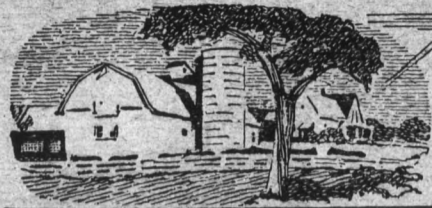
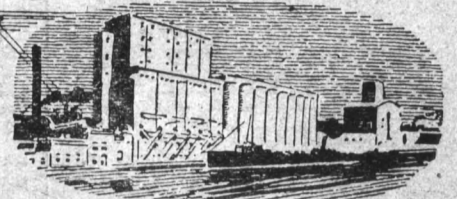


The Michigan
BUSINESS FARMER



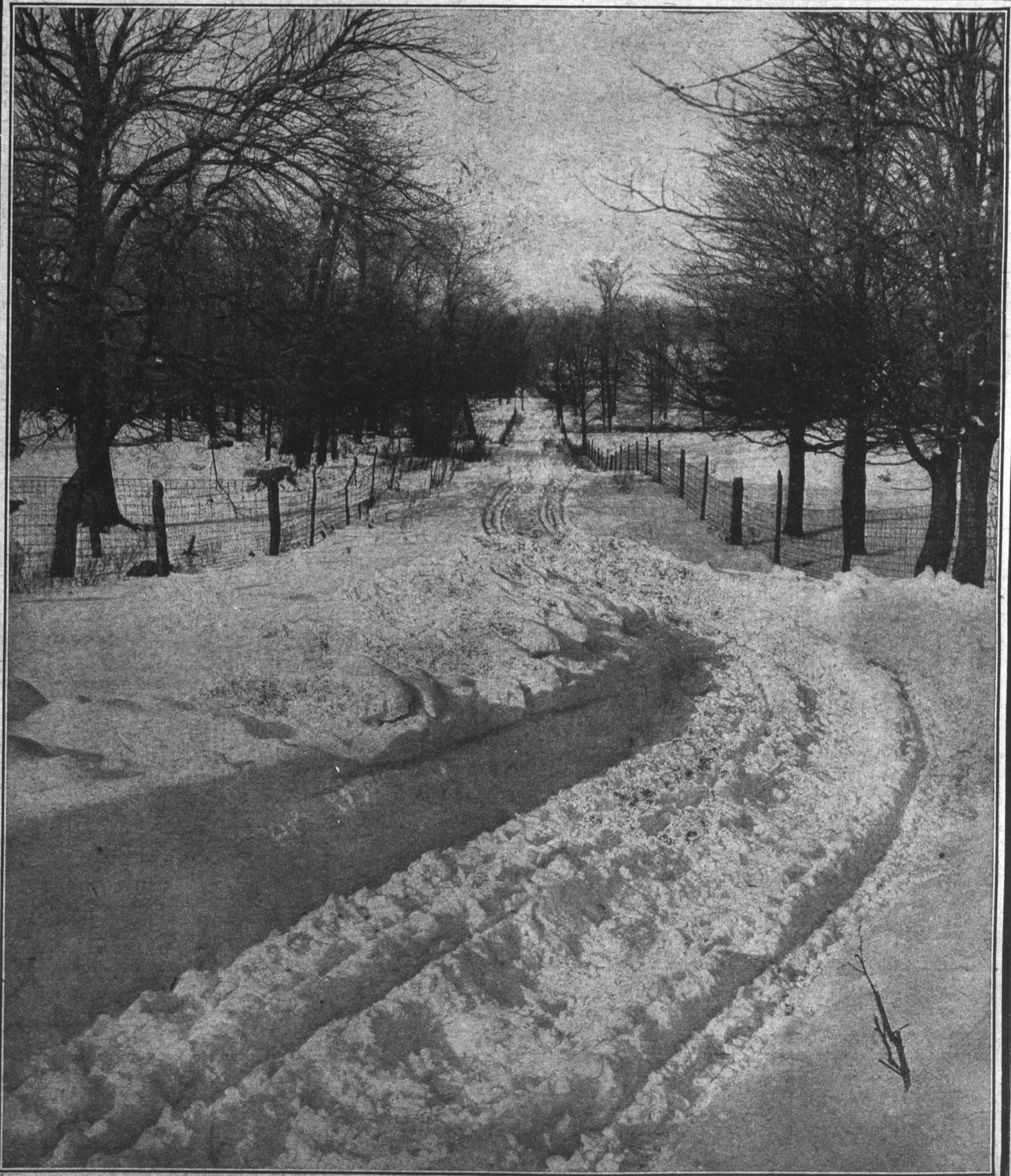
An Independent
Farmer's Weekly Owned and
Edited in Michigan



Vol. IX, No. 18-19.

MT. CLEMENS, DEC. 31-JAN. 7, 1921-22

\$1 PER YEAR



"YEAR OF SNOW, FRUIT WILL GROW"

Belgium Imported Melotte

Reduced 22%

Melotte, manufacturer of the greatest cream separator the world has ever known, announces a sweeping reduction in prices. Take advantage of this condition while it lasts. Buy now and save money.

Self-Balancing Bowl
The Melotte bowl is self-balancing. Positively cannot get out of balance, therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins 30 minutes after you stop cranking unless you apply brake. No other separator needs a brake. Bowl chamber is porcelain lined.

Catalog FREE!
Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor.

\$7.50
after 30 Days Free Trial

90 days' free trial—then, if satisfied, only \$7.50 and a few easy payments—AND—the wonderful Belgium Melotte Separator is *YOURS*. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY.

The Melotte Separator, H. B. Babson, U.S. Mgr., Dept. 3301 2843 W. 19th Street, Chicago, Ill.

PISO'S

Safe & Sane
For Coughs and Colds
Insist on it by name

This syrup is different from all others. Pleasant—gives quick relief. Contains no opiates—good for young and old.

55¢ per bottle everywhere

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 Skin Leather.

We can tan your old skins into Shoe Leather, giving them an elegant grain finish in Gun Metal, Mahogany, Rose or lighter shades.

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 and when to buy the freight both ways about our size 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 Fur Company, 571 Lyell Ave., Rochester, N. Y.

STOP WASTING HALF OF Your Corn Crop Let us tell you how, in one year, we can save you 50% of your crop. Write today for our big free Silo Book which explains our special feeding plan on NAPPANEE wood silos.

NAPPANEE LUMBER AND MANUFACTURING CO.
Dept. (11), Nappanee, Indiana

NAPPANEE SEAL-TITE SILOS

WRITE FOR FREE SILO BOOK

CUTTERS, SLEIGHS and WAGONS

SLABY VEHICLE WORKS
TRAVERSE CITY, MICH.

Largest manufacturer of cutters in the United States. If your dealer does not handle our make write for catalogue and prices. Save money.

Current Agricultural News

WOOL INTERESTS DIVIDED ON TARIFF

REPRESENTATIVES of the various branches of the wool industry who appeared recently before the senate finance committee were unable to agree upon the degree of protection which the industry should have from foreign competition. Farmers' representatives have asked for a tariff of 33 cents per clean pound. Most of the manufacturers are opposed to so high a duty, claiming that the emergency tariff has already depleted the supply of certain kinds of wool to a serious degree. The carded wool branch of the industry argue that a 50 per cent ad valorem duty is high enough, but the growers maintain that this is not sufficient protection and argue that the tariff should be specific. Today American farmers are producing about 300,000,000 pounds of wool which is only about one-half of the domestic consumption. An adequate tariff will, it is the belief of growers' representatives, enable American wool growers to increase the domestic supply to somewhere near the domestic demand.

MICHIGAN FRUIT GROWERS FORM SELLING ORGANIZATION.

THREE HUNDRED fruit growers held a meeting at Benton Harbor December 22 which promises big things for the fruit industry of Michigan. Out of that meeting came action directed toward the great co-ordination of the selling power of Michigan fruit producers through the channels of co-operative marketing, a movement for the standardization of Michigan varieties of fruit, steps for affiliation with the State Farm Bureau and a plan for putting Michigan fruit on a sales plane with Pacific coast fruits by means of advertising. President Nicol of the State Farm Bureau presided at the meeting, which was called by the State Farm Bureau. It was decided that another conference of fruit growers would be held about the third week in January, the time and place to be fixed by the State Farm Bureau. The meeting will be attended by two delegates from every co-operative fruit marketing organization in the state's fruit belt. Cannery, bankers and farm bureau officials attended the Benton Harbor meeting.

One problem before the fruit growers, it is understood, is the building of a strong representative central organization which will enable the fruit marketing organizations of all sections of the state to concentrate on problems of interest to all of them. This matter will be taken up at the January meeting.

Fruit interests of the state began taking steps last spring toward affiliation with the State Farm Bureau under the commodity control plan. At that time no one of the several fruit organizations could be said to be truly representative of the fruit producers in all parts of the state. Since April the fruit growers have been working on a program which will enable them to cooperate with each other in the fullest sense of the word and which will enable them to affiliate with the State Farm Bureau under its commodity plan of control.

Farmers commodity marketing organizations which have joined hands with the State Farm Bureau under the Commodity control plan are the Michigan Milk Producers Association, the Michigan Elevator Exchange, the Michigan Live Stock Exchange and the Michigan Potato Growers Exchange.

The boards of control of all of the foregoing organizations have been authorized by their memberships to formally affiliate with the State Farm Bureau under the commodity plan of control as soon as the plan is worked out.

The plan contemplates the handling of the major agricultural commodities produced in the state thru large powerful commodity marketing exchanges. These exchanges would continue to be directly and entirely controlled by the growers

and would retain their own corporate identity officers, and so on as at present. The farm bureau plan contemplates only the federation of these exchanges so that they may work together more efficiently to attain common ends, it is said.

The commodity plan is practically in effect today. Representatives of the milk producers, potato growers, live stock men and grain growers sit with the State Farm Bureau executive committee and farm bureau representatives sit with the commodity marketing exchange boards of control, all representatives sitting in an advisory capacity and linking together the interests of the various exchanges.

The Michigan Elevator Exchange and the Michigan Potato Growers Exchange have a reciprocal business agreement whereby membership in one organization entitles the member to the special sales service of both. The commodity plan of control contemplates such exchange of special sales services between all the organizations some day.

RECORD OF ALFALFA SEED

IN RAISING 55 bushels of alfalfa seed this year, R. A. Peltz of St. Clair county is reported as having raised the largest crop of this valuable legume seed in Michigan. This crop is enough to plant 300 acres of the leguminous, says Prof. J. F. Cox, of the Michigan Agricultural College.

"While the past season was unusually favorable for alfalfa seed production," says Cox in discussing the yield, "Mr. Peltz has been producing seed reliably for the last three years. He has shown what can be done in Michigan. Seed for fifteen acres of this yield were secured from the Michigan Agricultural College ten years ago. The other two acres were planted with seed secured by County Agricultural Agent Brody, now business manager of the State Farm Bureau.

As a result of the recent Milk and Alfalfa Campaign in St. Clair county it is probable that the entire crop will be sold locally in the county. Michigan-grown seed is strongly recommended for Michigan planting if it can be secured. Grimm is the variety most recommended.—C. E. Johnson, M. A. C. Correspondent.

CO-OPERATIVE COMMISSION HOUSES

THE PROGRAM of the National Livestock Marketing Committee calls for the establishment of co-operative commission houses and stock yards in the principal cities. In keeping with this policy E. E. Compton manager of the Michigan Co-operative Live Stock Shipping Association announces that his organization will foster such a commission project in the city of Detroit. Fuller details concerning the plan will be made public shortly.

URGES MORE SHEEP FOR MICHIGAN FARMS

H. H. HALLADAY, commissioner of agriculture, wants Michigan business farmers to keep more sheep. "Sheep breeding and feeding is on the decline in this state due to the low prices for wool and mutton. Good breeding sheep can be purchased at prices far below what they will be worth a few years hence, and Mr. Halladay believes this is the ideal time for farmers to re-stock. Prices of wool and mutton are coming back with a bang and the commissioner of agriculture wants farmers of this state to be in a position to get some of the benefits.

AGRICULTURAL CONFERENCE

IN KEEPING with the recommendations in Pres. Harding's recent address to congress Secretary of Agriculture Wallace has announced that a nation-wide agricultural conference will soon be called to meet in Washington. This conference will consider steps to relieve the depression in the farming industry. The conference will not be limited to representatives of agriculture, but will include all important allied industries, such as packers, millers, railways and water carriers, exporters, commission merchants and so-called middlemen.

NOW ONLY \$295
PRICES SMASHED

Was \$625.00 Direct from Factory
1922 Model H. U. 1250 Watt

Lalley Light and Power Plant

Electricity for Farms and Rural Places

World's greatest lighting plant value. My famous model HU 1250 watt capacity Lalley Plant sold until recently for \$625. You can get it, if you act promptly, for only \$295, complete with battery, direct from factory to you. Anyone can install it. Ample capacity for your future needs. Proved by 12 years' service. Guaranteed. Approved by National Fire Underwriters—30 days' trial—return. Don't confuse this big 1250-watt capacity Lalley with smaller plants. Don't miss this opportunity.

FREE! Write today for free literature and information. ACT NOW—as I may have to increase this price almost any day.

W. H. LALLEY, President
Lalley Light Corp.
Dept. 88
Detroit, Mich.
Save \$330

Electric light and power for Farms, Country Residences, Summer and Winter Cottages, Lumber Camps, Yachts, Motor Homes, Camps, the Battery, etc.

Was \$625.00 NOW \$295.00

\$235 FOR THIS 10X30 SILO

Get Our Low Prices And Easy Terms NOW

Our silos are the best made and most durable. They are built on a foundation of concrete and are completely self-contained. They are the only silos that can be built on any kind of ground. They are the only silos that are completely fireproof. They are the only silos that are completely safe. They are the only silos that are completely easy to use. They are the only silos that are completely economical.

AGENTS WANTED

We will have some good money to pay you for agents. Write for agent's prospectus. Special approval given to farmers.

New Ross Silo CHAMPION

Write today—find out whether you want the best silo made like the Champion silo. It is the only silo that is completely self-contained. It is the only silo that is completely fireproof. It is the only silo that is completely safe. It is the only silo that is completely easy to use. It is the only silo that is completely economical.

THE E. W. ROSS CO.
Dept. 272 Springfield, Ohio

Saws Wood Fast

Make \$20 a Day Make big money with a **LONG LEG SAW**. Falls trees, saws up logs and makes by engine power. Saws 8" boards 4" wide. Good any place. Easy to handle, needs no washing. Light, durable, SAFE. **30 Days' Trial, 10 Year Guarantee.** Has many new patented features. Easy starting 4 H.P. throttle governed, specially designed engine with magneto. Safety friction clutch starts and stops saw. Built right through by old reliable firm—result of 25 years' experience. Write today for literature. **FREE Catalog of LONG LEG SAWS—ready to go.** **LONG MFG. CO., Dept. 217 Cherryvale, Kan.**

Saws 15 to 40 Cord's Day. A Real ONE-MAN Leg Saw.

TRY THIS MIXER

30 Days Free

Don't send a penny! Just ask to send you this **NEW MIXER**—Concrete Mixer—on 30 days' Free Trial. Do all your own concrete building—barn foundations, floors, feed floors, etc.

Have expense of hiring a contractor. Make money loaning mixer to neighbors. Or make \$10 to \$20 a day doing contract work in spare time. Work while the original inventor is still alive—lead out one side close to materials. Quickest method to other side—forms or wheelbarrow. All steel frame—stands years of hard use. Mixes two and one-half cu. ft. a minute. Any 1 1/2" engine runs it. Fully guaranteed.

Only \$9.75 After Thirty Days' Trial. Free trial—\$9.75 after trying 30 days free, balance \$9.75 every month for 3 months. \$1.00 discount for cash with order. Order from this ad or send for full particulars and interesting free book on concrete.

Badge of Worth from Works 1020 Cleveland Ave., Milwaukee, Wis.

GRASS SEED

FREE SAMPLES

Wonderful Value
Wholesale Prices
Highest Quality

Don't fail to investigate these bargains. Molehated Tested Timothy \$2.50 bu. Sweet Clover scurfed \$4.50 bu. Alsike Clover & Timothy \$3.50 bu. Sudan Grass 5 lb. lb. other Grasses & Field Seeds at low prices. All sold subject to State or Government Test under our double money-back guarantee. We specialize in grasses and field seeds. Located to save you money and give quick service. We expect higher prices—Buy now and save big money. Send today for our money-saving Seed Guide, explains all free.

American Mutual Seed Co., Dept. 627 Chicago, Ill.

Lyman's Genuine Grimm Alfalfa

Immense yield year after year without replanting. Seed from original stock, selected to increase germination. Booklet and seed sample free.

A. B. LYMAN, Introducer of Grimm Alfalfa.
551 Water Street Excelsior, Minnesota

DOES NOT WINTERKILL

Mid-Winter Review of the Potato Market

Unless all Signs Fail Potato Prices are Due for a Strong Advance

By THE EDITOR

ON NOVEMBER 1st the editor received the following anxious inquiry from a potato producer in Cass county:

"Would like to know personally what you think about potatoes. Looks pretty discouraging just now. I have a pit of 1,000 bushels and have been planning heavily on this as a mortgage lifter. Was offered \$1 per bushel once but was too busy to load them. Now can't get 75 cents. Aren't there more potatoes in the country than the government reports? There are more here in this vicinity than last year. Must be 5,000 bushels of potatoes within two miles of here. I don't like to bury mine for the winter as I haven't much to cover such a large pit with. The market surely doesn't look like scarcity. No one sold around here. People begin to talk cheap potatoes in the spring already. Have been counting on your reports in the paper and am hoping they will prove O. K."

Isn't that a poser? Here is a man who places confidence in your judgment. He asks for an opinion. On that opinion he proposes to make the sale of his potatoes upon which hinges the lifting of the mortgage. Your heart yearns to help that man and thousands like him. But you cannot know to a certainty what course the potato market will take; you can only gather all the facts in the case, survey them through the light of past experience and hazard an opinion which may be no better than the next man's. If the law of averages holds good, you stand a chance to win; if it doesn't you may lose. You may give the wrong advice. Your reader acts upon it, only to find too late that your advice has cost him money. It doesn't matter whether he would have taken the same course anyway. If he acts as you advise and he goes wrong, you get the blame.

But the temptation to help is strong. You have certain convictions about the market which you believe are right and if they are right you want to see other people profit by those convictions. So you say your prayers twice, draw up your will and let 'er go. And this is what we advised our Cass county subscriber to do:

"You little realize what a tremendous burden of responsibility you attempt to place on us when you ask for our personal opinion on the potato market. We have expressed ourselves so clearly on this subject in previous issues of the M. B. F. that there should be no doubt in your mind but what we think potatoes are going to be somewhat higher than they are now. It is true that the outlook is not very encouraging. It is true that there appears to be more potatoes in the country than indicated by the October first estimate, but you must remember that this apparent increase in the supply is offset to a considerable extent by the spoiling of potatoes in some of the eastern states.

"The October 1st estimate indicated a possible production of 345,000,000 bushels. Suppose the final estimate pulls this to 350,000,000, which it is not likely to do. Then, let us compare this

Year	Production	FARM PRICES				
		Nov 1	Dec 1	Jan. 1	Apr. 1	May 1
1907	298,262,000		\$.46			\$.50
1908	278,985,000		.60			1.50
1910	349,032,000	.55	.55	.54	.55	.62
1911	292,737,000	.76	.80	.84	1.17	1.27
1913	331,525,000	.69	.68	.68	.70	.71
1915	359,721,000	.60	.61	.70	.97	.94
1916	286,953,000	1.35	1.46	1.47	2.34	2.79
1919	355,773,000	1.52	1.60	1.78	2.95	3.93
1921	346,823,000	.75	.70	.90		

Caution: In applying above comparisons to current production and prices, do not lose sight of the fact that population has increased and that many more potatoes are needed now than ten or even five years ago. The 1920 census figures gave our population in round numbers as 107 millions which is an increase of 14 millions or 15 per cent over 1910. Each year we must produce a few more potatoes to take care of our increasing population.

350,000,000 bushels with the production in other years. Obviously we cannot compare it with 1919, because that was a year of high prices all along the line. During that year, however, we produced 355,000,000 bushels of potatoes, which on November first were worth at the farm, \$1.52 and on the following June first, were worth \$4.21 per bushel. Let us take a more comparable case. In 1915, before we began to feel the real effects of the war, we produced 359,000,000 bushels of potatoes. On November first the average price to farmers throughout the country was 60.8 cents per bushel. On May first the price was 94.8 cents and on June first, 98.8 cents. Now it is apparent that this year we will produce below that amount, which in itself is a bull factor. We must take into consideration of course the present financial depression. That will suffice to keep potato prices from going to any extraordinary heights despite the smallness of the crop.

"On the other side, however, we have a large increase in population. There are probably fifteen million more people in the United States today than there were in 1915. Suppose there are 10 per cent more. That means that at the same per capita rate we would have to grow this year about 390,000,000 bushels of potatoes to feed them all at the same prices which were paid in 1915. Unemployment and high prices are going to prevent people, from eating as many potatoes as normally, but it is our unbiased conviction that if our total production falls below 350,000,000 the price to the farmer must be considerably higher next spring than it is now.

"How high they will go is a question. We doubt very much if farmers in the so-called potato belt will receive more than \$2.00 per bushel, but we see no reason why farmers in the southern part of the state located as you are near Kalamazoo, and other large cities, should not receive more than this sum by May or June of the coming year. A great many potatoes have been shipped from the farms, the largest movement for this period ever recorded by the Bureau of Markets. That also is a bull factor, and we are afraid that when spring opens up most of the farmers will have sold their potatoes at prices

less than the cost of production, and that wise dealers who have laid them in stock will be able to sell at substantial margins over the purchase price.

"Now, this is our opinion, you can take it or leave it. We hesitate to give it to you because we realize how much every farmer needs every cent he can get from his crops this year and we know that if our opinion does not prove true, and you are eventually forced to sell your potatoes for less than you could get for them today, you are naturally going to feel rather harsh toward us, but the figures we have given are as authentic as can be procured and we see no reason, despite the uncertainty of the times, why one cannot be justified in drawing the conclusions above stated. It will be only a few days before the government's October first estimate is out, and we would wait until that time and take a chance of perhaps a lower market, which we yet see before cold weather comes on. If the October first estimate shows a much larger production than now indicated it might be wise for you to sell although that would still be an open question. Certainly, if the production does not exceed 350,000,000 in our judgment you should store your potatoes on the farm or better still in the nearest warehouse available."

Since the above was written the potato market has gone through many vicissitudes. The November crop report increased the estimate over October by about ten million bushels. The weather was fairly warm during November and the first part of December. The financial situation was bad; unemployment increased. Prices of other food products came down. Farmers, forced to liquidate their debts, had to sell their spuds. No more bearish situation imaginable could have existed. The market weakened some, but not materially. As the holidays approached shipments fell off and consumers found themselves in need of supplies. The weather turned colder. The December final came out revising the estimate downward again, with a total estimated production which is the second smallest since 1913.

Result: Today, Jan. 2nd, the potato market has lost its weakness and prices range from 20 to 40 cents per cwt., at jobbing centers over a fortnight ago. This jobbing strength has not yet perceptibly affected the price to the farmer, but it must soon.

As to the future! No one can say. The government report can now be taken as substantially correct. The actual may be a few million bushels above or below the estimate, but it can hardly be enough more or less to influence the price materially. The little table on this page shows what potato prices have been in the habit of doing when the crop was below normal. If the reader will just jot down these comparisons, apply them to the present year, and give careful consideration to the general business depression, he cannot go far wrong on the potato market.

Farming in 1922 as Seen by Secretary of Agriculture Wallace

WHEN ASKED for a statement on the prospects of the farmer in 1922, Secretary of Agriculture Wallace said, there are signs which indicate that the coming year should be a better one for the farmer and for those who deal with him than was 1921. Among these hopeful signs he mentioned the following:

Credit conditions are better both through regular channels and through the special agencies created to meet the farmer's need. Interest rates also are softening.

Reductions already made in freight rates on farm products lighten by that much the farmer's transportation burden.

Cost of producing farm crops will be lower relatively in 1922 than in 1921.

Very likely there will be a reduction in the acreage of some of the grains and this should tend toward better prices.

The paralyzing effect of the sudden drop in prices last year is wearing off, and farmers will enter the new year more hopefully, believing that the worst is over.

Congress has indicated a willingness to enact legislation which promises to be helpful.

Farmers are coming to see more clearly that the task of putting farming on a sound business basis is really up to them and that thru organization they can reduce marketing costs. In this they will have increasing help from the Department of Agriculture and the various state agricultural colleges which now see better than before that they must give the farmer the same sort of help in the marketing of his crops that they have been giving him in the production.

In the industrial and financial centers there is coming to be a better understanding of the

important part the farmer plays in our general economic scheme, and consequently a decidedly more intelligent and sympathetic attitude toward him and his problems.

With prices of farm products falling and the future very uncertain, even those farmers who had money laid by—and there are a large number of such—have been restricting their buying to what they had to have. Now with the growing belief that prices have hit bottom, buying will be resumed and should increase in volume.

Everything considered, therefore, we can enter the new year in a spirit of hopefulness and good cheer. I see nothing which indicates boom times for the farmer in the near future, but there does seem to be promise of better times both for the farmer and for those whose business is largely dependent upon him.

Auction Prices Point to Higher Dairy Values

Recent Sales of Pure-Bred Cattle well Attended and Prices Bid Highest in Over Year

By H. H. MACK

FOREWARNED IS FOREARMED

MACK SAYS higher values for pure-bred stock are on the way. In fact, they are actually here, for at recent auction sales he has attended bidding has been more spirited and prices paid have been higher than for many months. Mack attributes this to two things: First, to the rapidly growing feel that the "worst is over" and the time to buy has come. Second, to the new demand for pure-bred breeding stock that has developed in the far western states. Mack believes that farmers who desire to get into the pure-bred live-stock game will never find a more opportune time than the present. Investments in pure-bred cattle now should return the purchaser handsome dividends within a year or two. "The farmer of modest means" says Mack, "who can afford to purchase only two animals should buy a pure-bred bull and a pure-bred cow, unrelated. By this method he will not only improve the average quality of his cattle, but will soon have a basis for a pure-bred herd."—Editor.

MEN WELL-VERSED in business ethics, realize, that in the course of human events an opportunity frequently presents itself to the provident and forehanded among us, which may properly be called the psychological moment to buy or sell. Times of financial and business depression, like those that this country is passing thru now, are cited as golden opportunities to purchase staple commodities and the operator is termed extremely lucky who has waited for such an occasion. It may be taken as a self-evident fact, however, that no man can be called lucky or fortunate, to whom such an opportunity comes, unless he has the good judgment to act at the right time.

For more than a year, a common saying has been going the rounds, in live-stock circles, to the effect, that the present is a much better time to buy than to sell improved live-stock; until recently, comparatively few could be found who were willing to take this statement at its face value and act upon the suggestion. As a natural result, there is good reason to believe that men who are still in need of foundation stock, as a basis for a pure-bred herd, have slightly "out-stayed" the market. All kinds of breeding stock is from 15 to 25 per cent higher than it was two months ago. Pure-bred cows and heifers, of either the beef or dairy breeds, are selling at public auction for prices that range from \$50 to \$100 higher than at the beginning of the fall auction season; even grade cows of common quality are \$10 to \$25 higher than on November 1.

Demand for Dairy Cattle

Probably, the most notable evidence of an increased activity in the demand for pure-bred cattle has developed in connection with recent auction sales of Holstein cattle. One of the first indications of this improvement was noticed in connection with the State Association sale at Jackson, on November 18; the next eye-opener came when the auction sale of Holsteins at Lake Odessa, on Friday, December 16, made such a wonderful success. From the outset, a difference was noted in the tone of the bidding at the last mentioned sale, when compared with the auction offerings that preceded it.

When the first cow was led into the ring, the auctioneer, Col. D. I. Perry, made a short opening address the tone of which indicated that he scented something in the air that meant for better business; hardly had the closing words of that address, dropped from the veteran salesman's lips, when the bidding began with an energy and activity entirely new to the auction

business of the current year. The sale moved forward, quietly, until the famous cow, Weedie Queen De Kol was led into the ring, when suddenly, as if by magic, an old-time interest and enthusiasm developed that put an entirely new face on the situation. Bids came thick and fast, from every quarter of the tent, until \$1,200 was reached; after that the pace was a bit slower until an offer of \$1,500, from E. M. Bayne, of Detroit and Romeo, turned the trick. The operation was repeated with slight variation, in the sale of a daughter of Weedie Queen to the same buyer for the same price.

When the big crowd of admirers of the black and white cattle which were packed into the tent at Lake Odessa on that disagreeable winter day, realized that two cows, one of them only two years old, had just sold for \$3,000, the excitement was intense. In view of the fact that many of the animals sold were young calves and junior yearlings, the prices secured were considered very satisfactory. That this sale marked the turning point in the trade in pure-bred dairy cattle in Michigan, is now universally conceded.

The question may be asked: Why this sudden

change? Many valid reasons can be assigned. In the first place, all thru the months of early winter, the state has been "combed" by the purchasers of grade Holstein cows for points near to the Atlantic seaboard; it is estimated that fully 25 carloads of grade milch cows were shipped east from Livingston and Ingham counties alone. Reports from the corn belt and the country farther west indicate a marked scarcity of milch cows. The activities of the War Finance Corporation, resulting in the disbursement of a large amount of money among western and middle-west farmers, has caused thousands of cattle to be taken out of the market; more than that, the availability of money referred to, has resulted in making would-be buyers out of many farmers that had hitherto been crowding their holdings of cattle into a market already oversupplied. Every day reports of sales of pure-bred Holstein cows, at prices running well up into four figures, are coming to hand. Men, who desire to establish pure-bred herds of dairy cattle, realize that there is no time to be lost.

The Beef Cattle Situation

Recent sales of pure-bred beef cattle have resulted in much higher averages than were looked for and men, who have been watching quotations from the leading cattle markets of the country, are wondering how anyone could have the nerve to undertake the breeding of beef producers when steers are selling so outrageously low. The men, who are buying breeding cattle of the beef breeds, have ample faith in the future of the fat cattle business. They realize the accuracy of the old saying that "it is always darkest just before the dawn" and they are wisely making ready for the dawn. Experience has taught them that one extreme follows another in the live stock business; they are measuring the stroke of the pendulum on the decline with the positive assurance that it will go just as far the other way when the tide turns.

Cattle production in North America, Canada and Mexico has dwindled during the last five years to the lowest record that has been known in 50 years. If consumption of beef had been normal during the last twelve months, this country would have been up against a shortage the like of which was never before known. When the grass begins to rise, next spring, a shortage of feeding cattle will develop; just about that time, the crop of steers, now on corn, will be well forward and the "easy picking" in the cattle business will be over. During the first eleven months of the current year, 10 of the leading live stock markets of the (Continued on page 21)

Are You Getting Ready for Farmers' Week? It's Almost Here



WELL, FATHER, it's high time to get out your Sunday serge and see if the pants are pressed and the buttons all in place and the seat strong enough to stand a forty-mile drive on the rough leather cushions of the flivver. And mother, you'd better get busy and make up that new dress material which John bought you for Christmas, and brush up the "feathers" on your hat, cause Farmers' Week is not so very far away.

You aren't going? Pshaw! Can't afford it? Stuff and nonsense! You mean you can't afford to stay away. Haven't forgotten already what a wonderful time you and mother had last year, have you? 'Member how I met you comin' down the campus arm in arm, lookin' like you'd been or were goin' a-courtin'? Now, I know you had the time of your life last year, and you can't deny it. Sure, things are a little tougher this year. Of course, it takes money to pay the taxes and keep the children clothed and get ready for another planting. But except for the taxes, it doesn't cost quite as much as it used to, and things are looking up a bit, and spring is on the way and the sun is going to shine again some day nice and warm, and next fall you'll have another good crop which you can give away to feed a hungry world. But in the meantime, you won't starve or freeze or go to jail or the poorhouse. And the fun and the new spirit which you'll get by attending Farm-

ers' Week will be worth ten times the small amount of money it will cost you. There, I knew you were only joking.

The program this year, we are told, will in the language of the Greek, be a "humdinger." Most of the talent in Michigan and a good share that isn't in Michigan will be there to entertain and set your lazy old brain to thinking as it has never thought before. The list of speakers will include our own David Friday, the new president of M. A. C., who is nationally known as an economist and is a walking and talking encyclopedia of facts and figures you ought to know. Then there is Dr. Marion Leroy

THE EXCESS PROFITS TAX IS A JUST AND SOUND TAX AND I AM OPPOSED TO ITS REPEAL



Burton, president of the U. of M., who said he needed \$9,000,000 to run the University this year, got six million more than most people thought he could get. Don't make the mistake of coming to the M. A. C., with your mind "set" against Dr. Burton. It won't do any good.

He has a smile which can melt a Greenland iceberg forty miles away in ten seconds. A big man, with a big heart. You'll like Dr. Burton. No lesser light to shine forth upon the speakers' platform will be Congressman John Ketcham, of whose brilliant platform ability nothing further need be said. John has been in Washington, and he'll probably have a good many things to tell you about the way the government has been run since he has been on the job.

Other speakers will include either the present secretary of agriculture, Henry C. Wallace, or the past secretary, E. T. Meredith.



And if these men can't keep you interested, there'll be plenty of other things going on to engage your attention, of which we shall have more to say in a later issue.

A separate series of meetings will be held for the women, so that father won't feel that he is tied to mother's apron string during the entire week. Last year over a thousand farm women registered and special attention will be given to their entertainment this year. Farmers' Week will no longer be just for the "men folks." It is coming to be recognized as the great annual get-together for all the farm folks, and everything will be done to make the women as well as the men feel "at home." Long years ago woman wasn't of much account but now her presence is needed and valued everywhere. Farmers' Week will not be complete without a goodly attendance of farm women, and mother should plan with father to be present.

Among the nationally prominent speakers who will address the farm housewives this year are Dr. Caroline Hedger of the McCormick Memorial Hospital in Chicago; Mrs. Barbara Bartlett, head of the Public Health Nursing service of the University of Michigan, and Martha Phillips of the service department of the North American Dye Works.

See you Farmers' Week, the dates are January 30th to February 3rd.

NO SIR—I WOULDN'T HAVE MISSED FARMERS' WEEK FOR THE PRICE OF A GOOD COW



Muskegon Dairymen Will Market Fluid Milk

Organized Farmers take over Entire Control of their Product from Farm to Consumer

THE GROWTH of co-operative marketing in Michigan has been remarkable. Through it farmers are more and more getting relief from bad economic situations, and are lessening the chances of avoidable loss in their business. Every co-operative enterprise, to survive, must



Board of Directors of the Muskegon Farmers' Co-operative Dairy

follow sound business principles, and it is encouraging to find this fact so well emphasized in our organization work in this state.

The handling of market milk by the farmers themselves in a co-operative way has been much discussed recently, and therefore there is more than the usual interest in the plans of producers for the Muskegon market for preparing and distributing their own products. The system is not untried here, as the Muskegon Height's Co-operative Dairy is just completing a successful year in the distributing of market milk and manufacturing the surplus into butter and cottage cheese. This dairy began business last January, and has handled considerable more than 2,000,000 pounds of milk with a business of over \$60,000. Altho the organization is small, the business has shown a steady growth. Four routes are maintained, and a ready market has been found for all butter, buttermilk and cottage cheese manufactured. The members have received more than they did from private distributors, besides paying on their own plant, and what in the long run is even more important, they are sure of a steady market for all their milk. As a result the business of producing milk has become more stable and members have increased their herds.

These producers all live south of Muskegon and Muskegon Heights. For some time there has been agitation among the producers to the north and east, who furnish the bulk of Muskegon's milk supply, for some such organization. Two years ago an attempt was made in that direction, but at the critical moment enough of the producers were induced to enter into a proposition of one of the distributing companies to disrupt the plans, and nothing more was done. However, the desire for better control of the marketing of their milk did not die, and matters were again brought to a head the latter part of the summer through two main causes. The first was the very unsatisfactory marketing situation. The price the larger distributors paid the producers was lowered until it became an altogether unjust proportion of the prices paid by the consumer. Some of the distributors, during the time of summer surplus, told the producers to keep their milk at home certain days, and with no means of disposing of the uncertain amounts thus erratically left on his hands, the man with the cows suffered a real loss. Other distributors paid a very low price for the milk which they did not market as whole milk, making the return inadequate even on a butterfat basis. The latter part of the summer the price of milk to the consumer was raised from ten to twelve cents a quart. The reason for this advance was given by the distributors as being the fact that it cost the farmer more to feed because of the dry weather and lack of pasture. Naturally the consumer supposed that this extra two cents would go to the producer, inasmuch as the cost of distributing was not influenced. The farmers thought the same thing but found that they received lit-

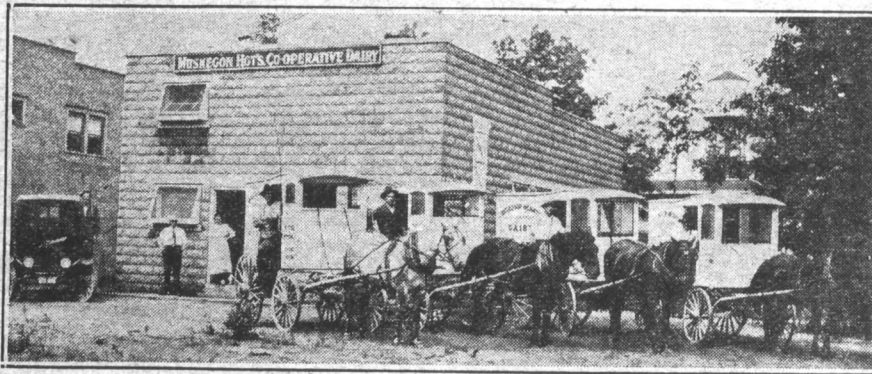
By DWIGHT C. LONG

tle if any of the extra amount. However, later on when the price was again reduced to ten cents, the farmer received his cut in proportion, or rather, more than his proportion.

The other cause was the success which the fifty farmers were having in the same problem with their Muskegon Height's Co-operative Dairy. Demonstration is a wonderful method of teaching, and when we see someone else getting out of a rut by doing a certain thing, we wonder why we can't do it too.

Finally things seemed to be well set for the start, and a meeting of the producers of the Muskegon territory was held on August 26. About seventy-five were present, and after a thorough discussion of the matter, a committee on membership and organization was appointed and another meeting called for September 6. At this time over sixty producers had signed a preliminary agreement and tentative articles of association and by-laws were discussed, which were adopted at the next meeting, September 9. A board of nine directors was elected and empowered to draw up plans for a dairy plant. This was the birth of the Muskegon Farmers' Co-operative Dairy.

The membership fee was set at \$200, the first half to be paid in at the time of signing, and the other \$100 payable upon thirty days notice by the board of directors. It was agreed that fifty members should have paid in their first \$100 before the contract for the building was let. This goal was reached the last of October,



Plant of Muskegon Height's Dairy Company, whose success in distributing milk led Muskegon farmers to organize a similar company

and meanwhile plans were completed the plant. The contract was let one day, the lots bought the next, and work on the foundation commenced on the following day,

The building is of brick and concrete, with large steel sash, giving plenty of light. It is 40 x 80 feet, and of two story height back 60 feet. The office is at the front on the ground floor. Back of this is the main work room and cooler, and back of these in the one-story part are the boiler, wash, and storage rooms. Over the office is the cheese working room, over the cooler another large room, and the other section of the upper floor is the pasteurizer room. The main work room extends up two stories, giving better ventilation and working conditions. Special attention was given to cutting down the labor in handling the milk. When it comes to the receiving platform it is emptied into a vat from which it is pumped to the pasteurizers on the second floor. From here it runs by gravity down over the cooler to the bottler on the main floor beneath. From the bottling department the cases are moved but a few feet into the cooler from which they are delivered to the wagons. The empty cans go direct from the receiving platform into the wash room and are delivered to the wagons at the rear. This means that the milk will be handled with the least amount of lifting and other labor. Mr. Orval C. White, the contractor, has co-operated with the board in making the arrangement of the building of the best. The machinery, which is all first class, is now being installed in the completed building.

There are now sixty-five members, and this number will undoubtedly be increased to seventy-five by the time operations begin, about January 15. A membership limit of 100 has been set for the present. In spite of the tightness of money, and the straightened circumstances of most of the farmers in this territory, the finances have been handled in fine shape. The second hundred dollars has been called for and with the new members which are assured, the expense of equipment and first operations can be nicely taken care of. All obligations have been met promptly which is an indication of the careful business-like way in which the directors are handling their work. Mr. E. E. Pierson, the president, and Mr. Warren M. Blank, the secretary have given generously of their time and energy, as have the following are now serving: Adolph Bard, Lester Benston, Nels Branstrom, Tom J. G. Bolt, Grank J. Gates, John Jensen, John Freeder. (Continued on page 5)

Good Seed Secret of Success with Grains

SHORTLY AFTER I returned from the International Hay and Grain Show I received a telephone call from the editor of the Business Farmer requesting me to write a short article on how prize grains are produced.

My interest in grains started in 1915, the year that I entered the Michigan Agricultural College. During my four years at college I took deep interest in the improved and pedigreed varieties of grains that the Michigan Crop Improvement Association was putting out to the farmers throughout the state. I was not satisfied to believe what the Secretary of the Association and the professors at the College told me about these grains. I took them to my father's farm and tried them out for four years.

In 1919, the year of my graduation, I had combined the scientific and practical features in the production of prize winning grain. This same year I went to farming. I started with the different varieties which I thought were the best after four years of study and trial. I considered at that time that I had the cream of what the College and Michigan Crop Improvement Association had been working on for years, and I owe my success in the production of these grains to the start which I received from them.

I consider the growing of prize grain a secondary feature. The wheat, oat, barley, rye and corn are planted on our farms the same way that other farmers plant them. Possibly we take a little more care during harvesting than other farmers but outside of that the production is the same.

By ARTHUR W. JEWETT, Jr.
LARGEST INDIVIDUAL PRIZE WINNER AT THE INTERNATIONAL HAY AND GRAIN SHOW

The main and underlying principle is good seed. The only source of this

seed in Michigan is through the Michigan Crop Improvement Association. This association guarantees the source, purity and genuineness of all seeds sold.

At a grain show pedigreed grains most invariably win over non-pedigreed varieties. A proof of this is the twenty-five prizes won out of thirty on rosen rye at the International this year. Ten red rock wheat samples from Michigan also placed high as compared with common varieties from other states.

I have in rather a brief way answered what the Editor asked me. Growing prize grain without using the best developed and pedigreed varieties is like trying to build up a pedigreed herd from a scrub bull.



Arthur W. Jewett, Jr.

State Grange Offers Solution to Rail Problem

Overseer Bramble Urges Government to Buy Out Roads and Lease them to Responsible Corporations

I BELIEVE that the Esch-Cummings law was one of the rankest pieces of class legislation that was ever enacted by the American Congress, because it guaranteed to private capital, a fixed minimum income, and did not fix a maximum income limit.

We have just as much right to expect that Congress will enact a law that will provide that all farm produce shall bring a price that will render to the farmer an income of 5-1-2 per cent upon his investment, as they have to guarantee to the stockholder of any railroad a fixed income, and this guarantee to the farmer based upon the same system of accounting. That, you know, would be rank legislation in favor of agriculture—the great basic industry. And why is it not also the rankest kind of legislation to guarantee to railroads a fixed income?

After the armistice, every paper, magazine and periodical in the United States magnified, enlarged and advertised the fact that the government was losing twenty-eight million dollars per month in the operation of the railroads under the guarantees given to the railroads when they were taken over by the government.

Congress passed the Esch-Cummings law and turned the railroads back to private ownership March 1st, 1920, and gave them the same guaranteed income during the next six months that they received during the war. The official reports show that under this guarantee during the first six months, it cost the government \$105,000,000 per month against \$28,000,000 a month lost during government operation. The papers and magazines do not advertise this fact. They are as silent as the grave in regard to the same.

It also said in the same law, that the Interstate Commerce Commission should increase freight and passenger rates high enough to pay the roads from 5-1-2 to 6 per cent upon their investment. Passenger rates were increased 20 per cent, sleeping car rates 50 per cent and freight rates 35 per cent, an added expense to the people of the United States, one billion, 500 million dollars per year. They also loaned to the roads three hundred million dollars at 6 per cent.

During the war, the government spent one billion dollars in permanent improvements for which the railroads agreed to pay the government under the law by which the government assumes control of the roads. Under the guarantee, for the first six months of private ownership, the government paid the roads six hundred thirty-six million dollars and this was to be taken out in the final settlement with the roads of the amount expended by the government for permanent improvements.

The railroads went before Congress and Congress allowed them to violate this agreement and paid the roads in cash Six Hundred Thirty-six million dollars, and the roads still owe the gov-

IS THIS A SOLUTION?

ACTING IN accordance with a recommendation of Overseer C. H. Bramble, the Michigan State Grange adopted a resolution at its last annual meeting urging the government to purchase the railroads and lease them to private corporations, the profits on the more profitable lines to go to make up the deficits on the unprofitable lines. This method has been followed out successfully in Germany, says Mr. Bramble. The suggestion is a novel one and has many points in its favor. Mr. Bramble's suggestions are published herewith. The editor wishes to correct Mr. Bramble's statement that "every paper, magazine and periodical in the United States magnified, enlarged and advertised the fact that the government was losing 28 million dollars per month in the operation of the railroads." The Business Farmer pleads not guilty to the indictment. Other recommendations which he presented before the state Grange on taxation and finance will be discussed in later issues.—Editor.

ernment one billion dollars for permanent improvements.

I wish to make a statement of the provisions of the Esch-Cummings law, for your information:

First—The railroads should be returned to their owners March 1, 1920. Second—That for the first six months after the roads were returned, the government should guarantee the railroad against loss. Third—The railroad rate should be increased so that after the end of the six months guarantee, the railroad should make at least 5-1-2 or 6 per cent upon their actual value. Fourth—That a special three hundred thousand dollar fund should be provided, to be loaned to the railroads at six per cent interest. Here is a rough statement of the total amount that the railroads have cost the government and the people, for the first year and a half of private ownership:

Increase in freight and passenger rates for the year ending August 22, 1921 — \$1,500,000,000
 Losses during the first six months of private operation — \$631,000,000
 Loaned out of the \$3,000,000 fund — \$192,000,000

A total taken by railroads from the people under the Esch-Cummings law — \$2,323,000,000
 According to official statements, the cost to government during the 26 months of operation was — \$712,000,000

It cost the government the first six months, as I said before, \$631,000,000, only \$90,000,000 less than during twenty-six months of government operation. If you will figure the one billion dollars of money loaned to the railroads for permanent improvements during the year as a total loss, and the seven hundred twelve million

dollars in guarantees, you will have a total of one billion, seven hundred twelve million dollars during government operation for twenty-six months against two billion, three hundred twelve million dollars during the first year and one-half of private ownership. A loss of \$129,000,000 per month for 18 months of private ownership against \$66,000,000 per month for 26 months of government operation.

Germany is electrifying all of her railroads at Government expense and is arranging to lease her roads to private corporations, for them to operate under iron-clad contracts, and leases, in order to furnish her people transportation at reasonable rates. I believe this would be one solution of our difficulty.—The Government to own the railroads and lease them to operating companies under a unified system, establishing rates and take the profits from the more profitable roads to furnish transportation to the less favored sections, at rates that will foster and encourage all industries. This is no experiment even in this country.

The Q. & C. road from Cincinnati to Chattanooga was built, and is now owned by the city of Cincinnati. The Georgia Central was built and owned by the State of Georgia—both leased to the Southern System for operating. When the present lease will have expired, all the bonds will have been paid and Cincinnati will be one million dollars to the good. This road refused the government guarantee and made more money during the first six months than the government guaranteed, because they were out of a stock-jobbing proposition. That is the great difficulty with our roads today—they are a stock-jobbing proposition, run for dividends only. * * *

Under the government guarantee, many of the Eastern roads received from the government, from twelve to twenty-nine per cent during the war. The Burlington Road declared a stock dividend of sixty million dollars, or fifty per cent, which was vetoed by the Interstate Commerce Commission. They have just declared a fifteen per cent cash dividend in addition to the annual five per cent dividend, and yet the Burlington Road, in the propaganda put out by its officials, would lead you to believe that it was in dire financial straits. So the Pennsylvania Road.

Our public libraries and papers are flooded with their propaganda, much of which is misleading, and many of their statements are absolutely false. * * *

I would suggest that this Grange go on record as favoring some system that will eliminate the stock-jobbing proposition, and furnish to the people of these United States transportation at reasonable rates, even though the loss should be paid by the people in the annual budget of the government.

Why not start something along this line?—C. H. Bramble, Overseer, Michigan State Grange.

December Value all U. S. Crops Placed at Five and Half Billions

THOSE SEEKING to learn "what's wrong with the country" may find their answer in the December crop report just issued by the U. S. Department of Agriculture. The total value of all crops produced in the United States in 1921 is placed by the Department at \$5,675,877,000. This is \$3,400,000,000 less than the crops of 1920 were worth and \$8,000,000,000 less than the value of the 1919 crops. How can the farmer suffer such an enormous loss in his purchasing power without the effects being felt by every trade, profession and business in the United States?

Comparing the December final estimate with the October which was the last previous estimate on grains, we see little significant changes. All wheat shows an increase of about 50 million bushels; oats show a loss of 18 million bushels; beans of 214,000 bushels; rye a loss of 7 million bus. The final on potatoes is 346,823,000 bus., which is about the same as the October estimate, but 10 million less than the November estimate.

The accompanying table shows the December, 1921 final and the final for 1920. A comparison will be found interesting.

Export Situation

In conjunction with the final estimates on production a little light might be shed with advantage upon the export situation. The U. S. Department of Commerce has just issued a very excellent statement upon this subject, showing

Crop	Production (000 Omitted)		Country Prices Dec. (average)	
	1920	1921	1920	1921
Corn, bus.	3,232,367	3,081,251	\$.67	\$.42
All Wheat, bus. ...	787,128	794,893	1.44	.98
Oats, bus.	1,526,055	1,060,737	.47	.33
Barley, bus.	208,095	151,181	.70	.42
Rye, bus.	69,159	57,918	1.27	.70
Buckwheat, bus. ...	14,978	14,079	1.29	.81
Potatoes, bus.	423,868	346,823	1.16	1.10
All Hay, tons	108,233	96,802	17.70	11.50
Apples, bbls.	37,239	96,881	1.13	1.70
Beans, bus.	19,075	99,118	2.99	2.66

how exports have increased in some case and decreased in others, and what the effect has been upon domestic prices. The report follows:

"The November exports of foodstuffs show a falling off which can be accounted for very largely by the fact that the domestic market has withstood the recent world-price decline better than most of the competing countries that export stuffs to Europe, announces the Department of Commerce. In wheat we have exported from July 1, 1921 to December 1, 1921, 181,000,000 bushels compared with 176,000,000 bushels for the same period last year and a pre-war average of 71,000,000 bushels for the same period. The exports today closely approach the estimated exportable surplus in this country of 200,000,000 bushels and are resulting in a stiffening of prices in the domestic market, due to some prospect of possible importations if exports should continue in any large volume.

"In meats we have a similar situation; namely, the declining exports may be largely ascribed to the fact that our domestic prices have stood up better in the world market than prices in competing countries. The disastrous liquidation forced upon the farmers of South America and Australasia will in time have the effect of reducing production in those regions and result in a more stable world price. In a broad way the American farmer is vitally interested in the re-establishment of stable agricultural prices in the other great export countries as well as the stabilization of economic conditions in Europe. Readjustment in both spheres is taking place and should result soon in a stronger demand for American agricultural products.

"The same agricultural crisis which we have experienced in the United States has also been experienced in South America, New Zealand and Australia, and has been even more severe, due to the fact that the three great commodities upon which the wealth of these countries depend are grain, live stock and wool. With the collapse of the wool market a year and a half ago, these countries were then compelled to rely more on their sales of grain and live stock.

"The recent low prices are not so much the result of actual oversupply of agricultural products as to the situation which has caused so much forced liquidation throughout the surplus producing regions and very cautious buying in Europe due in part to their depreciation of exchange. Both the European exchange situation and the agricultural situation in the surplus countries should steadily improve from now on."

What the Neighbors Say

HIGH TAXES

IN THE December 3rd issue of the Business Farmer you stated that when a farmer paid taxes he was buying good roads, education, protection from criminals, and a lot of other bunk. Now don't you think at the present rate of taxation he is paying an almighty high price for it? You also stated that taxes were not coming down for some time. If such is the case please tell us farmers how we are going to pay them. It already looks as if the majority of farmers will go broke by the time their taxes are paid this year.—J. R. Smith, Ionia County, Mich.

Had you read the editorial aright you wouldn't have found it necessary to ask me the above question. The purpose of the editorial was to impress you and other readers with the fact that you are paying high for the good roads, education, etc., which you are buying. I repeat that taxes are not coming down for a long time, if the contemplated projects of state and counties are carried out to the letter. It remains with you voting taxpayers to say whether they shall be carried out.—Editor.

AUTUMN SNOW

WHITEST snow through stretches of red-brown fern and brakes, red-brown oaks, red-brown laurel swamps; white poplar shapes and whiter birches; pines in masses of somber green against the white and brown; the wastes reaching on to drifts of purple hills against a slaty sky. Tangles of tamarack, balsam, cedar, spruce along singing brooks and about steely lakes. Tall gray columns of ruined pines, each stressed to its height by its line of clinging snow. Unfenced, a white cleared field with great stumps in white and gray. A lifeless rough board shack, the windows broken, black paper shreds streaming from wall and roof. Again, the waste; then woven wire; hardy cattle and hardier sheep browsing in brush and snow. A white cleared field with great roots in great snowy piles; smoke from the chimney of a wee shingled home. Within, wife and children, warmth, courage, cheer. Such folk abide, winnowed by hardness; no soft folk; sound grain. Our gracious frontier gives their comradeship, gives them blessed freedom, visions, hope. No weak war is theirs against chaos for God's kingdom. Still may wayfarers see this chimney with its banner of smoke.—David Clay (Michigan.)

"THE TWILIGHT ZONE"

YOUR EDITORIAL of December 3rd on "State Taxes" appeals to me profoundly. In fact, as I read your publication, though not myself a farmer today, I am often deeply impressed with the sanity of your views, and particularly with the name of a farmer paper which recognizes the business character of farming. My Uncle Ben in Minnesota, with whom I have often toiled and sweat in the open field, taught me, in my boyhood, what is far more true today than it was then: the big problem in farming is business management, not bone labor or perspiration.

As farmers who are business men are today taking an intensive view of the problems of government and are facing those problems from the standpoint of business, as affecting their business they must be interested in your discussion of State Taxes and of other kinds of taxes. When you say, however, that the average farmer is not sufficiently careful in buying with taxes the forms of service that government furnishes him, I am inclined to think you have limited too much the range of your statement. Is not this true of the average taxpayer, whether in country or city? There is probably no problem in government more difficult of solution than that of the incidence of taxation, or who pays the final tax. It is like chasing a needle in the haystack. But an equally difficult problem is that of the universal carelessness, indifference or ignorance of taxpayers regarding their tax money after it is paid.

Now to my point: While you are discussing state taxes, why not consider that twilight zone in American

government, called the "County." Representing the committee of disinterested citizens who have spent two or three years in study of the Michigan problem, I venture to utilize your space for the privilege of calling attention of your readers to the proposal for a constitutional amendment which, according to well informed public officials, ought to relieve some of the taxpayer's burden due to unbusinesslike methods of county administration.

It is reported that most of the rural counties are satisfied with their present conditions and do not seek any change. In fact, from some rural counties we get the message that there is likely to be stiff opposition even to a consideration of any change. Why this should be true is hard to understand unless opponents are afraid to let the people of Michigan or of any given county have the facts and express themselves at the polls.

The whole plan is overflowing with hurdles, difficulties, checks and popular referendums. It cannot be considered as a state issue until 105,000 signatures are secured to initiatory petitions. It cannot be adopted in the state except by majority vote of all voters in the state

in November, 1922. It cannot move hand or foot in the state until the legislature of 1923 has passed laws in harmony with the amendment. Even after the legislature has acted it cannot take effect in a single county of Michigan until a majority of the taxpayers and voters in such county have voted to try the suggested plan.

From the standpoint of the taxpayers alone, would it not be worth while to have a little light turned on the whole situation through the medium of the Michigan Business Farmer. If the people can get the facts through such invaluable agencies of public information as your paper, no one need worry as to the results.—W. P. Lovett, Campaign Manager, Committee on Reorganization of County Government in Michigan.

The facts are what we and our readers want. As we have said before, "if commission form of government means lower taxes and greater efficiency in the county we want it. If it doesn't we don't. We intend to inform ourselves and our readers upon this plan that we may be guided intelligently when called to vote upon the matter. Your views and others are invited.—Editor.

SOME OBJECTIONS TO CONSOLIDATION

IN ANSWER to Mr. Johnson's article in M. B. F. of November 19th, 1921. I came to Michigan with my parents from New York

state in the fall of 1868, to Greenville, Montcalm Co. The Little Red Schoolhouse was burned and a nice large building erected to take its place that would seat sixty-eight scholars. It was painted white. I received my first schooling there, and later I went to the Greenville High School through the tenth grade.

Now as I look back, and also from my observation at Climax, Kalamazoo Co., where I live, and where we have a twelfth grade school, I would rather my children would attend a good district school through the eighth grade than the city school through the same grades.

I agree with Mr. Johnson that we should have some additions to our educational system. The one most forcibly brought to mind just now is that the teacher should be morally, physically and educationally qualified to teach the grades they are hired to teach, or else the superintendent of public instruction should be compelled to revoke his or her certificate. Under the present law he will not do it. As the law is today, the superintendent of public instruction and state normal heads control the teachers and their salaries. The teacher very often is a poor one and the people have no redress. I think the teacher should be bound to give reasonably good satisfaction as a teacher, just as

(Continued on page 13)

Lower Machine Prices

—a factor in a brighter outlook for 1922

MOST of the readers of this paper know that we have reduced our prices on farm machines for 1922. The lower figures apply on practically our entire line of grain, hay, and corn harvesting machines, plows, tillage implements, seeding machines, etc.

Reductions in prices of farm machines and other articles the farmer buys is one of the many indications pointing to continued improvement in the farmer's situation. The War Finance Corporation is steadily pouring aid from its billion dollar fund into agricultural communities to finance the farmer. Freight rate reductions on stock, grain, hay, etc., now going into effect, will save many millions for the farmers. Land values are now on a sound-

er basis. For 1922, better labor at lower cost will be available, better marketing conditions are being evolved, and recent tariff legislation also should tend to increase farm product prices.

All these factors indicate that more efficient production by modern methods and improved machines will mean greater profit for the new year. You cannot afford to postpone the purchase of needed machines. Where repairs have been made again and again, beyond the point of serviceability, waste and loss are pretty sure to follow. The present prices will enable you to replace the old with efficient modern machines so that best use may be made of the opportunities that are certain to come to the farming world.

The International Harvester Line of Farm Operating Equipment

- Binders
- Threshers
- Harvester-Threshers
- Headers
- Push Binders
- Mowers
- Rakes
- Tedders
- Loaders
- Side-Delivery Rakes
- Sweep Rakes and Stackers
- Combined Side Rake and Tedder
- Baling Presses
- Corn Planters
- Listers
- Corn Cultivators

- Corn Binders
- Corn Pickers
- Corn Shellers
- Ensilage Cutters
- Huskers and Shredders
- Huskers and Silo Fillers
- Beet Seeders
- Beet Cultivators
- Beet Pullers
- Cotton Planters
- Grain Drills
- Lime Sowers
- Broadcast Seeders
- Tractor Plows
- Horse Plows
- Disk Harrows

- Spring-Tooth Harrows
- Peg-Tooth Harrows
- Tractor Harrows
- One-Horse Cultivators
- Culti-Packers
- Kerosene Engines
- Tractors
- Motor Trucks
- Cream Separators
- Manure Spreaders
- Stalk Cutters
- Feed Grinders
- Stone Burr Mills
- Cane Mills
- Potato Diggers
- Wagons

If you are interested in learning some of the new prices or in looking over any individual machine, the International Dealer in your vicinity is at your service. Or you may address your inquiry direct to us.

INTERNATIONAL HARVESTER COMPANY

CHICAGO OF AMERICA U.S.A.

82 Branches and 15,000 Dealers in the U.S.



Farmers Service Bureau



WORLD WAR VETERANS AND TAXES

I would like to know if men from Michigan who served in the World War are exempt from taxes?—C. H. Mikado, Michigan.

The tax laws exempt, to the amount of \$1,000, to soldiers who served three months or more in the Spanish-American, Civil or Mexican War, but it does not exempt the soldiers of the World War. The only exemption that I know of is the exemption from taxation of the bonds of the state of Michigan issued for the purpose of paying a bonus to the soldiers. There is an exemption from anyone for a number of years upon cut-over land.—Legal Editor.

WE CAN'T RECOMMEND THEM

I would like to ask you if you know anything about the Gerhart Knitting Machine Co., of Clearfield, Pa., or the Auto Knitter Hosley Co., of Buffalo, N. Y? Having read your paper for some time I would like to hear about these concerns.—H. G. K., Kendall, Mich.

You may have read the M. B. F. but you did not read it carefully enough, or you would have seen what has been published about the Auto Knitter. We know nothing about the other knitter mentioned but most of our readers who have tried the Auto Knitter do not make a very favorable report of the results obtained.—Editor.

DIVISION OF PROPERTY

My stepmother recently died and left a will giving everything to my brother who has just spent 4 months on the farm. Has he the right to everything or can I come in for a portion? Can I put in a claim for labor on the property for having worked the farm the first year by myself. Also one hundred dollars of my own money was spent on the place. Any advice would be appreciated.—H. M., Holly, Mich.

A person of sound mind and without undue influence has the right to will their property to whoever they desire. It is possible that you may be entitled to a claim for labor and for money expended for the benefit of her property and the Probate Court might allow you for the same to be paid you out of the assets of the estate. If the will is good the property is to be distributed according to the will, subject to the payment of the debts and funeral expenses of the deceased.—Legal Editor.

GLAZED TILE FOR HOUSE

Have you ever seen a house built of glazed building tile or Natco hollow tile and if it is as cheap as brick or stucco, and where can I get same and if you know of a house built of tile where I can see one?—R. C., Ithaca, Mich.

I have never seen a house built of tile, but I understand that it makes a cheap, durable and attractive material and is used in house construction, quite generally thru the east. I have asked the National Fireproofing Company of Pittsburg and the J. M. Preston Co., of Lansing, manufacturers of tile to send you descriptive literature. Readers who have used tile in the building of houses are requested to advise of the results.—Editor.

PAYMENT FOR SERVICE OF SIRE

I purchased a mare that's with foal and did not know it at the time of purchase. Who pays the horse service?—R. S., Harbor Beach, Michigan

You would have to pay for the service if the owner of the sire has filed a lien as required by Sec. 14889 of the C. L. of 1915.—Legal Editor.

KNOW NOTHING ABOUT THEM

As I take the M. B. F. (and you bet we like the paper and what you do for the farmer) will you please publish in the next issue what you know about the Security Producing and Drilling Co., of Fort Worth, Texas. This company is selling stock and is sending circulars through the mail trying to get farmers to buy their oil stock.—R. C., St. Charles, Michigan.

As indicated by the headline we know nothing about this concern or its proposition. But it looks like another gang of human sharks who

(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 so requested.)

are out after "easy money." When you receive invitations from concerns like these to invest in their stock always remember that the true "bonanza" does not have to go far or seek long for barkers. The world is full of money just waiting for "sure things" to come along. Oil stocks are good things to leave alone. If you want to drown your money, drop it down the well.—Editor.

LIABLE FOR BALANCE DUE

In Aug., 1920 an auto sales company of Ann Arbor sold us a six-passenger car taking our Ford as \$400 dollars payment and \$115 cash, leaving a balance of \$1,000. They took our note for 6 months on their own note form with no collateral for security. The only security they had was the car, the title of which was to remain in their name. Before the six months were up prices dropped and we realized we never could make payment on the note so we wrote these people and told them they could have the car as we couldn't pay for it. They came down here to see us a few days before the note was due and flatly refused to take the car. They finally arranged to renew the note for 3 months. During that time we tried all over to sell the car in order to meet the note and failed, so we took the car back to them. They took the car and asked us to sign a note for sixty days while they sold the car. There was no written or oral agreement regarding the selling of the car. They said they would sell the car to cover the note. They did not agree to give us the amount they received over the face of the note. A month ago they wrote us saying that they were offering the car at \$600 which meant a loss of \$400 and wanted us to stand one-half of that or \$200 and \$70 interest. Now they threaten us with legal action to get settlement. Can they make us pay the difference?—C. K., Belleville, Mich.

They were not obliged to accept the car in return for the note. When you signed the note you made a promise to pay the amount of the note which they might enforce irrespective of the reservation of the title of the car. As they did not seize the car by virtue of their contract in the note retaining title they acted as your agent in selling of the car and I am of the opinion that they would be authorized to endorse the amount of the sale upon the note and recover the balance from you.—Legal Editor.

BEE KEEPING BOOKS

Where can I purchase a book on bee-keeping and how to make my own beehives?—A. R., Allen, Michigan.

There are many good books on the market pertaining to this subject, but it is not necessary to buy them in order to get the desired information. Both the M. A. C., East Lansing and the U. S. Department of Agriculture have published excellent treatises upon the subject and we have asked the latter to send you such bulletins as they now have available. If these do not give you what you want write us again.—Editor.

CANNOT DRAIN LAND

Wish your advice on where can we put in this claim to have it adjusted. There is a big state ditch about 40 rods west of my farm. In order to get benefit from this I must have an outlet through a culvert under a road. The farms east of mine all drain onto mine and altho I have ditches through and around my land there is water standing so deep I can't get my corn fodder. In fact, about 5 acres all told is under water. I have talked with the road commissioners and all they say is they will see and they do nothing further. This culvert is necessary to me and the farms north and east of me. Where can I go or write to have this culvert put in?—C. H. L., Caro, Mich.

Your neighbor would have no right to dig ditches or furrows upon their premises that would father the water in unusual quantities or quicker than in a state of nature and cast them upon your premises. In order to protect your land from their overflow they might be willing to join you in a petition for a ditch to connect this property with the public drain. If the natural drainage of the land as it lays in a state of nature is affected or impeded by a fill in the highway and the water would sufficiently drain from your premises if the fill was removed you

might have authority to compel the commissioner to remove the fill or to make an opening therein. It is possible that some one would be liable for the damage for stopping up the water way with a fill in the highway. There are so many facts involved in a transaction that it is almost necessary that you state fully the facts to a good attorney and take his advice.—Legal Editor.

ANOTHER "GLORIOUS OPPORTUNITY"

Will you please advise me if the proposition described in the enclosed circular is a good thing to invest money in?—J. F., Tyre, Mich.

No! Oil stocks are not safe things for a novice to play with. "Drilling," says your circular, "is going on at 1,890 feet and the formation shows we are practically on top of the oil sand. Eminent geologists forecast oil within 300 feet at the most." And then glowing instances of the "gushers" which have just come in all about this favored property. How many promoters of oil drilling companies have stood with expectant hearts while their drills pounded away a few feet from the "oil sands," only to be doomed to black disappointment when the drill failed to find the coveted pool of oil. When you are tempted to invest in oil stocks by the alluring tales of the fortunes that have been made in oil, just hesitate long enough to think about the fortunes that have been lost in oil wells and you may then be able to turn the tempter away.—Editor.

WHEN TAXES ARE RETURNED

If I should refuse to pay my taxes and let my land be sold under the tax title law, could the buyer take possession if I live on my farm, and if I should later take up the tax title, what would it cost me? I think this would be cheaper than to pay the interest charged by the banks.—Subscriber.

If you should allow your taxes to be returned they would bear three-fourths of one percent per month or the equivalent of nine percent per annum interest until paid. It takes nearly three years before the property can be sold upon the taxes and before a purchaser can take possession he must give six months written notice of his purchase of the title at tax sale so that the owner would have a least six months leeway after the property was sold. If you have a note in which 12 per cent interest was reserved or in which the equivalent of 12 per cent was reserved and taken out in the hands of the original holder of the note the maker would have no interest to pay whatever should the holder of the note bring suit thereon. The maker of the note may defend it in the hands of the original holder but when transferred to an innocent purchaser who knew nothing about the usury in the note he could not defend against such innocent holder.—Legal Editor.

PARENTS NOT HELD FOR CHILD'S ACT

I had an automobile accident which was caused by a boy under age, and want to know if I can collect for the damage done to my car. I have a judgment against him and would like to know whether his father will have to stand for it.—C. F., Fostoria, Mich.

The parent is not liable for the wrongs of his minor children unless the acts complained of were done under his direction or under such circumstances as to really make the child the agent of his father. This was probably looked into before taking judgment against the boy.—Legal Editor.

FARM LOAN BUREAU

I would like to know if the Federal Land Banks have headquarters in Washington, D. C., and if so what is the name of the man at the head of it.—G. C., Osseo, Mich.

The Federal Farm Loan Bureau at Washington, D. C., has direction over all the land banks. Chas. E. Lodbell is land bank commissioner and executive officer.—Editor.

HAVE YOU A JOB FOR THIS MAN?

A fine stalwart young man of nineteen years, accustomed to farm work, wants a job. If any of the M. B. F. readers can use him, write us.

DON'T BUY IT

A couple days ago an agent was around selling stock for the Lakontan Valley Sugar Co., located at Fallon, Nevada. He was an agent of the Baker-Shook Company of Bay City, a branch office of the Indianapolis home office. He said the factory was now in operation. Will you please look these people up and let me know as soon as possible whether this company is reliable and if the stock would be a good investment?—A Subscriber, St. Johns, Mich.

Yours is the second letter asking our opinion about this stock. Why in the world, friend subscriber, do you even think of investing your money in a proposition way out in Nevada when there are so many good investments right here in Michigan? I don't know anything about this company, but I'd advise you NOT to buy their stock just on general principles. The sugar industry is in a very precarious way just now. Nobody knows what the outcome will be. But if you want to buy sugar stock invest in the stock of going Michigan factories which can be bought on the market today for one-third to one-half of its par value.—Editor.

EX-SERVICE MAN NEEDS MONEY

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

No, the banks have no right to charge a bonus, but they do it. And the reason they do it is because there is no penalty for violation of the law. In order to make the law function the complaint must be made by the borrower which means that his credit in his community and elsewhere is forever ruined. No banker is obliged to loan money and its a foregone conclusion that he will not loan to the man who has made trouble for him. I know of no law authorizing the government to make direct loans to ex-service men, but if you have adequate security your banker should take care of you at prevailing rates. If he hasn't the cash necessary or can't get it from his correspondent banks, he can probably get some assistance from the War Finance Corporation.—Editor.

FISHING RESTRICTIONS ON OTSEGO LAKE

Please tell me if the officers of Otsego county have any right to restrict the spearing in Otsego Lake in the months of January and February.—A Subscriber, Gaylord, Mich.

Yes. You cannot legally take any kind of fish from Otsego Lake during the months of November, December, January, February or March. This is in accordance with a "local act" passed by the 1921 session of the legislature. If you violate this law you are subject to fine or imprisonment or both. Laws of this nature are usually passed at the instance of sportsmen who fish in the summer time and do not like to see the "natives" taking out large quantities of fish in the winter. Those who are in the habit of taking fish from this and other island "protected" lakes for food purposes in the winter time and believe they should be permitted to do so without molestation should take the matter up with their state representative.—Editor.

RENEWAL OF NOTE

If a person has a note at a bank which is endorsed and pays the interest every six months, how long can it run that way before they can close on it?—F. S., Romeo, Mich.

A note is good only for the time given when it is payable upon demand. Renewal of a note is optional with the bank which carries it.—Editor.

Uncle Rube Spinach Saus:



ANSWERS TO ENQUIRERS, ETC.

MOST EVERY one in a while I receive a letter or two, or maybe a card, askin' my opinion on some very important matter, an' now that I have a little breathin' spell, I'll jest try an' answer some of the most important questions an' git 'em off my mind. I'll say before beginnin' that I have given much thought to these problems for I know they concern the whole human race an' my greatest specialty is helpin' my feller human bein's.

Helen R. of Lake Odessa, an' vicinity, asks if she ought to wear her skirts longer? My dear Helen, without seein' you I cannot answer as perfectly as I would like. I do not know how long you wear 'em, you know; but this I can say: Some girls, on account of their complexions an' other things, look better with longer skirts, but if you have two real good reasons for wearin' 'em short why it's all right with me, keep on wearin' 'em. By special wire from Paris (Ill.) I am advised that they will be longer next spring. They are to be one-fifth of an inch longer, which means that by the time you are a grandma, skirts may be back to normal—an' then agin they may not—all dependin' on whether they are or not.

To George of Kalamazoo: No George, Admiral Simms was not called back from Europe an' given a reprimand 'cause there were jackasses in Congress. He wasn't really to blame for their bein' there, but he was called home 'cause he told about 'em in a foreign country, where they have plenty jackasses of their own. No the jackasses are not all in Congress. The supply is ample to keep Congress supplied for years to come 'an there'll be some left for state legislatures an' similar for a good while yet. Don't worry, we'll always have a plenty of 'em an' some of 'em's bound to be elected for somethin' every year.

Nellie G., Pontiac: No Nellie, I wouldn't recomend tar for the complexion. I know its bein' used to some extent by the Ku Kluxes an' the like, but its no improvement to the looks an' should be avoided. Ivory soap an' water, good exercise, such as sweepin', makin' beds, washin' dishes an' helpin' mother, is far better for the complexion than anything else I know an' if used freely, will make any girl look beautiful. Try it out an' report results.

Percival Vincent Brown, of Potterville, asks me how to get rid of warts. My dear Percy, warts used to be a very tender subject with me. I might almost say I hardly thought of any thing else for quite a long time an' I found the best an' 'bout the only way to get rid of 'em is to wish 'em onto somebody else. If your best girl goes back on you, wish 'em onto her; or if some feller steps in an' cuts you out, jest wish 'em onto him. Before doin' any wishin', it's well to rub salt onto the warts, then throw it—the salt, into the fire an' git away before you hear it snap dein' your wishin' while on the run. I lost most of my warts that way an' think it'll be alright for you to try it. Jest a little word of advice however—be sure the feller you wish 'em onto is smaller than your self, else unpleasant things might follow—you know what I mean don't you, Percy dear?

A "Spinster," of Grass Lake, writes to ask if I think that women will ever be on an equality with men? My dear Spinster—how beautiful the name—I am very much afraid that, unless women change their ways, the time is coming when they will be. Already they are headin' strong in that direction. More an' more are they acquirin' men's ways an' doin' the things that men, a few years ago would have been ashamed to do an' as proof of this I'll jest mention a few things that the dear women are doin' an' you can judge fer yourself how long it'll take to reach the equality which so many of 'em crave. Women today are settin' in juries, holdin' office an' smokin' cigarettes; they are wearin' one piece bathin' suits, attendin' prize fights an'

drinkin' bootleg whiskey; many of 'em are successful bootleggers, can run a still an' are bettin' on the races; some of 'em shoots their husbands, poisons their lovers an' attend Fatty Arbuckle parties; they expose more of their person than men dast do, play poker an' make home brew; they paint their faces (men only paint the nose), swear like pirates an' dance the shimmy; they stay out late nights, talk about their neighbors an' git divorces from their husbands; they run foot races, play baseball an' beat up the traffic cops; they chew gum in the church and theatre, lie about their age an' play the ukelele; yes, an' they wear rats in their hair, which the men can't, run automobiles an' airplanes an' wear shoes two or three sizes smaller'n their feet. So you see my dear "Spinny" that women are rapidly approachin' the time when they will be on an equality with men an' may in time surpass 'em.

However, it is my firm belief that women will never really git down to men's level until they can drink white mule, smoke a corn cob pipe an' chew Copenhagen snuff. I thank you. Cordially yours.—UNCLE RUBE.

A COMMUNICATION

Editor Business Farmer, Mt. Clemens, Michigan.
In compliance with the request of the Board of Directors of the Michigan Milk Producers' Association, I am forwarding you a report of their action upon a certain matter which is explained in the following communication:

Report of Committee:

To the Board of Directors of the Michigan Milk Producers' Association.
Gentlemen:

The committee, appointed to investigate the charges made against Mr. Geo. Burt, which charges were to the effect that Mr. Burt, as a representative of the Association was disloyal to the organization, have had the said matter under investigation and consideration for a period of two months and after making said investigation we wish to report that the findings of the committee are:

- (a) The said charges were made without any foundation of fact.
 - (b) That in no instance have we found any disloyalty on the part of Mr. Burt.
 - (c) That Mr. Burt should be commended for his faithfulness and loyalty to the Association.
- A. M. Eckles, C. E. Gittins, R. G. Potts, R. C. Reed, Committee.

Resolved, That the Secretary be instructed to forward a copy of this report to the Editor of the Business Farmer at Mt. Clemens, Michigan, and request its publication in that paper. Carried.—R. C. Reed, Secretary.

The London-Paris air liner record was made by a Handley-Page W. 8 twin engine biplane on its maiden voyage from Croydon, England to Paris, France, on Oct. 22nd, the distance of 240 miles being made in 2 hours and 7 minutes, with 12 passengers and large quantity of freight. The new plane is 75 feet wide and 61 feet long, and weighs when fully loaded, 12,000 pounds.

FUR DEPARTMENT

EDITED BY A. R. HARDING

America's Foremost Author and Trapper

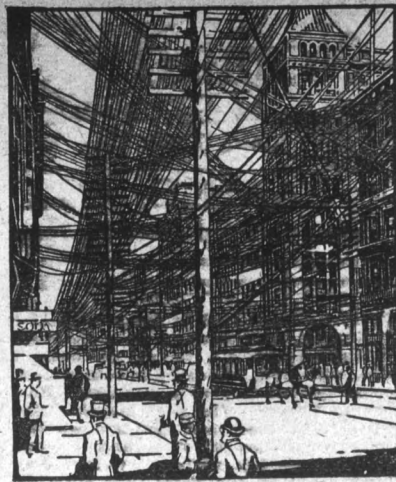
QUESTIONS ANSWERED

TANNING HORSE HIDES

Will you please publish how horse hides are tanned and the preparation used also? Can it be successfully done at home?—W. J. M., Gaylord, Mich.

To tan more quickly horse and cattle hides should have all surplus fat and flesh removed before tanning. A very good recipe is as follows: water, 1 gallon, salt, 1 quart, sulphuric acid, 1 ounce (fluid). Bring water to boiling to dissolve salt, and cool before adding acid. Of course you will need several gallons but use in same proportion. Don't lean over while pouring and stirring the acid in as the fumes are not beneficial. Keep in wood, earthen or glassware, never metal. It will take several days to tan. Keep in a place where the temperature is above freezing.

When taken out of the "tan" the hide should be rubbed and worked a great deal and then neatsfoot oil or rank butter applied to flesh side.



A scene on Broadway, New York, in 1890, showing the density of overhead wires.



The same scene after the overhead wires were replaced by underground cables.

Improvements

The history of the telephone is a record of constant improvement. Only by numerous inventions and ceaseless research for new and better ways has the present standard been reached.

Two-score years ago the telephone could hardly carry the human voice across a city. Now it carries it distinctly across this great continent. The once familiar network of overhead wires in large cities has been replaced by systems of underground cables, each cable containing thousands of slender, sensitive wires.

Switchboards, once primitive devices, called upon to handle only a few connections and limited in their workings, have now become great and precise mechanisms through which the volume and complexity of telephone traffic is handled with mechanical perfection.

With the continued growth in the number of telephone users, there is a continued increase in the problems of speed, accuracy and speech transmission.

These are the problems forever before the scientists and engineers of the Bell System; and the solution of these problems, in advance of necessity, is the objective of this great body of specially trained experts.

The Bell System will continue the improvements necessary to maintain its standard of service, which is the best and cheapest telephone service in the world.

"BELL SYSTEM"

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy, One System, Universal Service, and all directed toward Better Service

BUY Fence Now
Pre-War Prices
Price and Quality talks. You get both when you buy from Brown. My new 1922 cut prices have made a big hit—lower than ever. My (1)
Direct From Factory
freight prepaid plan of selling fence gates, steel posts, roofing and paint, is saving money for 600,000 farmers. Write for cut-price catalog—free.
BROWN FENCE & WIRE CO. Dept. 1271 Cleveland, Ohio

\$24.95 *American* **CREAM SEPARATOR**
On Trial. Easy running, easily cleaned. Skims warm or cold milk. Whether dairy is large or small, get handsome catalog and easy monthly payment offer. Address: AMERICAN SEPARATOR CO., Box 5067, Bainbridge, N.Y.

Only \$1.00 DOWN
FREE Lantern!
No Wicks
No Smoke
No Smell
300 Candle Power
15 Days Trial
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.
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.
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 \$8.50 is absolutely FREE. Let the SUNRAY bring light and cheer to your home. Act now!
Knight Light Co. Dept. 3301 Chicago, Ill.
Send me Torch Lighter for Kerosene Match Lighter for Gasoline Torch Lighter for Gasoline

(Continued from last week)

IN THAT moment of consternation and rage Neewa did not take size into consideration. He was much in the frame of mind of a man returning home to discover his domicile, and all it contained in full possession of another. At the same time here was his ambition easily to be achieved—his ambition to lick the daylight out of a member of his own kind. Miki seemed to sense this fact. Under ordinary conditions he would have led in the fray, and before Neewa had fairly got started, would have been at the impudent interloper's throat. But now something held him back, and it was Neewa who first shot out—like a black bolt—landing squarely in the ribs of his unsuspecting enemy.

(Old Makoki, the Cree runner, had he seen that attack, would instantly have found a name for the other bear—"Petoot-a-wapis-kum," which means, literally: "Kicked-off-his-Feet." Perhaps he would have called him "Pete" for short. For the Cree believes in fitting names to fact, and Petoot-a-wapis-kum certainly fitted the unknown bear like a glove.)

Taken utterly by surprise, with his mouth full of berries, he was bowled over like an overfilled bag under the force of Neewa's charge. So complete was his discomfiture for the moment that Miki, watching the affair with a yearning interest, could not keep back an excited yap of approbation. Before Pete could understand what had happened, and while the berries were still oozing from his mouth, Neewa was at his throat—and the fun began.

Now bears, and especially young bears, have a way of fighting that is all their own. It reminds one of a hair pulling contest between two well-matched ladies. There are no rules to the game—absolutely none. As Pete and Neewa clinched, their hind legs began to do the fighting, and the fur began to fly. Pete, being already on his back—a first-class battling position for a bear—would have possessed an advantage had it not been for Neewa's ferocious hold at his throat. As it was, Neewa sank his fangs in to their full length, and scrubbed away for dear life with his sharp hind claws. Miki drew nearer at sight of the flying fur, his soul filled with joy. Then Pete got one leg into action, and then the other, and Miki's jaws came together with a sudden click. Over and over the two fighters rolled, Neewa holding to his throat grip, and not a squeal or a grunt came from either of them. Pebbles and dirt flew along with hair and fur. Stones rolled with a clatter down the coulee. The very air trembled with the thrill of combat. In Miki's attitude of tense waiting there was something now of suspicious anxiety. With eight furry legs scratching and tearing furiously, and the two fighters rolling and twisting and contorting themselves like a pair of windmills gone mad, it was almost impossible for Miki to tell who was getting the worst of it—Neewa or Pete; at least he was in doubt for a matter of three or four minutes.

Then he recognized Neewa's voice. It was very faint, but for all that it was an unmistakable bawl of pain.

Smothered under Pete's heavier body Neewa began to realize, at the end of these three or four minutes, that he had tackled more than was good for him. It was altogether Pete's size and not his fighting qualities, for Neewa had him outpointed there. But he fought on, hoping for some good turn of luck, until at last Pete got him just where he wanted him and began raking him up and down his sides until in another three minutes he would have been half skinned if Miki hadn't judged the moment ripe for intervention. Even then Neewa was taking his punishment without a howl.

In another instant Miki had Pete by the ear. It was a grim and terrible hold. Old Soominitik himself would have bawled lustily in the circumstances. Pete raised his voice in a howl of agony. He forgot everything else but the terror and the pain of this new something that had him by the ear, and he rent the air with his outcry. His lamentation poured in an unbroken spasm of

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

(Copyright by Doubleday, Page & Co.)

SYNOPSIS

IT IS SPRING and in the northland Neewa, a black bear-cub, and his mother, Noozak, are starting on a journey to their feeding grounds. Challoner, a Hudson Bay Co. factor, discovers the tracks of the bears. He has a pup, Miki, with him, which he is taking to his sister, and he decides he would like to secure the cub to give to her also. He meets up with the bears, kills Noozak and secures Neewa. The next morning Challoner puts Miki and Neewa in the front end of his canoes and starts down the river. As they are nearing a waterfall the pup and the cub fight and roll out of the canoe. Challoner thinks the two will be killed but, unknown to him they arrive at the foot of the falls still alive. Coming out on the shore they start off through the woods. Neewa discovers a wasp's nest and tears it down. Neewa and Miki are badly stung but continue on their journey. They are attacked by a great owl but escape. They watch wolves kill a caribou and when the wolves leave they feast on the remains. With full stomachs they have a play and upon returning find two owls that have taken possession of the carcass are being attacked by a wolf. Neewa continues to feast on the carcass of the caribou and Miki leaves him to seek fresh meat. Miki discovers the camp of two men. He learns that it is not the camp of Challoner. He returns to Neewa who has been searching for him.

sound from his throat. Neewa knew that Miki was in action.

He pulled himself from under the young interloper's body—and not a second too soon. Down the coulee, charging like a mad bull, came Pete's mother. Neewa was off like a shot just as she made a powerful swing at him. The blow missed, and the old bear turned excitedly to her bawling offspring. Miki, hanging joyously to his victim, was oblivious of his danger until Pete's mother was almost upon him. He caught sight of her just as her long arm shot out like a wooden beam. He dodged; and the blow intended for him landed full against the side of the unfortunate Pete's head with a force that took him clean off his feet and sent him flying like a football twenty yards down the coulee.

Miki did not wait for further results. Quick as a flash he was in a currant thicket tearing down the little gulch after Neewa. They came out on the plain together, and for a good ten minutes they did not halt in their flight long enough to look back. When they did, the coulee was a mile away. They sat down, panting. Neewa's red tongue was hanging out in his exhaustion. He was scratched and bleeding; loose hair hung all over him. As he looked at Miki there was something in the dolorous expression of Neewa's face which was a confession of the fact that he realized Pete had licked him.

CHAPTER TWELVE

AFTER THE fight in the coulee there was no longer a thought on the part of Neewa and Miki of returning to the Garden of Eden in which the black currants grew so luciously. From the tip of his tail to the end of his nose Miki was an adventurer, and like the nomadic rovers of old he was happiest when on the move. The wilderness had claimed him now, body and soul, and it is probable that he would have shunned a human camp at this stage of his life, even as Neewa would

have shunned it. But in the lives of beasts, as well as in the lives of men, Fate plays her pranks and tricks, and even as they turned into the vast and mystery-filled spaces of the great lake and waterway-country, to the west, events were slowly shaping themselves into what was to be perhaps the darkest hour of gloom in the life of Miki, son of Hela.

Through six glorious and sun-filled weeks of late summer and early autumn—until the middle of September—Miki and Neewa ranged the country westward, always heading toward the setting sun, the country of Jackson's Knee, of the Touchwood and the Clearwater, and God's Lake. In this country they saw many things. It was a region a hundred miles square which the handiwork of Nature had made into a veritable kingdom of the wild. They came upon great beaver colonies in the dark and silent places; they watched the otter at play; they came upon moose and caribou so frequently that they no longer feared or evaded them, but walked out openly into the meadows or down to the edge of the swamps where they were feeding. It was here that Miki learned the great lesson that claw and fang were made to prey upon cloven hoof and horn, for the wolves were thick, and a dozen times they came upon their kills, and even more frequently heard the wild tongue of the hunting packs. Since his experience with Maheegun he no longer had the desire to join them. And now Neewa no longer insisted on remaining near meat when he found it. It was the beginning of the Kwashka-Hao in Neewa—the instinctive sensing of the Big Change.

Until early in October Miki could see but little of this change in his comrade. It was then that Neewa became more and more restless, and this restlessness grew as the chill nights came, and autumn breathed more heavily in the air. It was

HORSESHOE PITCHING

IT IS OUR OPINION that the farm family is as much entitled to healthy amusement as city folks and that horseshoe pitching is just as good sport and requires just as much skill as golf or tennis. The Business Farmer is encouraging township, county and statewide championship games to find a Michigan challenger for the national championship. We invite correspondence from those interested and will send a copy of the National Rules free on request addressed to Horseshoe Editor, The Business Farmer, Mt. Clemens.

WILL SEND LIST OF PITCHERS

Seeing your article in the Michigan Business Farmer this morning about horseshoe pitching, I am interested. We have a great many here who are enthusiasts in the game, in fact, we have some exceptionally good players and I would like to have you send me a set of the rules. Will furnish you a list of the players if you care to have them for your files.—Roland J. Frink, Clinton County, Mich.

GLAD TO SEE INTEREST IN GAME

As I am very much interested in the game of horseshoe throwing and play considerably would like the set of national rules. Glad people are beginning to see the merits of this game.—Jesse J. Russell, Muskegon County, Mich.

LIKES THE GAME

I notice that you would like to see Michigan farmers do more horseshoe pitching. As there is no sport I like better than a good game of horseshoe now and then I decided to write and ask you for a copy of the national rules as we do know the rules very well. When

we begin to throw a wicked shoe we will let you know.—P. M. Hanson, Bay County, Mich.

NOT MUCH DOING UNTIL SPRING

As I am interested in horseshoe pitching would like your rules on the game and will try and get up a club here. Will let you know how we get along, but probably there will not be much doing until spring.—M. W. Shafer, St. Joseph County, Michigan.

FAIRLY GOOD PITCHERS

I am a reader of your valuable paper and approve it as much as I enjoy it. I am interested in horseshoe pitching and would like a set of the national rules. We have fairly good pitchers here.—Andrew E. Surowka, Saginaw County, Mich.

PITCHED DURING SCHOOL DAYS

Please send me the national rules on horseshoe pitching. I am interested in the game as it used to be one of our principal games at the little country school in southern Michigan where I received my education.—E. D. Post, Antrim County, Mich.

Neewa who took the lead in the peregrinations now, and he seemed always to be questing for something—a mysterious something which Miki could neither smell nor see. He no longer slept for hours at a time. By mid-October he slept scarcely at all, but roved through most of the hours of night as well as day, eating, eating, and always smelling the wind for that elusive thing which Nature was commanding him to seek and find. Ceaselessly he was nosing under windfalls and among the rocks and Miki was always near him, always on the qui vive for battle with the thing that Neewa was hunting out. And it seemed to be never found.

Then Neewa turned back to the east, drawn by the instinct of his forefathers; back toward the country of Noozak, his mother, and of Soominitik, his father; and Miki followed. The nights grew more and more chill. The stars seemed farther away, and no longer was the forest moon red like blood. The cry of the loon had a moaning note in it, a note of grief and lamentation. And in their shacks and tepees the forest people sniffed the air of frosty mornings, and soaked their traps in fish-oil and beaver-grease, and made their moccasins, and mended snowshoe and sledge, for the cry of the loon said that winter was creeping down out of the north. And the swamps grew silent. The cow moose no longer moored to her young. In place of it, from the open plain and "burn" rose the defiant challenge of bull to bull and the deadly clash of horn against horn under the stars of night. The wolf no longer howled to hear his voice. In the travel of padded feet there came to be a slinking, hunting caution. In all the forest world blood was running red again.

And then—November.

Perhaps Miki would never forget that first day when the snow came. At first he thought all the winged things in the world were shedding their white feathers. Then he felt the fine, soft touch of it under his feet and the chill. It sent the blood rushing like a new kind of fire thru his body; a wild and thrilling joy—the exultation that leaps through the veins of the wolf when the winter comes.

With Neewa its effect was different—so different that even Miki felt the oppression of it, and waited vaguely and anxiously for what was to come. And then, on this day of the first snow, he saw his comrade do a strange and unaccountable thing. He began to eat things that he had never touched as food before. He lapped up soft pine needles and swallowed them. He ate of the dry, pulpy substance of rotted logs. And then he went into a great cleft broken into the heart of a rocky ridge and found at last the thing for which he had been seeking. It was a cavern—deep, and dark, and warm.

Nature works in strange ways. She gives to the birds of the air eyes which men may never have, and she gives to the beasts of the earth an instinct which men may never know. For Neewa had come back to sleep his first Long Sleep in the place of his birth—the cavern in which Noozak, his mother, had brought him into the world.

His old bed was still there, the wallow in the soft sand, the blanket of hair Noozak had shed; but the smell of his mother was gone. In the nest where he was born Neewa lay down, and for the last time he grunted softly to Miki. It was as if he felt upon him the touch of a hand, gentle but inevitable, which he could no longer refuse to obey, and to Miki was saying for the last time: "Good-night!"

That night the pipoo kestlin—the first storm of winter—came like an avalanche from out of the North. With it came a wind that was like the roaring of a thousand bulls, and over all the land of the wild there was nothing that moved. Even in the depth of the cavern Miki heard the beat and the wail of it and the swishing of the shot-like snow beyond the door through which they had come, and he snuggled close to Neewa content that they had found shelter.

With the day he went to the slit in the face of the rock, and in his

astonishment he made no sound, but stared forth upon a world that was no longer the world he had left last night. Everywhere it was white—a dazzling, eye-blinding white. The sun had risen. It shot a thousand flashing shafts of radiant light into Miki's eyes. So far as his vision could reach the earth was as if covered with a robe of diamonds. From rock and tree and shrub blazed the fire of the sun; it quivered in the tree-tops, bent low with their burden of snow; it was like a sea in the valley, so vivid that the unfrozen stream running through the heart of it was black. Never had Miki seen a day so magnificent. Never had his heart pounded at the sight of the sun as it pounded now, and never had his blood burned with a wilder exultation.

He whined, and ran back to Neewa. He barked in the gloom of the cavern and gave his comrade a nudge with his nose. Neewa grunted sleepily. He stretched himself, raised his head for an instant, and then curled himself into a ball again. Vainly Miki protested that it was day, and time for them to be moving. Neewa made no response, and after

a while Miki returned to the mouth of the cavern, and looked back to see if Neewa was following him. Then, disappointed, he went out into the snow. For an hour he did not move farther than ten feet away from the den. Three times he returned to Neewa and urged him to get up and come out where it was light. In that far corner of the cavern it was dark, and it was as if he were trying to tell Neewa that he was a dunce to lie there still thinking it was night when the sun was up outside. But he failed. Neewa was in the edge of his Long Sleep—the beginning of Uske-pow-a-mew, the dream land of the bears.

Annoyance, the desire almost to sink his teeth in Neewa's ear, gave place slowly to another thing in Miki. The instinct that between beasts is like the spoken reason of men stirred in a strange and disquieting way within him. He became more and more uneasy. There was almost distress in his restlessness as he hovered about the mouth of the cavern. A last time he went to Neewa, and then started alone down into the valley.

(Continued next week)

Winter Conveniences for the Farm Home

LIKE MOST country places, our home was not equipped with an abundance of conveniences in the way of toilet facilities. The house was an old one with large rooms such as it was the fashion once to make. We had an abundance of room but no facilities. Furthermore circumstances in general forbade us equipping the house with an expensive water system. However, we became resourceful, and at a very small cost, provided a number of conveniences that have in a single winter provided comforts worth vastly more than the entire cost.

One of the large rooms was deprived of a bit of its space in one corner, much to the improvement of the room, let it be said. By using wall board and some scantlings which we had on hand, this corner was partitioned off into another small square room. One door was placed in the partition while one of the outside windows was taken in the small room. All this work we were able to do ourselves.

At a plumbing shop we secured for five dollars an old marble-top sink or wash bowl, fitted with faucets, etc. This was placed in one corner, and connected with pipes leading to a tank in the attic.

A small framed mirror was purchased and by means of hinges, a knob and a latch, this was made the door to a box of the same size fitted with three shelves. This was hung in the corner over the wash stand, thus at once providing a mirror and a receptacle for toilet articles.

A small wooden arm was hung on a hinge so that it could swing freely in a complete semi-circle. This was attached to the wall just above the mirror. Electric light wires were then brought into the room, down the wall and out to the end of the wooden arm where the socket and shade were attached. The arm, or bracket, was placed so that it would be just slightly above the average person's head, yet within easy reach. By swinging the arm

the light is shifted so as to light either side of the face, which is a pronounced convenience to a man when using the mirror to shave. Thus a convenience in lighting was provided by a little resourcefulness and at a cost almost negligible.

The other convenience, the greatest of them all, was an up-to-date chemical closet. Before purchasing a chemical closet, took a great deal of time to investigate the matter. First, as to whether or not the closet was satisfactory in a general way; secondly, as to the type to buy.

We talked to parties who had used them, we read the testimonials in the manufacturer's literature, and in every case we learned that where the ventilation pipe is properly conducted outside where it will produce a draft that will carry the decomposition odors to the outside air the results have been highly satisfactory.

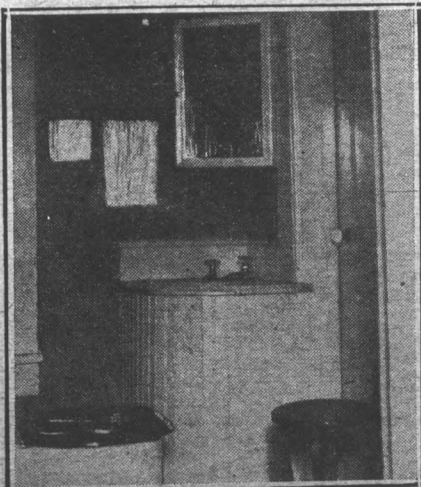
Health officers endorse them, school officials recommend them, farmers and people in rural villages who for years have suffered the discomforts of an out-door closet, lend their enthusiastic testimonials for the sanitary closet. So we were readily convinced on the matter of the closet being a success.

As to the type to buy, we found that all the closets put on the market by numerous manufacturers are of the same general type. The principle of operation is the same. However we did find that in the matter of general appearance there is a vast difference, with, of course, a more or less difference in price. One can find them from the very cheap ones with galvanized metal, unpainted, to those that are finished up in a way that makes it just as attractive in a room as the regular closet fittings.

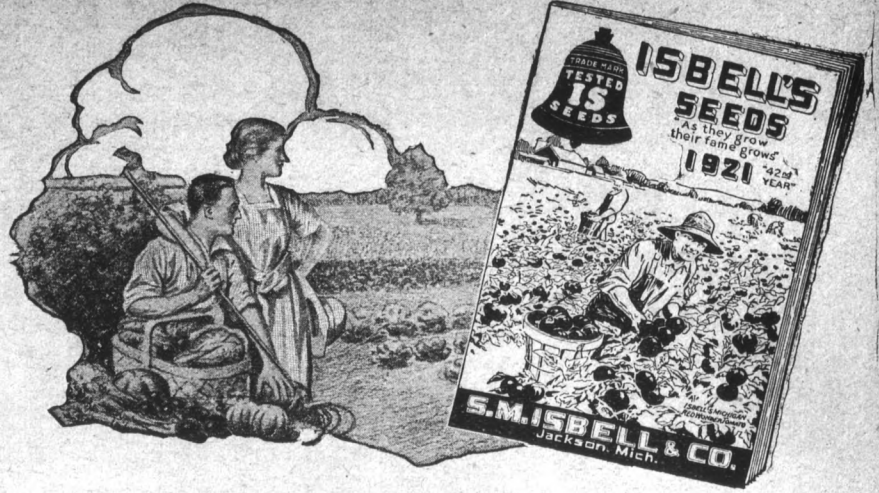
We were not long in deciding which of these various kinds to purchase. The most attractive one that we could find and the least expensive, when we considered appearance, was the one that we sent for. We have never regretted our selection. It is built strong and durable besides being finished in white with an attractive dark cover. In our room, which we finished in white, it fits with a pleasing harmony.

There comes with it enough pipe for the ventilating conductor both inside the room and outside the house. Also enough chemical to last for a long time.

Since using the closet we are heartily endorsing it to all those of our friends who are still undergoing the inconveniences and discomforts that we succeeded in overcoming in a way that any other farmer can duplicate and with a cost so small that it is not worth considering. In our own case, for instance, the work was done in the winter days when we were otherwise idle. The convenience and satisfaction in a single winter has been worth vastly more than it all cost, while we still have what it has meant by way of increasing the value of the property. —P. C. G.



Conveniences which can be installed in any farm home at little expense.



What Makes Your Garden Grow?

Good, productive, well fertilized soil, free from weeds, is one thing to produce big crops. But pure, tested, sterling quality seeds, adapted to the location, are first in importance to make your garden grow and yield the biggest cash returns.

Hardy, Big Yielding, Northern Grown

Isbell's Seeds
"As They Grow Their Fame Grows"
For Field For Garden

Have proved themselves the best by test. Earliness and hardiness are bred into Isbell seeds through years of scientific culture. They produce big, thoroughbred crops the same as thoroughbred cattle produce thoroughbred offspring. They inherit a rugged, big yielding quality that makes them grow even in spite of hardships. It takes experience to produce such seeds and Isbell has had 42 years of it. We grow our own.

Write for Your FREE Catalog TODAY

Your name and address on a post card will bring you this valuable book—it describes the best in seeds—gives cultural directions—shows how Isbell seeds are grown and quotes direct prices. It is one of the most helpful catalogs in America. Send for your copy now.

S. M. ISBELL & COMPANY
549 Mechanic St. JACKSON, MICH.

ALL-RUBBER ARCTICS

\$1.88 HALF PRICE
Plus Postage on Arrival **Send No Money**

Order No. MB 179 Sizes 7 to 12

All First Quality—Brand New Arctics

We have a limited quantity of first quality, all-rubber, 4-buckle arctics worth \$4.00 to \$5.00 per pair which we are offering at \$1.88 while they last. They are all top quality; every pair guaranteed perfect condition. You need not send a penny with your order—just pay the postman \$1.88 plus postage when they arrive. Then examine them, and if you don't feel they are worth double the money, return them and we will gladly refund every cent.

HIP BOOTS, \$2.98

Men's first quality hip boots at \$2.98 plus postage Sizes 7 to 12. Order No. MB 173. Send for our catalog.

GORDON BATES SHOE CO.
Minneapolis, Minn.

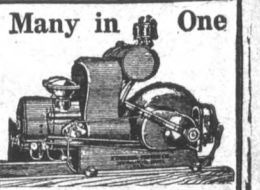


CHANGE POWER AS YOU CHANGE JOBS

1½ to 6 H. P. just as you need it. The one economical engine on all farm jobs up to 6 H.P. Saves investment, upkeep, time. Portable.

WORLD'S GREATEST FARM ENGINE

Busiest machine on the farm. Wonderful value at less than pre-war price. Never was such an engine bargain. Direct from factory to you. Learn about this wonderful farm helper. Kerosene or gasoline. No cranking. Write for description and factory price.



Don't Wear a Truss



C. E. BROOKS, 463F State Street, Marshall, Mich.

BROOKS' APPLIANCE, the modern scientific invention, the wonderful new discovery that relieves rupture will be sent on trial. No obnoxious springs or pads. Has automatic Air Cushions. Binds and draws the broken parts together as you would a broken limb. No salves, No lies. Durable, cheap. Sent on trial to prove it. Protected by U. S. patents. Catalogue and measure blanks mailed free. Send name and address today.

Only \$2 DOWN ONE YEAR TO PAY

\$38 Buys the New Butterfly Jr. No. 2½. Light running, easy cleaning, close skimming, durable. **EASY TO CLEAN**. NEW BUTTERFLY separators are a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 shown here; sold on **30 DAYS' FREE TRIAL** and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money. **ALBAUGH-DOVER CO., 2260 Marshall St., Chicago**

BARREN COWS are the results of **CONTAGIOUS ABORTION**. Prevent this by using **ABORNO**. Easily administered by hypodermic syringe. Kills abortion germs quickly without harming cow. Write for booklet with letters from users and full details of Money-Back Guarantee. **ABORNO LABORATORY**, 42 Jeff St., Lancaster, Wis.

EVERGREENS Hill's Hardy Tested Varieties. Fine for windbreaks, hedges and lawn planting. All hardy, vigorous and well rooted. We ship everywhere. Write for free Evergreen book. Beautiful Evergreen Trees at moderate prices. **H. Hill Nursery Co., Box 295 Duoden, Ill.**

The Michigan BUSINESS FARMER

An Independent Farmer's Weekly Owned and Edited in Michigan

SATURDAY, DECEMBER 31st-JANUARY 7, 1921-1922

Published every Saturday by
THE RURAL PUBLISHING COMPANY, Inc.
Mt. Clemens, Michigan

Represented in New York, Chicago, St. Louis and Minneapolis by
the Associated Farm Papers, Incorporated

GEORGE M. SLOCUM PUBLISHER
FORREST A. LORD EDITOR

ASSOCIATES:
Frank R. Schalek Assistant Business Manager
E. R. Walker Circulation Manager
M. D. Lamb Auditor
Henry F. Hopkins Plant Superintendent
Milan Grinnell Managing Editor
Grace Nellis Jenney Farm Home Editor
H. H. Mack Market and Live Stock Editor
William E. Brown Legal Editor
W. Austin Ewalt Veterinary Editor

ONE YEAR (52 Issues) \$4; TWO YRS (104 Issues) \$1.50
THREE YRS. (156 Issues) \$2; FIVE YRS. (260 Issues) \$3.00
The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: Forty-five cents per agate line. 14 lines to the column inch, 772 lines to the page. Flat rates.
Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.



RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in 'The Michigan Business Farmer'." It will guarantee honest dealing.

Entered as second-class matter, at post-office, Mt. Clemens, Mich.

Look Ahead

WE CAN liken the new year that is upon us to nothing better than the calm which follows the storm. The year just closed has been a turbulent one. Business the world over has passed through great stress and disaster. We have been driven by the tempest from port to port as it were, trying desperately all the while to anchor but finding nothing substantial nor enduring to which to tie our bark. Many thousands have gone down never to return. The storm-tossed waves are covered with wreckage upon which human beings struggle with new hope against the time when the waters shall quiet down and they may drift to shore. The storm is subsiding. The clouds are breaking away. Soon the warm sun of a new day will arise above the horizon and fill us again with warmth, joy, hope and encouragement. Look ahead!

The Future of Farming

AS FOR the farmer, he has suffered the worst of all. Slowly, slowly the truth has gone home to the nation that agriculture, upon whose firm foundation the rest of our national prosperity structure is laid, has suffered a blow from which it will take some years to recover. Selfish business measures the plight of the farmer in the dollars and cents less to the business world. But we who live so close to the farm hearthside see another aspect to the situation. We see the dark shadow of the mortgage, the heavy hand of the tax collector, the venal demands of the usurer, the broken hopes, the black discouragements which hang like a pall over many farm homes today throughout the length and the breadth of the land. For some of these farmers there is no hope. Bankruptcy stares them in the face; they must see the little farm for which they have struggled go to meet their obligations. They must strike out anew. For the young it may be but another delightful adventure. But for the old, it is hard, so pitifully hard. Others who say there is no hope will find their feet. Providence is more kind than cruel. She will show them the way.

But even for the farmer the future is bright. Prices have reached or are near the bottom. And the things he has to buy are on the way. A little over a year back he saw his own prices crashing downward while other prices held stationary or advanced. Very soon now he will witness exactly the opposite, his own prices advancing and others declining. Some day, perhaps within another year, these prices traveling in opposite directions will find a common level. When that happens we will have normalcy, dearly bought though it will be.

In looking toward the future we should

purge our minds of certain notions. We may safely accept it as a fact that the prices of farm products will not again reach the high point of 1919 and 1920, at least for many years, barring another war or a great crop calamity. We may reasonably expect that prices on the majority of next season's crops will average much higher than they have thus far on last year's, but they will not approach the 1920 level. Whatever the improvement may be it will be a God-send to the farmer and the millions who depend upon his purchasing power for their livelihood.

Crop and Market Outlook

NOTHING short of a world panic can prevent substantial gains in the prices of many farm products before another season's crops are gathered. This prediction is based on the established fact that a large percentage of the 1921 crops have been sold by the farmers and are either consumed or in strong hands able to hold for larger prices. The speculators will, as usual, get the major benefit of the higher prices though some benefits will dribble through to the farmer whose bank account and credit has been large enough to enable him to hold. With some minor exceptions all remaining crops will be in fair demand from now on with prices tending upward.

So far as acreage is concerned the tendency will be toward fewer acres and less risk and work. There will be more men to farm but less machinery and fertilizer to farm with. Farmers will take a chance on fields which aren't fit to produce a decent crop. And they will not be so particular about the quality of their seed. We may, therefore, look for a smaller total acreage and a smaller total production.

The corn acreage will be greatly reduced particularly in the surplus states. The crop on hand now is nearly a third of a billion bushels more than the normal surplus. The corn farmer's financial safety depends upon cutting this down, and a word of mouth campaign with this in view is already going the rounds of the corn belt. But that should not influence the Michigan business farmer. He should plant his usual acreage for feeding purposes.

The world wheat acreage will be substantially the same as the 1921 acreage. Some countries will plant less; others more. The yield per acre will be less. Soil fertility has suffered from the abnormal drain of the past few years and the great droughts of 1921 have not helped the soil.

More acres will be planted to oats and the total yield will probably be larger. It is not likely that we shall have two years of blasted oat crops in succession.

True to the rule of averages which has seldom failed in the past quarter of a century the potato acreage will be slightly increased in all countries. The U. S. production will exceed 1921, but will not be nearly so large as the 1920. Here, again, the ability of the farmer to buy fertilizer and certified seed will be a reckoning factor in the acre yield.

The bean acreage will be largely increased in Michigan and New York, but will probably show a falling off in California and other western states. Many farmers in Michigan who turned from beans to sugar beets will surely turn back again this year. That will mean more beans and less sugar beets, which will be well for all concerned.

Dairy production will increase if anything. And prices must inevitably go to still lower levels. That will force every dairyman to practice the most rigid economy and follow the most prolific production methods. Fewer cows and more milk per cow will be his salvation. The poor cow will have to go to the shambles. Low milk prices will force farmers into the marketing end, also. Despite the farmer's low financial condition he will find money to finance his marketing projects. Farmers will soon realize the absurdity of working fourteen hours a day, to save a penny here and there while the cost of marketing remains so high. So in 1922 we will

see many dairymen's organizations going into the actual distribution of fluid milk and the manufacture of dairy products.

In Conclusion

THE STORM is nearly spent. But it will take us some little time to gather our wits, regain our breath and get to solid ground. To repair the damage that has been done will require patience and a good deal of hard work. The job cannot be done in one year or two. But every day that passes by from this time on should give us new encouragement and determination to go forward. Farming has not yet seen its best days. There are rich rewards ahead for the man who has the will to conquer his discouragements and begin again.

Recognition

IT WOULD appear that the American aristocracy of great wealth and special privilege is about to recognize its poor relation, the farmer. For many months, this toil-worn son of the sod has stood shivering at the back door for admission and sustenance. But instead of wheat he has been given chaff; instead of meat he has been given bone; instead of welcome he has received the cold shoulder of indifference.

But friends have interceded. The door has been opened a crack, giving him a glimpse at least of the warmth and the abundance inside. After many months of fruitless pleading on the part of the farmer's friends, the "rich uncle" has finally deigned to notice his kin. The agricultural inquiry committee has made its report and the essence of it is unqualified "recognition" of the farmer.

This committee was appointed some months ago to find out what was wrong with agriculture. It has had to contend with the indifference of the public and the opposition of certain small selfish groups, but it has done its work well, and here are a few of the things it recommends:

1. That the federal government affirmatively legalize the co-operative combination of farmers for the purpose of marketing, grading, sorting, processing, or distributing their products.
2. That the farmer's requirements for credit corresponding to his turnover and having maturity of from six months to three years, which will enable payment to be made from the proceeds of the farm, be met by an adaptation of the present banking system of the country, which will enable it to furnish credit of this character.
3. That there be a warehousing system which will provide a uniform liability on the part of the warehousemen and in which the moral and financial hazards are fully insured.
4. That an immediate reduction of freight rates on farm products is absolutely necessary to a renewal of normal agricultural operations and prosperity. Prompt action by the railroads and constituted public authority to that end must be forthcoming.
5. That there be an extension of the statistical divisions of the Department of Agriculture, particularly live-stock statistics.
6. That provision be made by Congress for agricultural attaches in the principal foreign countries producing and consuming agricultural products.
7. That more adequate wholesale terminal facilities be provided for handling perishables at primary markets, with a more thorough organization of the agencies and facilities of distribution in the large consuming centers of the country.
8. That better roads to local markets, joint facilities at terminals connecting rail, water and motor transport systems, and more adequate facilities at shipping points be constructed, with a view to reducing the cost of marketing and distribution.

A mean trick has been played on Congressman Fordney. Someone sent him two knives exactly alike and both made by Henckle in Germany. One of the knives was supposed to have been bought in Germany at a cost of 9.6 cents. The other at Marshall Field's in Chicago at \$5. Congressman Fordney is using the incident in his speeches to convince the public that the importer is a profiteer and should not be reckoned with in the new tariff schedule. The mean part lies in the fact that a Henckle knife cannot be bought of any merchant in Germany for the equivalent of 9.6 cents. The editor knows because he bought a Henckle knife while in Germany for which he paid 125 marks or the equivalent at that time of \$1.75. Moreover, he is quite sure that no one would pay Marshall Field \$5 for the same knife.

NOTICE TO SUBSCRIBERS

TO MAKE up for the loss of the Dec. 31st issue of the Business Farmer which was unavoidably omitted because of improvements to our press, we will extend all subscriptions one week following date of expiration.

SOME OBJECTIONS TO CONSOLIDATION

(Continued from page 7)

much as the district is bound to keep them and pay them.

The laws of today are being made by the few, functioned by the few, to compel the many to do as the few want, whether for better or worse. When we vote for a consolidated school we vote to let the state officers at Lansing run our school for us. Read the school law if you don't think I am right.—Archer R. Tobey, Kalamazoo County, Mich.

In the discussion of this and other subjects we must stick to the facts. I must, therefore, correct you on one of two points. The superintendent of public instruction has no control over salaries of school teachers. The contract is entirely between the school board and the teacher. The board sets the salary. Again, I may say, that consolidation is not a "pet" scheme of Mr. Johnson's. The consolidated school has been agitated by the leading educators of the country for years and in most states of the union the consolidated school is an established institution. With those facts in mind we can more fairly judge of the issue in this state. And this should not be entirely a matter of opinion. Our judgment should rest finally upon what the majority have found out by experience in districts which have been consolidated. If they, after a thorough test of the consolidated school, are not satisfied with the experiment I think it would be a fair criterion to go by. And vice versa, as well. Other communications on this subject will be published from time to time, together with such facts as our editorial staff is able to gather from consolidated school districts.—Editor.

THEY STAND BY THE COUNTY AGENT

Editor's Note: The publication of a letter in several issues back criticizing the work of the Luce county agricultural agent has brought many farmers to his defense. Below are published two of the letters received from Luce county farmers commending the work of their agent.)

WHILE READING through your issue of Dec. 10, 1921, I see where a person signing F. E. R. from Luce county, Mich., says some of our neighbors can't see where they are being benefitted to one dollar by our county agent.

In reply I wish to say that our county agent is and has been a real live wire and has done every thing he could. Of course there are some he can't do much for because they won't let him and he is no good because he won't listen to their hot air.

When any good American citizen says that he is not a benefit there is sure something wrong with their head or they may be blind or have not brains enough to think back a year or two when our local merchants were soaking us \$22 per bushel for clover seed and \$28 per hundred for dynamite and were offering us 50c per bushel for our potatoes and would not take them at that price. Our county agent was right on the job to get men in to buy our potatoes at 70 and 75 cents per bushel, cash at the car and sold nine car loads. He dug us up a whole carload of dynamite at \$6 per hundred and A. No. 1 clover seed at \$14 per bushel. These are only a few of the many benefits he has been to the Luce county farmers. I am sure the expense of keeping him does not all come out of F. E. R.; of course there is always and always will be some sore head; they should use a good liniment. Come again, F. E. R.

Keep up your good work, Mr. Editor, we sure like your paper. You have the right dope.—A Luce County Farmer, Newberry, Mich.

HOW THE COUNTY AGENT HELPS

IN THE Business Farmer for Dec. 10th, appeared a letter from Luce county, criticizing the county agent. The editor wants to hear from those who think the county agent is of any benefit to the farmer. He certainly is, but you know, Mr. Editor, that when you get a county agent who is helping the farmer he will have all or nearly all business men against him.

Luce county is a little different from your counties below the straits. We raise some crops like potatoes, which we need an outside market for. The local market can not take care of all. That is where the county agent has got to help us. The first year the county agent was here he sold 9 carloads of potatoes for

the farmers for 70 cents a bushel. The storekeepers would not pay 10 cents a bushel because they could not handle them.

But here is where the trouble comes in. We organized a Farm Bureau a year ago; the county agent was very active in helping organize it. We don't yet raise enough feed for our needs, so we have to buy bran, middlings, corn, flour and a lot of other things. Our local price was rather high so we, through our county agent and Farm Bureau started to take in feed in carload lots, and we saved a lot of money. At the same time the local market came down giving everybody a benefit. Retail prices at Newberry were about the following: Corn, \$40 and \$45 a ton, bran and middlings, \$39 and \$40 a ton; flour, \$12 a barrel. We could get carload lots through our local merchants at following prices: Corn \$26 a ton; bran and middlings, \$21 a ton; flour, the very best \$9 a barrel giving the storekeeper at this price a small profit for handling it.

The very same farmers who are fighting the county agent objected to dealing with any local merchant, but we did not organize the Farm Bureau to put the storekeeper out of business. I think we need each other. But it is hard times and we have to try to buy our stuff the cheapest we can, that is what the storekeeper's are doing.

We are getting a lot of certified Michigan grown clover seed and genuine Grimm alfalfa seed through the county agent and Farm Bureau and you know that clover seed bought in a lot of stores is half Italian or southern grown seed. It is wasting time and money to seed it. All this outside buying, of course, is taking some profit from our local stores. But, Mr. Editor, do you blame the farmers if they try to do a little better than they have been doing before?

The whole thing in a nutshell is this: The county agent is working to help the farmers here in every way he can, and business doesn't like it. "He is going to get fired out of here next fall," as one storekeeper put it, "and we got farmers helping us to do it." And it looks like some narrow-minded farmer is helping to hurt himself, judging from his letter in M. B. F.

But this farmer is "way off" when he says a lot of his neighbors can see no benefit from the county agent. Everybody has been praising the county agent for the hard work he put in this year on our county fair, getting everybody interested, girls and boys included, and for a poor season as we had this year, we had the most successful and biggest fair we ever had. And most of the credit goes to the county agent in that case. He is encouraging farmers to raise more pure-bred stock, to raise Rosen rye, red rock wheat, pedigreed oats, getting more bushels to the acre, was helping in every way to fight grasshoppers and is doing a lot of other things that no white man can deny.

But Christ had one traitor among his twelve disciples which sold out for a few cents and I wonder if we today have narrow-minded farmers that will do the same? What do you think Mr. Editor?—One Who Believes in a Square Deal to All, Newberry, Mich.

ODDS AND ENDS

European reports show Germany has spent over 17 million marks since the armistice in reconstructing her commercial aviation. At present there are 15 lines connecting the principal cities of Germany with international lines. In 1921 a total of 5,981 passengers and 13,417 pounds of mail were carried on 2,714 trips.

Ex-service men who have allowed their war-risk insurance to lapse may have their policies reinstated at any time before March 4, 1926. Earlier regulations set the last date on which reinstatement could be made as Jan. 1, 1922. Fuller details concerning the reinstatement of lapsed policies may be obtained by writing the Federal Board for Vocational Education at 14 East Congress street, Chicago.

Department of Agriculture bulletin No. 612, "Breeders of Beef Cattle," gives the characteristics of the beef and dual-purpose breeds raised in the United States and a brief history of their development in this country. The bulletin may be had free by addressing the department at Washington, D. C.



Sponge Cake Recipe

5 eggs, 1 cup sugar, 1 cup water, 1 1/2 cups Lily White Flour, 1 heaping teaspoon baking powder sifted with flour five times. Flavor to taste. Cook sugar with water until it is a thick sirup. Let cool and pour over well beaten yolks of eggs. Fold in flour, then the beaten whites and flavor. Bake quickly in layers or in a sheet.

Lily White

"The Flour the Best Cooks Use"

When flour is milled from the finest wheats grown in America, with such extraordinary care and sanitation that it possesses absolute uniform granulation, proper color, texture and nutritive value, the best baking results are not only possible, but assured. Your success with LILY WHITE will surprise and delight you. The next time you bake try it.

Guaranteed

Look for the ROWENA trade-mark on the sack

If a trial does not convince you your grocer will refund your money, for LILY WHITE must please you better than any flour you ever used. It is backed by a guarantee extending through nearly three generations.

Call up your dealer today.

VALLEY CITY MILLING COMPANY
GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years"

Improve Your Farm *The Kalamazoo Way*

DECAY is the world's greatest destroyer. It robs you of farm profit. Stop decay and you win. By building with Kalamazoo Glazed Tile, greater comfort, convenience and ever-lasting value are added to your farm.

Kalamazoo GLAZED BUILDING TILE

made of genuine fire-clay—cannot decay or burn. Special block construction makes walls air-tight, wind and frost-proof. No chance for rats or vermin. Beautiful buildings that need no paint to keep them in condition. No expensive upkeep, but constant and dependable service and protection.

FREE ESTIMATES AND BUILDING HELPS

Send rough sketch of buildings wanted and receive complete estimates on cost of Kalamazoo tile construction. Let us help you. Write today. If interested in silos, ask for our catalogue of wood and tile silos.

KALAMAZOO TANK & SILO CO.
Dept. 444, Kalamazoo, Mich.

When Writing to Advertisers, Please Mention the Fact that You Saw it in the Michigan Business Farmer. It will Help Both of Us.

PEOPLE TALKED ABOUT

MRS. CORA HARRIS, author of "The Circuit Rider's Wife," and "Eve's Second Husband," did not awaken to find herself famous. She has been getting famous for twenty years, but her friends only discovered her literary identity recently. Although her story, "The Circuit Rider's Wife," did not appear under her name, it was at once recognized as her work by those who knew her best, for it contained much of the experience of her early married life as the wife of a "circuit rider" in the Southern Methodist Church. Her husband, Lundy H. Harris, was generally supposed to be the hero of the story, which was not altogether to the liking of his fellow-churchmen. At the time of its appearance he occupied a high official position in the publishing house of the church, at Nashville, Tenn., where Mrs. Harris now lives. Last September he committed suicide and soon after his death the clerk of the court requested of Mrs. Harris an inventory of her husband's estate. In answer she wrote to the clerk as follows: "It is not with any intention of showing an egregious sentimentality that I say I find it impossible to give you a complete and satisfactory inventory of the estate of Lundy H. Harris. The part that I give is so small that it is insignificant and misleading. At the time of his death he had \$2.35 in his purse, \$116 in the Union Bank and Trust Company of this city, about four hundred books at the cost about eighty-five dollars, the coffin in which he was buried, but major part of his estate was invested in heavenly securities, the value of which have been variously declared in this world and highly taxed by the various churches, but never realized. He invested every year not less (usually more) than twelve hundred dollars in charity, so secretly, so inoffensively and so honestly that he was never suspected of being a philanthropist and never praised for his generosity. He pensioned an old, outcast woman in Barton county, an old soldier in Nashville. He sent two little negro boys to school and supported for five years a family of five who could not support themselves. He contributed anonymously to every charity in Nashville; every 'old maid' interested in a 'benevolent object' received his aid; every child he knew exacted and received penny tolls from his tenderness. He supported the heart of every man who confided in him with encouragement and affection. He literally did forgive his enemies and suffered martyrdom, September 18th, 1910, after enduring three years of persecution without complaint. He considered himself one of the chief survivors and was ever recognized as one of the largest bondholders in heaven. You can see how large his estate was and how difficult it would be to compute its value so as to furnish you the inventory you require for entry on your books. I have given you faithfully such items as have come within my knowledge."

READ THIS AND PONDER

AFTER READING the letter headed, "Unfaithfulness" I want to say a few words.

First I want to say that I am one of the poor fools who was tempted and went astray and today my home is broken up, our little girl of two (who dearly loved her daddy) is with her mother. I am alone on the farm and heartbroken over the past. I don't know the circumstances surrounding the downfall of the husband in the recent letter but I can relate mine.

We were married nearly fifteen years ago. I was a hard-working young man with a wife who dearly loved me. She was a good housekeeper, a slave to cleanliness, so much so that she broke her health and was a semi-invalid for several years. After a few years in the country we decided to go to the city and I curse the day that we did for my work brought me in contact with the kind of women who tempt men.

However after a few years I was sick of the way I was doing and moreso when our little girl came.

It was with a great deal of per-

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

suation that my wife decided to go on the farm with me. I bought far enough from the city where we lived so I knew I would not have a chance to go back if the devil wanted me to. My wife did not suspect me, so I felt that we would be happy and we were.

Here I want to say that many a time I wanted to tell her why I wanted to leave the city but knew if I did it would cause trouble so did not do it. But one of the men I worked with who thought he loved her came out to see us real often, and he took it upon himself to tell her of my shortcomings. Of course she became dissatisfied with me and cursed the day she met me.

I want to say to the lady who wrote the letter recently published to forgive your husband and forget the past. No doubt he is sincere in his regret of the past. I know I am. I often think of the Bible's reference to forgiveness when Christ said, "Unless you forgive your fellow men who trespass against you your heavenly Father will not forgive you." We are all weak and liable to fall when tempted. Let's think, "It might have been me, or could I have been to blame for the fall of the one I loved?"—Sorry Husband.

BETTER MOTHERS

I HAVE read with interest the letters which have been running in the M. B. F. during the last few weeks on "Unfaithfulness," "The Marriage Triangle," etc. Since we have the question so nicely solved by one who knows and a single man at that, I suppose it is needless for a mere woman to express her views, nevertheless, I am going to write down an incident which came to my notice a number of years ago—where the woman acted so differently from any of the women of whom we have been reading. At the time of my acquaintance with the family, there were the father and mother and three grown boys. The father had been a well educated man of good family, but was morally weak, very selfish; he believed in "personal liberty" and practiced it to the downfall of all others, himself included.

And the mother. I shall never forget the first time I saw her—her face was so disfigured that she had to wear a veil when out in public. Her eyes, such beautiful dark, gray eyes, which showed that within that diseased body was an undaunted spirit that would not give up.

In visiting with her I found her very intelligent, well posted in the

latest books, had firm opinions of her own and a cheerfulness that was contagious; every one felt the uplift of her personality. Not one word of fault finding or complaint. After a few years they decided to move away. Of course during the time they remained in our neighborhood I had heard the whole family history—how through lack of self control and selfishness the husband had just dropped so low.

I suppose right here the man writer will say his wife should be well dressed and kept herself more attractive. Many people have found out that it takes more than attraction to make up life. I visited her again before they went away. I don't know how she happened to talk of herself; but we did have the most heart to heart talk. When she finished talking I said "Don't you feel any resentment for your husband and those other women?"

She just looked at me with her dear, kind eyes and said, "Resentment, child! I have no time for resentment or self-pity. You know my boys were born before this tragedy came into our life. My life and duty is to them, to teach them to have some backbone. I have read the lives of a great number of heroes to them. I see that they have instruction in the care of the body and sexual knowledge, etc."

The care of the future generation is largely entrusted to mothers. Are we doing our duty or are we rearing a weak, spiritless, self-indulgent race of men and women?—Mrs. S. M. P. S.—

In glancing over my letter I find many mistakes but have no time to rewrite. Duty is ever present with this mother. I have a big churning and an ironing to do before dinner and at present one little youngster is rubbing goose-oil on the cat. There are so many things to do but I find time to read, study and live such a happy, full life. I wish you lots of success. These little talks in the M. B. F. are doing lots of good among the readers. We women must wake up to so many, many things.—Mrs. S. M.

"HEART SUFFERER"

DO NOT throw thy life away to Satan because this man has hurt your life. Satan will only laugh at the double victory he has won. Your husband has committed almost an unpardonable sin, but God will not excuse you for committing the same kind of a sin because he has sinned. Think of the dear little babes God trusted to your

THE INVENTOR'S WIFE

IT'S easy to talk of the patience of Job. Humph! Job had nothing to try him! Ef he'd been married to Bijah Brown Folks wouldn't come nigh him. Trials, indeed! Now I'll tell you what—if you want to be sick of your life, Jest come and change places with me a spell—for I'm an inventor's wife. And sech inventions! I'm never sure, when I take up my coffee pot, That Bijah hain't been "improvin'" it, and it maynt go off like a shot. Why, didn't he make me a cradle once, that would keep itself a-rocking; And didn't it pitch the baby out, and wasn't it's head bruised shoekin'? And there was his "Patent Peeler" too—a wonderful thing, I'll say; But it had one fault,—it never stopped 'till the apple was peeled away. As for locks and clocks, and mowin' machines, and reapers, and all sech trash Why Bijah's invented heaps of 'em, but they don't bring in no CASH. Law! that don't worry him—not at all; he's the aggravatin' man— He'll set in his little workshop there, and whistle, and think, and plan, Inventin' a jew's harp to go by steam, or a new-fangled powder horn, While the children's goin' barefoot to school and the weeds is chokin' our corn. When Bijah and me keep company, he warn't like this, you know; Our folks all that he was dreadful smart—but that was years ago. He was handsome as any picture then, and he had such a glib, bright way—I never thought that a time would come when I'd rue my weddin' day; But when I've been forced to chop the wood, and tend to the farm beside, And look at Bijah a-settin' there, I've jest dropped down and cried.

We lost the hull of our turnip crop while he was inventin' a gun; But I counted it one of my merces when it bust before 'twas done. So he turned it into a burglar alarm—it ought to give thieves a fright— 'Twould scare an honest man out of his wits, if he sot it off at night. Sometimes I wonder if Bijah's crazy—he does sech cur'ous things. Hev I told you about his bedstead yet?—'twas full of wheels and springs; It had a key to wind it up, and a clock face at the head; All you did was to turn them hand, and at any hour you said, That bed got up and shook itself, and bounced you on the floor, And then shet up, jest like a box, so you couldn't sleep any more. Wa'al Bijah he fixed it all complete, and he sot it at half past five, But he hadn't more'n got into it when—dear me, sakes alive! Them wheels began to whizz and whirr! I heard a fearful snap! And there was that bedstead, with Bijah inside, shet up jest like a trap! I screamed, of course, but 'twant no use, then I worked that hull long night A-tryin' to open the pesky thing. At last I got in a fright; I couldn't hear his voice inside, and I thought he might be dyin'; So I took a crow-bar and smashed it in— There was Bijah peacefully lyin'; Inventin' a way to git out ag'in. That was all very well to say, But I don't believe he'd have found it out if I'd left him in all day. Now, since I've told you my story, do you wonder I'm tired of life? Or think it strange I often wish I warn't an inventor's wife?

—Courtesy of Mrs. E. F. Corbett.

keeping to train and prepare for his kingdom. If they have an unrighteous father all the more responsibility rests on the mother to teach them the way of life. If they look to father and mother and find nothing but sin who then will teach them the way of truth and the life? Jesus comforts in the day of sorrow.

I have never written for this paper before, but this case appealed to me so strongly I could not resist writing a few lines but words are weak. I like the M. B. F. better every week.

When We Are Weakest

Like a cradle rocking, rocking,
Silent, peaceful, to and fro,
Like a mother's sweet looks dropping
On the little face below.

Hangs the green earth swinging,
turning,
Jarless, noiseless, safe and slow
Falls the voice of God's face bending,
Down and watching us below.

And as feeble babes that suffer,
Toss and cry and will not rest,
Them it is the tender mother,
Holds the closest, loves the best.

So when we are weak and wretched,
By our sins weighed down distressed,
Then it is that God's great patience
Holds us closest, loves us best.—
Mrs. C. P., Glennie, Mich.

THOSE REQUESTS FOR "GRIGGSBY'S STATION"

A M AN interested reader of M. B. F. and especially of the department your represent. As you say you are "interested and curious" at the numerous requests for "Griggsby's Station" by James Whitcomb Riley, I may be able to solve the problem, yet may be misled. A number of the year books for various Woman's Clubs have a "Riley" program for one evening. His poems are "homey" and appeal to the home loving people. His verses have sung their way into the hearts of the people, with love, sympathy and understanding. Its not the light and faddy poetry or the jazz music or popular dancing that appeals to the clean minded people. "Griggsby's Station" bears evidence of the type of many our fathers and mothers who spent most of their lives in honest labor that they might "lay by" for old age and live in ease and in comfort in their declining years. Even though their dreams were realized, memory takes them back to the long ago, and they live over the days of true and neighborly friendships, days when it did not seem a "crime to be honest." Some time ago I enjoyed a Riley and Guest program with some other readings. It was especially pleasing. One of the numbers was a reading, "The Patchwork Quilt" with musical accompaniment which was nicely rendered. The closing number was a playette from "The Circuit Rider's Wife" by Cora Harris. I had read it when published in the Saturday Evening Post and I wish everyone might read it. It's good for the "blues." It can be best appreciated by those like myself who lived in the days of "donations for the minister," who preached in one circuit and we all did our "bit" even tho it might not have included the generous supply of home grown tobacco that the minister's wife accepted so gracefully.

I am pleased with the recipes in the household column. Am glad that Mrs. L. M. N. of Kingsley, Mich., has donated the recipe for white cake. I had lost mine that was similar to this. Did she ever take part the batter and add few nut meats and candied citron? There is plenty to make two small loaf cakes.

I will tell the inquirer for table centerpiece decoration what I have used. Sprigs of holly laid in circle about the white centerpiece with cranberries laid among them. Nothing prettier than a basket of fruit in center. Small poinsettias can be used instead of holly.

This year I had a large white layer cake on standard in center, cut in as many pieces as guests. Fasten as many strips of green or red paper to the ceiling above it with Xmas bell in center. Let the strips come outside the bell and the lower end

fasten with a pin to each piece of cake (outside edge). Have a tiny doll or toy fastened to each end of the paper that will hang just to the table. Let one person clip the papers above the cake and serve to each person. I usually cut a circle in the center of the cake with small glass or tin. Then cut the pieces up to the circle. A toy Santa Claus could be placed in the center. No more as this may be assigned to the waste paper basket.—Katherine.

CORRESPONDENTS' COLUMN

Mrs. J. C. L.: I think Knox's Sparkling Gelatine is meant, it is not sweetened or flavored.

Mary K.: A mistake was made in the proportions of the starch for your hair receiver last week. The directions should have read 1 cup of sugar to 1-3 cup of water.

Mrs. Ernest G. Luder: Your order and remittance for patterns received and the patterns are here waiting for your address which was omitted from your order. Please send it on.

Will Mrs. W. who wrote the letter concerning her cousins domestic trouble send me her full address? I have a personal letter here for her.

Mrs. A. L.: Can you not let your friends and neighbors know of your willingness to re-foot stockings and do plain knitting?

H. L.: Write to Newcomb, Endicott & Co., Detroit, Fancy Work Department for information regarding Royal Society handiwork. They will give you any information you want.

Will Mrs. R. G. M. of Bronson, Mich., send her recipe for putting down fresh pork?

Mrs. L. O. B.: I will write you a personal letter as soon as possible. My desk is piled so high with letters I wish to answer personally. Yours will be the next some day soon.

Several Helps

I have been a silent but exceedingly interesting reader of your paper and especially of "The Woman's Department" and will try to exchange a few helps for the many I have received.

On the subject of canned corn requested. I find using "Mrs. Price's Canning Compound" the most satisfactory method of many I have tried. There is absolutely no taste and no more trouble than cooking for the table. One ten cent package cans four quarts and the package contains full directions. I have a baby moccasin pattern like the little ones to be bought in the stores which can be made of any material desired, which I will send to anyone sending me a stamped, self-addressed envelope. Am sending my recipe for apple dumplings which are a great favorite with the children. Thanking all for the help I have received from your paper. I am, Mrs. S. A. T., Matherton, Mich.

Apple Dumplings

1 pint flour, pinch salt, 1 teaspoon baking powder, 1-2 cup shortening, 1 and 1-2 cups sour milk, 1 teaspoon soda, flour to roll out about one-fourth inch thick. Cut in squares the size of a pie plate and fold in a handful of sliced apples for each one. Place in deep pans, sprinkle with sugar and cinnamon and dots of butter, nearly cover with boiling water and bake until a light brown.

Dark Cake

1 egg beaten, 3-4 cup of brown sugar, 3 tablespoons lard or heaping butter, 1-2 cup molasses, 1 teaspoon ginger, 1-4 teaspoon ground allspice, 2 teaspoons cinnamon, 1-2 teaspoons cocoa, 1-2 teaspoon salt, 1-2 cup hot water, 1-2 cup of milk, either buttermilk or sweet, 1 teaspoon soda, about 3 cups of flour, maybe a little less or a little more, may add raisins if liked. Put whipped cream

on top. It is fine, at least we think so.—Mrs. C. W., Sterling, Mich.

Home Made Sausage

We take the M. B. F. and enjoy it very much especially the women's page. I saw a request in the last issue of Dec. 17th for home made sausage. I have one we like very much which I will send. To twenty pounds of meat, two-thirds teacup of salt, pepper and sage to suit taste. Also scant half teacup sugar.—Mrs. J. T. Daniells.

Canning Meat

I would like to get a bulletin or recipe on canning meat. I wrote to East Lansing but don't get any answer. In the last Business Farmer, I see Mrs. R. C. M. of Bronson mentions it but she doesn't give her full name so I can write her. Any help from you will be gladly accepted. Hope to hear soon as I am about ready to can my meat and I have never canned any before.—Mrs. Minnie Gorham, Shultz, Mich.

White Cake

2 cups of white sugar, 1-2 cup of butter, 1 cup of sweet milk, whites of 4 eggs, 3 cups of flour, 1 teaspoon cream of tartar, 1-2 teaspoon of soda, teaspoon of vanilla, 1-2 teaspoon of salt, makes a nice loaf cake or can be used for any kind of layer cake. We take the M. B. F. and find it a great help.—Mrs. J. M. C.

Black Sticking Salve

Can you give me the formula for the black sticking salve our grandparents made and used. I made soft soap with mutton fat and concentrated lye. It appeared all right when first made but now the grease and lye have separated. What can I do with it? Why did it do that?—C. O. G.

Mince Meat

4 lbs. meat, ground, 9 lb. apples, ground, 1-2 lbs. suet, ground, 1 lb. raisins, 1 lb. currents, 4 lbs. sugar, 3 tablespoons (level) cloves, 10 tablespoons cinnamon, 1 tablespoon black pepper, 2 tablespoons salt, 1 quart molasses, 1 pint boiled down cider or other juice. Cook slowly for a long time and can while hot.

Mince Meat Cake

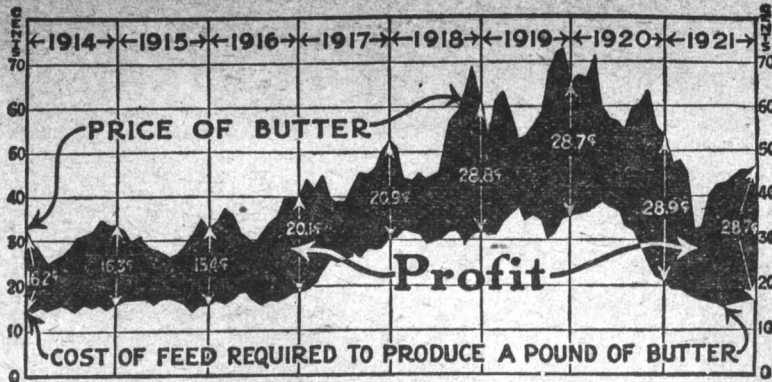
2 eggs, 1 cup sugar, 1-2 cup lard (mix well) 1-2 cup molasses, 1-2 cup cold coffee or water, 1 level teaspoon soda, 2 1-2 cups flour, 1 teaspoon cinnamon, 1 scant teaspoon cloves, 1 cup mince meat.—Mrs. R. H., Allegan, Mich.

CEDAR CHEST WILL PROTECT WOOL CLOTHING FROM MOTHS

CHESTS MADE of red cedar heartwood are effective, if in good condition and thoroughly tight, in protecting clothing from clothes moths, it has been found by the United States Department of Agriculture. That is, provided proper precautions are taken first to beat, brush and, if possible, sun all articles before they are placed in chests.

Since it is the odor of red cedar that kills young moth worms special care should be taken to prevent undue escape of the aroma from the chests. Chests at all times should remain tightly closed except when clothing is being removed or placed in them, and this procedure should be accomplished quickly.

Clothes moths during their growth pass through different stages known as the adult or moth miller, the worm or larva, and the pupa stages. It is only the larva or worm that damages fabrics. The moth miller merely lays the eggs from which the worms hatch. Cedar chests do not kill the moth miller, its eggs or pupae. Neither do they kill the larvae or worms after they have become one-half to full grown. Cedar chests it has been found, do kill young worms. Practically all moth worms hatching within the chests die within one or two weeks after hatching and a surprisingly large number die within two to three days. Of the worms hatching within cedar chests from the 2,074 eggs recorded in experimental work, none were found alive one month from the date the eggs were placed in the chests.



(Compiled from U. S. Government statistics)

Look at this diagram!

It shows just how profitable the production of butter or butter-fat has been since 1914, and that it pays just as big today as ever.

The top line of the black area shows the price of butter, while the bottom line shows the cost of feed required to produce a pound of butter. The thickness of the black area then shows the spread between cost of feed and price of butter—or the net profit. For example, near the end of 1921, feed to produce a pound of butter cost 16.9 cents; butter sold for 45.7, leaving a difference of 28.8 cents per pound, or 170% profit.

De Laval Cream Separators have helped more than any other factor to put the butter business on such a profitable basis—by saving cream, improving butter in quality, saving time, and saving skim-milk in the best condition for feeding.

Let a De Laval start making and saving money for you now. See your De Laval agent or write for full information. Prices on pre-war basis. Sold on easy terms.

The De Laval Separator Company
NEW YORK CHICAGO SAN FRANCISCO
165 Broadway 29 E. Madison St. 61 Beale Street

Sooner or later you will use a De Laval Cream Separator and Milker



De Laval Separator
The world's standard—over 2,500,000 in use the world over. Skims cleaner, turns easier and lasts longer than any other.



De Laval Milker
The better way of milking—cheaper, faster and cleaner than any other way of milking. In use on thousands of dairy farms.

Genuine



Aspirin

Always say "Bayer"

Unless you see the name "Bayer" on tablets, you are not getting genuine Aspirin prescribed by physicians for 12 years and proved safe by millions. Directions in package. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylic acid

Stop Hatching Weak Chicks

Chicks that hatch out weak and wobbly, and live but nothing to you but trouble and loss. with cheap incubators. Remember, it is not how many you hatch that counts but how many you raise.

Queen Incubators
produce large hatches of strong, vigorous chicks that live and grow. The Queen is accurately regulated—taking care automatically without attention of a variation in temperature of 70 degrees without danger to the eggs. It is built of genuine Redwood—very scarce in these days of imitation. Redwood does not absorb the odor from hatching chicks. Cheaper woods and strawboard or composition lining in iron or tin machines, retain the odors, to weaken and kill the chicks of later hatches. Queen Incubators and Brooders are sold by dealers everywhere. Send for Free Book. (42)
QUEEN INCUBATOR CO. Lincoln, Nebraska

DELICATE GIRLS

Many who are inclined to over-thinness, or anemia and dread winter's cold, should take

Scott's Emulsion

and keep on taking it and realize how effectually it warms and strengthens the body and helps make winter enjoyable.

Scott & Bowne, Bloomfield, N. J. 20-51

GARDEN SEED

Isbell's Bell Brand Garden Seeds are Michigan-grown—hardiness and early maturity are bred into them through 43 years of selection and development. Planting Isbell's seeds is the first step toward a big profitable garden.

Catalog Free Isbell's 1922 Seed Annual—giving valuable information about seeds and gardening, and quoting direct-from-grower prices, sent free on request.
S. M. Isbell & Company
550 Mechanic St. (32) Jackson, Mich.

5 — Good — \$ 1
Magazines

Woman's World, (Monthly) Our Price
Good Stories, (Monthly) \$1.00
American Woman, (Monthly)
Mother's Magazine, (Monthly) ALL FIVE
The Farm Journal, (Monthly) FOR 1 YEAR

ORDER BY CLUB NUMBER 252
A Dollar Bill will do—We take the risk
Send all orders to
Whitlock & Summerhays
25 North Dearborn Street, CHICAGO

AIDS TO GOOD DRESSING

FOR APPEARANCE, COMFORT AND ECONOMY

A Jaunty Top Garments for the Small Boy or Girl



Patterns 3768 is here shown. It is cut in 4 sizes: 2, 4, 6 and 8 years. A 4 year size requires 2 5-8 yards of 27 inch material.

Cheviot, serge, twill, mixtures, velvet and plush and other pile fabrics, silk, pongee and linen may be used for this model.

Pattern sent on receipt of 12c in coin or stamps. Address Pattern Department, M. B. F., Mt. Clemens.

A New Blouse Style

Pattern 3760 was used to make this style. It is cut in 6 sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size will require 2 1-8 yards of 54 inch material. This model may be finished with a high collar, or with low round neck edge and collarless. It may be made without the portions below the belt. Broadcloth, serge, satin, velvet, pongee, duvetyne, velours, tricotine and gabardine are good for this model.



SAVED THREE COWS BY TIMELY AID

Jacob Germann of Farmingdale, Ill., tells of his experience with cow ailments, much the same as hundreds of others who take the trouble to write us every year. He says:

"I had three cows this Spring, one had garget and one had milk fever, and one was done up completely from calving and could not get up or walk and I had a veterinarian with no good results. I began feeding Kow-Kare and she is able to go to pasture with the other cows now. I just know I would have lost the three if I had not had your medicine."

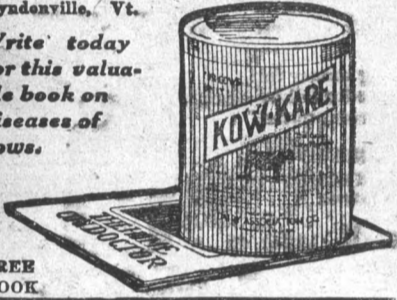
D. B. Thomas of Knightville, Utah, had an experience with a barren cow that is just like scores of others who have kept cows on a paying basis with the aid of Kow-Kare. He writes:

"Had a valuable Jersey cow eight years old that had had seven calves. Something went wrong with her after her last calf came, so that for two years she failed to become with calf. Fed her some of your Kow-Kare last January and she was all right the first serving, and long before I had given her the whole package of your Kow-Kare that I purchased."

For the prevention or successful treatment of Barrenness, Abortion, Retained Afterbirth, Scouring, Bunches, Milk Fever, Loss of Appetite, etc., no cow medicine has such a record of constant successes as Kow-Kare. Every cow owner should keep it on hand. Sold by general stores, feed dealers and druggists at the new reduced prices—65c and \$1.25

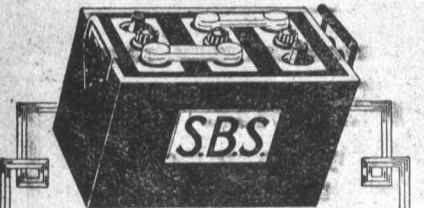
DAIRY ASSOCIATION CO., INC., Lyndeville, Vt.

Write today for this valuable book on diseases of cows.



FREE BOOK

BUY



BATTERIES
direct from factory and save

50%

6 VOLT 11 or 13 Plate \$15⁰⁰

Any Assembly

12 VOLT 7 Plate \$20⁰⁰

Any Assembly

Every Battery carries a One Year Guarantee

WHEN ORDERING GIVE MAKE OF CAR AND YEAR MADE. A \$5.00 DEPOSIT MUST ACCOMPANY ALL ORDERS. ALL BATTERIES SHIPPED EXPRESS. C.O.D. SUBJECT TO INSPECTION. A \$1.00 DISCOUNT WILL BE ALLOWED IF THIS ADVERTISEMENT IS RETURNED WITH ORDER.

Storage Battery Service Co.
6432 E. JEFFERSON AVE. DETROIT MICH.

CLOVER AT WHOLESALE

We save you money. Buy now before advance. Crop short. We expect higher prices. Don't buy field seeds of any kind until you see our samples and prices. We specialize on Guaranteed Quality, Tested Clover, Timothy, Alfalfa, Sweet Clover, and Alsiker, sold subject to your approval & government test. Do not fail to secure our Samples and Big Seed Guide all FREE. Write today. American Mutual Seed Co., Dept. 127, Chicago, Ill.

STAMMER

Send for free 200 page book. It tells how to permanently stop stammering or stuttering in a few weeks' time. A natural guaranteed method. The Lewis School for Stammerers 151 Lewis Bldg., 71-77 Adelaide St., Detroit, Mich.

The Children's Hour

DEAR CHILDREN: How many erasers have you worn out so far this month? I need a new one nearly every day. Every time I write the day of the month and the year I write the year "1921" instead of "1922." Do you? I bet you do. I made only one resolution this year. I decided I would do the best I knew how in every thing I did. I think if we all resolve to do that and carry out our resolution we will not be very bad people. The Boy Scouts have a motto I admire and I have made it mine also. It is, "Do a good turn daily." Let us all decide to do that, not only during 1922 but during the rest of our life upon this earth. I am going to tell you about the Boy Scouts and their work in another issue.

Did you ever hear of a cat that was worth \$300 a year to anyone? A man living in Texas has one he calls "Tom" and he declares this cat is worth that much to him. The man keeps a restaurant and he says that before he got Tom he lost not less than \$200 a year through rats, mice and cockroaches. In addition to this he spent \$100 a year for rat traps, roach powder, etc. He secured Tom 9 years ago and he declares since that time there has not been a rat, mouse or cockroach in the restaurant. At this rate Tom has been worth \$2,700 to his owner already. This remarkable cat is a cross between a house cat and a wild cat and the owner would not accept an offer of \$1,000 for Tom; in fact, Tom is not for sale at any price. Tom is very sociable and all of the patrons of the restaurant are his friends. Nearly all of us have one or two cats, and, although they may not be worth as much as Tom, they are worth considerable when we stop and think of what good they do. We should feed them well and take good care of them. Don't you think so?

You will notice that many of the letters I am printing this week contain mentions of Christmas coming and wishes of a "Merry Christmas." It may seem strange to you to see such things in print at this time but you must remember that all but a few of these letters were received before Christmas and if I left that part of the letters out it would spoil the letters.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned—I thought I would write to you as I have never seen a letter in your columns from Kentucky. I live on a farm of about 300 acres. I am ten years old. My birthday is on February 26. I go to school every day. My teacher is going to give me a Testament for coming every day. We are going to have a Christmas tree at our school the 24th. I think I will enjoy myself fine. I will write again.—Hazel Lee Thompson, R 4, Waynesburg, Ky.

Dear Uncle Ned—I am a farm girl 12 years old and in the fifth grade at school. I have 2 miles to go to school. We have 3 horses, 5 cows, 5 calves and 35 chickens. We are going to have a Christmas program in my schoolhouse Thursday, Dec. 22. My birthday is the first of June. With love, I remain.—Helen J. Larson, Tustin, Michigan.

Dear Uncle Ned—We have snow six feet deep here in places. I made a snow house in a big drift but it caved in. We are going to have a Christmas entertainment the 23rd of December. I hope the Doo Dads will be back by Christmas. I like them so well. For pets I have four cats.—Phillip Boll, Alba, Michigan.

Dear Uncle Ned—I have been a reader of the Children's Hour for a long time. It will soon be Christmas now, won't it, Uncle Ned? I wonder what I am going to get. I live on a farm of 40 acres and we have 3 horses, 2 cows, 1 pig and quite a few chickens. I was 14 years old the 26th of last September. I will be glad when the Doo Dads get back. Every week I look to see if they are there.—Grace Tanner, Gades, Mich.

Dear Uncle Ned—How are you getting along? We take the M. B. F. I like to read the Children's Hour very much. I live on a 20-acre farm. For pets I have one cat. I am 14 years old. I am in the sixth grade, but expect to go in the seventh soon. I would be in the eighth if I had not been sick so much. I attend the Swartz Creek public school. In our room we have the fourth, fifth, and sixth grades. There are 42 children in my room. I have one brother and three sisters. My birthday is March 14, 1922. I will be 14 years old. Christ-

mas will soon be here. We are planning on it at our school. We have one dialogue, one recitation and a song. Well, I wish you all a Merry Christmas and a Happy New Year.—Mary Ellen Bronson, R 1, Swartz Creek, Mich.

Dear Uncle Ned—I am a boy 8 years old and in the 3rd grade. We have 2 horses and 5 cows. For pets I have 1 rabbit. I had lots more but something killed them. When are the Doo Dads coming back again. I like to look at them. My birthday is the 12th of August.—Fred Pergande, R 2, Bay City, Mich.

Dear Uncle Ned—I am a boy nine years old. I live on an 80-acre farm. I enjoy reading the Children's Hour. I am in the fourth grade. My father takes the M. B. F. and he enjoys it. My birthday is September 11th. I wish you would put the Doo Dads back in again. I have 4 brothers and 1 sister. Did you ever hear the story of the empty house? Answer: There was nothing in it. We have 11 head of cattle, 5 head of horses.—Howard Ginter, R 1, Owosso, Mich.

Dear Uncle Ned—I am a boy 12 years old and am in the fifth grade at school. I go to school nearly all the time. I live on an 80-acre farm. For pets I have 2 cats. We have 2 horses, 4 cows, 4 pigs and 1 yearling. I have one brother. We live 2 miles from the school. Here is a riddle: He ran till he got it, picked it up and looked for it, couldn't find it, threw it down and ran away with it. Answer: A fly in a boy's foot.—Clare Hagerman, West Branch, Mich.

Dear Uncle Ned—I am a boy 11 years old. I am in the 5th grade at school. I live on a 40-acre farm. I am a new reader of the M. B. F. We have 12 pigs, 4 horses and 5 cows. I have two cats. I have four brothers and four sisters.—Melyin Allen, Gladwin, Mich.

Dear Uncle Ned—I am a girl ten years of age and in the fourth grade at school. For pets I have a dog, a pony and a bantam rooster. My birthday is the 8th of March. We take the M. B. F. and enjoy it very much.—Mildred Gere, Clio, Mich.

Dear Uncle Ned—Tonight I was reading the M. B. F. and I saw Edna Weifenbach's letter and I want to tell her that I am not one who missed seeing Crystal Lake. I also went bathing in it and it is sure a beautiful lake. I live about 40 miles northwest of there in Mecosta county. I live on a farm of 120 acres. We have a good school and I have only a mile to go. We boys have coasting and skating. I am 12 years old. I have a nice Angora cat for a pet.—James T. Riley, Remus, Mich.

Dear Uncle Ned—I am a boy 9 years old. I am in the third grade at school. I have 3-4 of a miles to walk to school. I like my teacher very much. We live on an 80-acre farm, have 3 horses, 4 cows, 18 sheep, 14 hogs and 50 hens. My father has a Fordson tractor. We like the M. B. F. very well.—Edward Motz, R 1, St. Johns, Mich.

Dear Uncle Ned—I have been reading the M. B. F. for some time and finally I have gotten up courage enough to write. I am 14 years old and I am in the 8th grade. My birthday is on February 9th. Have I a twin? We own quite a big farm but I am staying over to our friend's house now. My mother, sister and one brother are in Chicago. My big brother and I are staying here. Well I hope all the boys and girls have a Merry Christmas and get lots of presents. That poem Leslie sent in was fine I think. I just love poetry.—Evelyn Calow, R 2, Hart, Mich.

Mich. Club Members Win Canning Honors

MEMBERS of the Boys' and Girls' Clubs of Michigan again brought honor to the state in winning four of the seventy prizes offered by the Hazel Atlas Glass Jar Company of Wheeling, W. Va. The company offered prizes for the best cans of fruit or vegetables put up in the Hazel Atlas E. Z. Seal jars. The country was divided up into four large divisions. Michigan was placed in the northern division. Clarice Hager of Valley City, North Dakota, won the first prize of \$25 with a jar of Swiss chard. Elvis Alford of Detroit took the second prize of \$20 with her jar of peppers. Miss Barbara Van Heulen was leader of the club. Elvis also won sixth place with a jar of carrots. This place brought her one of the special one dollar prizes. A special prize was awarded to Jonnett Mason of Afton, Cheboygan county for a can of Swiss chard. Miss Ann R. Banks is her club leader. Wilhemena Nichols of Quincy also took one of the special prizes with a jar of preserves. Honors for being the state champion in the first year canning clubs

Dear Uncle Ned—I live on an 80-acre farm. We have 7 horses, 6 cows, 16 hogs, 16 sheep and 150 hens. I am in the eighth grade at school. My birthday is the 25th of September. If I have a twin I wish they would write to me. We had a Christmas program at our school the 22nd of December. We have a Ford car. I have three sisters. I will close with a riddle: Why is the letter 9 like a peacock? Answer: Because without the tail its nothing.—Thelma Moon, R 1, St. Johns, Mich.

Dear Uncle Ned—Christmas will soon be here and I have lots to be thankful for; home, clothes and lots more. There are many who are starving this Christmas. I have two brothers, one of my brothers has written to you and has received a letter all ready from one of the cousins in the Michigan Business Farmer. For pets I have a cat that is partly Angora. She is grey. My brother has Belgian hares. I am ten years old and I am in the fourth grade at school and like school.—Helen Carlson, Cheboygan, Mich.

Dear Uncle Ned—I am a farmer boy. Am 8 years old. I go to school every day and am in the 4th and 5th grades. I have one mile to go to school. I wish you and all the cousins a merry, merry Christmas, and a Happy New Year. I will close for this time.—Leo Colnus, Farwell, Mich.

Dear Uncle Ned—I am a boy 12 years old and am in the 6th grade. I go to school every day. I only live about ten rods from school and I come home for my dinner. We have 6 cattle, 6 hogs and 2 horses. We live 8 miles from town.—Wheeler Cooper, R 4, Gladwin, Mich.

Dear Uncle Ned—I work on a farm of 80 acres and I like it very much. I am 16 years old and am in the 8th grade. I have red hair, brown eyes and I stand 5 ft. 8 inches in my stocking feet. I would like to receive letters from the boys and girls. Write to me. I will answer all letters.—Julius Lintz, Williamston, Mich.

Hello Uncle Ned—I live on a farm and have quite a few pets; some pet sheep and a nice dog that saves papa many steps. I'm quite fond of outdoor sports. We have some ice near our school and go there many times at noon hour to skate or sleigh ride. I wonder if I have a twin? I am 12 years old and my birthday is January 28th. We are going to have a Christmas program this year and I hope it will be good. Our teacher sure tried hard to make it good anyway. I hope some of the boys and girls will write to me, and I hope you all will have a Merry Christmas.—Winifred Roberts, Newberry, Mich.

Dear Uncle Ned—I am 12 years old and in the fifth grade. My birthday is July 19th. If I have a twin I wish they would write. I have a good time at school. I had a good time Christmas. I think John Hann's riddle is Love. If it isn't please write and let me know.—Viola Bird, Grand Ledge Mich.

Dear Uncle Ned—I am a boy 8 years old. We own a 12-acre farm. For pets I have a dog, four kittens, two cats and two lambs. We have four horses and five head of cattle. It is snowing very hard now. We had a Christmas tree down at our school last night.—Harold Scofield, Mason, Mich.

OTHER LETTERS RECEIVED

Eula Mae Compton, R 4, Olivet; Lloyd Teller, Gageton; Johanna Huskin, Essexville, R 1; Frances Hufnagel, R 3, Fowler; Eloise P. Hulbert, R 2, Bay City; Garnet Rarif, R 3, Standish; Cleve Shuen, R 3, Sheridan; Lillah Chandler, R 2, St. Charles; Wilson Allgirl, Camden; Bernice Gere, Box 112, Clio; Irene H. Kahl, R 1, Gobleville; Ruth Alice Woodard, Bailey; Virgin Huskin, R 1, Essexville; Laverna Dexter, R 1, Rodney; Helen Adanski, R 1, Ossineke; Wilma Gilbert, Pine Grove, Michigan.

of Michigan falls to a boy canner from Wayne county. Theodore Swegles of Plymouth lead the whole state by canning 468 1-2 quarts of fruit and vegetables the first year that he was in canning club work. In the second year canning clubs, Mary Piechiowiak of Bay City, Bay county, is state champion, having canned 1,103-quarts of produce last summer. Elvis Alford of Detroit, Wayne county, won first honors in the third year canning clubs with 763 1-2 quarts of canned goods. Agnes Martin of Charlotte, Eaton county won the championship of the state in the fourth year clubs. She canned 185 quarts of fruit and vegetables. The above state champions, together with two other canning club members, Beatrice Effrick of Bay City and Zeta Weigand of Macomb county enjoyed a free trip to the International Livestock Show in Chicago the first of this month. Their expenses were paid by the Wilson Bros. Packing Co. and the Hazel Atlas Glass Jar Company of Wheeling, W. Va.—C. E. Johnson, M. A. C. Correspondent.

FRUIT and ORCHARD
EDITED BY FRANK D. WELLS

MICHIGAN NURSERIES

I have just bought a 40-acre farm here and am a stranger in this part of the world. I am thinking about putting out 500 fruit trees next spring. Where should I write for bulletins on the care of fruit? I would like to get in touch with some nursery. There must be several in Michigan, why are they not up-to-date and advertising?—R. P. Harrisville, Michigan.

Write to the director of the Experiment Station, East Lansing, Michigan, requesting that your name be put on the mailing list for bulletins. Ask for the list of published bulletins, from which you can choose such as you desire. These bulletins are sent free upon application. There are some good nurseries in Michigan, but perhaps they are not advertising as much as usual because there is a shortage of stock. Even at the present high prices the demand in some lines has exceeded the supply. The Prudential Nursery, Kalamazoo; Spelman & Son, Adrian; Pontiac Nursery, Pontiac; and at Monroe the Mutual Nursery, the Greening Nursery and I. E. Ilgenfritz Sons Company are growers of fruit stock.

BEARING AGE FRUIT TREES

Have any of your readers had any experience with "bearing age fruit trees?" Having moved to a new part of the state and wishing to get bearing trees as quickly as possible, I ordered some at a fancy price from an eastern nursery, two years ago. Nearly every one died. To compromise, the firm duplicated my order the next spring at half price. The last lot were mere whip sprouts, tall, but not a limb on them. I have never seen a blossom on either the first or second lot and this is an excellent fruit region.—C. W. O., Cheboygan County, Mich.

Bearing age fruit trees have never appealed to us. Some varieties will bear at an early age. The Wagener, Transparent and Grimes apples will frequently bear in the nursery row. With them the bearing age may be not more than a year or two after being planted out. Jonathans, Greenings, Wealthies and several other varieties will bear a little fruit after being out three or four years, in orchards that have been cultivated. How much better will these trees of bearing age do?

It must be admitted that the term "bearing age" has a pleasing sound to those who are in a hurry for the fruit and that is the nurseryman's opportunity. He can unload stock too large for the orchard man of experience to plant. Such stock may be too old, or it may have been forced to an abnormal growth on too rich ground. In either case it is not good stock to plant. The favorite kind among orchardists now is the two-year bud, or three-year graft—medium sized trees. Planters of experience usually do not want large stock. It is much more liable to die the first year, does not grow as well as the smaller trees and will probably come into bearing no earlier.

Two-year apple, pear, plum and cherry are best, so far as our observation goes. With the peach there is only one age, anyhow, though a vast difference in size. The pits are planted in the fall, budded the following summer and dug a year later. A tree man may sell stock which he claims is older, but which is merely overgrown. The smaller trees are preferred by most planters, though some want large stock.

The "whip sprouts" sent for replacing may have been "cut-backs." When trees have been injured by a severe winter the top is cut back too near the ground, below the injury. A sprout will usually come up and as it has the root system of two or three years growth it will be vigorous and may soon overtake those as old as the original tree. As they had no limbs they were probably of one year's growth. Had they been cut back when set out at the height desired for a head, they should have thrown out branches enough. If they were not thus treated they probably kept on growing upward and were headed too high.

Perhaps some of our readers have had more satisfactory results with bearing age trees. If so we shall be pleased to hear from them.

CROP REPORTS

St. Clair—Farmers doing chores, cutting wood and getting ready for that great event, tax time, which will be a great burden to the man who is paying for his place on account of so many new roads being built in St. Clair county. The weather is quite cold just now and the ground is frozen quite hard. Farmers not selling much at present, not much demand for hay, grain or live stock. Butter, eggs and poultry are in quite good demand but the supply is limited.—Isaac Justin, December 31.

Shawassee—Cold, dry freezing weather, no snow. Very poor conditions for wheat and rye. Farmers busy getting wood.—Verne Woodbury, Dec. 30.

Bay—No snow, ground frozen. Corn about all in and shredded. Farmers not doing much, only chores. No improvements in market. Not much going to market. Cattle demand poor. Very little being offered for cows. Only nice young fat cattle in demand.—J. C. Armour, Dec. 30.

Genesee—Fine winter weather. Ground frozen but no snow. Routine work is all there is to do on farms. Lots of water in ground so wells should not get dry and ground should plow and work well next spring. Better times are at hand for farmers. Freight rates reduced and other things must come down to our purchasing strength.—A. R. Graham, Dec. 30.

Easten—Cold and very little snow. The ground is frozen. Hard to get corn out as it is frozen in. Farmers cutting wood. Some stock going to market and prices low. Grain mostly all marketed at below cost of production. Not much stock being fed; perhaps 1-2 the usual number of cattle, a few lambs and about average number of hogs. Wheat and rye looked fine when snow came.—C. F. L., Dec. 30.

Wexford—Quite a blizzard last night; the snow drifted in places. A nice crowd of neighbors assembled at Mr. and Mrs. Chas. Dehn's the 28th as a surprise to Mrs. Dehn on his 63rd birthday anniversary. Clifton Baldridge built a very nice hen house that cost him a little over 3 score and ten dollars. Prices on some of the farm products seem to be on the bottom, but when it comes out of the stores, it's out of sight.—S. H. Slagle, Dec. 28.

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 want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your questions 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.

BUCKWHEAT KILLS OUT WIRE WORMS

Will the readers of the Business Farmer be interested in knowing what our experience has been with wire worms? We had a piece of ground which was badly infested. We sowed it to peas and no crop at all. Finally we sowed to barley but the worms ate it all out. We summer fallowed and sowed to wheat. No crop at all. Finally we sowed to buckwheat, got a fine crop, and wire worms all gone.—W. P., New Baltimore, Mich.

Hers to Blame

He was applying for a divorce, and the judge was endeavoring to find out just what difficulties lay between them. "Aren't your relations pleasant?" he asked.

"Oh, yes," replied the gloomy benedict. "Mine are all right, but hers are the most unpleasant lot I ever met."—Milwaukee Journal.

Preparedness Program

He—There is a certain question I've wanted to ask you for weeks.
She—Well, hurry up. I've had the answer ready for months.—Judge.

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.)

BUSINESS FARMERS' EXCHANGE

50 A WORD PER ISSUE—3 insertions for 10c per word. Farm for sale ads not accepted for less than 3 times. Twenty words is the minimum accepted for any ad. In this department. Cash should accompany all orders. Count as one word each initial and each group of figures, both in body of ad and in address. Copy must be in our hands before Saturday for issue dated following week. The Business Farmer Adv. Dept., Mt. Clemens, Michigan.

FARMS & LANDS

224-ACRE DAIRY FARM WITH 6 HORSES 33 cows and heifers, bull, poultry, full modern equipment, winter's feed included; personal property worth over \$7000; in one country's best dairy districts, close village; city markets; 170 acres heavy cropping tilage, creek watered pasture, wood, timber; 100 apple trees, peaches; warm house, 85 ft. basement barn, silo, tenant house, etc. Retiring owner's low price \$10,000 only \$3000 cash, easy terms. Details page 24. Illus. Catalog 1100 Bargains. FREE STROUPE FARM AGENCY, 814 B E, Ford Bldg., Detroit, Mich.

FOR SALE, 160 ACRES AT FOUR DOLLARS AN ACRE Nine miles east of Bay Minette, Alabama. C. C. AMSTUTZ, Justus, Ohio, R1

EXTRA GOOD 140 ACRES 1 MI. FROM County Seat. Hard roads, excellent buildings, good soil. Write for price, etc., RUDOLPH HASSLER, Sandusky, Mich., R-4.

98 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 homes, cattle and implements if wanted. MARTIN SMITH, R 1, Rhodes, Mich.

BEST FARM IN OSCEOLA COUNTY 120 acres clay loam slightly rolling, 3/4 mile from Marion. 15 acres fruit trees, apples, pears, plums and cherries. Full basement barn 44x70 Hood Roof, double track, water in basement, tile sile 12x28, tool house, garage and small barn. If you want a nice home and a good bargain write THOMAS WHITE, Marion, 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 building, prosperous neighborhood. Good roads. JULIUS HOLETZ, Gladwin, Michigan.

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.

FOR SALE, 185 ACRE FARM 1/2 MILE west of Harbor Beach, on State Road. This farm is suitable for dairy, small fruits, potatoes or general farming. Harbor Beach is in need of a good dairy. It is a summer resort town and dairy products can be sold at a good profit. This farm will be sold very reasonable. For price and terms apply to HURON COUNTY SAVINGS BANK, Harbor Beach, Mich.

160 ACRE FARM FOR SALE OR TRADE for 180 acres with buildings. If interested write GEORGE MATTINSON, Turner, Mich.

RENTER WANTED FOR 140 A. FARM; ON Interurban car line 1 1/2 miles from Michigan Agricultural College; 100 A. cleared; 11 room house; basement barn; concrete sile; must be good live stock man. Man under 45 yrs. and with more than high school training preferred. Possession March 1st, 1922. Write C. A. WILLSON, 1710 Yale Ave., Knoxville, Tenn.

MISCELLANEOUS

MACHINERY

BUZZ-SAW FRAMES, BLADES, MAND-rels, pulleys, etc., of every description. Prices very low. Shipments promptly made. Folders free. Write: GEO. WETTSCHURACK, La Fayette, Ind.

FOR SALE: GOOD REBUILT 1 1/2 H. P. Fairbanks Morse Engine, \$35.00. Brand new 3 H. P. Fairbanks Engine \$75.00. ARBUCKLE-BYAN COMPANY, East Broadway, Toledo, Ohio.

NEVER-KLOG SAW DUST BLOWER. Guaranteed five years. Cash or easy terms. Write for circular. HILL-CURTIS CO., 1507 No. Pitcher St., Kalamazoo, Mich.

TOBACCO

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.

1000 NO. 2 CONCORDS to EACH, TILL surplus reduced only. Larger sizes reasonable. Why pay agents double? Write GOBEVILLI, MICH., NURSERIES.

Going to hold an ?
AUCTION SALE

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

Send Us Complete Description

and remember your copy must reach us one week in advance of the date of issue. Address:

Advertising Dept., The Michigan Business Farmer, Mt. Clemens

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

COMMISSION HOUSES

SHIP YOUR POULTRY, VEAL, EGGS, ETC. to C. Quinn, 3 Fulton Market, Chicago. Correct weights, prompt returns and highest prices guaranteed. Established 1878. Write for tags and quotations; modern cooling rooms.

HIGHEST PRICES PAID FOR LIVE AND dressed poultry, wild rabbits, veal, eggs, etc. A square deal always. C. E. McNEILL & CO., 825 W. So. Water St., Chicago, Illinois.

FILM DEVELOPING

KODAK FILMS DEVELOPED AND SIX prints, 25c. MODERN PHOTO WORKS, Box M. B. F., La Crosse, Wis.

KODAK FINISHING! NOT THE CHEAP way, but the neat, at a reasonable price. Make us a trial order and prove to yourself that it is not only what you pay but what you get for what you pay. Our aim always has been and always will be, "the very best prints from every negative." MOEN PHOTO SERVICE, Quality Kodak Finishing, Box M. B. F., La Crosse, Wis.

GENERAL

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

5 POUNDS BEST SOLE LEATHER \$49. 5 pounds next grade 2-49. Collect on delivery. Hides tanned for farmers. Samples free. THE COCHRAN TANNING CO., Greenville, Mich.

WE SELL NEEDLES, PARTS AND REPAIR all makes sewing machines. Let us know your troubles. We can help you. De-STEIGER MUSIC CO., Mt. Clemens, Mich.

OLD TRUSTY INCUBATORS, SLIGHTLY used, 150 egg size, \$20 freight paid, Cost \$28 new. GORET BROS., Coruna, Mich.

FANCY SHELLED PEANUTS 4 lbs. \$1.00 prepaid! Crisp, crunchy, delicious. Great fun roasting them. Recipes for candies and baked peanuts included. CHESTERFIELD PLANTATION, Norfolk, Virginia.

MEN'S FOUR BUCKLE ANOTICS—perfect, best grade, makers' only, sizes 6 to 12. All rubber \$2.95. Cloth tops \$3.45. DAVIS BROTHERS, Lansing, Michigan.

PURE CLOVER HONEY, \$2.00 WILL bring a ten lb. pail to your door, and \$9.00 a 60 lb. can to your station. Produced in the rich cloverfields of Huron County, by the Bloomfield Apiaries, ED. STEWART, Prop., Port Hope, Michigan.

ALL MEN, WOMEN, BOYS, GIRLS OVER 18, willing to accept Government Positions, \$185, write MR. OZMENT, 856, St. Louis, Mo., immediately.

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.

FULL BARREL LOTS DISHES, SLIGHTLY damaged crockery, shipped any address direct from pottery, Ohio, for \$6.00. Lots are well assorted and still serviceable; Plates, platters, cups and saucers, bowls, pitchers, Bakers, mugs, napkins, etc., a little of each. Send cash with order. Write us E SWASEY & CO., Center Street, Portland, Maine.

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

IS YOUR FARM FOR SALE?

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

Address the Michigan Business Farmer, Adv. Dept., Mt. Clemens.

WANT TO SELL LIVE-STOCK?

AN AD IN M. B. F. WILL DO IT

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.

Jan. 13—Horses—Mich. Horse Breeders' Ass'n, M. A. C., East Lansing, Mich.
 Jan. 13—Mich. Shorthorn Breeders' Ass'n—Mich. Agricultural College, East Lansing, Mich.
 Feb. 2—Hampshire Swine, Lenawee County Hampshire Swine Breeders' Assn, Adrian, Mich.

LIVE STOCK AUCTIONEERS

Andy Adams, Litchfield, Mich.
 Ed. Bowers, South Whitley, Ind.
 R. L. Benjamin—Waukesha, Wisconsin.
 Porter Celestoc, Eaton Rapids, Mich.
 Harry A. Eckhardt—Dallas City, Ill.
 John Hoffman, Hudson, Mich.
 John P. Hutton, Lansing, Mich.
 L. R. Love—Waukesha, Wisconsin.
 L. W. Lovewell, So. Lyons, Mich.
 J. E. Mack—Et. Atkinson, Wisconsin.
 D. L. Perry, Columbus, Ohio.
 L. Post, Hillsdale, Mich.
 O. A. Rasmussen, Greenville, Mich.
 J. E. Ruppert, Perry, Mich.
 Guy O. Rutherford, Decatur, Mich.
 Harry Robinson, Plymouth, Mich.
 Wm. Waffle, Coldwater, Mich.
 S. T. Wood—Liverpool, Ohio.

PURE BRED LIVE STOCK AUCTIONEERS

WM. WAFFLE, Coldwater, Mich.
J. T. HOFFMAN, Hudson, Mich.
 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 Chester. 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 Aargie Korndyke-Hengerfeld DeKol bull from a nearly 19 lb. show cow. First prize junior calf, Jackson Fair, 1920. Light in color and good individual. Seven months old. Price \$125 to make room. 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 nearest dams are 33.34 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.

MY, OH MY! WHAT AN OPPORTUNITY

We are now offering a beautiful calf born Aug. 2nd, 1920. His sire a 35.68 lb. bull. Dam's sire has three sisters each with yearly records of over 1200 lbs. two of them former World's champions. Write for pedigrees.
 HILLCREST FARM, Kalamazoo, Mich.

HOLSTEIN BULL CALVES

sired by son of Carnation King Sylvia and out of good A. R. O. Dams.
GIER FARMS, - - - - - Lansing, 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 bulls and dairymen. Sire Segis Flint Hengerfeld. 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. a. 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 Ota. 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 Hengerfeld De Kol Butter Boy, one of the great bulls.
JAMES HOPSON JR., Owosso, Mich., R. 2.

FOR SALE CHEAP My entire herd of Holsteins consisting of 30 head of grades and thoroughbred cows and heifers. **HENDRICKS SILVER FOX CO., Flint, Michigan, R 1**

WOLVERINE STOCK FARM REPORTS GOOD calves from their herd. We are well pleased with the sales from our Junior Herd Sire "King Pontiac Laude 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, Emblaggard Lillith Champion 108073. His sire's dam is the 4th's Johanna, world's first 35 lb. cow, and world's first 1,200 lb. cow. The only cow that ever held all world's butter records from one day to one year, and the world's yearly milk record at the same time. His dam Lillith Piebe De Kol No. 93710, over 1,150 lbs. of butter from 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 25,515.9
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 E O granddaughter of Pontiac Korndyke.
Sired by our SENIOR SHOW BULL Modal King Segis. Gilt 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 Griswood St., Detroit, Michigan

Two Holstein Bull Calves
Nearly ready for service.
A. B. O. dams. Sire one of Michigan's best bulls.
Dam of No. 1 has 512 lbs milk, 23.5 lbs. butter in 7 days at 4 yrs. Dam of No. 2 has 507 lbs. milk, 25 lbs. butter at 5 years.
They are both extra good, well marked and guaranteed right in every way. \$100 each. I cannot buy their equal for twice that amount.
A postal will bring particulars.
W. J. Gamble
306 Taylor Ave., Detroit, Mich.

SPLENDID ONA BULL CALF
Born Sept. 27, 1921. Sire, Flint Maplecrest Ona Pontiac; Dam, Imlay Beets De Kol Elsevera 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 calves, also good grade heifers; tuberculin tested herd. Prices are right.
LARRO RESEARCH FARM, Box 4 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.

HOLSTEINS THREE COWS AND BULL. Registered, heading strain. Singly or the lot a real bargain.
M. E. OSBORNE, Sun Haven Farm, Standish, Mich.

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

REGISTERED HOLSTEIN BULLS
Sired by a son of King Ota and from good producing cows. Write for photos and prices.
EARL PETERS, North Bradley, Mich.

SHORTHORNS
REGISTERED SHORTHORN CATTLE, DUROC Jersey Hogs and Percheron Horses. Quality at the right price.
CHASLEN FARMS, Northville, Mich.

SHORTHORNS
We are now offering two splendid bulls, ten months old, the kind that is hard to find, out of our great breeding bull Perfection Heir; also a few heifers, some of them well along in calf. Will be priced worth the money. Write your wants or better come and pick them out. Will guarantee breeders.
S. H. PANGBORN & SON
8 Miles East, Bad Axe, Mich.

MILKING STRAIN SHORTHORNS
Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmascott Viscount 25th, 648,563. Prices reasonable.
LUNDY BROS., R4, Davison, Mich.

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

FOR SALE MILK STRAIN DOUBLE STANDARD Polled Shorthorn Calves either sex, by Yorks Polled Duke No. 16884-545109 from accredited herd.
PAUL QUACK
Sault Ste Marie, R. 2, Mich.

FOR SALE 3 SHORTHORN BULL CALVES 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 BREEDERS' 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

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

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

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

FOR POLLED SHORTHORNS
Shropshire, Southdown and Cheviot rams write to
L. C. KELLY & SON, Plymouth, Mich.

FRANCISCO FARM SHORTHORNS AND BIG TYPE POLAND CHINAS
Now offering—Three bulls ready for service. Mastodon, Clansman, Emancipator breeding in gilts bred for spring farrow. See them.
POPE BROTHERS CO
Mt. Pleasant, Michigan

ANNUAL MEET OF MICHIGAN BREEDERS JAN. 11TH
GEORGE A. Brown, secretary of the Michigan Improved Live Stock Breeders' and Feeders' Association, announces the following fine program for the thirty-second annual meet, scheduled to be held at the M. A. C., January 11-12th.

GENERAL PROGRAM
 Wednesday, January 11, 1922, 5 p. m., Room 402, Agricultural Building. Joint meeting of all allied organizations. Music, Short Course Orchestra; Agriculture as a National Problem, Ex-Gov. F. O. Lowden; M. A. C. Swartz Creek Band; Reports of Association Secretaries; Annual Banquet of members of the Michigan Improved Live Stock Breeders' and Feeders' Association; M. A. C. Variety Quartette.

Thursday, January 12, 1922. Meeting called to order at 9:30 a. m., Room 402, Agricultural Building.
 Secretary's report; Treasurer's report; President's Address, H. H. Halladay; The Making of a Pork Chop, W. M. McFadden, Chicago; Concentrating the Activities of Farm Organizations, J. G. Brown, Indianapolis, Ind.; President, Indiana Federation of Farmers' Associations. Recess for lunch. Meeting called to order at 1:30 p. m.; Economic Research and its Relation to the Live Stock Industry; Rural Credits and Farm Loans, H. A. Moehlenpah, Milwaukee, Wisconsin. President, Investors' Finance Corporation; Music, vocal and instrumental; Agricultural Development as a Means of Increasing our Trade in Pure-bred Stock, J. A. Doelle, Lansing, Member of the State Board of Agriculture; report of committees; election of officers; exhibit of draft colts and judging demonstrations in pavilion.

MICHIGAN SHEEP BREEDERS' AND FEEDERS' ASSOCIATION
 President, J. H. McBride, Lansing, Secretary, Don Williams, Lansing. Wednesday, January 11, room 206, meeting called to order at 10 a. m.
 Address by the President; Wool Pools and Wool Marketing, C. J. Fawcett, head of the Wool Division, American Farm Bureau Federation, Chicago; The Outlook for the Sheep Breeder, by representatives of the different breeds of sheep, Messrs. Wing, Parsons, Powell, Tyler, Nye, Calhoun and others.

MICHIGAN SWINE BREEDERS' ASSOCIATION
 President, Newton Barnhart, St. Johns, Secretary P. P. Pope, Mt. Pleasant; Wednesday, January 11, Room 109. Meeting called to order at 1 p. m.
 Placing Pure-bred Swine on Every Farm, E. C. Stone, Secretary, American Hampshire Swine Association; Breed Ideals, W. M. McFadden, Secretary, American Poland China Association; Types, Present and Future, W. J. Carmichael, Secretary, National Swine Growers' Association; Fitting and Showing, J. W. Clapp, Northville; Forty Years with Pure-bred Swine, E. N. Ball, Hamburg.

MICHIGAN HORSE BREEDERS' ASSOCIATION
 President, Ray Whitney, Onondaga, Secretary, Ralph S. Hudson, East Lansing. Wednesday January 11, Room 206. Meeting called to order at 3 p. m.
 President's Address, R. E. Whitney, Onondaga; The Comeback of the Horse, Wayne Dinsmore, Chicago, Secretary of Horse Publicity Association of America; The Draft Horse, Jacob DeGeus, Alicia; Report on Stallion registration, Judson Black, Richmond; Colt Show, 3 p. m., January 12; sale 10 a. m., January 13.

MICHIGAN HOLSTEIN-FRIESIAN ASSOCIATION
 President, Dudley E. Waters, Grand Rapids; Secretary, H. W. Norton, Jr., Lansing, Tuesday Evening, January 10, 7 p. m.; Annual Banquet, Plymouth Congregational Church, Lansing, Wednesday, January 11, Room 402, Meeting called to order at 9:30.
 President's Address, Dudley Waters, Grand Rapids; Report of Secretary-Treasurer; Awarding Prizes for Official Records; Business Session, afternoon meeting, Room 402, 1:30 p. m.; The Better Sire Train, E. J. Leenhouts, Lansing; Address, O. E. Reed, Professor of Dairy Husbandry, M. A. C.; Address, F. O. Lowden, President, Holstein-Friesian Association of America.

MICHIGAN GUERNSEY CATTLE CLUB
 President, F. H. Ormston, St. Johns, Secretary, H. G. Ray, Albion, Tuesday, January 10, Room 109. Meeting called to order at 1:30 p. m.
 Reading of Minutes, Reports of Secretary and Treasurer, and Reports of Committees; Address, James E. Harper, Fieldman for Ohio Guernsey Breeders' Association; My Experience with Advanced Registry Work, Fred C. Gleason, Sodus; Discussion; My Experience with Marketing of Guernsey Dairy Products, Geo. J. Hicks, Saginaw; Discussion, Hints for Breeders, Young and Old, H. W. Wigman, Lansing; Discussion.

Tuesday Evening, January 10, 8 p. m. Annual Banquet, Hotel Downey, Lansing, Wednesday, January 11, 9:30 a. m., room 110.
 New Business, Outlining Work for 1922, Field Day, Exhibit at Fair, State Consignment Sale; A Guernsey Sale, Officers; Election of Officers.
MICHIGAN JERSEY CATTLE CLUB
 President, Alvin Balden, Capac, Secretary, Alfred Henriksen, Shelby, Wednesday, January 11, Pavilion, 10 a. m.
 Stock Judging Contest, Captained by Messrs. J. F. Eardley and Arthur Edson, Grand Rapids; Stock Judging Demonstration, H. B. Demmon, Ass'n Prof. of Dairy Husbandry, M. A. C.
 Afternoon Session, Room 110. Meeting called to order at 1 p. m.
 The Jersey in Michigan, O. E. Reed, East Lansing, Professor of Dairy Husbandry, M. A. C.; The Jersey as an Eco-

nomic Producer, H. F. Probert, Jackson; Feeding Problems, H. C. Moore, Durand; Business Session, Election of Officers and outlining work for 1922.

MICHIGAN HEREFORD BREEDERS' ASSOCIATION

President, Jay Harwood, Ionia, Secretary, Paul O. McCarty, Bad Axe. Wednesday, January 11, Room 111. Meeting called to order at 1 p. m.

How the Hereford Assists Me in Farming, E. E. Cole, Hudson; Laying the Foundation for a Hereford Herd, E. J. Taylor, Fremont; The Hereford, R. J. Kinzer, Kansas City; Secretary, American Hereford Breeders' Association; Herefords at our State Fair, Jacob DeGeus, Atalia; Hereford Calf Clubs, R. A. Turner, State Club Leader; White Faces at the International, W. W. Crapo, Flint; Advertising, A. L. Smith, Eckford.

The Michigan Ayrshire Breeders' will meet at the Dairy Building, Wednesday, January 11, at 2 p. m. for the purpose of organizing a State Association. Mr. C. L. Burlingame, Secretary of the National Ayrshire Breeders' Association will be present to address the meeting, also Professor O. E. Reed of the Department of Dairy Husbandry, M. A. C.

MICHIGAN SHORTHORN BREEDERS' ASSOCIATION

President, G. A. Prescott, Jr., Tawas City; Secretary, W. E. J. Edwards, East Lansing. Thursday, January 12, Room 109. Meeting called to order at 4 p. m. President's Address, G. A. Prescott, Jr.; Business Meeting; Modern Tendencies in the Shorthorn Show Ring, J. L. Tormey, Chicago; American Shorthorn Breeders' Association; Address, Member of the M. A. C. Veterinary Division; 6:30 p. m., Shorthorn Breeders' Banquet, place to be announced later; Friday, Jan. 13, 8:30 a. m., show of sale cattle, live stock pavilion; Friday Jan. 13, 1:00 p. m. sale of 45 head of Shorthorns.

MICHIGAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION

President, Alexander Minty, Ionia; Secretary, Ward Hathaway, Ovid; Wednesday, January 11, Room 405. Meeting called to order at 2 p. m.

National Breed Affairs, Chas. Gray, Secretary, American Aberdeen-Angus Association. Advancing Aberdeen-Angus Interest by the use of Better Sires, Dr. K. J. Suelke, Ithaca, N. Y.

MICHIGAN RED POLLED BREEDERS' ASSOCIATION

President, N. C. Herbinson, Birmingham; Secretary, Mark R. Westbrook, Ionia. Wednesday, January 11, Room 118. Meeting called to order at 2 p. m.

More Steers and Fewer Common Bulls, R. L. Westbrook, Ionia; How Can We Interest New Breeders, J. A. Battenfeld, Pife Lake; The Use of Better Sires, E. W. Lackie, Filion.

MICHIGAN POLAND CHINA BREEDERS' ASSOCIATION

President, W. E. Livingston, Parma; Secretary, L. K. Maystead, Osseo. Wednesday, January 11, Room 207. Meeting called to order at 3 p. m.

President's Address, W. E. Livingston, Parma; Constructive Breeding of Poland Chinas, W. M. McFadden, Secretary, American Poland China Association; Impromptu Discussions, By members.

MICHIGAN DUROC JERSEY SWINE BREEDERS' ASSOCIATION

President, O. F. Foster, Pavilion; Secretary, J. B. Miller, Wednesday, January 11, Room 109. Meeting called to order at 8 p. m.

Durocs in Michigan, I. R. Waterbury, Detroit; Our Home Market, C. E. Buskirk, Paw Paw; Market Versus Show Ring Type, Representative of Swift & Company, Chicago.

MICHIGAN HAMPSHIRE SWINE BREEDERS' ASSOCIATION

President, O. M. Case, Adrian; Secretary, Alfred J. George, Cassopolis. Wednesday, January 11, Room 108; Meeting called to order at 1:30 p. m.

Appointment of Committees, Pres. C. M. Case, Adrian; General Discussion of the following subjects: Mineral Supplements in Swine Feeding, Led by Chester Ball, Dowagiac; Public Sales and Advertising, Led by E. C. Stone, Peoria; Financing the State Association, led by Clarence Campbell, Parma. Afternoon meeting 3 p. m., Room 103. Opening Remarks, C. M. Case, Adrian; Report of committees; Election of officers; Ratification of constitution; Hampshire Promotion in Michigan, E. C. Stone, Secretary of National Hampshire Swine Breeders' Association; Discussion, led by A. J. George, Cassopolis.

MICHIGAN OXFORD SHEEP BREEDERS' ASSOCIATION

President, O. M. York, Millington; Secretary, I. B. Waterbury, Detroit. Wednesday, January 11, Room 118. Meeting called to order at 2 p. m.

Friday, January 13, 10 a. m.—Sale of 20 head of Draft Horses. Under the auspices of the Michigan Horse Breeders' Association.

Friday, January 13, 1 p. m.—Sale of 45 head of Shorthorn Cattle. Under the auspices of the Michigan Shorthorn Breeders' Association.

SALES

Friday, January 13, 10 a. m.—Sale of 20 head of Draft Horses. Under the auspices of the Michigan Horse Breeders' Association.

Friday, January 13, 1 p. m.—Sale of 45 head of Shorthorn Cattle. Under the auspices of the Michigan Shorthorn Breeders' Association.

VETERINARY DEPARTMENT

DR. W. AUSTIN EWALT : : EDITOR

QUARTER OF UDDER HARDENS

I have a good cow freshened July 8, 1921 and gave a good flow of milk for about two weeks, then one quarter of her udder started to harden and gave little milk from that quarter. It seemed like a caked udder. I consulted a doctor who said it was garget and I used 3 bottles of medicine which he gave me. He also told me to use a combination of

SHORTHORN SHOW - and - SALE

Michigan Shorthorn Breeders Association

at

M. A. C., East Lansing, Michigan
FRIDAY, JANUARY, 13, 1922

SHOW 8:30 A. M. SALE 1 P. M.

32 FEMALES, 12 BULLS

CONSIGNORS:

- | | |
|------------------------|---------------------|
| C. H. Prescott & Sons, | Tawas City, Mich. |
| John Lessiters' Sons, | Clarkston, Mich. |
| John Schmidt & Son, | Reed City, Mich. |
| Mich. Agr. College, | East Lansing, Mich. |
| J. M. Hicks & Sons, | Williamston, Mich. |
| V. M. Shoemith, | East Lansing, Mich. |
| Andy Adams, | Litchfield, Mich. |
| A. & F. Parmenter, | Durand, Mich. |
| W. J. Baird, | DeWitt, Mich. |
| O. E. Bell, | Mason, Mich. |
| M. B. Hallstead, | Orion, Mich. |
| W. E. Cummings, | Coleman, Mich. |
| Hoyt Shisler, | Caledonia, Mich. |

Every animal Guaranteed, Tested and sold subject to 60 days' retest.

COME TO THIS SALE FOR SHORTHORNS OF MERIT.

Write for Catalogue.

W. E. J. Edwards, Mgr.

EAST LANSING, MICHIGAN.

Auctioneers, Hutton & Adams.

RICHLAND SHORTHORNS

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

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.

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.

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

GUERNSEY BULL CALF 7 MONTHS OLD. SIRE, Langwater Prince Charmante, A. R. 4 A. R. daughters average 416 lbs. fat 2-1-2 yrs. Dam: Langwater's Lady Lu, A. R. 416 lbs. fat class A. A. (farmer's class) 1 A. R. daughter, 409 lbs. fat D. D. Write
MORGAN BROS., Allegan, R. 3, Michigan

FOR SALE REGISTERED GUERNSEYS Have two choice Bull calves eight months old, \$60 each. Also herd Bull eight years old, a son of Langwater's King of the Mays, \$125. All May-Rose breeding. VERN LAMBERT, Evart, Mich.

GUERNSEY BULL & BULL CALVES from dams making large A. R. O. Records. Accredited herd. Write for particulars.
A. M. SMITH LAKE CITY MICHIGAN

REGISTERED GUERNSEYS 2 CHOICE HEIFER calves \$250. A choice bull calf very cheap.
J. M. WILLIAMS No. Adams, Mich.

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 sire's 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 HEIFER CALVES for \$125 each delivered. Bull calves for \$50. Sires 5, nearest dams average 725 lbs. fat.
PINE HILL FARM, R. 3, Howard City, Mich.

JERSEYS

REG JERSEYS HEIFERS 1 YR. OLD—Young cows in milk sired by Majesty's Oxford Shylcock 156,692 also young bulls sired by Frolie's Master Pegasus 177,683, a grandson of Pegasus 99th and Sophie 19th's Tormentor, two great bulls of the breed. Write for prices and pedigree.
GUY C. WILBUR, R 1, Belding, Mich.

JERSEYS

We offer a few young cows at \$125.00 each. Heifer calves \$75.00 delivered. Bull calves at \$50.00. All registered and transferred. Noble of Osklands and Oxford Lad blood lines.
M. A. O'BRIEN Reedsville, Wis.

ONE OF OUR MAJESTY BULLS WOULD IMPROVE YOUR HERD.
FRANK P. NORRINGTON, Ionia, Mich.

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

IF THE BULL IS HALF THE HERD, HOW much would a son of Pegasus 99th's Duke 8th, who has 60 per cent blood of Sophie 19th, be worth to your herd? Let me send you pedigrees and prices on bull calves from this bull and Sophie Tormentor cows.
FRED HAYWARD Scotts, Mich.

HEREFORDS

WE WANT Beef Cattle Breeders & Feeders TO PROSPER AND MAKE MONEY. In truth the World's Best Beef is made at the lowest cost. If you have a Hereford Bull or herd. If you would produce your own feeding cattle—far better than you could buy. If we supply you cattle that are right. If you would feed cattle profitably,

SOTHAM'S EARLIPIE BEEF PLAN insures your success. Our system is the satisfying substance of 30 years' conscientious service to the cattle industry of America by three generations of Sothams. GET THE FACTS. WRITE, RIGHT NOW, OR WIRE. Address

T. F. B. SOTHAM & SON (Cattle Business Established 1832) Phone 850. SAINT CLAIR, MICHIGAN

HEREFORDS & DUROCS

Yearling bulls and bull calves, Beau Donald breeding. Also Duroc boars and gilts.
J. C. THOMSON & SON, Parma, Mich.

ANGUS



ABERDEEN ANGUS

BRED IN THE PURPLE

ACHIEVEMENT

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 he 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.

FOR SALE TWO REGISTERED ABERDEEN-ANGUS BULLS, one six months old and the other 3 years. They are from the best herds in the country. Address
GEORGE D. STUCK, Osseo, Mich.

PREMIUM BEEF PRODUCERS

Sired by Bjerk 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. 5, Vassar, Mich.

RED POLLED

THREE YOUNG RED POLLED BULLS for sale. Sired by Cosy Eds 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

FOR SALE LARGE TYPE POLAND CHINA boar pigs. Sired by P's Clansman 391211, Michigan's 1920 Gr. Champion boar, and by Smooth Buster 395823, Michigan's 1920 1st Jr. Yearling Boar. Immune by double treatment. Priced to sell. Write or see them. Free livery to visitors.
A. A. FELDKAMP Manchester, R. R. No. 2 Mich.

WALNUT ALLEY

Big Type Poland Chinas. I have a few more of these big boned, high backed, smooth sided boars left. The 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 Price 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 Clansman 2nd, litter brother to Michigan 1920 Gr. Champion. Also fall pigs. Write for prices. Immuned 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 President
O. E. ATWATER Secretary
 Gladwin, Mich.

BIG BOB MASTODON

Is sired by Caldwell Big Bob, champion of the world. His dam's sire is A's Mastodon, grand champion at Iowa State Fair, some breeding. Peter A Pan is my new boar sired by Peter Pan, he by Peter the Great, Glover & Frank D. Winn herd, Kansas City, Mo. Some choice boars left sired by Big Bob. Priced low and guaranteed. 30 choice fall pigs, either sex.
C. E. GARNANT, Eaton Rapids, Mich.

B T P C BOARS & GLITS
 for sale at all times, at farmer prices.
M. M. PATRICK, Grand Ledge, 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, prices reasonable.
L. W. BARNES & SON, Byron, Mich.

BOARS AT HALF PRICE BIG TYPE
 bred in the purple, sired by Mich. Buster, 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 TYPE P. C. TWO SPRING BOARS, ONE SOW
 \$25.00 each. Registered if sold this month.
PLEASANT HILL FARM
 Evart, Mich., Route 3, Box 89.

HIGH CLASS POLAND CHINAS
 Anything you want Choice spring glits and boars. Auction Sale Nov 16.
HOWLEY BROS., Merrill, Mich.

BIG TYPE POLANDS, by Big Giant and C-2 Ronger, largest boars of the breed. Fall gilt and herd boar prospects. Double Immuned, J. C. CLIPP & SONS, Saffilo, Ind., Box M.

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

LARGE TYPE POLAND CHINAS
 For sale, boars and glits sired by B's Clansman, grand champion at 1921 Mich. State Fair, and by F's Clansman 1920 grand champion. Prices reasonable. Visitors welcome. Free livery from Parma. Correspondence cheerfully answered.
N. F. BORNOR, R 1. Parma, Mich.

DUROCS
FOR SALE SEVERAL GOOD SPRING
 boars, also September and October pigs, either sex.
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.
SCHAFFER BROS., Leonard, Mich, R 1.

LOOK
 Boar Pigs farrowed September 1921, weighing 75 to 100 lbs, sired by Uneeda Model Orion, 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 full shipment \$10.00 each or \$18.00 per pair including papers. Service Boars and Bred sows
LAPHAM FARMS
 Pinckney, Michigan.

DUROC SERVICE BOARS
 \$20 to \$40. Bred sows and glits \$30 to \$50. Fall pigs \$10 to \$15. All registered or eligible. We have one of the largest and best herds in state. Ample opportunity for selection.
Michigana Farm, Pavilion, Mich. Kalamazoo Co.

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

DUROCS ANYTHING YOU WANT AT
 Farmer's prices.
C. L. POWER, Jerome, 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 bonny, prolific 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 immuned except fall pigs. Satisfaction guaranteed.
F. HEIMS & SON, Davison, Mich.

Duroc Jersey Bred Stock all Sold. Orders taken for wantling 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
 Pottersville, 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 SELECT.
 Fall spring Duroc Boars, also bred sows and glits in season. Call or write
MCAUGHTON & 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 82949
 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 RICHARDSON, Blanchard, Mich.

O. I. C.
O. I. C. & CHESTER WHITE SWINE. SPECI-
 al 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. Clara V. Dorman, Snover, 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.
 Citzs. 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. S.

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
 Bred glits, bred sows, fall pigs, bargain prices.
M. E. OSBORNE, Sun Haven Farm, Standish, Mich.

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, regis-
 tered and bred, for sale cheap, only 5 to sell.
DAN BOOHER, Evart, 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.

REGISTERED RAMBOUILLET RAM
 Breeding and individuality. Ranging from one to four years old.
ROBERT J. NOON, Jackson, Mich., R 9.

PET STOCK

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

FOR SALE, SCOTCH COLLIE PUPPIES 2 to
 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.

AN EXPLANATION

IN LOOKING over a copy of the Business Farmer, I noticed a slight difference between the letter which was submitted to me for reply and the letter as it was printed in your paper. The last sentence in the letter as printed in your paper states:

"They gave me to understand there was nothing to it, that I would have to get a local veterinarian to take care of same, and he wants \$21 a head for from one to ten head."
 The letter received by me states " \$21 a head for from one to ten head."
 I have no objection to offer to my reply as printed; but in view of the very high price for testing indicated by the last sentence of the letter as printed, my statement to the effect the price mentioned for a subcutaneous test is not unreasonable seems rather ridiculous. I am not at all in favor of charging for this kind of work by the head. I do not believe a charge of that kind can be made that will be fair to both the owner and the operator.
 However, I shall state a charge of from \$20 to \$25 for a herd of from twenty or twenty-five head of cattle is reasonable.—B. J. Killham, Chief Veterinarian.

I admire the fearless way in which you go after the rights and interest of the farmer. You certainly should have the loyal support of every farmer in the state.
J. C. Martz, Mason County, Michigan.

linseed oil and turpentine and rub of the udder. This also did not help. The cow's udder is about the same and she does not kick or move when it is massaged. Sometimes a little milk comes and sometimes some small yellow clots come but it is not stringy. The cow appears to be in good health and gives milk in her other 3 quarters. I had a bit of trouble in getting her dry. She was dry only about 4 weeks before freshening.—E. M., Lake City, Michigan.

This is a very difficult case and results will be slow and possibly not very satisfactory. Try giving two drams of potassium iodid dissolved in a little warm water twice daily. Bathe udder in hot water as much as possible. Would advise veterinary give mixed infection vaccine.

TUBERCULIN TESTING

Why is it that the government only tests pure-bred cattle? I understand they will not test grades.—A. M., Ypsilanti, Mich.

The laws do not shut out the owners of grade cattle in the areas in which co-operative tuberculin testing is not being conducted. The only tuberculin testing being conducted by the state and federal bureaus outside of the areas in which co-operative campaigns are being conducted is that upon herds in the process of accreditation. It was agreed at the outset of the work that the herds to be accredited should be pure bred herds. It was realized that the service could not be extended to any great number of herds at the best and that if any herds were favored, it should be the pure bred herds, which are the foundation of the cattle industry. By pure-bred herds we do not mean of the herd must be 100 per cent pure bred. In this state it was agreed that a herd containing approximately 50 per cent or more pure-breds should be classed as a pure-bred herd. A few herds have been taken in under this plan, which contain less than 50 per cent pure bred, it being believed that the owner was building a pure bred herd; although he did not have the required number of pure-breds at the time the work was started, he soon would have.—B. J. Killham, Chief Veterinarian, Lansing, Mich.

HOLSTEIN MAKES FINE RECORD

Annie Segis Cornucopia Glista, 499674, has just completed a record of 19,814 pounds butter from 361.1 pounds milk with an average test of 4.449 per cent. This fine heifer is a 2 yr. 9 mo. of age and owned by Corey J. Spencer of Jackson, Michigan. She is a daughter of Mr. Spencer's fine young herd sire, Model King Segis Glista, 204234, age 4 yrs., 11 mos. This young bull who has won several ribbons in the show ring is a son of Glista Fenella 154477 the 32.37 pound daughter of Glista Ernestine who has seven 30 pound records, and his sire Model King Segis Koningin 131819, is a grandson of King Segis and is out of the 30.91 pound cow Annie De Kol Koningin 1113317. Mr. Spencer has about 25 daughters of this fine young mull and he will undoubtedly be heard from as a breeder of high producing Holstein-Friesians in the near future.

MUSKEGON DAIRYMEN WILL MARKET FLUID MILK

(Continued from page 5)
 The feeling of the board members as to their job was well expressed by the president, Mr. Pierson, when he said to the members at the last meeting, "When you elected us and told us to go ahead with the job of putting up the best plant in Muskegon, you gave us a real responsibility, and we have felt the burden of it. Now the building is ready for the equipment, and soon we shall begin distributing milk. We directors will go on, feeling that we have a great responsibility in seeing that things go right, but we want every member back of us in this business."
 The services of Mr. George Nielson as manager have been secured. He is a man of experience in commercial dairy work, and comes from a similar position with the Muskegon Height's Co-operative Dairy. Mr. Dalson, also an experienced dairy man, will assist him, and in addition there will be other office and dairy help.
 Time only will tell how successful the Muskegon Farmers' Co-operative Dairy will be. The work of organization and preparation for business has been well done. With the good management and increasing support it is now enjoying, there is every reason to believe it will be a profitable venture in co-operative marketing on the part of its members.

HORSE SALE
Friday, January 13th, 1922, 10:00 A. M.
 STOCK JUDGING PAVILION
 MICHIGAN AGRICULTURAL COLLEGE
Registered Percherons, Belgians and Clydesdales, Stallions and Mares
 A FEW HIGH CLASS WORK HORSES
MICHIGAN HORSE BREEDERS ASSOCIAT'N
 Auctioneers: { J. P. Hutton
 Andy Adams
R. S. HUDSON, Secretary.
COLT SHOW
3:00 P. M., January 12th, 1922

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!

... You and the Also...
 ... free...
 ... Baby and...
 ... FOR...
 ... offer...
 ... TOP...
 ... W...
 ... BAR...
 ... stock...
 ... John...
 ... BAR...
 ... BAR...
 ... KN...
 ... SING...
 ... SING...
 ... R. C...
 ... R. C...
 ... R. 2...
 ... W...
 ... able...
 ... ship...

POULTRY BREEDERS DIRECTORY

Advertisements inserted under this heading at 30 cents per line, per issue. Special rates for 13 times or longer. 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.



POULTRY

MATING DUCKS AND GEESE

Please give me number of geese that can be mated with one gander, also number of ducks to one drake.—P. A. V., Morgan, Mich.

The number of geese that are ordinarily mated with one gander depend primarily upon the purpose of the mating. If the mating was intended to perpetuate certain desirable characteristics of an individual we would resort to the single mating of one goose with one gander. It would be necessary to keep the birds confined in a yard until it was certain that the pair had mated.

For ordinary market purposes, if the females and males run together in large flocks, one gander to three or four geese is usually maintained. Higher fertility and stronger hatching ability of the eggs is usually secured where the stock has access to swimming pools.

Opinion seems to differ relative to the number of ducks that should be mated with one drake. If the ducks have a scanty supply of water, high fertility is usually obtained by using three ducks with one drake. If there is an ample supply of water for swimming purposes, then the ratio can be increased so that the mating will consist of one drake to five ducks.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

AUCTION PRICES POINT TO HIGHER DAIRY VALUES

(Continued from page 4) Country receives 1,700,000 fewer cattle than during the same period in 1920; this in spite of the fact that every cattle raiser in the western country was forced to liquidate his holdings in order to secure money to meet his pressing obligations.

The great grass country of the west and southwest is practically bare of cattle and without them its inhabitants cannot thrive; this vast region must be restocked and only a fool would have the nerve to predict that this great work of rehabilitation will be carried forward with scrub cattle. The modern cattle-raiser has learned that there is no economy in raising a scrub steer and the pedigreed herds of beef cattle, in this country and in Canada, will be taxed to their full capacity as the re-stocking process goes forward.

From time to time, rumors are heard, to the effect, that many breeders of beef cattle are sending their young bulls to the shambles because they see no hope of selling them for breeding purposes. Owing to the scarcity of pure-bred females many western cattlemen will be obliged to use cold-blooded cows, to begin with, but they will buy pure-bred sires if they can be found in the country.

The time is not far distant when the producer of pure-bred cattle will come into his own; all that is required of him is to keep his stock in thrifty breeding condition and his name before the public in the leading live stock papers of the country. The sequence of events, that always follows in the wake of a great business revival, will do the rest.

A WONDERFUL COW

Chla. M., a Guernsey cow owned by John Endicott of Birmingham, Mich., has just completed a year's test, for milk and butter fat in which she broke the state record by a generous margin. The cow is seven months old and, in a period of twelve months, just closed, she produced 886 pounds of butter fat and 17,130 pounds of milk.

Delay Doesn't Pay Break That Cold Today



Checks Colds in 24 hours—La Grippe in 3 days. Quickly relieves Headaches. Tab let form. Standard remedy world over. Demand red box bearing Mr. Hill's portrait and signature. At All Drugists—30 Cents W. H. HILL COMPANY, DETROIT (200)

COMING POULTRY SHOWS Pontiac, Jan. 16-21, A. D. J. Shimmel, R. No. 1 Chicago National, Jan. 11-17, D. E. Hale, 349 West 65th St.

POULTRY

DAY OLD CHICKS HOMESTEAD FARMS LEGHORNS

We are issuing a Bulletin that describes the kind of a fowl the farmer now days wants. Send for this description of our Pure-Bred Practical Poultry. The highest class practical stock in Michigan; stock that each year is also now being shipped to poultry farmers of other states. You will like particularly the White, Brown, and Buff Leghorns of this breeding; they give the eggs. Also Barred and White Rocks, Reds, Wyandottes, Orpingtons, Anconas. DESK 2 STATE FARMS ASSOCIATION Kalamazoo, Michigan

ORPINGTONS AND LEGHORNS Two great breeds for profit. Write today for free catalogue of hatching eggs, baby chicks and breeding stock. CYCLE HATCHER COMPANY, 149 Philo Bldg. Elmira, N. Y.

Baby Chicks, Eggs—Leghorns, Rocks, Reds, Wyandottes, Orpingtons, Catalogue free. GOSHEN POULTRY FARMS, R. 21, Goshen, Indiana.

FOR SALE—SILVER SPANGLED HAMBURG Cockerels, \$2.00 each, ROSEDALE FARM, Port Huron, Mich., R. 1, J. G. Philpott.

MUD WAY AUSH-KA FARM offers young stock and a few mature breeders in White Chinese Geese, White Runner Ducks and White Wyandottes. Also O. I. C. spring gilts. Write today for prices on what you need. DIKE C. MILLER, Dryden, Mich.

TOP QUALITY COCKERELS—MINORCAS, Houdans, Rocks, Reds, Orpingtons, Spanish. TYRONE POULTRY FARM, Fenton, Mich.

W CHINESE GESE, PEKIN DUCKS, R. C. Br. Ladies, MRS. CLAUDIA BETTS, Hillsdale, Mich.

PLYMOUTH ROCK

BUFF ROCKS Quality Bred—By us for 30 years. Hundreds of big husky cockerels and pullets; solid color from "Hogan" tested heavy layers. BIG TYPE, BRONZE TURKEYS Massive chicks and pullets by 1st Chicago and Cleveland winners. Our exports to Europe and So. America recently proves their quality. Large White African Guinea, any number. J. C. CLIPP & SONS Box M, Saltville, Ind.

Big Barred Rock CK's, Bradley Strain. Narrow dark sparry barring full of quality. Mrs. Emerson Bishop, BX M, Orleans, Ind.

BARRED ROCK COCKERELS, bred direct from the famous Norman stock of national repute. Trapped and bred to lay for many generations. Large boned, finely barred fellows at farmers' prices. MRS. JESSIE B. DEAN, Mason, Mich.

John's Big Beautiful Barred Rocks are hen hatched, good layers, Cocks and Cockerels \$4 to \$8 each. Sold on approval. Circulars photos JOHN NORTON, Clare, Mich.

BARRED ROCKS. Surplus breeding stock all sold. More hatching eggs next spring. More Cockerels next summer and fall. From stock from Parks best pedigreed pens. R. G. KIRBY Route 1, East Lansing, Mich.

BARRED ROCK Cockerels, Hills heavy laying strain, deep, narrow, barring. Large birds \$4 and \$5 each. Lucien Hill, Tekonsha, Mich.

KNIGHTSBRED TO LAY WHITE ROCKS Hens, pullets, cockerels, at farmers' prices. ROBERT E. KNIGHT, New Batimore, Mich.

LEGHORNS

SINGLE COMB BUFF LEGHORN BABY CHICKS. Order now for spring delivery. Send for circular. J. W. WEBSTER, R. 2, Bath, Mich.

SINGLE COMB BROWN, WHITE AND BUFF Leghorns, R. I. Reds, White Wyandottes and Barred Rocks. Eggs, stock and chicks in season. Write for prices. Cedar Lawn Poultry Farm, Dansville, Mich. R. 1

R. C. BROWN LEGHORN COCKERELS, KULP strain. \$2.50 for one bird, \$2.00 each for 2 or more. W. E. CUMMINGS, Coleman, Mich.

R. C. BR. LEGHORN YEARLING HENS FOR sale. Pure bred. MRS. JOHN EDGERTON R. 2, Yalo, Mich.



BREEDERS We have a fine lot of English and American Leghorn Cockerels for sale at reasonable prices. Let us know your wants. We ship on approval and guarantee satisfaction. LORING & MARTIN CO. East Saugatuck, Mich.

LEGHORNS

Single Comb Buff Leghorn Cockerels \$5 to \$5.00 each. Hens and pullets \$2.50 to \$5.00 each. Will start shipping Baby Chicks in March. LAPHAM FARMS, Pinckney, Michigan.

GRABOWSKIE'S S. C. WHITE LEGHORNS, cockerels and cocks for sale. L. G. GRABOWSKIE, Merrill, Mich. R. 4

WYANDOTTE

C. W. CASE ROCHESTER MICH. WHITE WYANDOTTE SPECIALIST offers strictly high-grade young and old stock at popular prices. Correspondence solicited.

SILVER AND WHITE WYANDOTTE COCKERELS, bred from prize winners at Battl Creek and M. A. C. Round-up show. Good birds at \$3.00, \$4.00 and \$5.00 each. C. W. BROWNING, R2, Portland, Mich.

WHITE WYANDOTTES

Martin Foundation. A few good breeders for sale. No more baby chicks this year. Order cockerels now for early fall delivery. Prices reasonable.

C. W. HEIMBACH Big Rapids, Mich.

RHODE ISLAND REDS

WHITTAKERS R I REDS Both Combs, Michigan Greatest Color and Egg Strain. Free, by blood test, from bacillary white diarrhoea. If you are interested in Breeding Stock, Day Old Chicks or Hatching Eggs write for our Twelfth Annual Catalog. It is free. INTERLAKES FARMS BOX 4, LAWRENCE, MICH

A FEW CHOICE ROSE COMBED RHODE Island Red Cockerels, of the Whittaker Strain for sale. Price \$4.00 each. Omar C. Henderson, Memphis, Mich.

R. I. RED Thompkins Strain Hatching eggs and baby chicks. Eggs, Jan., Feb., \$12.00; Mar. \$10.00; May, June, July, \$8.00 chicks. Apr. twice price of eggs. A few good cockerels left. W. M. H. FROHM, New Baltimore, Mich., R1

ORPINGTONS

COCKERELS AND PULLETS for sale. Buff, White, Black Cockerels at \$7, \$8, and \$10. Pullets at \$3 and \$5. Also yearling hens \$3 and \$4. Hatching eggs, \$6 per setting of 15. GRABOWSKIE BROS., R. 4, Merrill, Mich.

ANCONAS

3000 EARLY APRIL HATCHED FULLY MATURED ANCONAS. BUCKEYE ANCONA FARM NEW LONDON, OHIO.

Heavy layers and show birds, none better. Reasonable prices and quality stock is our motto. Can furnish winners for any show. Ask for our late winnings at Columbus, O., Louisville, Ky., Cleveland, O., Pittsburg, Pa., Hagerstown and Cumberland, Md. Chs. Hens, Cks., Pul. and Mated Pairs always for sale. Eggs and Baby Chicks in season. 100,000 Incubator capacity. Write us and get the best.

LANGSHAN

DR. SIMPSON'S LANGSHANS OF QUALITY Bred for type and color since 1912. White laying strain of both Black and White. Have some cockerels for sale. Eggs in season. DR. CHAS. W. SIMPSON Webberville, Mich.

TURKEYS

GIANT BRONZE TURKEYS Large vigorous pure bred birds of Copper Bronze strain. Buy your stock now at fall prices. MRS. PERRY STEBBINS, Saranac, Mich.

GIANT BRONZE HEN TURKEYS, splendid thoroughbred birds of the Hugo King strain. MRS. LAVERNE BROWNELL, Belmont, Mich.

MICHIGAN'S BEST Giant Bronze Turkeys Splendid pure bred birds. Great in size; fine in color. N. EVALYN RAMSDALL, Ionia, Mich.

FOR SALE—MAMMOTH BRONZE TURKEYS. Write for prices. MRS. H. D. HORTON, Fillion, Mich.

Bourbon Red Turkeys, young vigorous, nicely marked, early hatched hens and toms, not akin. ARCHIE D. IVES, Rockford, Mich., R. 3

DUCKS

DUCKS FINE WHITE PEKINS AND PURE MALLARDS. E P KINNEY, Okemos, Michigan R1

BABY CHICKS

CHICKS WITH PEP If you want chicks that pay you we have them. Ours have the egg-laying habit. From show winning strains and egg strains as high as 290. Leghorns, Rocks, Reds, Anconas, Wyandottes, Minorcas, Orpingtons, Safe delivery. Prepaid. Prices right. Free catalog. HOLGATE CHICK HATCHERY, Box B, Holgate, Ohio.



BABY CHICKS

200,000 FOR 1922. Sheppards Anconas, English type White Leghorns and Brown Leghorns, \$15.00 Barred Rocks \$18.00 per 100. Get them direct from Hatchery from all culled out flocks. Free and safe delivery guaranteed. Catalogue free. KNOLLS HATCHERY, Holland, Mich., R. 5

NABOB JUST-RITE Baby Chicks

1 1/2 MILLION CHICKS Postage PAID 95 per cent live arrival guaranteed. MONTH'S FEED FREE with each order. A hatch every week all year. 40 breeds chicks 4 Breeds Ducklings Select and Exhibition Grades. Catalogue Free, stamps appreciated. NABOB HATCHERIES, Dept. 30, Gambler, O.

CHIX ANCONAS, WHITE AND BROWN Leghorns. From select, heavy laying parent stock. Very reasonable prices. Get your order in soon. CITY LIMITS HATCHERY Holland, Mich



DAY OLD CHICKS

It is now time to think about next season's chicks. You want the best available to start with at the right time, and at a reasonable price. We are here to meet those demands. We supply efficiency chicks' Reds, Rocks, Wyandottes, Leghorns Ship them prepaid by special delivery parcel post, guaranteeing delivery. You take no chance. Send for our catalogue for full information and why you should buy chicks. CLYDE CHICK HATCHERY, Box 511, Clyde, O

Day Old Chicks, Standard varieties. Make your selections. Catalogue and price list now ready. H. H. PIERCE, Jerome, Mich.

CHIX FROM TWELVE LEADING VARIETIES OF heavy layers on free range. Reasonable prices. Get catalog and order NOW. SUNBEAM HATCHERY, H. B. Tippin, Box 303, Findlay, Ohio.

LOOK! CHIX EGGS S. C. WHITE LEGHORNS, 230-284 egg strain. Prices greatly reduced for 1922. Satisfaction and delivery guaranteed. Hundreds of satisfied customers. Catalog FREE. REPIG'S LEGHORN FARM Box 50, Auburn, Ind

IF YOU ARE GOING TO BUY CHICKS THE coming season write me; get description of pure bred S C W leghorns, S C Brown, Anconas, Barred Rocks. Send your order in early for 1922 delivery. Our prices are reasonable. We give you a square deal. QUEEN HATCHERY, Zeeland, Mich. D. J. Van Der Koal.

The 'Old Reliable' OHIO HATCHERY

which has been in the business TWENTY-TWO YEARS can supply you with the best Chicks from all leading varieties and at reasonable prices. Get our Free Catalog NOW before you order Chicks elsewhere. 100 per cent Live Delivery Guaranteed. To your door by Prepaid Parcel Post. THE UHL HATCHERY, Box 502 New Washington, Ohio.

BABY CHICKS

STOCK AND EGGS—quality for the particular Breeder. Write for special price list today. Specializing in Barred Rocks, 10 other breeds.

BEECHMONT POULTRY FARM Box 16, Crandall, Ind.



Big Value Baby Chicks

Eleven popular, money-making breeds. Easy to buy—priced low. Easy to raise—husky, healthy, vigorous. And guaranteed! Write today for FREE catalog showing many breeds in full colors.

OHLS POULTRY YARDS and HATCHERY BOX 28, MARION, OHIO

Cockerels

If you have any to sell, now is the time. Breeders are now looking for new blood to head their flocks. Take advantage of the opportunity by advertising your surplus cockerels at this time in

M. B. F.'S POULTRY BREEDERS' DIRECTORY

MARKET FLASHES

TRADE AND BUSINESS REVIEW

THE NEW year opens with an encouraging outlook for general business. Undertakings and the opinion seems to prevail that 1922 will be a banner year from the standpoint of business done. The retail store trade of the last month in the year, has been eminently satisfactory but other branches of the mercantile business finished rather close to the bottom. Men of experience and good judgment think they see a rift in the financial clouds that means for much better business.

The demand for pig iron is increasing, rapidly and sales of this commodity are coming to be of an every day occurrence. Structural steel is quiet with production running on little more than a 30 per cent basis; the existing stagnation, in connection with manufactured steel, is said to be the result of a desire on the part of buyers to delay making further commitments until after the beginning of the new year. One of the conditions which are depended on to give an impetus to the steel and iron business, when once the manufacturing of the new year gets under way, is the low prices which prevail in both these lines. Men of foresight try to purchase material for construction purposes on the lowest possible basis and it is believed that the first advance in prices will be the signal for everyone who is need of steel or iron to come into the market, an action if it should become universal, would send the market upward at a much higher rate of speed than that which has ruled in the decline.

Probably the most serious condition, which the country must face at the beginning of the new year, is the deplorable plight in which the farmer finds himself; with a shrinkage in the value of many of his products equal to 50 per cent he is without money or credit with which to finance his future agricultural and breeding operations. The silver lining to this cloud is seen in the fact that the public at large begins to appreciate the situation and a movement is on foot which has for its object the organization of a corporation which will furnish financial aid to every farmer in the union that is need of it. The business of the country is rapidly finding out that when the farmer goes broke the whole country goes broke with him. The calling of a great conference in the near future by the president for the purpose of devising some adequate means for relief to the farmer is one of the encouraging signs of the times.

That great barometer of business, the New York Stock Exchange, seems to be handing out some advance tips in the way of improved values for all the specialties traded in on that market. It would seem that the public considers the present moment an advantageous time to purchase industrials, rails, equipments and all other dividend-paying stocks.

WHEAT

It is not entirely clear what transpired in the Chicago Board of

WHEAT PRICES PER BU., JAN. 3, 1922			
Grade	Detroit	Chicago	N. Y.
No. 2 Red	1.17	1.12 1/2	1.17 1/2
No. 2 White	1.14		
No. 3 Mixed	1.14		

PRICES ONE YEAR AGO			
No. 2 Red	No. 2 White	No. 2 Mixed	
Detroit	2.00	1.97	1.97

Trade regions on Saturday of last week and Tuesday of the current week to put the skids under the grain markets and cause wheat to slip back seven cents a bushel. The reason given by the traders was the failure of a big grain house and the near failure of two large Chicago banks. For a time the financial condition of many of the big grain firms was in question which caused, it is alleged, undue liquidation. It is significant that no important changes had taken place during this time in the estimated supply of wheat or the potential demand, so again the farmer suffers from the

Edited by H. H. MACK

MARKET SUMMARY

The old year closed with a general feeling of confidence in all markets with the exception of livestock and dairy products. Grains which suffered some the fore part of last week regained most of their strength, oats closing the week at 41 cents, the highest point reached in several months. But the first day of trading the new year saw a good deal of selling and all grains lost from one to five cents per bushel. The grain situation as we go to press is distinctly bearish. Beans are firm and potatoes have advanced materially. Hay is firm. Butter and eggs weak.

(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.)

misdeeds and mistakes of the handful of men engaged in the enjoyable pastime of gambling in his products.

Contrary to our predictions wheat gained considerable strength the last week in December but lost it all the opening trading day of the new year. The market recovered slightly at the close of the trading Tuesday, but there was a lack of confidence which did not augur well for higher prices. Our exportable surplus of wheat has been sold and if the Chicago gamblers can get their financial affairs in shape we may have hopes of higher prices. Otherwise the least said about the future of the wheat market the better.

CORN

While trading was light last week the market showed more activity

CORN PRICES (new) BU., JAN. 3, 1922			
Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	52	47	64 1/4
No. 3 Yellow	49		
No. 4 Yellow			

PRICES ONE YEAR AGO			
No. 2 Yell	No. 3 Yell	No. 4 Yell	
Detroit	53	79	76

than it has for some time during the holiday period from Christmas to New Year's. During the week before Christmas the market was very active and strong. Receipts were large, amounting to 2,982 cars for the week, against 1,067 a year ago. Export demand was good. But last week there was a letting up all along the line; receipts decreased, demand, both domestic and foreign, was smaller and the market was easy. The final government crop report showing over 70,000,000 bushels less than was estimated on November 1st had little effect on the market as nearly all looked for this reduction and many believed the loss would be greater. The failure

of a large commission house did not cause the market to fluctuate as many thought because the greater part of its holdings were taken over by other firms and only a small portion of the grain appeared on the market. While foreigners were in the market every day last week their bids were mostly under prevailing prices and they took little grain. New corn declined 1c at Detroit last week but old corn remained at the level established the week before.

OATS

Oats did not reach the level the first of the year predicted some time

OAT PRICES PER BU., JAN. 3, 1922			
Grade	Detroit	Chicago	N. Y.
No. 2 White	40	36	47
No. 2 Yellow	38	33 1/2	
No. 4 White	35		

PRICES ONE YEAR AGO			
No. 2 White	No. 3 White	No. 4 White	
Detroit	50 1/2	49	46

ago, but they did reach 41 cents on the Detroit market which is the highest quotation for several months. Commission firms and cereal manufacturers who have been out of the buying for a long time are showing some interest in oats now. This market should show a healthier tone from now on, but higher prices must await the cleaning up of the large supplies in storage at terminal points.

RYE

During the past two weeks rye prices advanced to 90c at Detroit and at Chicago. But the market suffered with wheat at the opening of the current week and lost 2 to 3c per bushel.

BARLEY

There is little change in the bar-

ley market either in tone or prices. Within the past fortnight barley at Chicago advanced to 53c per bushel while at Detroit prices drew slightly closer together as this grain is now \$1.14 @ 1.25 per cwt.

BEANS

The new year opens with beans firm and demand active. The hard

BEAN PRICES PER CWT., JAN. 3, 1922			
Grade	Detroit	Chicago	N. Y.
C. H. P.	4.30	4.87	5.20
Red Kidneys		6.85	

PRICES ONE YEAR AGO	
	C. H. P.
Detroit	4.00

times are forcing people to eat more beans which are still very cheap in comparison with their food value and the prices of other foods. There are no unusual features to the market at this time, but the Business Farmer fully expects to see a strong advancing tendency develop in beans very soon. Nor are we alone in this feeling. The bean market has suffered the worst and the longest from over-production and the consequences of the war. The market will not regain all that it lost but it will regain a large part of the loss.

POTATOES

Potatoes jumped from \$2.90 @ \$3 per 150 pounds on the Detroit mar-

SPUDS PER CWT., JAN. 3, 1922			
	Sacked	Bulk	
Detroit	2.25		
Chicago	2.10		
New York	2.16		
Pittsburg	2.00		

PRICES ONE YEAR AGO	
Detroit	1.89

ket to \$3.25 @ 3.50 in less than one week's time. During the same period Chicago prices showed a gain of 35 to 40 cents per cwt. It could not have done this had supplies in transit or in storage been anywhere near normal. We know of no unusual influence which could have given such strength to the potato market in such a short time aside from actual shortage. And if this was the only influence, then the predictions we have been making with regards to potatoes are to come to pass sooner than we realized. The potato situation is so fully covered on another page of this issue that it is unnecessary to go into fuller details here. It is sufficient to say that market has seen the low point so far as the 1921 crop is concerned, and the trend should be persistently upward from now on, with perhaps slight seasonal and temporary declines.

HAY

Detroit and eastern markets failed to show any activity during the

	No. 1 Tim.	Stan.	Tim.	No. 2 Tim.
Detroit	19.00 @ 20	18.00 @ 19	17.00 @ 18	
Chicago	20.00 @ 22		18.00 @ 19	
New York	28.00 @ 29		25.00 @ 18	
Pittsburgh	21.50 @ 29	19.50 @ 20	17.50 @ 18	

	No. 1 Light Mix.	No. 1 Clover Mix.	No. 1 Clover
Detroit	18.00 @ 19	15.00 @ 16	14.00 @ 15
Chicago	19.00 @ 20	17.00 @ 18	16.00 @ 15
New York	25.00 @ 28	21.00 @ 25	
Pittsburgh	18.50 @ 19	20.00 @ 21	

HAY PRICES A YEAR AGO				
	No. 1 Tim.	Stan.	Tim.	No. 2 Tim.
Detroit	26.00 @ 27	25.00 @ 26	25.00 @ 26	

	No. 1 Light Mix.	No. 1 Clover Mix.	No. 1 Clover
Detroit	25.00 @ 26	23.00 @ 24	22.00 @ 23

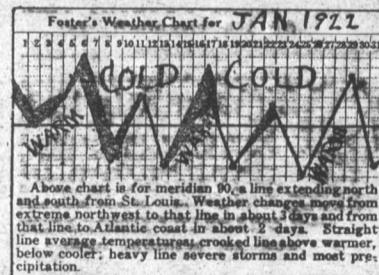
holiday season but prices held owing to lack of receipts. Prices on the Chicago market made sharp advances during the week between Christmas and New Years and the market is steady at present. There should be considerable improvement in the market and higher values during the next few months.

ONIONS

There is a better demand for domestic onions due to the poor keeping qualities of the imported Spanish onions, and it looks as if we were to see some real fancy prices paid for onions before another crop is harvested. Many onions were sold in New York last week for from

THE WEATHER FOR NEXT WEEK

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



WASHINGTON, D. C., Jan. 5, 1922.—The week centering on Jan. 12 will average colder than usual in Michigan. The high temperature of that disturbance will be in northwestern Canada about Jan. 9, on and all along meridian 90 Jan. 11, and in eastern sections Jan. 13. A cold wave will be in northwestern Canada near Jan. 11, in Michigan 14, eastern sections 15. Top of a great high temperature wave will be in northwestern Canada near Jan. 15, in Michigan 18, eastern sections 19. These will progress eastward as usual.

The forces in these storm features will begin to increase near Jan. 13 and will be at their greatest about 16 and 17. No great snows nor floods are expected from these severe storms, but near the 10-year averages of such weather events. The place where the ocean waters are being evaporated is too far away for the moisture to reach this continent in large quantities. Our

great snows, rains and dangerous storms do not occur when only small amounts of moisture are conveyed to the storm centers on the continent.

I have repeatedly told you that the amount of precipitation in North America would be less than usual from Oct. 1921 to April 1922 and that American winter wheat would be injured by a shortage of moisture. But you must read more carefully. I did not say that all sections of the continent will get that kind of cropweather. Thousands of readers misunderstood when I said I would reply to all inquiries about cropweather. That did not mean I would send you a whole year's cropweather forecast for your immediate section and pay the postage.

In at least two-thirds of the sections that border on the Gulf of Mexico, winter truck gardening will not more than pay expenses up to the middle of April and after that date a drought will effect some sections of that Gulf coast. As the cropseason progresses toward its close in the fall of 1922 the unfavorable winter cropweather of the extreme south will change northward over the continent from two-thirds good, making the average of our North American crops for 1922 about equal to the 10-year averages. These conditions promise success to North America so far as our crops can effect the continent.

W. T. Foster

to \$6 per cwt., and with a strong one and limited supplies higher prices are in prospect.

APPLES

The demand for apples which showed some falling off the fore part of December has improved, and New York quotes the following prices paid last week for popular varieties: Fancy Greenings, \$9@10 per barrel; Baldwins and Kings, \$6.50@7.50; Ben Davis, \$3.50@6.

BUTTER

The butter market which showed such a healthy condition the first half of December has become weak and unsettled due primarily to the heavy fall production and imports. Cheese markets are also weak. This had news to farmers who are selling milk on a butter and cheese basis. A good deal of butter was received at U. S. ports during the month of December from Denmark, Ireland, Argentina, New Zealand and Australia. Dairy interests feel that with the domestic dairy industry in such a bad way something must be done at once to curb the imports.

LIVE STOCK MARKETS

Just now beef seems to be the most unpopular meat in the world, a fact that is very hard to account for when the recent wonderful activity in the lamb and hog market is taken into consideration. That holiday time in America has come to be the open season for poultry must be conceded; meat dealers say that they never knew a season when it was so hard to sell all kinds of fresh meat, except poultry and so easy to sell the latter if it was reasonably attractive.

Barly last week receipts of cattle were light in the Chicago market and prices advanced sharply only to fall back when arrivals reached normal levels again. Cattle receipts were 10,000 less in Chicago than for the week before, a fact that has but little bearing upon a situation that has for its keynote the "eat no beef" propaganda. The season for extra good bargains in cattle is over, simply, because the cattle that are coming are "warmed over" stock and have no right to be classified as finished animals. Everything desirable is selling very well but the market is getting an overdose of nondescript cattle that nobody wants at any price. Steekers and feeders are holding up fairly well when the slump in fat cattle is taken into consideration.

The sensational feature of the current live stock market is the pressing demand for lambs and light yearlings; scarcity is beginning to attract the attention of the dealers both at wholesale and retail trade in sheep and lambs at the leading markets of the country is supported by the strongest kind of competitive bidding. Activity in the wool trade is also responsible for the urgent demand for breeding ewes and ewe lambs of good breeding. On the trade in Chicago, last Saturday, fat lambs sold for \$11.75 and feeding lambs for \$10.75; in both of the above cases a record for the present season was broken.

The holiday season brought a big break in hog prices, caused in the main by record breaking receipts. Chicago got 191,700 hogs last week only two weeks during the year showing as many hogs in the Windy City. Hogs were plentiful all around the market circle and the packers made good use of the opportunity to pound values. Had it not been for a strong shipping demand for eastern account prices would have gone very much lower for the big packers hung back as usual resorting to every known subterfuge. That the eastern district is bare of fat hogs is universally conceded and the wonderful volume of recent arrivals would suggest an early let up in receipts from the corn belt. The demand for fresh pork has been rather quiet during the past week but a pronounced revival is looked for as soon as the holiday supply of poultry is out of the way.

EAST BUFFALO LIVE STOCK MARKET

December 31st—Cattle—receipts, 225; steady. Calves—receipts, 150; 50c lower; \$13@13.50. Hogs—receipts 4,800; un-

even; 25c higher to 25c lower; heavy, \$7.25@7.50; mixed, \$7.50@8.50; Yorkers, \$8@8.50; light Yorkers, \$8.50@8.75; pigs, \$8.75@9; roughs, \$6.50@7.75; stags, \$3.50@4.50. Sheep and lambs—receipts, 1,400; lambs 25c lower at \$5@12.25; others unchanged.

BOSTON WOOL MARKET

The Commercial Bulletin says: "The demand for wool of all grades kept up with unusual animation last week, not a little wool having been purchased in bond, especially wools of fine grade and good staple, which some of the mills need apparently with which to piece out current orders. Prices generally showed an advance for the week of 1c to 2c a pound in the grease. The wool industry is hoping for early passage of the permanent tariff bill in order that a basis upon which to operate in the new clip may be ascertained. The manufacturers are not consuming so much as they were but still are using considerable stock. The clothing industry is cutting prices in order to move large surplus stocks."

The Bulletin gives wool quotations as follows:

Ohio and Pennsylvania fleeces—Delaine unwashed, 40@41c; fine unwashed, 33@34c; 1-2 blood combing, 36@37c; 3-8 blood combing, 33@35c.

Michigan and New York fleeces—Delaine unwashed, 38@39c; fine unwashed, 29@30c; 1-2 blood unwashed, 34@35c; 3-8 blood unwashed, 32@33c; 1-4 blood unwashed, 31@32c.

Wisconsin, Missouri and average New England—1-2 blood, 31@33c; 3-8 blood, 31@32c; 1-4 blood, 29@30c.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Jan. 3rd.

BUTTER—Best creamery, in tubs, 36@37c per lb.

EGGS—Fresh, candled and graded, 42@43c; storage, 35c per doz.

APPLES—Greening, \$3@3.50; Baldwins \$2.50@2.75; Spy, \$3@4; Jonathan, \$3@3.25; western boxes, \$2.50@3.50.

CABBAGE—\$1.50@1.60 per bu.

POPCORN—Globe, 5c; Little Buster, 10c per lb.

CELERY—Michigan, 40@50c per doz. and \$1.25@1.50 per box; California Jumbo, 60@65c; extra Jumbo, \$5@90c; mammoth, \$1.20@1.30 per doz.

DRESSED HOGS—Small to medium, 9@10c; heavy, 5@7c per lb.

DRESSED CALVES—Choice, 13@14c; medium, 10@12c; large coarse, 5@10c per lb.

LIVE POULTRY—Best spring chickens, 24c; Leghorn springs, 18c; large fat hens, 23c; medium hens, 21c; small hens, 14c; old roosters, 14c; geese, 20c; large ducks, 28c; small ducks, 25@27c; large turkeys, 35c per lb.

Jobbing Prices

SUGARS—Eastern granulated, \$5.95; non-caking mixture, 7.25; XXXX powdered, 7.15; No. 8 soft, \$5.65; Michigan granulated, \$5.75 per cwt.

HIDES—No. 1 cured, 6c; No. 1 green, 5c; No. 1 cured bulls, 4c; No. 1 green bulls, 3c; No. 1 cured calf, 14c; No. 1 green calf, 13c; No. 1 cured kip, 9c; No. 1 green kip, 8c; No. 1 horsehides, \$2.50; No. 2 horsehides, \$1.50; sheep pelts, 25c @ \$1; grubby hides, 2c under No. 2; No. 2 hides 1c and No. 2 calf and kip 1-2c under No. 1.

WEEKLY MARKETGRAM

By U. S. Bureau of Markets and Crop Estimates

Washington, D. C., for the week ending December 30, 1921.

FEED—Mill feed market continues inactive. Wheat feed prices firm on light production but demand is light and offerings are slightly larger. Demand for other feed only fair and prices and conditions are practically unchanged. Quoted December 30: spring bran \$22.50, Minneapolis; \$25.50, Chicago; standard middlings, \$22; flour middlings \$24, Minneapolis; 36 per cent. cottonseed meal \$34, Memphis; \$40.50 Chicago; linseed meal \$52 New York; \$44 Minneapolis; gluten feed \$36.65 Chicago.

GRAIN—Market uncertain throughout week, Chicago May wheat registering a net decline of two cents and closing at \$1.15; Chicago May corn down one cent at \$4c. Prices declined on the 30th on bearish construction placed upon government crop report estimating winter wheat area sown this fall 44,293,000 acres, which is 1.2 per cent less than the revised estimated area sown in fall of 1920. Closing prices in Chicago cash market: No. 2 red winter wheat \$1.13; No. 2 hard winter wheat \$1.13; No. 2 mixed corn 48c; No. 2 yellow corn 48c; No. 3 white oats 34c. Average price to farmers in central Iowa for No. 2 mixed corn about 33c; to farmers in central North Dakota for No. 1 dark Northern wheat \$1.09 3-4; to farmers in central Kansas for No. 2 hard winter wheat 95c. For the week Minneapolis May wheat down 2-1-4c, closing at \$1.21 3-4; Kansas City May wheat down 1-3-4c at \$1.17 1-4; Winnipeg May wheat down 3-1-2c at \$1.10 1-8.

FRUITS AND VEGETABLES—Potato markets stronger, demand and movement slow. Northern sacked round whites up 20c in Chicago at \$2@2.20 per 100 lbs; up 10@20c in producing sections at \$1.65 @1.85 f. o. b. Eastern round whites up 30c in Pittsburgh at \$2.35; up 25c at shipping points at \$1.90. Maine green mountains in bulk up 10@20c at \$1.46 @1.56 per 100 lbs. f. o. b.; firm in Boston at \$1.90@2.10 per 100 lbs. sacked. Apple markets slow and steady, demand limited. New York A2 1-2 Baldwins \$6.50@6.75 per bbl. Michigan stock dull in Chicago at \$7@7.50. Cabbage market generally slow and dull, prices higher. New York Danish type up \$7@10 in Philadelphia at \$50@55.00 per ton bulk, up \$5 in Chicago and St. Louis at \$58@60.

Northern Danish stock strong in Chicago and St. Louis at \$58@60.

DAIRY PRODUCTS—Closing prices \$2 score New York 40 1-2; Philadelphia 41 1-2; Boston 42; Chicago 40. Cheese markets quiet with tendency toward weakness. Dealers generally expect better demand after first of year and some southern business has already opened up. However neither factor is of sufficient strength to hold prices.

JUDGES ANNOUNCE CONTEST WINNERS.

THE JUDGES in the Business Farmer's "S" puzzle contest consisting of Geo. W. Dickinson, manager Michigan State Fair; former governor Fred M. Warner, and Mr. A. B. Cook, master of the Michigan State Grange have just completed their examination and declare that "to the best of their knowledge and belief the following named persons rendered 'the largest and nearest correct number of words' in the order given and are therefore declared to be the winners of the contest."

First—Mrs. A. E. Tanner, Spring Arbor, Mich.

Second—Mrs. Vern S. Cosgray, Eaton Rapids, Mich.

Third—Harold E. Saunders, 230 Park avenue, Takoma Park, Md.

Fourth—Arthur C. Clafflin, Charlotte, Mich.

Fifth—Jerry Campbell, Pecos, N. Mex.

Sixth—Ellis C. Martin, Spruce, Mich.; Doris Schermerhorn, Traverse City, Mich.

Seventh—Margaret B. Reabe, Rockwood, Mich.

Eighth—Margaret Stinnett, 221 Windmere ave., Highland Park, Mich.

Ninth—Mrs. Grace Sheffer, Williamsburg, Mich.

Tenth—Mrs. Waldorf Aldrich, Vermontville, Mich.; Esther Priehs, Imlay City, Mich.; Miss Ruby Fletcher, Pellston, Mich.; Herman Ohse, Branch, Mich.; E. M. Ferguson, Eckford, Mich.

Eleventh—Marian Dolbee, Mason, Mich.; Mrs. Minnie Norris, Charlotte, Mich.

Twelfth—Mabelle Kruger, Centerville, Mich.; Claudia M. Brown, Shepherd, Mich.; Francis A. Smith, Memphis, Mich.

Thirteenth—Arthur Howse, Frederic, Mich.; Clark E. Sharp, Vestaburg, Mich.

Fourteenth—Mrs. Andrew Govan, Metamora, Mich.

Fifteenth—Howard E. Rice, Otter Lake, Mich.

The correct list of words used by the judges in making their decision is as follows:

- sack shelf smoke star
sacking shell smoker stationery
saddle sheller smoker statue
sag shield statute
sail shin stave
sailing shine steam
sailor ship snake steamer
salmon shirt snap stool
salsolary shirting snache stoople
sand sheat sniveler stom
sardal shock stout stop
sap show storm stick
sapping shoe stork stile
sash shog stork stilt
satchel shog stork stilt
saucer shorhand stork stork
sausage shot stork stork
saurian shoulder stork stork
savage shovel stork stork
saw shrimp stork stork
sawyer strawberry stork stork
saxophone struk stork stork
shutter stork stork stork
soabard elokle spade steamer
soafes side spar string
soalops siding spat stripe
soalp slope spear stirrup
soandling sign stork stork
soar signal sphere stork
soarf sght stork stork
soene sphere stork stork
sconery signature spico stone
soentiation silhouette spike stool
sooop sill spiro stoop
soore silo spint stroke
soout site spitch structure
soovi skate sponge stuble
soov skator spone stud
soorif skeln spoon studding
sooythe skln spoonful stump
soa skln spot sty
soal skirt spout
soeal skirting spout
soeat skirf spread
soeaty skruk sprig
soection sky spur
soediment stete square sun
soene sted squash support
soemaphore stedge squaw supporter
soentry steddng squint surr
soette sneeper squitral surrce
shade stook stork surrounding
shadov stoove stable susperidors
shaf stack stork
shamrock stak stag swab
shank stalf stork swallow
shanty slipper stork swan
shark stll stall sweater
shawl stope stamp swim
sheaf stot stanchion swimmer
shears shed stand swing
shed shod standard switch
sheep smile staple sword

SALE OF WOOL Embroidered SERGE DRESSES \$3.88



Don't miss this amazing bargain! Only a few of these stunning style, fine quality Serge Dresses to go at this sensationally low price. Fashioned from extra quality Serge, always looks nice and gives excellent wear. Beautifully designed and stitched wool embroidery in two harmonizing colors will not pull out or run. 2 novelty pockets; self material sash belt; full length sleeves.

SEND NO MONEY

So sure are we that you will say this is the most wonderful bargain you ever saw, we send it without one penny in advance. Just your request brings this charming dress. But don't delay—they will go fast—get into the first mail. Colors: Navy blue only. Sizes: Women's sizes 32 to 46 bust; Misses' sizes 14 to 18. STATE 22Z.

ACT NOW!

Send no money now—pay only \$3.88 and postage on arrival. Your money back quick if you want it.

International Mail Order House

Dept. KK01 3311 Ogden Avenue, CHICAGO

International Mail Order House Dept. 6811—3311 Ogden Ave., CHICAGO

Please send the quick Bargain Serge Dress. Will pay postage when it arrives.

\$3.88 and postage on arrival. If not delighted you will refund my money.

Name _____ Size _____

Address _____

City _____ State _____

FISH - FISH

I have a limited amount of HERRING that were caught in November and Salted immediately, which I am going to sell direct to the consumer. Let us get together, not only now but for future business in the Fresh Fish line, I will offer for the next (60) sixty days:

125 lbs. Salted Herring in new keg at \$4.50

400 lbs. Salted Herring in new keg at \$4.00

25 lb. Salted Herring in Pails at \$1.20

The packages alone cost me one-third of this amount. Fish are dressed either round or flat; please mention when ordering. Money refunded if not satisfactory.

W. D. DUTCHER SEBEWAING, MICH.

COOPER The Wonderful New Strawberry 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 offered. Send for catalog, STEVENSVILLE NURSERY, Box 95, Stevensville, Michigan.

Detroit Incubator \$12.45 140-Egg Size—Guaranteed—has double walls, copper tank, full-size nursery, automatic regulation thermometer held so that chicks cannot break it when hatching. Detroit Brooders, too. Double walled; hot water heated. Write for special low price on both machines. Detroit Incubator Co. Dept. 10 Meritt St., Detroit, Mich.

CUSTOM FUR TANNER Dresser and Manufacturer of Coats, Robes, Latest styles in Ladies' Furs. Rug Work on Floor Rugs. Get our Catalog. W. W. WEAVER, Reading, Michigan. Established 1891.

64 BREEDS Most Profitable pure-bred Northern raised chickens, ducks, geese, turkeys, Fowls, eggs, incubators at reduced prices. 29th year. Largest plant. Large valuable poultry book and catalog free. R. F. NEUBERT Co., Box 431, Mankato, Minn.

INSTRUCTIONS in Practical Pruning to community classes. O. S. KETCHUM, Middlefield, O.

Read the Classified Ads -IN- M. B. F.'s Business Farmers' Exchange

Walsh No-Buckle Harness

No Buckles To Weaken And Tear Straps



Before You Buy Any Harness Let Me Send You This Wonderful No-Buckle Harness On 30 Days' FREE TRIAL

The time has come to buy new harness. Thousands will find their old harness won't last through another season and it doesn't pay to spend another dollar patching.

Before you buy yours, post yourself on the new improved way of making harness which has three times the strength of buckle harness. Let me send you a set of Walsh No-Buckle Harness on Thirty Days' Trial, just as thousands in every state in the Union have done.

Let me show you how harness can be made three times stronger without buckles—how much better looking—and how much handier in every way. Try the Walsh on your team thirty days. If not all I claim, send it back at my expense. No obligations on your part. This wide open offer shows that the Walsh must be an exceptionally good harness. Investigate—post yourself—write today for full particulars.

THREE TIMES STRONGER THAN BUCKLE HARNESS

Buckles weaken and Tear Straps. As an example a Walsh 1 1/8 inch breeching strap holds over 1100 lbs. The same strap with the buckle will break at the buckle at about 350 lbs. pull. Ordinary harness has 68 buckles. Walsh Harness has no buckles—easy to see why Walsh is three times stronger, lasts so much longer without repairs. Walsh Breeching, as well as all other parts of the harness, are easily adjusted to fit perfectly any size work horse. Mail coupon for Free Book which shows how Walsh Harness are made.

Friction—Another Destroyer of Harness

The constant rubbing or see-sawing of a strap against rings or dees is bound to cut through the best strap ever tanned. That is friction, and friction is destroying every old style harness in use.

Yours very truly, JAMES M. WALSH, President

WALSH HARNESS COMPANY

Dept. U-3 137 Keefe Avenue,
Milwaukee, Wisconsin

Look at your old buckle harness and see how the straps are nearly worn in two by friction rings. A set of ordinary harness has 270 places where there is friction on straps. The Walsh Harness has no rings, no friction to wear straps in two. Send for my book, which shows how I have done away with strap-destroying friction.

Costs Less—Lasts Twice As Long

The Walsh cuts down harness costs. The price is no more than buckle harness, yet it not only outlasts two buckle harness, but saves many a dollar now spent on repairs. You get three times the harness strength for the same money. Mail coupon today for new reduced prices.

A Great Advance In Harness Making

Not only is the Walsh the World's strongest harness, but it is better looking. It is easier to put on and take off. Easily adjusted to fit perfectly any size work horse. It has other features not found in buckle harness, such as better fitting hames,—zinc galvanized rust-proof hardware,—adjustable strap holder—the harder the pull, the tighter it holds—renewable spring snap—and many other advantages fully explained in my free book. Write for it today.

Liberal Terms

Cash or note—No extra charge for credit. Special liberal credit terms to those who order early. Send coupon now for full particulars.

Mail coupon today or write postal for free illustrated book,—new reduced prices—liberal terms—30 days' Free Trial Offer—also how you can make money showing Walsh Harness to your neighbors.

Sold Direct By Mail

Thousands of Users Praise Walsh Harness

The success of Walsh Harness has been astonishing. In a few short years it has gained national fame. Here are a few examples of letters received every day.

The Walsh No-Buckle Harness will outwear two buckle harness, better in a hundred and one ways. BILLINGS BROS., R. 32, Dousman, Wis.

I am sending you my order for another set of Walsh No-Buckle Harness. This makes my third set since 1918, and now have all my teams equipped with Walsh Harness. I would not think of buying any more buckle harness. C. G. ANDERSON, Arthur, Minn.

I have watched your harness in operation on my neighbor's team for the past year and am so well satisfied with it that I am now ordering a set for myself, for which please find check enclosed. OSCAR BEIMBORN, R. R. No. 3, Box 127, Fredonia, Wis.

The Walsh certainly can stand all kinds of hard pulling. I was working with a lot of men in a sand pit. None of the other teams could pull out as I did. All remarked how my Walsh stood the wear. GUST STEIGERWALD, P. O. Box 266, Sayville, L. I.

I have used my Walsh harness two years now, and I consider it greatest harness on market today. When I buy more harness it will be a Walsh. HARRY ANDERSON, Toledo, Iowa.

I have had praise from hundreds of people over my Walsh harness. Have used it hard for 3 years, and it shows practically no wear at all. EARLE BEST, Dota, Ark.

I have used my Walsh for all kinds of work, and I am well pleased with it. It adjusts quicker, and easier than buckle harness. I can harness the horses in dark or in the light, or with mittens on quicker than with buckle harness.

HARRY C. CONLON,
Clearville, Pa.

I have used most all kinds of harness during my life but I would say if I were going to buy a hundred harness, they would all be Walsh No-Buckle Harness. It is the best in all ways. C. A. BROWNELL,
West Oneonta, N. Y.

MADE IN ALL STYLES



Side Backer



Back Pad



Breechingless



FREE Handsome BOOK with 100 Illustrations

THE Walsh HARNESS
Not a buckle on it

Send No Money—Mail Coupon or Postal for FREE BOOK

James M. Walsh, Pres., WALSH HARNESS CO., Dept. U3 Milwaukee, Wis.
Send me free of charge Walsh Harness Book, free trial offer and liberal long time terms on Walsh harness.

Name _____
Town _____
State _____

R. F. D. 10-22