match lighter for Gasoline ☐ Torch lighter for Gasoline ☐

Business Farmers' Exchange

5c per word per issue—3 issues for 10c per word—Minimum number of words accept, 20.

FARMS & LANDS

50-ACRE MICHIGAN FARM WITH TOOLS. horses, 3 cows, implements, hay, grain, potatoes, included; has yielded 100 bu. corn, 65 bu. oats, 24 bu. beans, 27 bu. wheat acre; on improved road, close city; 35 acres leamy tillage, creek-watered pasture, wood, fruit; practically new 5-room cottage, large barn, poultry house, etc. Adjoining farms worth \$150 acre. To close out all \$4700. part cash. See page 60 Illus. Catalogue 1100. Bar gans. FRED. STROUT FARM AGENCY, 514 B E Ford Bldg., Detroit, Mich.

EXTRA GOOD 160 ACRES KALAMAZOO Co. Level 20 acre fields, new modern building; near flag station and shipping point. Good gravel roads. Never been rented. Write for particulars. W. L. COLLINS, Scotts, Mich.

FOR SALE, 40 ACRE FARM, GOOD SOIL, good buildings, orchard, on good roads. 1 1/2 miles from town. Write me, JOHN SIMS, Reed City, Michigan.

80 ACRE FARM GOOD SEVEN ROOM house, large barns, orchard, deep well, all cleared; hard road, price reasonable. ARTHUR CROSS, West Branch, Ogemaw County, Mich.

FOR SALE: 80 ACRE FARM 40 MILES west of Detroit, 12 from Ann Arbor, one mile postoffice, on State road, plenty of good buildings, sandy loam, good condition. 8 acres alfalfa, 30 seeded, 60 acres, plow, \$8500. One-third down, bal. easy terms. Address BOX 75, Rush-ton, Mich.

120 ACRES NUMBER ONE LAND AND best of buildings, fruit, timber. One mile to Dixie Highway, station, church and school. 30 miles from Detroit. Dry oak body wood for sale. R. W. ANDERSON, Clarkston, Michigan.

10 ACRES, TRUCK, BERRY AND POUL- try land, one mile to city limits, tiled, all tillable. Write for price. H. E. HARPST, Alma, Mich., R. 4.

82 ACRES GOOD SOIL, BUILDINGS, WELL, alfalfa, 1/2 mile from school, 1 mile from Kendall State road. H. L. ROOT, Kendall, Mich.

160 ACRE FARM, COMBINATION BARN 98x36, good house, granary, tool shed, hog house, hen house. Soil mixed clay black loam, 105 a. cultivation, 3 acre timber, rest pasture. Lake, good fishing, prosperous neighborhood. Good roads. JULIUS HOLLATZ, Gladwin, Michigan.

FIFTY ACRE FARM, TWENTY-FIVE A cleared, buildings, fruit, flowing spring, nut trees, only \$850. Write CHARLES SANFORD, McEwen, Tennessee.

68 ACRE FARM FOR SALE, MOSTLY ALL cleared. Fair frame house, new barn built last year, 32x46; frame granary 14x20, good well 280 feet deep; well drained, good ditches and fences; clay and black loam land; good road, mail route, schools and churches. Located in Bay county, Garfield township. Section six. With horses, cattle and implements if wanted. MARTIN SMITH, R. 1, Rhodes, Mich.

FOR SALE, 122 ACRES, THE BEST OF soil, good buildings, fine location, 3 miles from Lansing. Must sell, am not able to farm. \$150 per acre. S. W. HEMPHY, R. 7, Lansing, Michigan.

120 ACRE FARM, GOOD LAND, GOOD buildings, fenced, deep well, about 30 acres cleared, good drainage. If you want a farm, write at once for price and terms. J. D. STONE, Rhodes, Mich.

MISCELLANEOUS
MACHINE

BUZZ-SAW FRAMES, BLADES, HAND- reels, pulleys, etc., of every description. Prices way down. Shipments promptly made. Polders free. Write. GEO. WETTSCHURACK, La Fayette, Ind.

BREEDERS DIRECTORY

(SPECIAL ADVERTISING RATES under this heading to honest breeders of live stock and poultry will be sent on request. Better still, write out what you have to offer, let us put it in type, show you a proof and tell you what it will cost for 13, 26 or 52 times. You can change size of ad. or copy as often as you wish. Copy or changes must be received one week before date of issue. Breeders' Auction Sales advertised here at special low rates: ask for them. Write today!)

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

CLAIM YOUR SALE DATE

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

Feb. 2 — Hampshire Swine, Lenawee County Hampshire Swine Breeders' Assn., Adrian, Mich.
Feb. 14 — Durocs, J. C. Barney, Coldwater, Mich.
Feb. 15 — Durocs, Hillsdale Co. Duroc Breeders' Ass'n., Hillsdale, Mich.

LIVE STOCK AUCTIONEERS

Andy Adams, Mt. Clemens, Mich.
Ed. Bowers, South Whitley, Ind.
R. L. Benjamin, Waukegan, Wisconsin.
Porter Colestock, Eaton Rapids, Mich.
Harry A. Eckhardt, Dallas City, Ill.
C. S. Forney, Mt. Pleasant, Mich.
John Hoffman, Hudson, Mich.
John P. Hutton, Lansing, Mich.
L. W. Love, Waukegan, Wisconsin.
L. W. Lovewell, So. Lyons, Mich.
J. E. Mack, St. Atkinson, Wisconsin.
D. L. Perry, Columbus, Ohio.
J. I. Post, Hillsdale, Mich.
O. A. Rasmussen, Greenville, Mich.
J. E. Ruppert, Perry, Mich.
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Harry Robinson, Plymouth, Mich.
Wm. Waffle, Coldwater, Mich.
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PURE BRED LIVE STOCK AUCTIONEERS

WM. WAFFLE, Coldwater, Mich.
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on the block.
We make a specialty of selling pure bred big type Poland Chinas, Spotted Poland Chinas and Duroc Jerseys. We are experienced. We sell 'em and we get the money. We are expert hog judges. We are booking dates right now for 1922 sales. We would like to sell for you. We have one price for both of us and it's right. Select your date; don't put it off; write today. Address either of us.

U-NEED-A PRACTICAL

COMPETENT AUCTIONEER

to insure your next sale being a success. Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions.

Satisfaction GUARANTEED or NO CHARGES MADE. Terms \$50.00 and actual expenses per sale. The same price and service to everyone.

I specialize in selling Polands, Durocs, and Cheshires. Let me reserve a 1922 date for you. Write or wire.

HARRY A. ECKHARDT
Dallas City, Illinois

JOHN P. HUTTON
LIVE STOCK AUCTIONEER
ADVANCE DATES SOLICITED.
ADDRESS 113 W. LAPEER ST.
LANSING, MICH.

CATTLE

HOLSTEIN-FRIESIAN

SHOW BULL

Sired by a Pontiac Angie Korndyke-Hengerveld DeKol bull from a nearly 10 lb. show cow. First prize junior calf, Jackson Fair, 1920. Light in color and good individual. Seven months old. Price \$125 to make room. Hurry!

Herd under Federal Supervision.

BOARDMAN FARMS
JACKSON, MICH.

Holstein Breeders Since 1906

I AM OFFERING LIGHT COLORED HOLSTEIN-FRIESIAN bull 1 year old from 21.51 lb. dam and sire whose six year old dams are 33.3 lbs. butter. Herd under state and federal supervision. Oscar Wallin, Wisconsin Farm, Unionville, Mich.

TUEBOR STOCK FARM

Breeders of Registered Holstein cattle and Berkshire Hogs.

Everything guaranteed, write me your wants or come and see them.

ROY F. FICKIES
Chesaning, Mich.

LAST ONE ADVERTISED SOLD

We offer another calf, born Nov. 23rd, 1920, world champion breeding. Write for pedigree and information.

HILLCREST FARMS

KALAMAZOO MICHIGAN

\$50

BIG, HUSKY, HEALTHY, HOLSTEIN BULLS from Traverse State Hospital stock. Registered and ready for service.
GEO. W. PUFFER, So. Boardman, Mich.

BULL CALF, BORN APRIL 20, 1921, WELL grown, well marked, very straight, and sure to please you. Sire Segis Flint Hengerveld. Lad whose two nearest tested dams average \$1.93. The dam is a 21 lb. three year old grand daughter of King Segis, she has a 30 lb. daughter. Price \$125.00 f. o. b. Flint. Write for extended pedigree.
L. C. KETZLER, Flint, Michigan.

7 YEARLING BULL BARGAINS

Sired by Segis Korndyke De Nijlander, a 32 lb. son of a twice Michigan ribbon winner, her dam, 29 1-2 lbs. Dams are daughters of King Segis Pontiac, a 37 lb. son of King Segis. Records 16 lbs. to 30 lbs. Priced at half value. \$100 up. Federally tested June 10. Write for list.
ALBERT G. WADE, White Pigeon, Mich.

SOME GOOD YOUNG REGISTERED HOLSTEIN COWS. Fair size, good color, bred to good bulls and due from July to December. Mostly from A. R. O. stock, prices reasonable and every one guaranteed to be exactly as represented.
M. J. ROCHE
Pinckney, Mich.

SOLD AGAIN

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

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

Fairlawn Herd—Holsteins

Hire Sire, Embalgard Lillith Champion 108073 His sire's dam Colantha 4th's Johanna, world's first 35 lb. cow, and world's first 1,200 lb. cow. The only cow that ever held all world's butter records from one day to one year, and the world's yearly milk record at the same time. His dam Lillith Plebe De Kol No. 98710, over 1,150 lbs. of butter from 20,599.4 pounds of milk in a year. World's 2nd highest milk record when made and Michigan state record for 6 years. Only one Michigan cow with higher milk record today. His two nearest dams average:
Butter, one year 1,199.22
Milk 28,515.9
Champ's sons from choice A. R. O. dams will add prestige to your herd and money to your purse.

J. F. RIEMAN

Owner
Flint, Mich.

A BLUE RIBBON WINNER YOUNG BULL on the 1921 Show Circuit. For sale at a low price. Out of an A. R. O. granddaughter of Pontiac Korndyke.
Sired by our SENIOR SHOW BULL Model King Segis Glista 32.37 lbs.

GRAND RIVER STOCK FARMS
COREY J. SPENCER, Owner
111 E. Main Street, Jackson, Mich.
Herd under State and Federal Supervision.

NICE YOUNG BULL

Sired by 35 lb. son of King of the Pontiacs. Dam over 20 lbs. First check \$100 gets him. Also a few heifers by same sire.

BRANDONHILL FARM

Ortonville, Michigan

JOHN P. HEHL

1205 Griswold St., Detroit, Michigan

SPLENDID CNA BULL CALF

Born Sept. 27, 1921. Sire, Flint Maplecrest Ona Pontiac; Dam, Imay Beets De Kol Elzevers who is milking nearly 60 lbs per day on regular feed.

He is nearly white but built right. First check for \$60.00 gets him. Herd under State test and free from T. B.
SCHAFFER BROS., Leonard, Mich., R 1

HOLSTEIN FRIESIAN PURE-BRED BULL grade heifers; tuberculin tested herd. Prices are right.
LARRO RESEARCH FARM, Box A North End, Detroit, Michigan.

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

DON'T BUY HOLSTEIN OR GUERNSEY CALVES ANYWHERE UNTIL YOU WRITE
EDGEWOOD FARMS, WHITEWATER, WIS.

REGISTERED HOLSTEINS Our Special price on your next year bull is interesting. 24 lb. dam 32 lb. Sire.
J. M. WILLIAMS, No. Adams, Mich.

HOLSTEIN BULL READY FOR SERVICE. Fine large growthy fellow born Jan. 16, 1921. From a fine large show cow with record of 25.93 lbs. butter 7 days. Sires dam 30 lbs. Nicely marked half white and half black. Price \$200. I also have 3 others, 1 born Nov. 1st, 1921 from cow with record of 30.21 lbs. butter, 633.8 lbs. milk 1 born Mar. 10, 1921 from cow with record of 20.23 lbs. butter, 509.5 lbs. milk as a 2 year old.
A. KIDNEY, P. O. Brant, Mich.
R. R. Station, St. Charles, Mich.

FOR SALE REGISTERED HOLSTEINS
A few young fresh cows \$300 each. Also two Heifer calves out of 33 lb. sire and good producing dams \$100 each. Federal Accredited herd.
WM. C. SCHOOF, R 2, Washington, Mich.

FOR SALE THREE HOLSTEIN BULL calves from one week to ten months old sired by a son of Beets Walker the sire of the World's Champion two year old heifer which made 1102.69 lbs. butter in one year.
V. J. CARPENTER, Cass City, Mich.

HOLSTEIN BULL BORN OCT. 13, 1921 Dam is sired by a 30 lb. Bull and out of a 22 lb. daughter of a 21 lb. cow. \$50 delivered your station.
EARL PETERS, North Bradley, Mich.

FOR SALE TWO HOLSTEIN BULL CALVES of high breeding. Dams ranging from 18 to 32 lbs. Nicely marked, and thrifty fellows. No. 1 born March 11, 1921; No. 2 born Nov. 26, 1921. \$75.00 apiece takes them. Pedigrees will be furnished.
W. O. SEARS, Beulah, Mich.

FOR SALE, SHOW-BULL-CALF, FIVE nearest dams average thirty-two pounds butter. Sire Curnation Champion. First check for \$125 gets him. A Curnation bull will make you money. Franklin Rasmussen, Greenville, Mich.

SHORTHORNS

REGISTERED SHORTHORN CATTLE, DU- roc Jersey Hogs and Percheron Horses. Quality at the right price.
CHASLEN FARMS, Northville, Mich.

MILKING STRAIN SHORTHORNS

Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmecott Viscount 25th, 648.563. Prices reasonable.
LUNDY BROS., R4, Davison, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.
J. A. DeARMO, Muir, Mich.

FOR SALE MILK STRAIN DOUBLE STAN- dard Polled Shorthorn Calves either sex, by Yorks Polled Duke No. 16384-545109 from accredited herd.
PAUL QUACK
Sault Ste Marie, R 2, Mich.

FOR SALE 3 SHORTHORN BULL CALVES and 1 L T P O spring boar. Inspection invited.
SONLEY BROS., St. Louis, Mich.

WATERLILY STOCK FARM

offers 4 fine Reg. Shorthorn Bulls from 10 to 22 mo. old at bargain prices.
THEODORE NICKLAS, Metamora, Mich.

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

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

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

INHERITED SHORTHORN QUALITY Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write to:
JOHN LESSITER'S SONS,
Clarkston, Mich.

FOR POLLED SHORTHORNS

Shropshire, Southdown and Cheviot rams write to
L. O. KELLY & SON, Plymouth, Mich.

FRANCISCO FARM SHORTHORNS AND BIG TYPE POLAND CHINAS

Now offering—Three bulls ready for service. Mastodon, Chausman, Emancipator breeding in silts bred for spring farrow. See them.

POPE BROTHERS CO

Mt. Pleasant, Michigan

FOR SALE FOUR REGISTERED DURHAM bulls from 8 to 10 months old. Also some fine female Durhams.
HENRY J. LYNCH, Mayville, Mich.

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

RICHLAND SHORTHORNS

ATTENTION: We are sending five heifers and five Bulls to the Association Sale at M. A. O. January 13th, 1922, the best of Scotch blood. Lines. Attend this sale and buy cattle worth the money.
O. H. PRESCOTT & SONS, Tawas City, Mich.

ATTENTION SHORTHORN BUYERS If you want a real herd bull, or some good heifers bred to Perfection Heir, write me. Satisfaction guaranteed.
S. H. PANGBORN & SON
S. ml. east, Bad Axe, Mich.

DUROCS AND SHORTHORNS, BRED GILTS, yearlings and two year olds, few good boars, bull calf 8 weeks old, good cow with heifer calf. Several bred heifers.
P. B. LUDLOW, Rolling Prairie, Ind.

MACK'S NOTES

AT THE ANNUAL MEETING OF BREEDERS AND FEEDERS

THE THIRTY-SECOND annual meeting of the Michigan Improved Live Stock Breeders and Feeders Association was held at the Michigan Agricultural College, at East Lansing, on January 10, 11 and 12. Program arrangement were in charge of George A. Brown and W. E. J. Edwards, of the animal husbandry department of the college. The leading speakers at the open sessions and the various breed meetings were as follows: Ex-Gov. F. O. Lowden, of Chicago; W. M. McFadden, of Chicago; J. G. Brown, of Indianapolis; H. Tenant, East Lansing; H. A. Moehlenpah, Milwaukee, Wis.; C. J. Fawcett, Chicago; E. C. Stone, Peoria, Ill.; Jacob DeGeus, Alicia, Mich.; Prof. O. E. Reed, Lansing; George J. Hicks, Saginaw; H. W. Wigman, Lansing; Charles Gray, Chicago; Dr. K. G. Suelke, Ithaca, N. Y.; W. J. Carmichael, Chicago; J. L. Tormey, Chicago.

A report of the annual election of the various breed associations will appear in next week's issue of this paper.

The Guernsey Cattle Club, of Michigan held its annual banquet at the Downey House on Tuesday evening; it would be very hard to beat the splendid layout that was placed before the thirty or more men and women that graced the occasion with their presence. One of the things that was most appreciated by those present was the rich Guernsey cream and milk that was placed beside each plate.

Prof. O. E. Reed—"It is my belief that the Guernsey breeders of Michigan should, as far as possible, market their milk and cream in the villages and smaller cities near which their farms are located. The people who live in these villages and cities will be delighted to have this splendid milk and will be willing to pay more for it than for the average milk that they are using at the present time. Producers, who desire to get away from the delivery end of the business will find it easy to arrange with some man to furnish the bottles and other delivery equipment and take the milk, f. o. b. the farm."

Gov. Alex. Groesbeck—"I was proud, a few minutes ago, when I heard one of your speakers refer to the great agricultural educators that have been given to the world by the Michigan Agricultural College. I am also proud of the work that the Michigan Department of Agriculture is doing for the farmers of this state; whenever this department asks for anything within reason, I shall do my level best to see that it gets it. More than that, I pledge you here tonight, that this administration will do everything in its power to make the Michigan Agricultural College the greatest institution of its kind in the world."

T. F. B. Sotham—"It seems to me that it would be a good plan if we could vary our breeding practice so as to decrease the number of farmers engaged in the dairy business and increase the number of beef breeders. If some of our dairymen, who have small herds, would reconsider and put in beef-bred herds and raise baby beef would it not increase the profits to be made by those still engaged in the dairy business? We are buying hundreds of calves from the 'panhandle' every year that could be profitably produced on some of the cheap lands in Michigan."

Ex-Governor F. O. Lowden, of Illinois—"I often wish that we could give every farmer in America an oracular demonstration of the value and utility of producing pure-bred stock. Like some other things, farmers are slow to start in any new thing; they go well once they get away but it is hard to warm them up. You can do your splendid research work, here in the college, but you find it difficult to get it all across to the farmer."

Ed. Stone, of Peoria, Illinois, secretary of the National Hampshire Swine Association, addressed the Michigan Swine Breeders meet at the college on Wednesday. Mr. Stone is a live wire and he certainly did stir up things. He spoke in favor of closer relations and more active co-operations between the producers of the various varieties of hogs. The wonderful increase in the number of Hampshire breeders in this country, during the last few years is credited largely to the splendid work of the national secretary.

HOLSTEIN SALE AT MT. PLEASANT

On Wednesday, January 4, a herd of more than fifty head of pure-bred Holstein-Friesian cattle was sold at public auction on Fertiland Farms, near Mt. Pleasant, Michigan. The owner of the farm and its splendid cattle equipment, W. T. Bantzen, having decided to give up farming and become a minister of the gospel, adopted this method for the dispersal of a herd he had been building up for the last fourteen years. The sale, as it was carried out, was one of the most convincing demonstrations of the value of pure-bred stock to the average farmer, that the writer has ever seen. With nearly every mature cow offered, two of her calves—a yearling and a suckling—were led into the ring and sold immediately after she was sold; the meth-

od of selling referred to, not only proved, conclusively, that the cows were regular breeders, producing calves that were faithful copies of their dams, but it also showed that these splendid cows had been earning an average of nearly \$60 per year for their owner in progeny alone.

The auctioneer, Col. S. C. Forney of Mt. Pleasant, did splendid work at this sale and it was largely owing to his energy, enthusiasm and never failing courtesy that the offering was saved from making a complete failure; the attendance was fairly good but those present were decidedly conservative in their attitude and the bidding was slow. Ward Campbell, of Mt. Pleasant, was the clerk of record and F. J. Fishbeck, of Howell, was in the box. The highest priced cow brought \$205 and the highest priced heifer, \$105. The top price paid for a calf was \$55.

A large delegation of farmers and breeders, from Midland, Mich., headed by I. B. McMurry, county agent of Midland county, were present and contributed to the success of the sale by their prompt and persistent bidding; about 15 head of the best animals in the offering went to Midland.

The name and addresses of the buyers are as follows: Nathan Coates, Ward Hancock, Leo Hancock, Glen Stowitz, G. E. Smith, Harvey Gillespie and J. Sagerland, all of Midland. Sam Forney, Robert Schmidt, Charles Glavin, Joe McDonald, Albert Schmidt, Onit Belink, Romeo Belink, Earl Grace, Fred Reppert, James Brown, Joe McDonald from Mt. Pleasant. Hoyt & Son, Oscar Wolfe, E. R. Johnson and William Kipp of St. Louis, Myron Weeks of Shepherd and C. W. Hunter of Rosebush.

SHORTHORN SALE AND SHOW

A shorthorn show and sale was held at the Michigan Agricultural College January 13, being one of the leading features of Breeders' and Feeders' week at the college. The exhibition classes were as follows: Cows calved before Jan. 1, 1919, two cows with calves by side; three cows calved between Jan. 1, 1919 and Jan. 1, 1920; four heifers calved between Jan. 1, 1920 and Jan. 1, 1921; five heifers calved after Jan. 1, 1921; six bulls calved before Jan. 1, 1921; seven bulls calved after Jan. 1, 1921. The American Shorthorn Breeders' Association furnished a part of the premium money.

At the auction sale which was held Friday afternoon, Jan. 13, 44 head were sold including several young bulls. The auctioneers were John P. Hutton, of Lansing and Andy Adams, of Litchfield, Mich. The consignors were as follows: John Lessiter's Sons, Clarkston; C. H. Prescott & Sons, Tawas City; John Schmidt & Son, Reed City; Michigan Agricultural College, East Lansing; J. M. Hicks & Son, Williamston; V. M. Shoemith, East Lansing; Andy Adams, Litchfield; A. & B. Farmer, Durand; W. J. Baker, DeWitt; O. E. Bell, Mason; M. E. Halstead, Orion; W. E. Cummings, Coleman; Hoyt Shister, Caladonia.

The highest-priced female was a yearling heifer from the Prescott herd, which brought \$250, the buyer was O. A. Hoopengartner, of Bronson, Mich. The highest-priced bull came from the Lessiter herd and sold for \$200. The names and addresses of the purchasers are as follows: E. M. Bernbridge, Greenville; Barney Kaiser, Three Oaks; A. C. Martin, Stanton; John Lewis, Crosswell; Charles Bowditch & Son, Osseo; W. F. Hall, Jackson; W. B. Kelly, Ypsilanti; H. E. Hartwell, Williamston; William Blossley, Williamston; Elmer O. Bixby, St. Johns; H. W. Lyon, Mason; Wilson Space, Grand Ledge; J. W. Phillips, Baton Rapids; Frank Britcher, Haslett; Earl F. Smith, Bath; E. A. Wensey, Shepherd; C. B. Kenyon, Grand Ledge; Claire Belaro, Tecumseh; Clyde A. Fordham, Charlotte, and P. J. Wilson, Charlotte.

HORSE AUCTION AT THE M. A. C.

An auction sale of registered Percheron horses was held at the Michigan Agricultural College on Friday forenoon, January 13, under the management of R. S. Hudson, of East Lansing. Thirty-three horses and colts were sold for prices, which in the aggregate, totaled \$5,990. The highest-priced animal, a Percheron brood mare from the college herd, was bought by A. M. Brown, of Jonesville, Mich. There were four stallions in the consignments and several weanling colts and yearlings. The auctioneers were John P. Hutton, of Lansing, and Andy Adams, of Litchfield.

The names and addresses of the buyers were as follows: J. P. Wilson, Mason; William P. Rosse, Mt. Clemens; A. M. Brown, Jonesville; L. B. Freshour, Mason; William P. Rosse, Mt. Clemens; Dwight Mackey, Six Lakes, Mich.; John H. Smith, Central Lake; E. M. Sharp, Jackson; A. E. Bash, Alto; John Sair, Jackson; Hugh Carpenter, Lansing; A. B. Startz, Lansing; Lew Hunt, Baton

Rapids; Archie Pedden, Strathroy, Ontario, Canada; Frank Burnham, Bellevue; M. T. Ketter, Grand Ledge; John Sharkie, Bellevue; W. B. Smith, Lansing; W. C. Knickerbocker, Lansing and H. A. Zimmerman, Charlotte.

Crop Reports

GENESEE—Auction sales are again in full swing. Some people without experience in farming bought land last year and hard times caused them to lose all they had and they are now selling personal property and moving into the city. It's a regular thing, this city-to-farm and farm-to-city movement. Non-experience on both is cause usually.—A. R. Graham, Jan. 13.

MIDLAND—Very cold at present, with signs of snow. Farmers are hauling wood to town and having feed ground. Ice will soon be thick enough to cut. Some building is being done, but it is too cold just now to do a great deal of outdoor work.—C. L. Haefka, Jan. 13.

LIVINGSTON (E)—Not much snow on the ground to cover wheat and rye and is looking like an open winter. Farmers not doing much except chores and cutting a little wood. A few potatoes going to market at 90 cents. No auction sales on hand at present writing. The mail men and the bus drivers of Hartland township school are having good roads for their trips. No snowbanks in the way.—J. W. C., Jan. 13.

WASHTENAW—Fine weather, no snow. Good time to cut wood and do chores. Some corn out to husk. Wheat and rye looking good. No auction sales. Everything cheap. The flu has again made a few visits here the last week.—H. C. Ringle, Jan. 13.

EATON—Cold, 10 to 20 above zero, about one inch of snow, slight protection to wheat and rye. Quite a number putting in ice, about seven inches thick. Some grain going to market, also hogs, calves and lambs. Milk for Jan. \$1.55 for 3 5. Nothing for the producer except experience. Dairyman not satisfied and some going out of the business.—C. F. La., Jan. 13.

JACKSON—Fine weather, with no snow, but hard on wheat. Beef is cheap. There is a good demand for light hogs. Help plentiful, wages lower. Ten farmers feeding steers.—G. S., Jan. 13.

SHIAWASSEE—Show flurries today. The ground has been bare practically all this winter. Winter wheat apparently but little, if any, injured. Business firms and farmers are filling their ice houses with eight-inch ice of good quality. Many cross roads are being graveled, farmers donating the team work, the townships paying for the gravel.—D. H. M., Jan. 13.

MISSAUGEE—Nothing doing, snow too deep; 2 1-2 feet on the level. Main roads open.—Jan. 13.

ST. JOSEPH—Started snowing here last night and is still snowing this A. M. Beautiful weather fore part of week, like spring; later colder and now snow. Some beans thrashed fore part of week and some late shredding done by one of the neighbors. Funeral Monday. An old neighbor passed away at age of 79 years. Lots of sickness over entire community.—Mrs. H. C. H., Jan. 13.

The Experience Pool

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't wait our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

ATTACHMENT TO MAKE TRACTOR OF FORD AUTOMOBILE

I wonder if any of our readers can give their views on the attachment for Ford cars that is designed to make use of the car as a tractor. It is widely advertised, and if practical, the experience of others is valuable. It makes a paper more interesting, anyway, for as a rule what interests one farmer interests many.—C. W. K., Pinconning, Mich.

COURSES FOR POWER FARMERS

EVERYONE knows Detroit to be the seat of the automobile manufacturing industry of the world. It is logical, therefore, that a great automobile school should exist there, giving a complete, practical course of training. There are thousands of young men on the farms of Michigan who could, by attending such a school, greatly increase their earning power by becoming a trained auto, truck or tractor mechanic; whether they go into business for themselves, start a garage or care for and repair their own and their neighbors machinery.

The profits in these lines of business are big and anyone interested in the sort of training would do well to write the Michigan State Auto School, 2261 Auto Bldg., Detroit, Mich., and ask for their big 188-page catalogue and Auto School News, which are mailed without cost or obligation.—Adv.

We certainly do enjoy each department of your paper. The longer we take it the better we like it. Keep it coming.—E. E. Sizemore, Kalamazoo county, Mich.

MILKING SHORTHORNS Bulls old enough for service, tuberculin tested and at bargain prices. W. S. HUBER, Gladwin, Mich.

BUY SHORTHORNS NOW, 4TH ANNUAL herd test without a reactor. Some bargains in bulls. JOHN SCHMIDT & SON, Reed City, Mich.

TWO REAL SHORTHORN HERD BULLS FOR SALE 15 mo. old and sired by Imp. Dainty Prince. W. W. KNAPP, Howell, Mich.

GUERNSEYS

FOR SALE REGISTERED GUERNSEYS

Have two choice Bull calves eight months old. \$60 each. Also herd Bull eight years old, a son of Tankwater King of the May \$125. All May Rose breeding. VERN LAMBERT, Ewart, Mich.

GUERNSEY BULL & BULL CALVES

from dams making large A. R. O. Records. Accredited herd. Write for particulars. LAKE CITY MICHIGAN

A. M. SMITH

FOR SALE, GUERNSEY BULL, 1 YEAR OLD. Write for particulars to ECHO LODGE FARM R. F. D. 2, Watervliet, Mich.

GUERNSEYS

OF MAY ROSE AND GLENWOOD BREEDING. No abortion, clean federal inspected. Their sires dam made 19,400.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk 778.80 fat. Can spare 3 cows, 2 heifers and a beautiful lot of young bulls. T. V. HICKS, R. 1, Battle Creek, Mich.

REGISTERED GUERNSEY BULL CALF for \$30.00. May Rose breeding. PINE HILL FARM Howard City, Michigan.

JERSEYS

REG JERSEYS HEIFERS 1 YR. OLD—by Majesty's Oxford Shirelock 156,692 also young bulls sired by Frolic's Master Pops 177,683, a grandson of Pops 99th and Sophie 19th's Tormentor, two great bulls of the breed. Write for prices and pedigree. GUY C. WILBUR, R. 1, Redding, Mich.

ONE OF OUR MAJESTY BULLS WOULD IM- prove your herd. FRANK P. NORMINGTON, Ionia, Mich.

JERSEY BULLS AND BULL CALVES sired by a son of Sophie 19th Tormentor. J. E. MORRIS & SON, Farmington, Mich.

HEREFORDS

BEEF

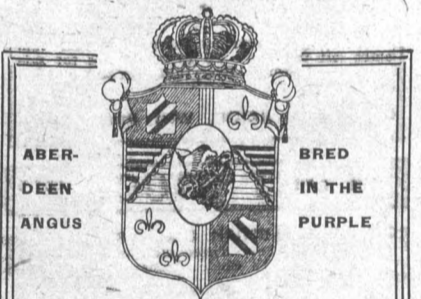
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Michigan Produces the World's Best Beef at the Lowest Cost. Raise for better feeding Cattle than you can buy. Grow Baby Beef when gains cost least in feed and labor. Avoid costly rail hauls with their shrink, bruises and loss.

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Solves your problem—insures your success. A fair intelligent, satisfying system evolved from 37 years conscientious service to American Cattle industry by three generations of Sothams. GET THE FACTS. Write now or wire. Address T. F. B. SOTHAM & SON (Cattle Business Established 1835) SAINT CLAIR, MICHIGAN Phone 250.

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The reward of pure breeding; the accomplishment of quality. Success has again contributed more laurels to the already remarkable record of

EDGAR OF DALMENY

THE SIRE SUPREME

At the International Live Stock Exposition, where gathers each year the elite of North American Cattle to compete for the coveted awards, five more honors have been bestowed upon the "get" of Edgar of Dalmeny.

You too may share these honors. A bull by this world famous sire will prove a most valuable asset to your herd. Write us today.

WILDWOOD FARMS ORION, MICHIGAN

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

DODDIE FARMS ANGUS of both sex for sale. Herd headed by Bardell 31910, 1920 International Jr. Champion. Dr. G. R. Martin & Son, North Street, Mich.

PREMIUM BEEF PRODUCERS

Sired by Black Rosegay, third at Mich. State Fair and grand champion at Bay City, 1921. Young stock for sale.

ANGUS HOME FARM

Davison, Mich.

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

AYRSHIRES

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

RED POLLED

THREE YOUNG RED POLLED BULLS FOR sale. Sired by Costy Ella Laddie. He took the prize at six State Fairs. PIERCE BROS., Eaton Rapids, Mich., R. 1

25 RED POLLED CATTLE

Registered. All ages. E. S. CARR, Homer, Mich.

BROWN SWISS

FOR SALE OR TRADE

Some of the best Brown Swiss bull calves in this country. Priced right. Will guarantee them as I represent them or I will refund the money.

A. C. KLOSS Ionia, Michigan.

FOR SALE FIVE REGISTERED BROWN Swiss cows and one yearling bull, priced right.

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

SWINE

POLAND CHINA

Large Type Poland Chinas Spring boars all sold. Fall pigs at bargain prices. Bred gilts held for public sale. Date will be announced later. Watch this ad.

A. A. FELDKAMP

R. F. D. No. 2 Manchester, Mich.

WALNUT ALLEY

Big Type Poland Chinas. I have a few more of those big boned, high backed, smooth sided boars left. This kind that makes good at one-half their value. Come or write and let me tell you what I will do.

A. D. GREGORY, Ionia, Michigan.

LEONARD'S BIG TYPE P. C. BOAR PIGS at weaning time, from Mich. Champion herd \$25 with pedigree. Satisfaction guaranteed. Call or write E. R. LEONARD, R. 3, St. Louis, Mich.

L. T. P. C. \$15-\$20-\$25

We are offering our 1921 fall crop of pigs at the above prices. They are sired by Hart's Black Prince and Right Kind Clan.

F. T. HART, St. Louis, Mich.

BIG TYPE POLAND CHINAS

Spring pigs of both sex for sale at reasonable prices. Sired by Orange Chansman 2nd, litter brother to Michigan 1920 Gr. Champion. Also fall pigs. Write for prices. Inmured by double treatment.

MOSE BROS., St. Charles, Mich.

GLADWIN COUNTY PURE BRED LIVESTOCK ASSOCIATION. Hereford, Shorthorn, Jersey and Holstein cattle; Duroc-Jersey, Poland China and Hampshire hogs; Oxford, Shropshire and Hampshire sheep.

A place to buy good breeding stock at reasonable prices. FRED B. SWINEHART, O. E. ATWATER, President, Secretary, Gladwin, Mich.

B T P C BOARS & GILTS

for sale at all times, at farmer prices. M. M. PATRICK, Grand Ledge, Mich.

BIG TYPE POLAND CHINAS

Bred gilts for sale to farrow in April; also fall pigs either sex, one great litter by Orange Chansman 2nd. Write for prices. NIMM BROS., Chesaning, Mich.

BIG TYPE POLAND CHINAS

Spring pigs all sold. For fall pigs, write W. CALDWELL & SON, Springport, Mich.

L. S. P. C. BOARS AT FARMERS' PRICES. H. O. SWARTZ, Schoolcraft, Mich.

BIG TYPE P. C. SPRING PIGS EITHER SEX from large growthy dams and sired by choice herd boars. Come and see our stock, price reasonable. L. W. BARNES & SON, Byron, Mich.

BOARS AT HALF PRICE BIG TYPE Poland Chinas bred in the purple, sired by Mich. Bester, A. Giant and Butler's Big Bob. No better breeding. A big rugged, big-boned boar ready for service, registered, for \$25.00—\$30.00. JNO C. BUTLER, Portland, Mich.

L. T. POLAND CHINAS. SPRING BOARS, gilts and weanling pigs. Write HAROLD LEONARD, Alma, Mich.

LARGE TYPE POLAND CHINAS

For sale, boars and gilts sired by B's Chansman, grand champion at 1921 Mich. State Fair, and by F's Chansman 1920 grand champion. Prices reasonable. Victoria welcome. Free delivery from Parma. Correspondence cheerfully answered. N. F. BORNOR, R. 1, Parma, Mich.

BREEDERS' ATTENTION

If you are planning on a sale this year, write us now and

Claim The Date!

This service is free to the live stock industry in Michigan to avoid conflicting sale dates.

LET "THE BUSINESS FARMER" CLAIM YOUR DATE!

HILL'S HAVE HILLS' ANDY

CASCARA QUININE

BROMIDE

ALWAYS keep C. R. Q. Tablets in the medicine cabinet. They cure Colds in 24 hours and relieve La Grippe in 3 days. At All Druggists. W. H. HILL COMPANY, CHICAGO

BREAKS COLD IN 24 HOURS

OWOSSO SUGAR CO.'S PRAIRIE FARM

More of the better kind of Draft Horses used on the farm would lower the cost of production. Heavy Draft Horses on short hauls are economy and will lower the high cost of transportation.

Buy Heavy Draft Mares and raise your own power on the Farm. We have fifty mares in foal to select from. They possess the best blood that Belgium has ever produced.

Belgian Draft Horses are getting more popular. Their qualities as workers cannot be excelled by any other breed.

Before buying see the sires and dams and also see the largest breeding establishment of Belgian Draft Horses in the world. Located at

ALICIA, Saginaw County, MICHIGAN

BIG TYPE POLANDS, by Big Giant and C-2 Ranger, largest boars of the breed, Fall gilt and hard boar prospects. Double Immuned, J. C. OLIPP & SONS, Sault Ste. Marie, Mich., Box M.

DUROCS

FOR SALE EXTRA FINE SEPT AND OCT pigs, either sex, priced right. **HARLEY FOOR & SONS**, Gladwin, Mich., R. 1.

1 FINE DUROC SPRING BOAR ready for service. Sired by Big bone Giant Sensation. Brookwater Dam. Registered. \$35.00 gets him. **SCHAFER BROS.**, Leonard, Mich. R. 1.

LOOK

Boar Pigs farrowed September 1921, weighing 75 to 100 lbs, sired by Unedda Model Orior, Dan's Defender, and Orion, \$12.50 while the last. Their Sire Grand Son of \$20,000 boar **V. LIDGARD**, Hesperia, Mich.

DUROCS

Fall pigs sired by Orion Defender ready for fall shipment \$10.00 each or \$18.00 per pair including papers. Service Boars and Bred sows **LAPHAM FARMS**, Pinckney, Michigan.

For Sale, Reg Duroc Bred Sows and Glits. Also some good Fall pigs. All double immune at Farmers' prices. **JESSE BLISS & SON**, Henderson, Mich.

PEACH HILL FARM

TRIED sows and glits bred to or sired by Peach Hill Orion King 152489. Satisfaction guaranteed. Come look 'em over. Also a few open glits.

INWOOD BROTHERS

Romeo, Mich.

AM OFFERING SOME HIGH CLASS SPRING DUROC BOARS

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

FOR SALE DUROC PIGS, 4 to 6 months old, either sex, big bony, pro life strain, superior individuals and breeding. Price reg. 15 to 20 dollars. Satisfaction or money back.

WEST VIEW FARM, Hillsdale, Mich.

B. E. Kies, Prop.

PURE-BRED DUROC JERSEY HOGS

We usually have good boars and sows of all ages for sale. Reasonable prices. **LARRO RESEARCH FARM**, Box A North End Detroit, Michigan.

DUROC JERSEY BOARS. Boars of the large, heavy-boned type, at reasonable prices. Write, or better, come and see.

F. J. DRODT, R. 1, Monroe, Mich.

FOR SALE—REG. DUROC JERSEY SWINE. A few real boar and sow pigs by Michigan Grand Champion Boar and from prize winning dams. Also a few fall pigs either sex, sired by 5th aged boar Detroit and 2nd at Saginaw. All stock double immune except fall pigs. Satisfaction guaranteed.

F. HEIMS & SON, Davison, Mich.

Duroc Jersey Bred Stock all Sold. Orders taken for weanling pigs. 1,000 pound herd boar. **JOS. SCHUELLER**, Weidman, Mich.

OAKLANDS PREMIER CHIEF

Herd Boar—Reference only—No. 129219

1919 Chicago International

4th Prize Jr. Yearling

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

RICHLY-BRED DUROCS. YOUNG BOARS and glits sired by Brookwater Demonstrator 27, 2nd prize aged boar, State Fair 1921.

H. E. LIVERMORE & SON, Romeo, Mich.

FOR SALE—BROOKWATER PRINCIPAL 33rd 2½ years old, right in every way.

J. E. MORRIS & SON, Farmington, Mich.

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

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

Duroc sows and glits bred to Walt's King 22949 who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroc boar. **Newton Barnhart**, St. Johns, Mich.

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

FOR SALE DUROC SERVICE BOARS and glits. Open or bred to A Model Orion King. Call or write. **CHAS. F. RICHARDS**, Blanchard, Mich.

O. I. C.

O. I. C. & CHESTER WHITE SWINE. SPECIAL 10 day sale at reduced prices. High backed smooth Aug. and Sept. pigs. Bloodlines of Advance Type, Schoolmaster and Special. They are sure to please, write me before you buy. I can save you money. **Clare V. Dorman**, Snover, Mich.

Registered O. I. C. bred glits for sale. Weight around 250 pounds at \$40.00. **JOSEPH R. VAN ETEN**, Cliford, Mich.

O. I. C's

4 last spring boars and 15 glits, Wt. Dec. 20th, 250 to 300. Also last fall pigs, good thrifty stock. Registered free. 1-2 mile west of depot. **OTTO B. SCHULZE**, Nashville, Mich. City. Phone.

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

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

HAMPSHIRE

An Opportunity To Buy Hampshires Right

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

HAMPSHIRE FOR SALE FALL PIGS both sexes, and one spring boar. **HERBERT BROOKS**, Lennon, Michigan.

HAMPSHIRE PLACE YOUR ORDER NOW for bred glits and fall pigs of the leading blood lines. 9th year. **JOHN W. SNYDER**, R-4, St. Johns, Mich.

SHEEP

FOR SALE AMERICAN MERINO and Black Top Delaine rams. Purebred Berkshire boars, true to type and ready for service. **JOHN W. WORTHINGTON**, Howell, Mich.

SHROPSHIRE EWES MIDDLE AGED, registered and bred, for sale cheap, only 5 to sell. **DAN BOOHER**, Ewart, Mich., R. 4

FOR SALE REGISTERED SHROPSHIRE ewes bred to lamb in March or April. **ARMSTRONG BROS.**, R3, Fowlerville, Mich.

HAMPSHIRE SHEEP

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

CLARKE U. HAIRE, West Branch, Mich.

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

FOR SALE, SCOTCH COLLIE PUPPIES two months old and fine ones, \$8, male or female. **THOS. STANFIELD**, Hillsdale, Mich., R. 1

COLLIE PUPPIES

Write Dr. W. Austin Ewalt, Mt. Clemens, Mich. for thoroughbred, pedigreed Collie puppies; bred from farm trained stock that are natural heelers with plenty of grit. All Puppies guaranteed.

GOATS

FOR SALE GOATS

Spanish-Saanen, three does and one wether. **M. E. HESS**, Pontiac, Michigan

EVERY

BREEDER

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

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DR. W. AUSTIN EWALT - EDITOR

COW HAS HARD BUNCH UNDER SKIN

Perhaps you can advise us how to treat our cow. She has a hard bunch underneath the skin just back of her right shoulder. This bunch discharges pus and has been there for some time, say two or three months. What should I give cows that do not come in heat regularly?—**H. F. B.—Dewitt, Mich.**

Wash entire enlargement thoroughly with soap and water, shave the skin around the opening after which wash again with any good antiseptic, say one teaspoonful creolin to a pint of water, then make an opening sufficiently large to insert the finger to the bottom of the wound and you will find a piece of wire, nail, stick or something of the sort which is causing the discharge and prevents the wound from healing. If you do not get results from this procedure write us again and we will be glad to advise you further. A nerve tonic consisting of powdered nuxvomica, two drams morning and night.

CRIBBER

Is there anything a man can do for a horse that is in the first stages of a cribber? If so please answer through your columns.—**J. A. P., Weldman, Mich.**

Cribbing is nothing more or less than a habit, after the habit becomes thoroughly formed is incurable. Remove the manger and place feed on the floor, buckle a strap around the neck and let him wear it continuously.

FARM RECORDS AND ACCOUNTS REVEAL WEAK SPOTS

(Continued from page 5)

The following outline shows a convenient way of determining yearly loss or gain:

1. Total receipts \$
- *2. Increased total farm investment \$
3. Total of (1) and (2) \$
4. Total expenses \$
6. Total of (4) and (5) \$
6. Total of (4) and (5) \$
10. Total (8) plus (9) \$
7. Farm income (3) less (5) \$
8. Int. on investment at % \$
9. Unpaid family labor Number of persons Time Wage
11. Labor income (7) plus (10) \$

*There will be either an increase or a decrease in total farm investment, not both. More cows, feed, etc., at the end of the year means, an increase; less a decrease.

This data, together with a record of crop yields, a knowledge of labor distribution, and a classification of receipts and expenses may be summarized to show relative costs or relative profitability of farm enterprises. Later articles will discuss accounting for the purpose of determining economy of various farm operations and the use of cost of production data in fixing prices.

OIL LIGHT BEATS ELECTRIC OR GAS BURNS 94 % AIR

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil.)

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency and without experience or money, make \$250 to \$500 per month. (Adv.)

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TOBACCO: HOMESPUN MILD SMOKING, 10 lbs. 2.00; 20 lbs. 3.50; Chewing 10 lbs. 2.75. **FARMERS CLUB**, Mayfield, Ky.

NURSERY STOCK AND SEED

REWARD: FOR THE LARGEST LIST OF names and addresses we will give a set of Rogers knives and forks; for second largest list will give solid silver souvenir spoon. Contest closes Jan. 15th, 1922. **ORCHARD LODG. NURSERY**, Galesburg, Mich.

HUBAM CLOVER SEED, UNHULLED 75c a lb **CLINTON GOFF**, Interlocken, Mich.

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ALL WOOL KNITTING YARN FOR SALE—direct from manufacturer—at 75c, \$1.25 and \$1.50 a pound. Postage paid on five-dollar orders. Write for samples **H. A. BARTLETT**, Harmony, Maine.

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NICE SWEET SMALL PRUNES DIRECT, 100 lbs. freight paid \$10.00; 25 lbs. express paid \$3.15; sample 15c. **KINGWOOD ORCHARDS**, Salem, Oregon.

\$100.00 WEEKLY POSSIBLE THROUGH our exclusive representative plan. Fastest selling Ford accessory on market. "Mayer's" Splash Fender for front of Ford car eliminates rattling of front fenders, prevents radiator lights and front of car becoming mud splashed, induces greater volume air into radiator, reflects lamp's rays onto road in night driving, beautifies lines of car putting Ford car in higher priced class. The Ford car, being the only car without a splash pan protection, every owner wants this essential attachment. Anyone can attach fender in few minutes. Retail \$8.50. Send \$4.00 for agent's sample and contract application for territorial rights. Give references. **MAYER AUTO ACCESSORIES CORPORATION**, Manufacturers, 333-335 Washington St., Buffalo, N. Y.

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Advertisements inserted under this heading at 25 cents per line, per issue. Write out what you have to offer and send it in, we will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt Clemens, Michigan.

*To Sell Pure Bred Poultry Advertise in
The Michigan Business Farmer.*



MARKET FLASHES



TRADE AND BUSINESS REVIEW

MANY EVIDENCES of improved business conditions are making their appearance as the first month in the year grows older. The development of a general activity, in manufacturing circles, is still delayed but the situation has in it much of encouragement. The lack of employment is still the condition that causes buyers at wholesale to be extremely conservative. Buyers at retail are said to be much more in evidence than they were one month ago. The ease at which money can be secured is one of the leading influences which have tended to loosen the situation. One of the conditions which is sure to lend activity to the general trade of the country before very long is the scarcity which exists in many lines of manufactured products.

The wool market is booming, several price advances having been noted during the past month; foreign demand is becoming much more active and the whole situation is gaining strength as the certainty dawns that a tremendous shortage in this product is imminent. The cotton market is uneven with a tendency toward weakness but the demand for both cotton and woolen cloth is active.

The recent even cold weather is having a steady effect on many commercial lines, notably, footwear of all kinds, fresh meats provisions, live stock and all other seasonable goods. The demand for copper and zinc is gaining in strength, coming largely from export sources and both mine owners and their employees are looking for prosperous year.

The stock market has been showing much more activity, of late, with the rail issues most in demand. Some of the best industrial issues have been moving upward, the principal impelling force being rumors of the purchase of large quantities of steel and other material which enters into the construction of automobiles. The bond market has been rather quiet of late and bids fair to continue so until further dividend disbursements release more money for investment. Call money is ranging from 3 to 3 1-2 per cent on the New York stock exchange and short time loans are easily available at 4 1-2 per cent. Weekly bank clearings were \$6,683,006,000.

WHEAT

Wheat weakened on the Chicago market at the close of last week

WHEAT PRICES PER BU., JAN. 17, 1922				
Grade	Detroit	Chicago	N. Y.	
No. 2 Red	1.19 1/2	1.17	1.21	
No. 2 White	1.16 1/2			
No. 3 Mixed	1.16 1/2		1.14 1/2	
PRICES ONE YEAR AGO				
(No. 2 Red No. 2 White No. 2 Mixed)				
Detroit	1.99	1.97	1.97	

but gained strength at Detroit. There is both bearish and bullish news of seemingly equal importance which keeps the market in a rather fidgety condition. Milling demand is light, but buying for foreign relief has been more active of late. Confidence in the statistical position of this grain seems to be on the increase and any appreciable falling off in visible supply should be immediately reflected in a stronger market. That there must come a pronounced decrease in the visible at a very near date is the opinion of many traders, who upon the strength of their convictions are doing some investment buying. Reports of European and Asiatic acreage indicate without question that more acres have been planted this year than last, but this does not necessarily mean a larger crop. The condition in which the domestic crop entered the winter will prove an unconscious factor in the wheat deal for some time to come. As stated last week we can see no important changes in sight in this market. Prices are still well up on the level of a month ago. They may advance

Edited by H. H. MACK

MARKET SUMMARY

Wheat prices unchanged, but tone stronger due to revived export demands. Corn strong; oats firm. Cattle market dull, but hogs firm and price trend upward. Beans in demand and 10c higher than week ago on Detroit market. Potatoes firm and higher. Eggs lower. Butter markets steady.

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

some and likely will but as likely will lose part of the advance.

CORN

The corn market fluctuated some last week but not enough to make

CORN PRICES PER BU., JAN. 17, 1922				
Grade	Detroit	Chicago	N. Y.	
No. 2 Yellow old	.56	.48 1/4	.66 1/2	
No. 3 Yellow new	.51 1/2			
No. 4 Yellow new	.49 1/2			
PRICES ONE YEAR AGO				
(No. 2 Yellow No. 3 Yellow No. 4 Yellow)				
Detroit	.74	.71		

changes in prices of consequence, prices in the Detroit market for new stock declining 1-2c. The Chicago market also declined in the neighborhood of this amount. There were many friends of corn in the market but they were not optimistic enough to make very large purchases and as soon as prices advanced they disposed of their holding and then waited for the market to go lower so they might "pick up a few bargains". On the other hand the bear side felt none too bearish and they did not exert themselves to force prices downward; in fact, they did not feel inclined to because when prices declined farmers refused to sell. The average for the week found receipts heavy at Chicago, amounting to 2,343 cars, but shipping demand was good and receipts were not burdensome. Shipment sales totaled 2,500,000 bushels at that market. Buying by the Russian Relief Commission has increased the demand for corn considerably. The opening of the current week found no change in tone or prices.

OATS

Oats are displaying more strength than any of the other grains. The

OAT PRICES PER BU., JAN. 17, 1922				
Grade	Detroit	Chicago	N. Y.	
No. 2 White	.42	.37 1/2		
No. 3 White	.39 1/2	.34 1/4		
No. 4 White	.36			
PRICES ONE YEAR AGO				
(No. 2 White No. 3 White No. 4 White)				
Detroit	.50	.48 1/2	.45 1/2	

visible supply shows some sign of decreasing, and export business is picking up a little. Demand for

feeding grains from the south also shows improvement, and there is a better feeling all around in this market. We hope our readers who buy oats have acted upon our advice and made their purchases on contracts. They will not be able to buy oats as cheaply for a long time as they were a few weeks ago.

RYE

The Chicago rye market showed no change during the week ending January 14 but at Detroit this grain declined 2c in price. There were two declines of 1c each the final one coming on the closing day of the week and the first one on the opening day. There is an easy tone to the trading according to all reports. No. 2 rye is 83c at Detroit.

BARLEY

There has been no change in the barley market since our last issue. Prices at Chicago are 53 @ 54c per bushel and \$1.05 @ 1.15 per cwt. on the Detroit market. Indications are that trading is of a quiet nature.

BEANS

The bean market which has been running for some weeks on a fairly

BEAN PRICES PER CWT., JAN. 17, 1922				
Grade	Detroit	Chicago	N. Y.	
C. H. P.	4.40	4.67	5.20	
Red Kidneys ...		7.12		
PRICES ONE YEAR AGO				
(C. H. P.)				
Detroit	4.00			

even keel again shows signs of life and the price is up five cents on the Detroit market. The close of last week trade in beans had been rather slow but the demand seems to have perked up a little, though other markets aside from Detroit show no change in prices. The advancing price of potatoes will have a pronounced effect upon the demand for beans; and as long as potatoes continue to go up we may expect higher bean prices as well.

POTATOES

Potatoes have advanced another 25 cents per 150-lbs on the Detroit market, and other markets report increased activity and higher prices. \$3.75 per 150-lb. bag is being paid

this week in Detroit for best grades. This is an advance of nearly 50 cents a bushel from the low of a month ago. The producing sections which have been slow to receive the benefits of the higher prices at consuming points are now getting them, it being reported that as far north

SPUDS PER CWT., JAN. 17, 1922		
	Sacked	Bulk
Detroit	1.97	2.42
Chicago		2.42
New York		2.42
Pittsburg		2.20
PRICES ONE YEAR AGO		
Detroit	2.75	

as Traverse City some sales have recently been made at \$1 per bushel, while in more southerly sections farmers are having no difficulty in getting \$1.25 per bushel. These increased prices will probably bring out more potatoes and there is a chance that the market may sag a little before the close of the month, but this should not discourage holders. As stated before we don't expect fancy prices on this crop, but we do expect considerably higher prices before next June than now prevail.

HAY

Most markets were fairly flooded with hay last week and as a result

HAY PRICES A YEAR AGO				
No. 1 Tim.	Stan. Tim.	No. 2 Tim.		
Detroit	19.00 @ 20	18.00 @ 19	17.00 @ 18	
Chicago	22.00 @ 24		19.00 @ 21	
New York	29.00 @ 30		27.00 @ 29	
Pittsburgh	22.50 @ 22	20.50 @ 21	18.50 @ 18	
HAY PRICES A YEAR AGO				
No. 1 Light Mix.	No. 1 Clover Mix.	No. 1 Clover		
Detroit	18.00 @ 19	15.00 @ 16	14.00 @ 15	
Chicago	21.00 @ 23	19.00 @ 20	17.00 @ 18	
New York	21.00 @ 22	24.00 @ 26		
Pittsburgh	20.50 @ 21	20.50 @ 21		

the market was easier and tended toward lower values. The best grades were in good demand but the greater portion of the hay received was of poor quality and dealers experienced much difficulty in disposing of it at prices quoted. The Detroit market was steady and no changes in prices were made.

APPLES

A marked improvement is shown in the Chicago apple market and many varieties advanced in price during the week ending Saturday, January 14th. Buyers were somewhat backward about paying the higher prices but there was a good trade in many varieties, especially barreled Greenings, Jonathans, Kings and Spies.

Quotations on "A" grade barreled stock are: Greenings, \$10 @ 10.50; Jonathans, \$10; Kings, \$9; Spies, \$9.1 Baldwin's, \$7.50 @ 9; Grimes Golden, \$8.50 @ 10; Tolman, \$7.50; Wagons, \$8; Spitzenberg, \$8.50; Canadian Greenings, \$9.50. Quotations on Western boxes are: Jonathans, extra fancy, \$2.75 @ 3; fancy, \$2.50; Delicious, extra fancy, \$3.50 @ 4; fancy, \$3.25 @ 3.50; King David, extra fancy, \$2 @ 2.25; Winter Banana, extra fancy, \$2.25 @ 2.50; fancy, \$1.75 @ 2; Rome Beauties, extra fancy, \$2.50 @ 3; fancy, \$2 @ 2.25; Baldwin's, \$1.75 @ 2; Bellflower, \$1.75; Greenings, \$1.75 @ 2; Spitzenberg, \$2.25 @ 3; Wagons, \$1.75; Black Twigs, \$2 @ 2.25; Stayman Wine-saps, \$2.50 @ 2.75.

ONIONS

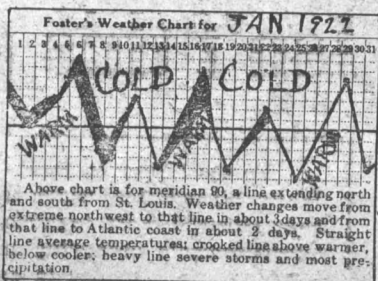
The car lot onion market is firm and values are at a higher level than they have been at any time during the past two weeks. Receipts are moderate, amounting to about the same as a year ago. Dealers are selling some stock but are not anxious to dispose of their holdings as they believe higher prices are due in the near future. Indiana reds and yellows are quoted at \$6.50 per cwt. f. o. b. shipping point, at Chicago.

CABBAGE

Dealers are disappointed in the cabbage market. While there is a steady tone in evidence the brisk demand they expected after the holidays failed to mature. Chicago operators are quoting Wisconsin cabbage at from \$45 to \$50 per ton with most of the sales at around \$45 @ 47.

THE WEATHER FOR NEXT WEEK

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



WASHINGTON, D. C., Jan. 19, 1922. —The week centering on Jan. 29 will average warmer than usual on meridian 90 from the Gulf of Mexico to the far north. The high temperature of that disturbance will be in northwestern Canada about Jan. 27, in Michigan Jan. 30, and in eastern sections Jan. 31. A cold wave will be in northwestern Canada near Jan. 29, in Michigan Feb. 1, eastern sections Feb. 2.

Last week of January will bring to Michigan one of the three warmest periods of the month and the week

centering Jan. 22 has been counted as the coldest of the month in Michigan.

Those whose business it is to produce grain, cotton and live stock are quickest to understand the laws of nature that produce our weather changes and I am making it a specialty to teach them. When the storm center, called the low, comes into the far northwest and begins to reach Michigan it is moving southward and exactly at the same time the winds that carry the moisture from the Caribbean Sea and Gulf of Mexico to that low begin to blow northward, thus carrying north the warm air of the tropics. But as the storm center moves eastward across the continent the place in the Gulf and sea where the moisture is lifted mains stationary.

Rather quiet last part of January; not much rain or snow; bad for winter wheat. These conditions will continue, with warmer than usual, till the week centering on Feb. 12.

W. T. Foster

LIVE STOCK MARKET

Cattle and hogs that were headed back by the big packing-house strike are coming forward in large volume and prices are suffering as a result. Chicago got 24,000 more cattle last week than the week before and the close last Saturday was 25 to 50 cents lower on all of the killing kinds. Canners and cutters were 10 to 15 cents higher and stockers and feeders were 25 cents higher than the close of the week before. Exporters took about 1,000 cattle last week at Chicago but they were of the medium-priced kinds, no attempt to buy the best, long-fed steers, being made.

Eastern dressed beef markets advanced early last week but the gain was short-lived and the close was on a par of the week before. At Chicago eastern order buyers showed a pronounced preference for heavy, highly finished cattle. Yearlings of the second-grade type were dull and hard to sell all the week; really fancy yearlings were scarce with not enough on offer to meet the needs of the trade. It begins to look like a big February run of both hogs and cattle, the underlying cause being the pressing need of money. March 1, will see a large number of men moving away from the corn-belt; all of the feeders in this list, who have cattle or hogs, will send them forward before the date mentioned.

In spite of the fact that Chicago got 20,000 more sheep and lambs than during the week before, prices for all of the desirable killing kinds ranged 50 to 75 cents per cwt. higher than the average of the week before. Last week's average on mature sheep in the Chicago market was \$1.05 per cwt. higher than for the week before. From Monday morning of last week until Thursday night, fat lamb values rose steadily, some sales on the "peak" showing \$1 gain over the close of the week before; on Friday the trade eased off, but at that, the net gain for the week was fully 50 cents per cwt. A strong eastern demand was the lifting force, receipts east of Chicago, being very light until Friday when eastern markets got large runs.

Feeding lambs were in large supply, all last week but everything offered was promptly taken at prices steady with the week before and about 65 cents per cwt. higher than for the same week last year. The average price for lambs in Chicago, last week was 80 cents higher than for the previous week and 95 cents higher than for the same week last year.

Chicago got 104,000 more hogs last week than during the week before; this increase in arrivals represented just about the number taken by the shippers, leaving the remainder, or more than 150,000 hogs for the packers to absorb. Buyers for shipping purposes favored heavier hogs than usual last week, a fact that held the top price for the week down nearer to the general average.

The new year opened with stocks of provisions, in the storehouses of the country, 50,000,000 pounds smaller than on the same date last year. Regardless of the claims that Europe is not buying our products, export figures on meats show that for December and for January, so far, export clearances have been much larger than for a like period, last year.

Live Stock Prices

The following prices were paid at the Detroit Stockyard, Tuesday, Jan. 16th:	
Best heavy steers.....	6 50@7 50
Best handywt butcher steers	6 75@8 00
Mixed steers and heifers....	5 25@6 25
Handy light butchers.....	5 25@6 00
Light butchers.....	4 50@5 00
Best cows.....	4 75@5 50
Butcher cows.....	4 00@4 50
Cutters.....	3 00@3 50
Canners.....	2 25@2 75
Choice bulls.....	4 50@5 50
Bologna Bulls.....	4 00@4 50
Stock bulls.....	3 50@4 25
Feeders.....	5 50@6 00
Stockers.....	4 25@5 25
Milkers and springers.....	40 00@75 00
Calves	
Best.....	\$12 00@12 50
Others.....	5 00@10 50
Sheep	
Best lambs.....	\$12 75@13 00
Fair lambs.....	9 75@11 00
Light to common lambs.....	7 50@8 75
Fair to good sheep.....	5 00@6 50
Culls and common.....	1 50@2 00
Hogs	
Mixed hogs.....	\$7 85
Extreme heavy.....	6 75
Roughs.....	6 50
Stags.....	4 50
Boars.....	3 00
Pigs and lights.....	8 10

EAST BUFFALO LIVE STOCK MARKET

January 16.

Cattle: Receipts, 2,750; slow, steady to 25 cents lower; no other shipping steers offered; quoted at \$7 25@8 25; butchers, \$7 25@8 25; yearlings, \$9@10; heifers, \$5@7 50; cows, \$2 25@5 50; bulls, \$3 50@5 25; few at \$6; stockers and feeders, \$5@6; fresh cows and springs, \$4@125. Calves: Receipts, 2,200; 50 cents higher at \$3@13 50. Hogs: Receipts, 17,600; slow at 50 to 75 cents lower; heavy, \$7 75; mixed, \$8; yorkers, \$8 25; light do and pigs, \$8 25@8 50; roughs, \$6@6 25; stags, \$3 50@4 50. Sheep and lambs: Receipts, 13,000; lambs 40 cents higher; lambs, \$6@13 65; yearlings, \$6@11 50; wethers, \$7 25@7 50; ewes, \$3@7; mixed sheep, \$7@7 25.

BOSTON WOOL MARKET

The Commercial Bulletin of Jan. 14 says: "There has been a fairly considerable business in the seaboard markets during the last week, manufacturers showing decided interest in wools, which they needed for filling out contracts. Prices have been marked up again this week, as the knowledge of the growing shortage of wool has become more general and certain. The situation in the foreign markets is very strong.

The Bulletin gives wool quotations as follows:

Ohio and Pennsylvania fleeces—Delaine unwashed, 43@45c; fine unwashed, 33@35c; 1-2 blood combing, 38@40c; 3-8 blood combing, 35@36c. Michigan and New York fleeces—Delaine unwashed, 40@42c; fine unwashed, 31@33c; 1-2 blood unwashed, 37@38c; 3-8 blood unwashed, 35c; 1-4 blood unwashed, 33@35c.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, January 16.

BUTTER—Best creamery, in tubs, 31@32c per lb. EGGS—Fresh candled and graded, 37@38c; storage, 20@26c per doz. APPLES—Greening, \$3@3.50; Baldwins, \$2.75@3; Spy, \$3@4; Jonathan, \$3@3.25; western, boxes, \$2.50@3.50. POPCORN—Globe, 5c; Little Buster, 10c per lb. CELERY—Michigan, 40@50c per doz. and \$1.25@1.50 per box; California Jumbo, 75@90c; extra Jumbo, \$1.15@1.20; mammoth, \$1.40@1.50 per doz. ONIONS—Eastern, \$7@7.25 per 100-lb sack. DRESSED HOGS—Small to medium, 10@11c; heavy, 5@7c per lb. LIVE POULTRY—Best spring chickens, 25c; Leghorn springs, 20c; large fat hens, 27c; medium hens, 25c; small hens, 18@20c; old roosters, 15c; geese, 18@20c; ducks, 28c; turkeys, 30@35c per lb.

WEEKLY MARKETGRAM

U. S. Bureau of Markets and Crop Estimates.

WASHINGTON, D. C., For the week ending, January 14, 1922.

FRUITS AND VEGETABLES:—Eastern potato consuming markets weaker. Chicago market steady. Demand and movement limited. New York sacked round whites down 10 to 20 cents in New York and Phila. at \$2.15-\$2.35 per 100 pounds. Firm in producing regions at \$2. Bulk stock firm in New York City at \$2.35-\$2.50. Northern sacked round whites steady in Chicago at \$1.90-\$2.10, weaker at shipping points at \$1.75-\$1.85.

A firm tone prevails in barreled apple markets. New York Baldwins @ 2 1-2 ranged \$7.25-\$7.75 per bbl. in eastern markets. Michigan stock up 50 cents in Chicago at \$7.75-\$8. Maine No. 1 Baldwins from cold storage steady at \$7-\$8. Prices in cabbage markets slow downward trend. New York nearly steady at \$53-\$58 per ton bulk, for Danish type stock. Other markets ranged \$45-\$50. New York Danish steady at shipping points at \$40-\$42; Wisconsin Danish down \$7-\$8 at \$41-\$43.

FEED—Demand continues light in most markets. Wheat feeds are a trifle easier, due to heavier offerings from spring wheat mills for future shipment. Mill offers are for bran and middlings equal qualities each month February to June, inclusive, at slightly below prompt shipment prices. Cotton-seed meal prices unchanged, demand unimproved. Hominy weaker, quoted \$1 lower. Gluten feed price reduced \$2 per ton. Alfalfa meal and beet pulp quiet; Prices unchanged, stocks and receipts fairly good. Quoted January 13: Bran, \$21; Middlings, \$21.50; flour middlings, \$23; Minneapolis; 36 per cent cotton-seed meal \$33.50, Memphis; white hominy feed \$20, St. Louis; gluten feed \$34.65, Chicago; 34 per cent linseed meal \$43, Minneapolis; No. 1 Alfalfa meal \$16.75, Kansas City.

DAIRY PRODUCTS—Butter markets demoralized early in week but firm at close following advances the past few days. Best trading on

top grades. Storage butter moving better as fresh prices show tendency to advance. Closing prices 92 score: Philadelphia, 37 1-2c; Boston, 36 1-2c; New York, 37 1-2c; Chicago, 34c. Trading in cheese markets fairly active. Tone steady. Increased demand for small lots but business involving large orders still dull. Slight declines on Wisconsin cheese boards Monday, January 9. Shipping in Wisconsin hindered by cold weather. Prices at Wisconsin primary markets January 13: Twins, 20c; daisies, 20 1-2c; double daisies, 20 1-4c; longhorns, 20c; square prints, 22 1-2c.

MUSINGS OF A PLAIN FARMER

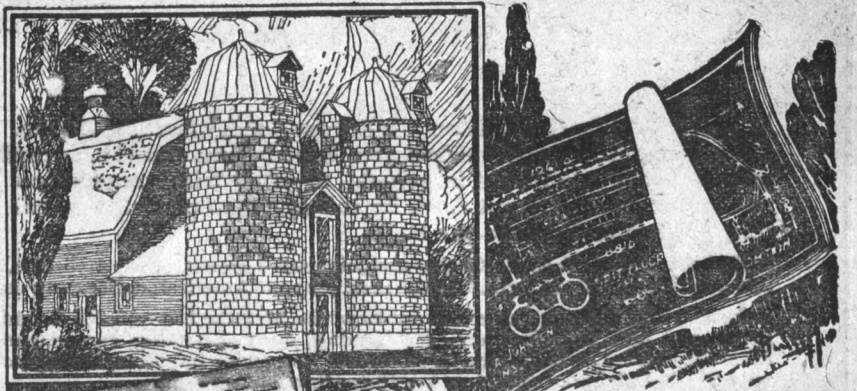
A ROSE EARLY! Being awakened by a gust of wind striking my cottage with cyclonic force. I'll keep a weather eye out while going around the barn. I am not so active on my feet as I once was, it might trouble me to side-step a rafter. The barn is insured and so am I, but I hope neither of us goes. The old year is going out with a

bang. He has been rather tempestuous all through. Tomorrow is the day of resolutions, one I can make quite easy—Unless my purchasing power is increased. I am resolved to go without some things I need badly.

If I could bridge the space between January and January and tell the price of my farm products next year, I would be a marvel, wouldn't I? Yes, indeed! Should I suggest a price one year ahead, I would be a joke. The farmer never knows, and yet, he keeps on and on, crawling around in his fields plowing, sowing, reaping—Gambling with the elements above and below. Dreaming of better days, flattering himself with impossibilities.

Gosh! I didn't intend to get into that heavy stuff, I'll stop and take inventory and make out my income tax.

The inventory is easy, I didn't have anything when I started a year ago, and I have just broke even. And the income tax, well!—A. P. Ballard.



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Jamesway Equipment For Chickens

Now comes the Jamesway to solve problems of poultry raisers.

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The new Jamesway design of poultry house bids fair to revolutionize the poultry industry of the country.

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Every Belgium imported Melotte Cream Separator is sold under an absolute, ironbound, 15-year guarantee. No Melotte is ever sold except under this guarantee. A guarantee written in plain English so that you can understand it. A guarantee that is 100% stronger than any other separator guarantee ever made. A guarantee that really guarantees something—upon which you can absolutely rely—an absolute protection to the purchaser, and which binds us to our bargain.

Vibration of a cream separator's bowl will soon cost you more money in cream waste than the price of your separator. U. S. Government Bulletin No. 201 says that a perfectly true motion of the bowl is absolutely necessary. The bowl is the vital part of any separator—the part where the cream separation takes place.

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The Belgium Melotte is the only single-bearing-bowl separator made. This patented bowl hangs from one frictionless ball bearing and spins like a top. It is self-balancing. It skims as perfectly after 15 years' use as when new. Positively can not ever get out of balance—can not vibrate and thus cause cross currents which waste cream by re-mixing with the milk. The 600 lb. Melotte turns as easily as the 300 lb. machine of other makes. Spins for 25 minutes unless brake is applied. No other separator has or needs a brake. The Melotte bowl has solved the problem of perfect skimming.

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after 30 Days
Free Trial

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We will send an Imported Melotte Cream Separator direct to your farm on a 30 days' absolutely Free Trial—no deposits—no papers to sign—use it as if it were your own separator. Satisfy yourself that the porcelain bowl is as easy to clean as a china plate. Compare it—test it in every way.

When you are convinced the Melotte skims cleaner, turns easier, washes quicker, has one-half less tinware to clean, lasts longer than all others, then pay \$7.50 as first payment and the balance in small monthly payments until the separator is paid for.

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After 30 days free trial, then send only the small sum of \$7.50 and the balance in small monthly payments. The Melotte pays for itself from your increased cream checks.

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it is the machine you want. Keep it for 30 days and use it just as if it were your own machine.

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