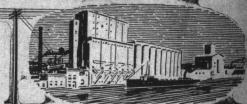
BUSINESS FARMER



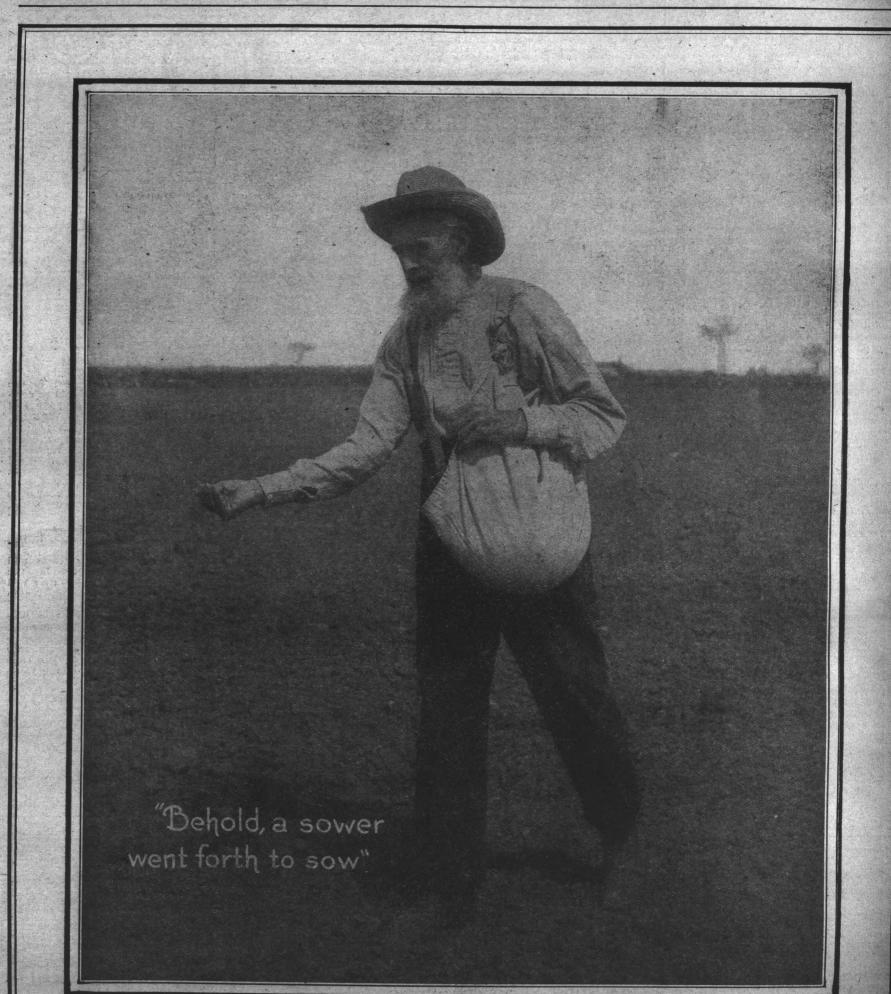
An Independent
Farmer's Weekly Owned and
Edited in Michigan



VOL. IX, No. 34

MT. CLEMENS, SATURDAY, APRIL 29, 1922

\$1 PER YEAR





Current Agricultural News



THE DANGER FROM FOOT-AND-MOUTH DISEASE By Dr. B. J. Killham

WE are in receipt of communica-tions from the Federal Bureau of Animal Industry indicating that foot-and-mouth disease is be-coming widespread in some of the E ropean countries. One report in-dicates that this disease appeared in 966 herds in Great Britain between January 1st and March 5th, 1922, requiring the slaughter of 43,735 animals.

The United States has been very fortunate thus far in having escaped an invasion of the plague, as it is exposed by commercial contract with many countries in which the disease has been unusually prevalent since the war. The Federal Bureau of Animal Industry is using every reasonable precaution to prevent an invasion of the disease and the personnel of that Bureau has been so organized that several hundred veter-inarians can be senf into the field for the purpose of suppressing footand-mouth disease upon a few hours

There are some sources of danger from this disease which are very difficult to guard against. For example, it seems possible for the virus of the disease to be carried long distances in the clothing or other belongings of immigrant farm laborers, and hay or straw used as packing for crockery and other

It is desired that the danger from foot-and-mouth disease be given publicity in order that those inter-ested in the live stock industry will be on the alert for the first appearance of the disease should we be so unfortunate as to have another outbreak

Every effort should be made to prevent hay and straw used for packing imported goods from reaching susceptible animals and where possible, the animals attended by immigrant farm laborers arriving re-

cently in a community should be observed closely to ascertain whether or not they develop the disease. The appearance of any disease resembling foot-and-mouth disease should be promptly reported to a veterinarian or the State Department of Agriculture. of Agriculture.

ARE YOU INTERESTED IN GROW-

ING BETTER POTATOES? LL farmers interested in the pro-A LL tarmers interested in the production of better seed potatoes may make application to have their seed potato field inspected and certified if they desire. There are certain rules and regulations that one must comply with in order to have this work done but no farmer need hesitate because all can become eligible if they will try. Copies of the rules governing the inspection come eligible if they will try. Copies of the rules governing the inspection and certification of seed potatoes in this state can be secured from the Secretary of the Michigan Potato Producers' Ass'n, East Lansing, Mich. We are getting rid of the scrubs in our flocks and herds and replacing them with nurse breds why replacing them with pure breds why not discontinue raising the scrub potato?

NEW COUNTY AGENT FOR CHARLEVOIX

O. HAGERMAN of Ann Arbor B has been appointed county agent for Charlevoix county to succeed C. W. Wing who resigned to accept a similar position in Osceola county. Mr. Hagerman is a brother of D. L. Hagerman, agricultural agent of the Pennsylvania railroad. Charleveix county is one of the leading counties in potato production.

MICHIGAN SEED POTATOES IN FAVOR IN PENNSYLVANIA

MICHIGAN grown certified seed potatoes scored another triumph in Pennsylvania, when they ranked first in yield per acre in tests held in Berks county. The county agent speaks very highly of Michigan potatoes in the following

"Last year the average yield of

potatoes grown from disease-free Michigan seed was 24.6 bushels per acre greater than the average yield of all potatoes grown in the county and 68.7 bushels per acre more than the average for the state. On six-teen farms the Michigan potato seed out-yielded all other potatoes, and on only two farms was the yield less than that of the other potatoes

"Seven hundred bushels of Russets were brought into Berks county, Pennsylvania last year. Seventy farmers planted this seed with high-ly satisfactory results. Of this num-ber, eighteen checked on our yields. "If good seed, free from disease will outyield all other seed on the

average by twenty-four bushels or more per acre in an unfavorable year, we can expect even more of an increase in the average potato year. The farm bureau is planning to bring in several carloads of disease-free seed this spring."

BAKER NOT CONNECTED WITH CLEARING HOUSE ASS'N CEN. H. F. BAKER, of Weddock,

is not and never was connected with the Gleaner Clearing House Ass'n which recently applied for a receivership and permission to dissolve. We make this statement in correction of a press report which emanated from Grand Rapids and was copied in the April 15th issue of the Business Farmer. The re-port was published without verifica-tion and had no foundation what-

FARMERS of Michigan can save practically two milion dollars which they annually lose through oat smut, this year by proper treatment of their seed, declares Dr. G. H. Coons, plant pathologist at the Michigan Agricultural College Treating the seed with formulage at the Michigan Agricultural College. Treating the seed with formal-dehyde, a method which is cheap, safe and easy, will almost eliminate the smut. Oats are less liable to injury by treatment than wheat and the following treatment may be safely carried out.

This method has been used in every county of the state and is very well liked by the farmers. Use formaldehyde at the rate of 1 pint to 50 bushels of grain. Reduce this amount if the amount of grain to be

bushels of grain. Reduce this amount if the amount of grain to be treated is less. Put the right amount of formaldehyde in a pint or quart hand sprayer or atomizer and spray the grain as it is shovelled over and over. If the sprayer is kept close to the grain, and if treatment is given in a room where there ment is given in a room where there is a good draft, the offensive odor of the formaldehyde will give little discomfort. When the right amount of formaldehyde has been applied, of formaldehyde has been applied, shovel the oats into a pile and cover for four hours or the grain may be sacked immediately. The grain should be planted at once as it is unsafe to hold treated grain after treatment. Do not treat more than can be planted in the same day.

The old, or so-called "sprinkling" method is also efficient, and may be used to control oat smut.

used to control oat smut.

EXPORTS INCREASING

NORN went over the top in Februwere exported, establishing a new high record, says the Department of Commerce in a recent statement. Unusually large shipments of corn have been made during the past two months to Russia, Germany.

past two months to Russia, Germany, England, Canada, the Netherlands, European Russia and Ukrania.

Meat products, principally cured pork and lard, are showing a steady but conservative increase, February exports being about 50 per cent greater than November. The United Kingdom', Germany, Cuba, Belgium, Mexico, France and the Netherlands have made the largest purchases in have made the largest purchases in recent months.

Europe, with relatively poor harvests last year and a gradual improvement in the standard of living, is concentrating its resources upon

the importation of foodstuffs, espe cially grain and meat products. The outlook is promising for compara-tively large purchases, until at least after the next harvest.

The surplus of wheat in the United States in 1921 moved unusually early, most of it being exported from July to October, and the di-minished supply in this country has stiffened the domestic market until prices are getting to be equivalent to or above the world level, with a resultant decrease in shipments

FARM MACHINERY AND TOOL PRICES DECLINE

THE average of prices for things farmers buy was 1.6 per cent lower February 15, than on January 15, according to a survey made by the United States Department of Agriculture. The decline since February 15, 1921 is 20.2 per cent.

The declines for the month were most pronounced in the case of machinery and tools such as tractors, cream seperators, harrows, lumber, manure spreaders, mowers, scythes and wheelbarrows. Prices of fertilizer and leather goods such as harness and shoes show but little change.

DAIRY PRODUCTS DECLINE 20 PER CENT IN VALUE THE value of dairy products on

THE value of dairy products on farms in 1921 was \$2,410,000,000, a drop of 20 per cent from 1920, according to a statement issued by the United States Department of Agriculture. The 1920 value was \$3,025,000,000 as compared with \$2,970,000,000 in 1919, during which period the value of animals raised on farms declined should. sharply.

animals raised on farms declined sharply.

The estimates of the quantities and values of the various dairy products include a milk production of 10,535,000.000 gallons in 1919, and of 10,425,000,000 gallons in 1920.

The estimated whole milk sales and farm consumption, at farmers' wholesale prices, had a value of \$1,787,000,000 in 1919, of \$1,836,000,000 in 1921. These values are based on estimates of 6,113,000,000 gallons of milk in 1919, 6,101,000,000 gallons in 1920, and 7,118,000,000 in 1921, at the average price of 29,24 cents per gallon in 1919, of \$0.1 cents in 1920, and of 22.19 cents in 1921. These average milk prices were computed from extensive information on milk prices derived from all parts of the country, based on the relative monthly production of milk.

For butter made on farms, a value of \$345,000,000 is estimated for 1919, of \$366,000,000 for 1920, and of \$242,000,000 for 1921, with an estimated production of farm butter falling from 685,000,000 pounds in 1919 to 650,000,000 in 1921, and an average price of 50.35 cents per pound in 1919, of 54.25 in 1920,

average price of 50.35 cents per pound in 1919, of 54.25 in 1920, and of 37.16 cents in 1921.

Heretofore, no estimate of the values of the buttermilk, skim milk, and whey of farms have been made as items of total dairy products. Based on feeding value, these products had a value of \$261.000,000 in 1919, of \$230,000,000 in 1920, and of \$100,000,000 in 1921.

\$1,000,000 SAVED BY POOLING WOOL

FIWENTY-TWO and a quarter millions of pounds of wool was pooled and co-operatively markpooled and co-operatively mark-eted by 45,000 wool growers in the United States in 1921 at a saving to growers of over \$1,000,000, accord-ing to figures compiled by C. J. Faw-cett, director of the wool marketing department of the American Farm Bureau Federation and made public recently.

The output was marketed from concentration warehouses located in Nek York, Ohio, Michigan, Texas, Illinois, Oregon and North Dakota, the statement said. The average net return was a fraction over 20c a

FARM BUREAU ENDORSES

PACKING PROJECT
S if to answer the criticism that A the farm organizations of the state are luke-warm in their support of privately-financed projects to provide better markets for jects to provide hetter markets for Michigan farm products the Michi-gan State Farm Bureau executive committee recently adopted the fol-lowing resolution. lowing resolution:

"Believing that the Michigan State Farm Bureau should encourage every earnest effort by Michigan farmers to sell Michigan products to Michigan people, thereby building up our own industry and paving the way for mutual economies in transporation and handling cost for producer and consumer, the Board of Directors of the Michigan State Farm Bureau, meeting at Lansing April 12, hereby

"RESOLVES, That the Michigan State Farm Bureau heartily endorses the work being done by the Detroit Facking Company, a farmer-owned and farmer-controlled organization engaged in the operation of a packing plant and the marketing of live stock products largely produced in the State of Michigan. The Farm Bureau helieves that the preparation and distribution of meat by such an organization is a splendid service to the people of Michigan."

WOOL QUALITY IMPROVES

REMARKABLY low per cent of rejected wool is featuring the first wool coming into the State first wool coming into the State Farm Bureau's 1922 pool, according to figures from the Lansing warehouse and the first two special pooling dates, held last week at Charlotte, Eaton county, and St. Johns, Clinton county, preceding the opening of the regular local pooling campaign May 1. At Charlotte and St. Johns less than five per cent of the total amount of wool pooled fell into the rejects classification. The into the rejects classification. same figure holds true for the Lansing warehouse, said the bureau wool department. This figure reprewool department. This figure repre-rents a great improvement in the cleanliness of Michigan wool as com-pared to that pooled in 1920 and 1921 according to Don Williams, manager of the pool. He attributes the change to the local grading campaign of 1921 when farmers for the first time saw their wool graded by their own graders. This feature is being repeated this year.

About 7,000 pounds of wool were pooled at Charlotte and at St. Johns. Bad roads and cold rainy weather kept distant wool poolers at home until the next grading date, it was reported.

reported.

May 1 three grading teams will start work. Commencing in the southern part of the state, they will carry the local pooling campaign to 75 or 100 local grading stations and will cover every county that produces wool in volume. The grading crews will grade and weigh before the farmers, issuing a warehouse receipt good for an immediate cash advance of 40 per cent of the value of the graded wool on date of grading. It also provides for final settlement when the 1922 pool is closed and points for the week of out. Pooling points for the week of May 1 are:

May 1, Adrian, Eaten Rapids; May 2, Adrian, Chelsea, Mulliken; May 3, Tecumseh, Dexter, Bellevue; May 4, Onsted. Saline, Charlotte; May 5, Addison, Saline, Nashville; May 6, Hillsdale, Manchester, Hast-ings: May 8, Hillsdale, Brooklyn,

Included in the important activities in the wool market recently, says the Farm Bureau Wool Department, is an announcement from the eastern wool markets to the ef-fect that while the recent demand for wool has been rather limited in volume, the foreign markets, both primary and secondary, are very firm, with a tendency upward. The American Woolen Mills recently announced an increase of ten to 45 cents a yard on its woolen cloth, stating the action was taken because of increased material costs and because the mill is well sold up in its various lines. President Wood of that company said he doubted whether piece goods could be bought again for years at prices that have prevailed lately. It is his opinion that the country is again on the verge of prosperous times.

1922

The Michigan BUSINESS FARMER

Number 34

Farm Bureau Completes Produce Sales Plans

Proposes to be Ready for Business in Detroit by June 1st to Handle Produce of Member Locals

RGANIZATION of the Farm Bureau Produce Exchange department was effected April 12 when the State Farm Bureau board of directors adopted a set of rules and regulations for the Exchange, which is expected to begin operations in the Detroit market about May 15 to June 1. Mr. F. A. L. Bloom, of Detroit, is to be manager of the Farm Bureau Exchange. He has been Michigan manager for the American Fruit Growers, Inc., for several years.

At the time the rules and regulations were adopted thirty local farm bureau associations were ready to become members of the Produce Exchange. It wil handle produce for member crganizations only, according to the rules adopt-

The Farm Bureau Produce Exchange has for its object the provision of a "reliable distribution and sales service without profit and on a purely co-operative basis" for the produce handled by local units of the Michigan State Farm Bureau and by other co-operative associations of producers who are now or later become affiliated with the Farm Bureau. It plans to establish at Detroit as conditions permit, wholesale stores, offices and ware houses and other facilities for carrying on such business. The exchange proposes to charge not more than the customary commission charge for equivalent service as given by the general trade and will work to effect savings for its members through a co-operative sales and distribution service, the announcement said. The Exchange plans to notify its members when it is ready to begin operations.

Membership qualifications stipulate that any group of producers organized to market farm produce on a purely co-operative basis, who are affiliated with the State Farm Bureau and who shall conform to the rules and regulations of the Exchange shall be eligible to membership. Each local organization shall be required to pay a membership fee of \$25 and sign a contract with the Exchange for the marketing of the produce. The membership fees shall go into a fund to provide permanent working capital for the Exchange.

The Produce Exchange plans to develop grades and brands which will identify its produce, will assist in collecting and disseminating produce crop information, hopes to develop the market for Michigan produce, and assist members in their produce transportation problems.

April 21 county farm bureau representatives from the Thumb district met in Detroit to discuss the organization and operation of the Farm Bureau Produce Exchange.

RULES AND REGULATIONS

Some of the more important rules and regulations of the new exchange are as follows:

The Farm Bureau Produce Exchange shall be a department of the Michigan State Farm Bureau and it shall, be under the control of the Secretary-Manager and Board of Directors of said

Sect. 1. To provide without profit and on a purely co-operative basis, a reliable distribution and sales service for the produce (such as fruits and sales service for the produce (such as fruits and vegetables, poultry, eggs, butter, cheese, dressed hogs and veal calves, maple syrup, etc.) handled by the local units of the Michigan State Farm Bureau and by the other co-operative organizations of producers which are now or later become affiliated with said Bureau, all of which are hereinafter referred to as "Locals," provided that the Produce Exchange shall render only a jobbing and retail service in the handling of fruits and retail service in the handling of Iruits and potatoes for consumption in Detroit and its environs without special and specific co-operative arrangements with the Michigan Potato Growers'. Exchange and the Michigan Fruit Growers', Inc.

Sec. 2 To establish, first in Detroit, Michigan, and later in such other cities as conditions may warrant, wholesale stores, offices, warehouses and such other facilities and equipment as may be deemed necessary for the economic and efficient desired necessary for the economic and emelent distribution, storing, handling and sale of the produce which may be consigned by locals to the Produce Exchange and to furnish the necessary force of trained workers with which to operate

AN IMPORTANT STEP

AN IMPORTANT STEP

LEXT to the stimulation the Farm Bureau has given to the wool market by pooling and actually entering the manufacturing field we consider its proposed invasion of the produce marketing field as likely to develop into one of its most important activities. Certainly no other branch of marketing has been so neglected by farmers as the produce end. Before the Farm Bureau came into existence there were organizations successfully handling many of the major crops of the state, but none have dared, except in a small way to chance the many risks attendant upon the marketing of so-called produce and truck crops. Private capital and in toe many cases unscrupulous capital has successfully controlled the marketing of these particular commodities. It may not be possible for the Farm Bureau's Produce Exchange Department to do business on a less margin than the private dealers, but if it makes honest returns on all produce sold, which very few of the private dealers do. It will more than justify its existence. The department can do much to encourage better methods of packing and shipping and save farmers thousands of dollars that are now lost to them thru carelessness in these particulars.—Editor.

Sec. 3. To collect from all desirable sources and disseminate regularly and promptly to Locals, accurate crop and market information on the products handled by the Produce Exchange.

Sec. 4. To enlarge present outlets and to aggressively develop new outlets in Detroit and elsewhere for the products handled.

Sec. 5. To distribute the products of Locals direct from shipping point to markets other than Detroit when conditions make it possible to get better results by so doing, and to develop in markets of Detroit, reliable representatives so that the broadest and most efficient distribution of members' products may be obtained.

Sec. 6. To promote and establish desirable grades, brands and labels for products handled by the Produce Exchange and to work with Locals in the development of improved quality and standardized methods of handling, grading, packing and shipping their produce.

Sec. 7. To handle claims of member organizations against transportation companies and to furnish advice and information on transportation problems.

Sec. 8. In general, to furnish to member organizations at cost, a complete, reliable and high class marketing service on such products as the Produce Exchange is in position to handle.

Utah Sugar Factories Divide with Growers

THE Utah farmer for April 1 says: "It is a great relief to all to have the sugar beet contract for 1922 finally agreed upon by the companies and the committee of the State Farm Bureau. The negotiations have continued over a prolonged period, and have been characterized by what might be called 'ultimatum diplomacy.' That is, each side made proposals and counterproposals in its turn, until a deadlock was finally reached. This deadlock was not broken until a third party interceded and brought the two contestants to a compromise agreement. agreement itself is based upon the principle of profit-sharing, the producer to receive 46 1-2 per cent of the price of the sugar, and the manufacturer to receive 53 1-2 per cent. It is not radically different from the contract of last year, except that the ratio on the lower prices of sugar —that is, from \$4 to \$8 a hundred—is more favorable to the sugar beet grower than was the case last year. On the other hand, the 1921 contract provided for a \$5.00 minimum guarantee. The 1921 contract differs from this year's contract also in that it was based upon a fiftyfifty division of the profits above \$8 sugar. It is to be hoped that the farmers will plant a normal acreage this year, in order that the industry may have a full opportunity to revive from the devastating depression into which it was thrown at the close of the war."

MEMBERSHIP QUALIFICATIONS

Sec. 1. Any group of producers organized to market farm produce on a purely co-operative basis and who shall conform to the rules and regulations now or hereafter in effect shall be eligible for membership in the Produce Exchange.

Sec. 2. At the time of uniting with this Produce Exchange each local organization shall pay a membership fee of twenty-five dollars (\$25.00) and sign a membership contract appointing the Produce Exchange its exclusive agent for the sale of such farm products as the Produce Exchange shall be in position to handle and which may be delivered to the Local by its members for marketing, provided that the Local shall have the right to sell or give away such of its produce for consumption in the community market of said Local as it may desire.

Local as it may desire.

Sec. 3. Nothing in these rules and regulations shall be construed to preclude or abridge the right of individuals, who are members of a cooperative organization which is affiliated with the Produce Exchange, personally to deliver produce where said delivery does not involve the use of steam, electric railway or water transportation direct to the Produce Exchange at its place of business in Detroit, provided that proper arrangements shall have been made with the Produce Exchange and the Local. Exchange and the Local.

STORAGE AND REPACKING

All products of Locals consigned to the Produce Exchange for sale, whether packed under special brands or not, shall be graded, packed and shipped as nearly as possible in accordance with the directions given from time to time by said Exchange.

Sec. 2. The Produce Exchange shall have the authority to repack, grade, regrade and store for short periods of time, any products consigned to it by Locals when, in the opinion of said Exchange, such action will result in better returns. Any expenses incident to such services shall be considered legitimate charges for assessment against the goods so repacked, graded or stored.

Big Drop in Value of Poultry

THE total value of poultry and eggs produced on farms in 1921 was \$943,000,000, according to estimates made by the United States Department of Agriculture. Of this total, approximately \$401,000,000 was for poultry and \$542,000,000 for eggs. Production of poultry was 526,000,000 chickens and nearly 24,000,000 other fowls. Production of eggs was 1,837,000,-000 dozen chicken eggs, and 6,000,000 dozen eggs from all other poultry.

The 1921 value of all poultry raised on farms in the United States was a drop from \$456,000,-000 in 1920, and from \$417,000,000 in 1919. The decline in value from 1920 to 1921 was due to the fall in price per fowl, and the increase in value from 1919 to 1920 was due to larger production and an advance in average prices. The average value per chicken raised in 1919 was 81.6 cents, in 1920 it was 86.5 cents and in 1921 it was 71 cents.

The total value of poultry raised in 1921 is made up as follows: Chickens, \$373,500,000; turkeys, \$12,900,000; geese, \$7,000,000; ducks, \$4,900,000; guinea fowls, \$1,900,000, pigeons, \$1,400,000.

The chicken eggs produced on farms have a considerably higher value than the chickens raised. The estimated value of chicken eggs in 921 was \$539,000,000, in 1920 it was \$760,000,-000 and in 1919 it was \$679,000,000. For eggs production of all kinds of poultry, not including pigeons, a value of \$542,000,000 is estimated for 1921, \$765,000,000 for 1920 and \$683,000,-000 for 1919. In 1921 the average price of chicken eggs throughout the entire United States was 29.3 cents per dozen, in 1920 it was 44.4 cents, and in 1919 it was 41 cents.

The 1921 estimates for chickens and eggs produced are based upon 1919 census figures. It is also pointed out by the Department that there is a large production of poultry and eggs not on

Horner Predicts Return of Farm Prosperity

M. A. C. Economist Gives Reasons Why He Believes Better Times are Just Ahead for Farmer

(The following is the fifth of a series of articles on farm economics by Dr. Horner, of the M. A. C. The sixth will appear in an early issue.)

IT has been years since the business man or financier of the commercial and industrial centers has given as much thought and attention to the farmer as he has in the past year or The farmer has been called the "backbone" of the country and agriculture has long been dignified with the great cognomen of "the basic industry." Yet just how important the prosperity of the farmer is to every other line of business was never before so greatly impressed upon the mind of the business world. Some time ago the far-seeing minds knew that there could not be an approach to better business until there was a re-adjustment between the prices of things which the farmer had to sell and those which he had to buy.

Price changes, according to the Bureau of Labor Index numbers, during the first month of the new year were in favor of the farmer. Agricultural products increased in price from 113 to 116 considering the average prices of 1913-as a base of 100. All other commodity groups showed a decrease. However, while this recent change in price has been in favor of the farmer, prices of every commodity group are still farther above the 1913 base than are those of agricultural products, and there will have to be a great amount of adjustment before the farmer will be back to his relative 1913 basis.

The price changes as given above are those for the month of January, 1922, and at the time of writing this article the Bureau of Labor report on February changes are not available. From other sources the indications during the month just closed, being most pronounced in the case of hogs and corn. Wheat, cattle, sheep and wool, all increased in price during March. Cotton has shown quite an increase in the last few months and the outlook appears to favor a steady market. In general the price tendency is such that the farmer is inspired with hope that better times are ahead. However, it must be remembered that the price increases have not resulted in every case in a direct benefit to the farmers themselves as the greater portion of farm products are already out of the hands of the producer. This is especially true in the case of wheat. The price increases of hogs in the past few weeks have resulted in a direct benefit to

I. T. HORNER

Department of Economics, M. A. C.

the hog and corn sections of the country. The unprofitableness of hog feeding during the season of 1920, due to the high price of corn, caused a great decrease in the number of hogs. This great reduction in breeding stock has been a cause of the present shortage.

What does the future hold forth is the question which is on the tip of every farmer's tongue. Prediction is usually a risky business. The correct predictions are soon forgotten. The mistakes are remembered forever. Present conditions seem to indicate that there will be no worse times than we have just passed through. The worst seems to have been reached. The future prices of farm products depend upon many factors and will vary with different products. It is quite probable that the price of hogs will remain very satisfactory until there is a new crop of pigs grown and fattened for the market. Whether this crop will be large enough to depress the prices much below what they are today depends upon just to what extent the present price is going to encourage production and how well the demand remains stable.

There will probably be a decrease in the corn acreage in the corn belt with a probable increase in the cotton states. The chances are against a third successive "corn year" which will give such an abundant supply. Indications seem to point to higher corn for next year and not such a great profit in feeding this grain to hogs. The hog feeder has been fortunate in the past few months to have a favorable price for hogs at the same time a low corn price prevailed. This condition will of course adjust itself.

Wheat will sell for a better price during the coming season than it has the past, unless unforseen developments occur. The condition of winter wheat in the southwest is bad. There has been a great deficiency in moisture in that section this winter. However, March snows and April rains have put the soil in better condition. Russia has been one of the great wheat exporters of the world. As long as wheat does not come from this field to the world markets the price is very apt to be quite favorable to the wheat growers.

Butter and eggs have not enjoyed the increase in price. On the other hand there has been quite a reduction. This is due in part, at least, to the coming of spring and is seasonal. There is no reason to think that prices for these products will remain long out of line with those of other farm products. Potatoes, beans and perishable produce prices depend so much upon the yearly crop and the demand for them that a forecast as to what they will be could be nothing more than a guess. It must be remembered that the demand for products is probably of more importance in the setting of prices than is the supply and that one of the greatest factors influencing demand is the purchasing power of the consumer. If unemployment is reduced and the laborer gets the money with which to buy, prices will be better.

Increases in prices due to decreased production appear on the face of things to be a very good thing. However, 80c corn does not help a farmer unless he has corn to sell. The boll weevil pest may cause the price of cotton to increase but it also will reduce the number of bales which the farmer has to sell. A short wheat crop in Kansas may cause the price of wheat to go up, but this will not benefit the Kansas farmer who has no wheat to sell. A benefit will revert to wheat growers of other sections who have wheat to sell. The proper amount of any crop to produce is that which will give the farmer the greatest net return for his effort and yet enable the consumer to purchase the food he needs at a price which is "equitable." This is as indefinite as it is impossible to attain.

After the available facts are considered in the light of the past and present world conditions. it appears that agriculture is going to be on a better basis during the coming year than it has during the past. However, it would be a mistake to assume that things are going to "bloom" and that business would take on the activity of war years. There will be more time required to bring business conditions back to what we might want to call "normal" than most people think. It is quite likely that there will be a slump or two before we reach the high point in the next business cycle. Optomism is not going to bring back prosperity.

Faira in ourselves, our country and the fundamentals of our present civilization coupled with hard work and economy are going to be the basic factors in the recovery which is to come.

One Hundred Forty Lonely Farmers Seek Hand of Lovely

(March 11th issue M. B. F.) "STEP UP, ALL YOU LONELY BACHELORS

"Mrs. R. E. B. is a lonely widow of 28 summers who wants to correspond with some lonely bachelor or widower. Name and address will be given to all interested parties by applying to Editor, Business Farmer."

WITHIN two weeks after the publication of the innocent little item appearing above one hundred and forty lonely bachelors and widowers stepped forward and asked for the address of Mrs. R. E. B. Applications came from men of every age and condition of life. Young men, old men, strong men, crippled men, handsome men, homely men, modest men, bold men. Some wanted a housekeeper, others a wife. Some had many earthly goods to bestow upon the favored one, others offered simply a strong back and willing hands.

The Business Farmer had no notion there were so many lonely and bashful bachelors and widowers in the state of Michigan else the editor might have hesitated before arousing so many hopes, for obviously Mrs. B. can choose only one.

Although we have not from Mrs. B. since her mail became so voluminous it is quite likely that she, too, is astounded if not stunned over the results. We trust those who have written Mrs. B. will not become impatient if she does not reply by return mail. It must have been something of a task for her to read one hundred and forty letters to say nothing of answ-

ering them. Moreover, it connot be easy to decide between so many tempting offers. Twixt a young and handsome man of small means and a widower with five children and a bank account, any lady's choice must remain long in the balance.

It is not given to every lovely miss or widow to receive more than one proffer of marriage during a life-time. receive the invitation twice, but they are rare whose wooers number more. To receive 140 proposals within a single fortnight is, indeed, a distinction which so far as we know is enjoyed by only one person, namely, Mrs. R. E. B.

But levity aside, it ought not to be that one hundred and forty land-owning and home-loving farmers should want a wife and not be able to get one. they are too bashful or too particular to proceed in the reguar way the evidence showeth not, but in any event a means should be provided whereby they need not hunger longer for a help-mate. 'Tis said that "a man without a wife is forever free of strife," but the wise old Artemus Ward said, "the happy man dies in good style at home surrounded by his weeping wife and children. The old bachelor doesn't die at all, he sort of rots away like a pollywog's tail."

A SUGGESTION

A SUGGESTION

MORE than fifty foreges are in Nebraska penitentiary and a lot of them outside. In fact cases of foregry are getting more numerous than burglaries and holdups. The seeming inability of the law enforcement officers to prevent the fracturing of the statute against foregry will undoubtedly lead to a strong movement to secure the repeal of all laws making it a crime on the ground that to continue it will teach disrespect for the law to our young. When the movement progresses far enough, we shall suggest that it take over the organization of New Jersey wets who have been clamoring for the repeal of prohibition on the same theory and grounds.—The Commoner.

There is no doubt but what these one hundred and forty bachelors and widowers ought to be mated, so that they, too may leave someone to mourn when they shuffle off this mortal coil. Somewhere in Michigan there are probably many maids, matrons and widows who have been denied the opportunity to marry or re-marry and would like to make the acquaintance of some of our lonely Benedicts. But how is the trick to be turned?

A fine-looking young farmer of Macomb county came into the office one day seeking the address of Mrs. B. and he suggested that we establish a "Cupid's Column," through which lonely and unmated men and women on the farms could correspond with each other. "There are many farmers," he said, "who find it impossible to marry early because they have the care of parents or sisters and when they are relieved of this responsibility they are either past the wooing stage or the young lady of their earlier fancies has become the wife of another so they find it hard to get a wife. I think the Business Farmer would be doing a fine service if it would help those lonely folks to get acquainted

The idea is not bad. We are thinking it over. In the meantime, we have one hundred and forty farmers looking for wives and only one widow. What are we geing to do with the other one hundred and thirtynine? Names and addresses furnished to anyone looking for a hus-

with each other.'





Farmers Service Bureau



THAT TAX ON CONTRACTS

I saw in several newspapers that there is a tax on land contracts, 56 cents on each \$100. I had a contract turned over to me with a \$1,500 mortgage on it and when the contract is paid up to \$1,500 the second parties must raise money and pay up. Do I have to pay a tax on this \$1,500 or not?—M. M.5 Oakwood, Mich.

I have just been informed that the state has dug up an old law enacted in 1912 by which the holder of a contract must pay the county treasurer one-half of one per cent on the full face of the contract even though nine-tenths of it may have been paid in years ago to a former owner of the contract. I also understand if this contract is not paid at once when the assessor calls he will multiply it by 6 and you can pay it with your other taxes next fall if you are lucky to have the money. I wish you would print this law in full at your earliest convenience as I find but few people who have ever heard of it.—C. S. B., Bancroft, Mich.

Will you please give me the legal points of law concerning a tax on land contracts? From what date or year is this collected? What per cent is charged? When is this tax collected and by whom? Who pays the tax? Penalty for neglect? A. P., Stanton, Mich.

Would you please advise me if the specific tax law on land contracts is effective thruout the entire state and can a man be compelled to pay it whose land contract is not on record at the clerk's office?—J. B., Marion, Mich.

The tax on land contracts is a specific tax, payable but once during the life of the contract. The amount of the tax is 1-2 of 1 per cent, not on the full face vaue of the contract on the full face vaue of the contract as suggested by C. B., of Bancroft, but upon "the greatest amount which was at any time a debt secured by the contract." Example: A sells to B a piece of land for \$1,000, B pays \$200 down leaving a balance secured by contract of \$800. upon this amount A must pay his county treasurer 1-2 of 1 per cent or \$4.00. If A fails to pay this tax and sells his contract to C, C is obligated to pay it. C may claim this obligated to pay it. C may claim this is rather harsh on him, but the law presumes that the purchaser of a contract has satisfied himself that there is no encumbrance against the contract before he buys it.

If the tax inquisitors find that the . specific tax has not been paid on the above contract they order it placed on the assessment rolls and it is then taxed annually the same as other property. The tax authorities do not, as suggested by C. B., of Bancroft, arbitrarily multiply the tax by "six," etc. The same rate as applies to other property of its class in the county in question is

Mr. B. F. Burtless, secretary of the Board of State Tax Commissioners, very kindly gives us the following additional information which will answer other questions raised above.—Editor.

LAW DOES NOT REQUIRE CONTRACTS TO BE FILED

"TRACTS TO BE FILED

"The law does not require land contracts to be filed in the clerk's office. If recorded at all, the record should be made in the office of the Register of Deeds, but we are not following the matter to ascertain whether contracts are recorded or not, our sole interest being to see that the specific tax is paid as required by law. The payment of the tax is the first step to be taken before a contract can be recorded. After payment of the tax, it is optional with the owner whether he will place it on record.

"Section 10 of the Act, as amended

whether he will place it on record.

"Section 10 of the Act, as amended by Act 213 of the Public Acts of 1921, provides that the credit upon which the Act imposes a specific tax shall "when this tax has been fully paid" be exempt from further general taxation. Therefore, if the specific tax is not paid, the contracts are treated as ordinary credits and subject to assessment under the provisions of the General Tax Law. Until this year, owners of credits have been and subject to assessment under the provisions of the General Tax Law. Until this year, owners of credits have been able to offset against their taxable credits the full amount of their indebtedness; but an amendment to the fifth subdivision of Section 9 of the General Tax Law (4003-3L 1915) made by Act 297 of 1921 contains this proviso, "that if such person shall be the owner of credits that are exempt from taxation such proportion only of his indebtedness shall be deducted from that due or to become due as is represented by the ratio between taxable credits and total credits owned, whether taxable or not." Therefore, in determining the amount of credits subject to taxation it is necessary to secure a statement of the credits which are exempt from taxation as well as those which are taxable, and only that portion of the indebtedness represented by the ratio of the taxable credits to the entire amount of credits owned can be (A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if requested.)

as an offset against the taxable

used as an offset against the taxable oredits.

"This board is conducting a systematic campaign throughout the state to see that the specific tax is paid on land contracts, or that such contracts are brought within the provisions of the General Tax Law. Our entire field force is now occupied in finding owners of land contracts and notifying them of the requirements of law. Lists are made of all contracts found and information given the assessing officers as to the number and value of contracts held. The work will be followed up carefully and wherever contracts are found upon which the specific tax is not paid, we will see that they are placed upon the assessment rolls. We intend to continue this work even after the adjournment of boards of review and will place upon the assessment rolls by special review contracts found to have evaded the specific tax. In determining the amount of assessable land contracts, the amount remaining unpaid on the contract of course is all that can be assessed, subject of course to the offset above described. B. W. Burtless, Secretary.

COVERT ROAD LAW

Under the Covert road system how long after a petition is filed for a road can it lay without the road board acting on it before it is outlawed? If a road has been surveyed and staked by order of the road board and at the road meeting a lawyer tells the road board that the petition they worked on was outlawed and the hearing or meeting is unlawfully held and orders the road board to dismiss the meeting who will have to pay the cost of the surveying, etc. the road board or the taxpayers? How long before a new netition can be got up and the road built? Can a petition be got up and the road built? Can a petition be got up and the road built? Can a petition be got up and the road built? Can a petition be got up and the road built under the surveying already done?—M. B. F. is fine.—A. S. Bath, Mich.

There is no definite length of

There is no definite length of time which a petition may be filed with the board of county road com-missioners before action is taken thereon by the board .-

In case proceedings are held under this petition and a road is surveyed and other expenses incurred the board then dismisses petition, the statute provides that the petitioners shall pay the expense of the preliminary proceedings. There is no length of time set in the law which shall lapse between the date of dismissal of a petition and the filing of a new petition for the construction of the road in question. If a petition be filed and a survey has already been made on this road, there would be nothing to prevent the adoption of the minutes of the surveyor and the road constructed under the survey as taken on a preceding petition.—State Highway Department, Lansing.

SEED POTATOES

Could you tell me if potatoes that are in a basement under water for several days will be fit for seed?—F. S., East Jordan, Mich.

Potatoes that have been submerged in water for some length of time are liable to be damaged to some extent for seed purposes, however, this will show up shortly after they have been placed in a dry place.

If they have been harmed by the water, rotting will set in and the damaged ones can be readily eliminated. I see no reason why any of the potatoes which come thru in a good firm condition should not be fit for seed purposes.—C. E. Cor-many, Ass't Prof. in Farm Crops, M. A. C.

HAY CROP WITH OATS

HAY CROP WITH OATS

Have only about 12 acres clearing on my farm and wish to make as much use of it as possible. I want to start an alfalfa field and I want to raise oats enough to winter my stock. Last year I had nearly 5 acres in oats. The field is clay loam and gives a good yield. Can I plant that field this year to oats and alfalfa and out the oats for grain to be threshed and also cut a hay crop from the alfalfa? If I cannot plant this way what would be your advice as to the seed to sow with the oats to get a hay crop also?—A. L. J., Mikado, Mich.

Alfalfa seeded with oats this

Alfalfa seeded with oats this spring is not likely to give a hay crop by fall. Last year's growing season was exceptionally long, and occasionally in southern Michigan spring seeded alfalfa gave a cutting for hay in the fall. This cannot be expected normally.

We know of no crop that you can plant with oats which will come on

and give a hay crop the same year with certainty unless the new Hu-bam clover proves to be of value for this purpose. For the first time sufficient seed is available to try this quick growing sweet clover. Not enough is known about Hubam to definitely place the crop in our agri-culture. At the Upper Peninsular Sub-station on a three-acre piece an excellent growth of either pasture or hay was secured after barley was taken off for grain. The seeding was made with the barley at time of planting, using 15 pounds per acre of Hubam.

Seed of Hubam can be secured from the Farm Bureau Seed De-partment, 221 N. Cedar St., Lansing, Mich., at \$15 per bushel in lots of

two bushels or more, Common biennial sweet clover can be depended upon to give considerable growth for pasture in the fall and may be available for hay the next year.—J. F. Cox, Professor of Farm Crops, M. A. C.

NO NAME SIGNED!

If Mrs. L. M. A., of Capac, Mich., had lived up to the rules of this department and signed her name to her question she would have had a reply by return mail, but as it is she has had to wait to read this item and send in her full name before she gets the information. We have repeatedly asked our subscribers to sign their full names and addresses when writing us, and we will positively pay no further attention to unsigned communications. We want to serve you, dear readers, but we can't give you prompt and efficient service unless you co-operate by SIGNING YOUR NAME!

ALFALFA WITH SOY BEANS

Would it be practical to seed alfalfa in Ito San Soy beans? Wish to drill beans 26 inches apart and seed the alfalfa at their last cultivation.—L. R., Osseo, Mich.

Drilling alfalfa in Soy beans at the last cultivation is a practice which is attended with much risk. In seasons such as we had during the past year with plenty of rain during late summer, followed by a late fall, alfalfa would catch dependably but in ordinary Michigan seasons a good stand could not be expected from seeding in this way.—J. F. Cox, Professor of Farm Crops, M. A. C.

TELEPHONE COMPANIES MUST RENDER SERVICE

Is it possible for an unincorporated farmers' telephone company whose lines are on the public highway, past a man's house to keep this man from buying stock in it or from using their line?—E. S, Twining, Mich.

Section 1 of Act 206 of the Public Acts of 1913 declares that all persons, corporations or associations operating telephone lines in the state of Michigan, are common carriers. Section 3 of Act 206 of the Public Acts of 1913 requires that "All persons, co-partnerships or corporations doing a telephone business within the state are required to furnish reasonably and adequate service and facilities for the use of their lines by the public."

From the two Acts which we mention the law requires that all persons which are now occupying a highway by their telephone lines must render telephone service to any person or persons who desire telephone service from this company.

There is nothing in the telephone law that we know of, that will require a telephone company to sell its stock to any person who wishes to buy the same.—Public Utilities Commission, Lansing.

CAN SCHOOL DISTRICT BE UN-SCRAMBLED

Last December the business men of Remus were out through the rural dis-tricts with petitions for a consolidated school to unite ten districts. They told the farmers their taxes would be less by uniting and misrepresented things in

many ways to get signers. The day of the election the roads were so icy that many of the farmers could not get out to vote. The election was held in Remus, the votes all counted together as one district. It carried. They have had three bonding propositions up and all have been turned down. The majority of the farmers do not want this school. Can one or more districts compel another district to unite with them without its consent? Is there any way for us to get this stopped and our districts back as they were?—E. P., Remus, Mich.

The County Commissioner of Schools of Mecosta County was presented with petitions signed by from forty to sixty per cent of the school electors of each of the districts included in the Remus consolidated school dstrict. Each of the districts petitioned to have a consolidation election called and thereby gave their consent for such an election. The statute reads as follows: "A majority vote of the qualified school electors present and voting as a unit of all the districts that filed peti-tions signed by at least twenty-five per cent of the legal voters shall be necessary to authorize the establishment of a rural agricultural school."

The election was held at the cent-er of the township of Wheatland. Remus is located at the center of the township. The petitions were circulated by both farmers and buiness men. The weather was fine on the day of election and a large vote was cast. Out of a school electorate of not over 475 a total of 411 votes were cast, 274 votes for consolidation and 137 voted against it.

The law provides that a consolidated school may vote to disband after it has been in operation for five years as a rural agricultural school. It does not bcome a rural agricultural school until the required vocational courses are in-cluded in the curriculum and the other requirements of the law relation to transportation, suitable building and equipment have been complied with. In other words a rural agricultural school must be maintained and operated for at least five year's before the consolidated district can vote to disband.

The bond issue has been brought to a vote just once and that was March 18. It was voted down at that time.—B. J. Ford, State Dpartment of Public Institutions, Lansing.

CROPS IN QUACK GRASS

CROPS IN QUACK GRASS

I have a field with some quack grass on it and I want to find out what kind of crop would make the best fertilizer for potato crop next year. Would Sudan grass make a good green manure crop? They say it grows quick. I thought it would keep down the quack. Could the first crop be cut down and let rot on the ground and when the second comes plow under, would that be as good or better than Soy beans as I won't have much time to cultivate them. This field was to corn last year. — Subscriber, Osceola County, Mich.

Sudan grass makes a quick, rank

Sudan grass makes a quick, rank growth and under some conditions might compete successfully with the quack grass. If the quack grass is fairly well established would suggest intensive cultivation until about the first of June and then seed from 25 to 30 pounds of Sudan grass seed per acre.

Soy beans are a leguminous crop and are able to obtain the free nitrogen from the air, consequently are of considerably more value in improving the soil than Sudan grass.

If the land can be well cultivated until the first of June and then Soy beans drilled in solid using a half-bushel of either Manchu, Ito San or Black Eyebrow seed per acre, it not be necessary cultivate them.

Only one crop of Soy beans can be secured in a single season while the Sudan grass will produce a crop of hay and considerable aftermath that may be used for pasture or plowing under.

FISHING ON POSTED LANDS

Will you please publish the latest law on fishing for trout on enclosed and post-ed land.—O. W. S., Barryton, Mich.

Section 43 of the Compiled Game and Fish Laws, revision of 1921, provides:

(Continued on page 19)

Michigan Agricultural College Will Talk to Farmer Via Radiophone

NOWING the great interest that is being taken in Radio, and feeling that the business farm-of Michigan would like to know what use the M. A. C. was making or would make of the Radio for the broadcasting of information of prac-tical value, the M. B. F. editor asked me to go to East Lansing to talk with President Friday of M. A. C.

Arriving at the office of President Friday just a few minutes before he was to meet with the State Board and submit his report and make re-commendations on plans for the fu-ture of M. A. C. I was fortunate in being able to have quite a talk with him on this very interesting subject, although he did most of the talking.

"Even before I took my seat as president," said President Friday, "I had been thinking of radio, thinking seriously of it, and since taking my office I have thought of it quite often. I have not given it the atPresident Friday Sees Wireless as Connecting Link Between College Educational Facilities and Farmers Needs

J. HERBERT FERRIS, Radio Editor

tention that it deserves in the past, but I am going to give it thought and serious thought, as soon as possible. I believe that radio has wonderful possibilities, its usefulness is practically unlimited as we now know it. The fact that by radio we can reach every farmer in Michigan in his own home every day will bring this college to his door and enable us to reach those whom we have never been able to reach be-

"The extension courses of the col-lege will all have to be changed ow-ing to the fact that radio will enable us to go direct to the farmer with our courses. The extension ser-vice will not be all that we can give the farmer, we will be able to reach

him with timely advice and suggestions, daily market and weather reports that apply to his particular locality. For instance, take the case of potatoes. There are less than 20 per cent of the farmers who spray their parters. their potatoes. We know what spraying will do and so at just the right time we can by radiophone tell the farmer what spray to use, how the farmer what spray to use, how to spray and when, repeat this advice in a few days and again later in the season for the later sprays; we can make this information useful not alone for the potato grower but the orchardist and the grower of any crop by giving him advice at the right time.

"We must realize that the farmer after a hard days work does not feel

like sitting down and reading a paper full of advice or listen to a lecture, but-combined with an in-structive program from this college he can hear entertaining talks and music. Our band and local musicians can supply music. He can get all this without effort on his part. Nor is he confined to our programs as he can listen to other broadcast.

as he can listen to other broadcast-ed programs of his own choice.

"It is not the farmer alone that will be benefited by radio. The people of the smaller communities will hear concerts, talks and instructive programs that they could only get by living in one of the larger cities. The city resident practically has at his door everything to fill his evening. If he wants entertainment he can have it. If he wants information or instruction there are lectures that he can attend. He can hear well known men and women speak, but the people throughout the state on the farm and the rural communi-ties cannot get all this so easily and directly but through the radiophone all this can be brought right to their homes.
"There is a natural mental inertia

in the rural communities due to the limited outlook and the confinement to routine labor that can be and will

be relieved in a large measure by the many available programs that will be broadcasted by radio.

"To my mind there is a large future possibility to radio in the good that it will do and I am going to the it attention as soon as possibility in the strength of the streng to give it attention as soon as pos-sible, this does not mean next win-er, but now."

BEFORE YOU BUY THERE are many dealers through-

out the state who are now sellout the state who are now selling radio receiving sets that will not do what is claimed for them. There seems to be a feeling among some of the new dealers that the farmer is legitimate prey and that if they can get his money it will be Beware of them!

When you are ready to buy, be sure you buy from reliable houses that have been in business for more than a month or two. Concerns who have been handling electric goods for years are generally in the business to stay and the radio is new with them. They are in the business because they see the future possi-bilities and are looking forward. They are the ones that will treat you square. Firms who advertise in these columns are reliable and their

statements may be depended upon.
When in doubt about your set, what you need and should have, ASK US.

There are some dealers who are thinking about sending out salesmen in autos to sell the farmer sets. We caution you to be very careful about purchasing under these circum-stances. Many a salesman can make a set work but the man who buys it can not do so and never will be able to do so;

President Friday of M. A. C. thinks that radio is going to be of great help on the farm and it will be if the farmer will use a little caution in buying his receiving set.

I have talked with dealers who candidly stated that they would sell to the farmer anything he wanted

to the farmer anything he wanted whether it would work or not. In fact they have tried to sell me a set that was guaranteed (by them) that would receive music from 500 miles when they knew that they were lying and I knew it also.

Again let us caution you, if in doubt ask our advice.

For the person who is not electrically inclined, who will not have much time to "monkey around" much time to "monkey around" making or assembling parts for a set, we recommend that a complete receiving set be purchased from one of our advertisers. You will not have to pay but a very little more than the price of the different parts and you will know that the set you buy is made correctly, it will save lots of time and in the long run give you more satisfaction, besides which, you can start enjoying the free concerts right away. certs right away.

Enjoy the Concerts! Get the Crop and Weather Reports! With One of These Radio Sets!

You can have them—enjoy lectures, symphony orchestra concerts, as well as lighter entertainments—just as easily as you could were you in the heart of Detroit.

However far away you are, there is a set here that will do it for you! .

Westinghouse R. C.—A detector and 2-stage amplifier, that has a telephone range of 100 miles. Under favorable conditions it has even picked up messages from as far away as Cuba.

Westinghouse Aeriola Jr., \$25-A crystal receiving set with double head set. Range of

De Forest Radiohome, \$36-Has range of

De Forest M. R. 6, \$112.50-Detector and 2-stage amplifier. Under favorable conditions will receive from a distance of 500 miles.

De Forest 2-Stage Amplifier, \$35-Added to the Radiohome it gives it a range of 500

De Forest Everyman, \$25—Crystal outfit with double head set—25 mile range.
Federal Jr., \$25—Crystal outfit with double head set—25 mile range.

A Very Complete Stock of Parts

If you are thinking of making your own outfit, it's good news to hear that here you'll be able to get just about any supplies you want.

Audion Tubes Audion Tube Sockets Radiotrons Audiotrons Receivers-many makes Receiving Transformers Detector Stands Fixed Receiving Condensers Variable Condensers

Antenna Switches Antenna Insulators Condenser Racks Line Protectors Oscillation Transformer Knob and Dial Assembly Lightning Switches High Frequency Buzzers

Test Buzzers Switch Points Binding Posts Batteries Aerial Wire Tested Galena Test Clips Phonograph Attachments Crystal Cups

Write for Your Set and Supplies

You will find that your order will be promptly and carefully filled.

Or If You're in Town Come and See Us

Talk over your radio plans with one of our experts. He will be able to tell you just what will be best for your particular case.

You will find anything that you need here, for our radio department is not only large but complete in every detail.

We stand back of every piece of equipment we sell. Visit our Booth at the Radio Show—No. 16 and 17.

Crowley, Milner &

Main Store, Gratiot, Library, Monroe and Farmer Avenues. Store Store Hours: 9 to 5:30. Saturday Nights the S We Deliver to 30 Suburban Cities

DETROIT

INSTALLING A RADIO SET (Continued from last issue)

THE next step will be to decide in which room you are going to have your set. It should be in a room that is comfortably warm in winter, as that is the time of the year when outside work is slack and you will have more time for "list-ening-in." It should also be situated where the total length of the aerial, lead-in wire, and ground connection does not exceed 150 feet in length.

Fasten two ropes to your aerial, after having passed one end through pulley, one on the tower and on the house, see Fig. 1, last issue, also fasten guy wires or small rope to the knobs for the guys. Hoist your aerial in place, pull the sup-porting ropes tight, so that the aerial does not sag. (There will be a slight sag, anyway.) You can now tie your ropes, so as to hold the aerial in place, pull guy ropes quite tight, this is to prevent the aerial swinging in the wind, also to prevent its twisting, which it will do in almost any windy day. Bring the free end of your lead-in wire into the house thru a porcelean tube, which you have placed in a window frame, or thru the wall, being sure that this wire does not touch anything except a porcelean knob, tube, or other good insulator. You are now ready to attach your instruments.

The Ground, Ground-lead and Lightning Protection

From your instruments, or receiving set, you must have a lead to your ground. This ground-lead should be of the same wire as your aerial lead-in wire. It must pass thru porcelean tubes or be well insulated from everything with the exception of the ground itself.

The "Ground" as it is called, or

the earth connection should be a well casing, water pipe that pass into the ground, or a large piece of metal (for the best results copper is used) buried in the earth at a sufficient depth to insure that the piece of metal is permanently in contact with moist earth. Those whose ground is very sandy should sink several pieces of metal separated by a few feet, as it is hard to get a good "ground" in sand. Solder the joint between the ground and the ground-lead. Right here it might be said that you can not make joints too good, they must be soldered for good results, as partly corroded wire, dirt and loose connection cause a lot of trouble, and at times prevent the reception of any wireless signals.

From your instruments you can now run your wire ground-lead to your ground connection and solder it. If you now had your receiving set, you could try it out and listen

for wireless signals. The Fire Insurance Underwriters, city laws, etc., in most places, require that a wireless receiving set or sending set must be properly protected from lightning, if it is not so protected, there is a question as to whether you could collect any insurance from lightning damage. As yet I have to hear of a house being struck by lightning that had a wireless set, provided that it was protected by a lightning protector and properly installed.

properly installed.

A 600 volt, 100 ampere switch, or a vacuum tube protector is required to ground your aerial at all times when not in use. The vacuum

tube protector can be bought from dealers in radio goods, a "double pole, double throw" switch of the above capacity can be bought from a lightning company or a radio house. I recommend the vacuum tube protector, it is cheaper, costing \$2.50 whereas the switch usually costs more and requires that you go outside and turn it over from the safe position to the receiving position each time that you wish to listen. The vacuum tube protector is automatic and protects your set and house from lightning at all times without any attention. (Lightning, or any high tension current will pass thru a partial vacuum such as in these tubes, in preference to coming into the house, as the path to earth is shorter, and easier than the roundabout way thru the receiving set.)

Figure 2, gives a side view of the lead-in wire, ground-lead, and how the lead-in is mounted to the lightn-ing protector. "A" is the aerial, "G" the earth or ground, these signs are always used in radio to designate these two parts, remember them and you will be helped, they will be used quite often in the future articles.

Figure 3, shows how to connect the lightning switch.

Figure 4, shows how to connect the vacuum tube protector.

In connecting the lightning protector to the earth, it is better to use a different earth connection than the one used for your receiving set. If you can, connect it to the lightning rod ground connection. A No. 4 or No. 6 stranded copper wire must used to connect the lightning switch or protector to the ground, and it should not touch the house, but run directly to the ground, or be fastened to insulators if you have to run it some distance.

Points to Remember

Solder all joints. Do not let any of your wires on the aerial, lead-in, ground lead touch anything except insulators.

Make a good earth connection, as it means a great deal as to whether or not you are able to receive mes-

Next we are going to take up the parts of the set needed for receiving the radio signals, beginning with a tuning set.

Radio signals are sent out on different wave lengths, each station having a certain wave length that it must use, as required by the government. To receive these signals, telephone or telegraph, we must be able to tune the received waves so that our detecting set will pick up just those waves that we are listening for. If we did not tune for the desired wave we would hear nothing, as radio waves are hitting our aerials at all times, not only the near stations but those that are thousands of miles away, and the ac-tual energy received thru the aerial is very small, so we must carefully sort out, or tune, till we get the waves that we want. Music and most of the interesting broadcasted information is sent out on a wave length of about 360 meters. We will make our set for that wave particularly, but you will be able to hear longer wave length messages as well as shorter.

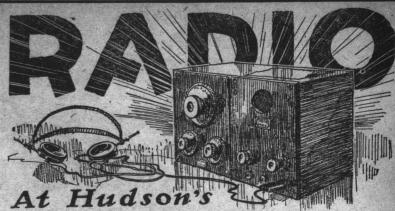
It is interesting to know that the radio waves as sent out travel at a speed equal to that of light, that is 182,000 miles a second;

seven times over around our world in one second!

(To be continued)

RADIO MAGAZINES

The Business Farmer can save you on subscriptions money on subscription of the leading Radio magazines. Special prices in combination with the Business Farmer. There are now a dozen or more weekly and monthly papers which are full of fascinating stories and illustrations on this new wizardry of the air. Prices, etc., on application. Address the Circulation Manager, Michigan Business Farmer, Mt. Clemens, Michigan.



The J. L. Hudson Co., Detroit, offers to the farmers of Michigan, a dependable and reliable Radio Service—every instrument we sell measures up to Hudson quality standard in every respect -Radio equipment which should be in every Farm Home.

Every day Radio is broadcasted from Detroit, Chicago and Lansing, with market quotations, weather forecasts, latest news and evening programs of orchestras, singers, speakers and entertainers—ALSO THE SCORE OF THE BASEBALL GAMES AS THEY ARE PLAYED.

HUDSON'S COMPLETE RADIO SERVICE

Free consultation and estimates on installation of exterior and interior aerials for long distance and local receiving. Your inquiries will be answered by these two men:

Captain C. O. Van Der Vort, a raduate electrical engineer, form-rly radio officer in the 85th Division f the A. E. F.

Mr. Charles Marvin, experienced amateur radio operator, well known locally to older radio fans.

Radio Receiving Sets

"Marvel," complete receiving set, including single receiver head-set and aerial, \$15.

"Everyman," De Forest portable set with double head phones, \$25. "Federal Jr.," a good crystal de-tector set that requires only two ad-justments. Black enameled case. With Federal double head phones, \$25. Lally Crystal Receiving Set in walnut case—complete with Everett double head phones, 3,000 ohm, \$25.

The above outfits will cover an area of 30 miles.

Aeriola Sr-Westinghouse set with detector, amplifier tube, aerial and battery, complete-\$67.40.

The above set will cover a distance of more than 700 miles. Head Sets, Detector and Amplifier Tubes, Batteries, Aerial Wire, Insulators, Detectors, Loud Speakers and other supplies.

THE J. L. HUDSON CO. DETROIT ::

Important—Write Hudson's for advice on the kind of equipment you need in your particular locality—you require expert advice on this—Address Personal Service Department.

RADIO BOOKS

ALLED TO DOOLED
The Home Radio, by A. Hyatt Verrill
The Construction of Radio Phones for Beginners85c By M. B. Sleeper Paper Cover
Design Data for Radio Transmitters and Receivers85c By M. B. Sleeper Paper Cover
Practical Amateur Wireless Stations, Paper Cover85c
Radio for Beginner\$1.25 By Alfred Fowler Board Cover
The A B C of Radio, Paper Cover30c
Wireless Experimenters' Manual\$2.50 By E. E. Bucher Cloth Bound
Experimental Wireless Stations
DOOR DELANTMENT

The RADIOPHONE for FARM and HOME-

THE MICHIGAN BUSINESS FARMER: Mt. Clemens, Mich.

Keep in touch with the outside world.

No matter where you are located you can sit in your own home and hear by wireless telephone-

Market reports, News, Government reports, Music, Church Services, Concerts, Speeches by Great Men, Time signals, Weather reports, etc.
Enjoy the programs sent out daily from New York, Denver, St. Louis, Chicago, Detroit, Madison, Cincinnati, Kansas City and dozens of other cities.

Hear the best talent in the big cities and enjoy advantages and

pleasures you never dreamed of before. No previous knowledge of wireless necessary. Requires only one

wire outside. Complete sets \$25 to \$65. Send us your name for booklet or any

information you desire. THE COBURN COMPANY WHITEWATER, WIS.

RADIO SUPPLIES

Aerial wire, magnet wire, insulators, receiving Barker Fowler Electric Co.

117 E. MICH. AVE., LANSING, MICH.

SEN. DUNLAP \$3.00 PER 1000

Want to move our surplus stockes. 1000 Progressive Everbearin

THE ALLEGAN NURSERY
ALLEGAN, MICHIGAN
Everything to plant Do R



F16.3





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

Radio Questions Answered by J. Herbert Ferris

RADIOPHONE IS "WIRELESS"

RADIOPHONE IS "WIRELESS"
Glad to see Business Farmer has
Radiophone Page. As I would like to
know more about the wireless telephone
I am sending some questions. How is
radiophone different than wireless, that
is, in make-up? A simple wireless receiving set consists of detector, receiver,
tuning soil and condenser. What does
radiophone receiving set censist of?
Could you use a radiophone receiving
set for either radiophone or wireless
messages? About what would a radiophone set cost that could receive music
etc., from Pittsburgh, Pennsylvania, and
what pieces would make up such a set?
I read you could get a receiving set for
less than \$20, is that possible? What is
best form of aerial to put up for such
an outfit?—D. B, Morrice, Mich.

Radiophone is not different from
wireless, it is also "wireless," except
that the term, wireless originally ap-

that the term, wireless originally applied to radio-telegraph. Radio-telegraph uses the Continental code in sending messages, whereas radio-telephone uses speech, the person re-ceiving a message actually hears a voice talking.

A radiophone receiving set con-sists of exactly the same instruments

that you mention, the same as for radio-telegraph. Radio-phone transmitters generally use less power than radio-telegraph, hence there is required at times, especially for distant stations, an amplifier. Yes, the same set may be used for both purposes. A set to receive radiophone, from Pittsburgh and distant points, from Pittsburgh and distant points, would cost approximately \$50, depending upon whether you had a storage battery or not, and assuming that you assembled the parts. If you did not assemble the parts, but bought it complete, would cost over \$75. The parts necessary are: An aerial, vacuum-tube detector, tuner, 1 or 2 sten amplifier, with 6-volt aerial, vacuum-tube detector, tuner, 1 or 2 step amplifier, wth 6-volt storage battery and a block battery of 22 1-2 volts. You can get a crystal detector, receiving set for \$20, but this is only good for about 25 miles for radiophone reception.

OF INFINITE VALUE TO

FARMERS

I am a reader of M. B. F. and think it is an excellent farm paper. I am glad to know that you are conducting a radio department, and I believe that it will be the means of bringing to the attention of the farmers of Michigan a means of communication which will be of infinite and lasting value to them. I believe it would be a help to many if Mr. Ferris would publish a wiring diagram of his hook-up.

I have an aerial hung between two trees 30 feet high at one end and 35 feet high at the other end and 80 feet long. The lead-in from aerial to instruments is 35 feet and 12 feet from instrument to ground. Can you tell the natural wave length of it? With this aerial and a vario-coupler of 4 1-4 inch diameter of primary, how many turns should be required to tune to 360 meters? I am now using a crystal receiving set, but am constructing a short-wave regenerative set for radiophone reception. Do you think that a "C" battery is necessary in using a 2 or 3 stage amplifier and loud speaker?—C. D. F., Lakeview, Mich. If the M. B. F. can find room for it we will nublish the hock-yen that

If the M. B. F. can find room for it we will publish the hook-up that I am using, but for your informa-tion might state that it is an ordinary regenerative hook-up using a vario-coupler, and a grid variometer, and a tuned plate circuit. The hook-up will appear later with other data on my set. The natural wave length of your aerial is about 185 meters. About 30 turns on your vario-coupler would be needed depending coupler would be needed depending upon the capacity of the wires, etc., now in your set. A "C" battery is not fequired, only when you use a loud-speaker that specifies an extra battery will you need one. Most of the loud speakers now on sale use a telephone receiver of about 2000 ohms, and a horn, which takes the place of your regular telephone receivers.

RUBBER COATED WIRE FOR AEMIAL

Would No. 14 rubber covered copper wire produce as good an aerial as No. 14 bare copper wire? If you had a one stage amplifier could you put in a transformer and use that instead of a six volt storage battery? Is a six hundred volt one hundred ampere ground switch required by all insurance companies?—R. R. Bellewie, Mich.

Yes, rubber covered No. 14 copper wire will do electrically as well as bare couper wire. You must re-

per wire will do electrically as well as bare copper wire. You must remember that the rubber covering, however will add considerable weight to your aerial. Better take a knife and peel it, do not burn it off as it will soften the wire and lessen its breaking strength. A small

step down transformer will do the work of a storage battery, provided you have the proper apparatus to deaden the hum caused by the alternating current. I have not found that the transformer saves anything in the long run, unless you are an expert and can buy the necessary parts for using it. The fire underwriters require a 600 volt, 100 ampere switch, or a vacuum tube ground, to ground your achial when not in use

TO RECEIVE 1500 MILES

Where could you buy a radiophone set that could reach about 1500 miles? About how much would it cost to get such a machine, if I would get my own poles or other things that I could get or make? How high would you have to have poles?—L. E., Interlochen, Mich.

A set that will receive satisfactorily from 1500 miles will cost from 1500 miles will cost from 250 to \$200 or more depending up.

\$50 to \$200 or more, depending upon just how you are situated and if it is the music broadcasts that you wish to receive. A set can be purchased from one of the advertisers in our M. B. F. or others who advertise in Radio magazines. See list of magazines in the M. B. F. Poles should be about 40 feet high.

BROADCAST BILL'S RADIOLAYS so fast and furious like, a fel-

low never knows what next will come along the pike, I ain't sur-prised at nothin' anymore, I tells my wife, partic'lar since this radio-phone has come into my life. The gol dern thing has suttinly changed matters 'round my home, I set around all day with this contraption on my dome, I've cut out whittlin' by the stove and' gassin' at the store—my wife don't understand my brand of loafin' any more! There ain't no movies out our way to give the soul relief—we don't have no the soul relief—we don't have no church musicales—the dominie is deef—no speakers come to Brussels Sprouts nor travelin' troops an' sich nothin' but wimmins' sewin' bees —an I can't sew a stitch. I reckon you can guess the awful life I used to lead, the thought-buds in my brain-house was a goin' fast ter seed, I lived in hopes from day to day some chariot would swing low and hist me out o' Brussels Sprouts list for tan years or see Systems. jist fer ten years or so. But since this radiophone an' me got hitched an' runnin' free, where'er them rub-ber ear-muffs is, that's home, sweet ber ear-muffs is, that's home, sweet home ter me! There ain't no didoes on this earth inquirin' minds can't hear if they'll just sit there long enough with them things on the ear. Doggone! Last night I'm sittin' there a-hopin' fer the best, when comes some sweet church music like from regions of the blest, an' my wife she hears the hummin' hymns and hears the church bells chime. and hears the church bells chime, "Lawks!" says she, "you've got religion! an' land sakes, I'll say it's time!" But then some jazz band started up and some gal sang o' love
—b'gosh I guess I backslid and I
didn't need much shove! Then comes an act of vaudeville and a goodnight tale for kids, and then some gink who studies birds, he talks on katy-dids. I hollered back some ques-tions 'bout graftin' sickle pears—I didn't get no answer so I guess he puts on airs. Gosh hemlock, that's them tunin' up, that cracklin' sound. by heck, means the whole dern world is callin' an' I gotta be on deck! (Copyright 1922, Westinghouse Elec & Mfg. Company.)



What the Neighbors Say

AGAINST CONSOLIDATION OF SCHOOLS

WILL try to explain why I am against consolidation of schools.
Was it taxes? Yes, but that
was not my main objection although I have had to let necessary repairs go in order to pay my taxes. In the last three years I have paid \$775 taxes on 76 acres.

The main issue with me was having our children go in a bus and go to town as well. I would rather our children would walk two miles to school than to ride in a bus five or six miles. I don't want our children to go to town until after the eighther words. I have sailed to find the children to go to town until after the eighther words. I have sailed to find the children to go to town until after the eighther words. grade. I have failed to find the children from our school weren't as well educated up to the ninth grade as those educated in town. Lately men (claimed to be educators) can't curse our country schools enough. I know our country schools are not kept up as they should be but take notice of the farm buildings the most of them around here are nearly like they were twenty-five years ago.

Our commissioners tell us that only about half as many of our country children that write on the eighth grade pass compared with the town and city but they fail to tell us that the town and city children don't have to write on the state eighth

grade examination.

Four of us from Birch Run town-ship went to Grand Blanc and out near Goodrich to find out what we could about consolidation of schools. Grand Blanc has a township unit. In this town we found very little obfection to consolidation but out in the country it was different. It was not the school they found fault with, it was the taxes which had become burdensome and the transportation of the children. We found that some of the children had to start from home about seven o'clock and didn't get home until six at night. We didn't find any that were far from school that were sending children under seven for they said it was too much for them to stand. Then some said that the older children abused the smaller ones in the

The school at Grand Blanc when completed will cost around \$120,-000, their bonds run for 15 years; taxes last year were \$13.26 on a thousand and no money being paid on principal. It takes 17 busses to haul 280 scholars to the school, the busses cary from 8 to 21 scholars. It cost \$15,500 to pay for these busses of which the state pays about \$5,500. The school is located nearly in the center of the township. The valuation of this district is \$2,418,575.

Goodrich consolidated school has a valuation of \$1,475,940, their tax last year was \$12.86 per thousand. At Goodrich they had a new school house to begin with so they only had to add on to acommodate the five bus loads brought in .

If our head officials want to help the country schools why don't they get the legislature to vote money to help the poorer districts instead of paying it to bus drivers to haul our children over the roads to town.

Mr. Farmer, I ask you to investigate before you sign a petition for consolidated schools. I am for the little red school house and always have been, and for the very best edu-cation I can afford to give our chil-Fred Boyce, Genesee County,

DRESS, AS A MEANS OF SAVING GRACE, AND A FEW OTHER REMARKS

REMARKS

I't is a far cry from today back to the time when the slogan was, "Let the women keep silent in the churches," supplemented by "It shall be an offence for a woman to sit with uncovered head in a place of worship." A far cry, but occassionally we of this age hear an echo of the "Hark, from the tomb a doleful sound" even though our ears do not attend the cry. Those ancient days were the good old days when women dressed decently and in order and a man wasn't haled into court

because he had a multiplicity of wives or a sizable bunch of concu-

Then, as now, the women of the Orient were garbed in the strictest fashion and wee betide one of them who walked in the market place with uncovered face even though just around the corner the ruler of the land or certain rich men lan-guished in their seraglios with a dozen or two hand-picked beauties. Not American Beauties! They don't pick 'em that way here, where the female dresses as she likes and does as she pleases.

Well, the old world rolled itself around until it came to the settling of our own beloved Ameria, when, as Washington Irving said: "Oh! as Washington Irving said: "Oh! blissful and never to be forgotten age! when everything was better than it has ever been since, or ever will be again. When the shad in the Hudson were all salmon—when innocence had nothing to fear from the lover who wore ten breeches and the damsel with petticoats half a score." And the general custom

was bundling.
When these virtuous and bigoted

When these virtuous and bigoted people flocked to the shores of this continent, they found a race of savages, weefully ignorant, shockingly clad, but,

"Lo, the poor Indian whose untutored mind, Sees God in the storm and hears Him in the wind," could have taught the new comers many a have taught the new comers many a useful lesson of morality in domestic relations. Who ever heard of an illegitimate pure-blood Indian baby? "Not I" said the Little Red Hen.

Which goes to show that lax morals are not caused by any particular style of dress. Will some one please stand up and tell me if it was indecent dress that caused the thous ands and tens of thousands of mulattoes and octaroons to be born in our own sunny south? Was it indecent dress that produced a crop of "Carpetbagger's" babies during the Reconstruction days? Not so you could notice it.

And so, these young men and old boys who are "falling by the way-side" need not cite the present style of dress as an excuse for so doing. True, it gives them a chance to drag a "red herring" over the legitimate trail and, like Adam when called to account for his sin in the garden: "The woman, Lord, the woman is to

blame, She did the mischief, go and chast-

My time is up, but as the Irish woman said, "There's but wan word with me, now let me say it." Two men in the city of New York were talking and one, a new comer, said, "My, what a lot of talk there is about the girls ankles." "Yes," said the other without enthusiasm, "it's just as it was about the airplanes when they were new. Then everywhen they were new. Then every-body was dislocating his neck and straining his eyes to see more of them. But now, shucks! when one makes a flight we say, 'Huh, only an airplane. Well let's hope she makes the trip, all right.'"—Rhoda, Olivet, Mich.

WOMEN'S COSTUME

THE views of H. W. (wish he had given us his full name) interested me very much because of the clear manner in which he ex-presses his views regarding the pres-ent style in women's dress (undress).

Perhaps the readers of M. B. F will not agree with the statement that woman's modesty is respon-sible, in a large degree, for man's purity, yet, upon careful reflection, the statement will be found to be

It will be helpful to recognize that "Good Taste" in one's dress, and in all other matters, is a God-given attribute and fortunate it is when "Style" harmonizes with good taste, as it always should be required to

The writer is confident that he woman, has seen the day when a woman, walking the streets of Detroit, cos-tumed as some are at this present day, would have been subject to ar-

(Continued on page 23)

"Not a Kick in a Million Feet"



Roof With MULE-HIDE

Because of its beauty and permanence.

Because of the positive satisfaction it will afford you.

Because of its lower cost per years of service.

Find the discriminating dealer in your town, -he has it.

Literature and Samples mailed on request.

THE LEHON COMPANY

44th to 45th Streets on Oakley Avenue, Chicago

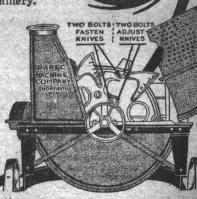
"Not a Kick in a Million Feet"

FEWER parts and better design explain why the Papec can be guaranteed to cut and elevate more ensilage with the same power than any other blower cutter. For the same reasons, the Papec gives longer service, less trouble and requires fewer repairs. Changing or adjusting the knives is easy and simple. Every working part of the Papec is easy to get at. It is the choice of men who know machinery.



intend to buy, also name and address of your dealer, and we will send you. FREE, a 50-page Farmers Account Book, worth a dellar to any farmer. Write today. PAPEC MACHINE COMPANY

187 Main St., Shortsville, N.Y. Distributing Houses E Papec Dealers to Give Pr Service



THROWS

AND

EAT MORE FISH

We will deliver to you express charges paid, new packed salted Herring, Pilots, (called Whitefish) Mackerel, etc., in 10 lb. or 20 lb. pails. 10 lb. Herring at.....\$1.15 20 lb. Herring at.... \$1.80 10 lb. White at......\$2.10 -20 lb. White at......\$3.65 lb. Mackerel at.....\$5.65 Smoked Whitefish, by mail, postage paid, 3 lbs. for 85c; 5 lbs. for \$1.25.

Money refunded if not satisfactory.

FLINT FISH COMPANY

: : : FLINT, MICH.

BUG-PROOF SISAL TWO

(Continued from last issue)

TO Miki and Neewa the report of the rifle and moaning whirr of the bullet over their backs re-called memories of a host of things, and Neewa settled down hump-backed, flat-eared flight of his that kept Miki pegging along at a brisk pace for at least a mile. Then Neewa stopped, puffing audibly. In-asmuch as he had had nothing to eat for a third of a year, and was weak from long inactivity, the run came within an ace of putting him out of business. It was several minutes before he could gather his wind sufficiently to grunt. Miki, meanwhile, was carefully smelling of him from his rump to his muzice. There was apparently nothing missing, for he gave a delighted little yap at the end, and, in spite of his size and the dignity of increased age, he began frisking about Neews in 1 manner emphatically expressive of his joy at his comrade's awak-

ening.
"It's been a deuce of a winter, Neewa, and I'm tickled to death to see you on your feet again," his antics said. "What'll we do? Go for a hunt?"

This seemed to be the thought in Neewa's mind, for he headed straight up the valley until they came to an open fen where he proheaded ceeded to quest about for a dinner of roots and grass ; and as he searched he grunted—grunted in his old, companionable, cubbish way. And Miki, hunting with him, found that once more the loneliness had gone out of his world.

CHAPTER TWENTY-FIVE

TO MIKI and Neewa, especially Neewa, there seemed nothing extraordinary in the fact that they were together again, and that their comradeship was resumed. Although during his months of hibernation Neewa's body had grown, his mind had not changed its memories or its pictures. It had not

omads of the North A STORY OF THE GREAT OUTDOORS

3 JAMES OLIVER CURWOOD Michigan's Own and Americas Foremost Author of Wild Life Romance

passed through a mess of stirring events such as had made the winter thrilling one for Miki, and so it was Neewa who accepted the new situation most casually. He went on feeding as if nothing at all unusual had happened during the past four months, and after the edge had gone from his first hunger he fell into his old habit of looking to Miki for leadership. And Miki fell into the leadership. And Miki fell into the old ways as though only a day or a week and not four months had lapsed in their brotherhood. It is possible that he tried mightily to tell Neewa what had happened. At least he must have had that desire—to let him know in what a strange he had found his old master, Challoner, and how he had lost him again. And also how he found the woman, Nanette, and the little baby Nanette, and how for a long time he had lived with them and loved them as he had never loved any-thing else on earth.

It was the old cabin, far to the north and east, that drew him now —the cabin in which Nanette and the baby had lived; and it was toward this cabin that he lured Neewa during the first two weeks of their hunting. They did not travel quickly, largely because of Neewa's voracious spring appetite and the fact that it consumed nine-tenths of his waking hours to keep full on such provender as roots and swelling buds and grass. During the first week Miki grew either hopeless or disgusted in his hunting. One day

he killed five rabbits and Neewa ate four of them and grunted piggishly for more.

If Miki had stood amazed and appalled at Neewa's appetite in the days of their cubhood and puppyhood a year ago, he was more than astounded now, for in the matmore than astounded now, for in the matter of food Neewa was a bottomless pit. On the other hand he was jollier than ever, and in their wrestling matches he was almost more than a match for Mikl, being nearly again as heavy. He very soon acquired the habit of taking advantage of this superiority of weight, and at unexpected moments he would hop on Miki and pin him to the ground, his fat body smothering him like a huge soft cushion, and his arms holding him until at times his arms holding him until at times Miki could scarcely squirm. Now and then, hugging him in this em-brace, he would roll over and over, both of them snarling and growling as though in deadly combat. This play, though he was literally the under dog, delighted Miki until one day they rolled over the edg of a deep ravine and crashed in a dogand-bear avalanche to the bottom. After that, for a long time, Neewa did not roll with his victim. Whenever Miki wanted to end a bout, however, all he had to do was to give Neewa a sharp nip with his long fangs and the bear would uncoil himself and hop to his feet like a spring. He had a most serious respect for Miki's teeth.

But Miki's greatest moments of

joy were when Neewa stood up man-fashion. Then was a real tussle. And his greatest hours of disgust were when Neewa stretched himself out in a tree for a nap.

It was the beginning of the third week before they came one day to the cabin. There was no change in it, and Miki's body sagged discon-solately as he and Neewa looked at it from the edge of the clearing. No smoke, no sign of life, and the window was broken now—probably by an inquisitive bear or a wolverine. Miki went to the window and stood up to it, sniffing inside. The smell was still there—so faint that he could only just detect it. But that was all. The big room was empty except for the stove, a table and a few bits of rude furniture. All else was gone. Three or four times durwas gone. Three or four times during the next half hour Miki stood up at the window, and at last Neewa—urged by his curiosity — did likewise. He also detected the faint odor that was left in the cabin. He sniffed at it for a long time. It was like the smell he had caught the day he came out of his den—and yet different. It was fainter, more elusive, and not so unpleasant

For a month thereafter Miki insisted on hunting in the vicinity of the cabin, held there by the "pull" of the thing which he could neither analyze nor quite understand. Neewa accepted the situation good naturedly for a time. Then he least uredly for a time. Then he patience and surrendered himself, to a grouch for three whole days during which he wandered at his own sweet will. To preserve the alliance Miki was compelled to follow him. Berry time—early July—found them sixty miles north and west of the cabin, in the edge of the country

where Neewa was born.
But there were few berries that summer of drought and fire). early as the middle of July a thin, gray film began to hover in palpitating waves over the forests. three weeks there had been no rain. Even the nights were hot and dry. Each day the factors at their posts looked out with anxious eyes over their domains, and by the first of August every post had a score of halfbreds and Indians patrolling the trails on the watch for fire. In their cabins and teepees the forest dwellers who had not gone to pass the summer at the posts waited and watched, each morning and noon and night they climbed tall trees and peered through that palpitating gray peered through that palpitating gray film for a sign of smoke. For weeks the wind came steadily from the south and west, parched as though swept over the burning sands of a desert. Berries dried up on the bushes, the fruit of the mountain ash shriveled on its stems, creeks ran dry, swamps turned into baked peat, and the poplar leaves hung wilted and lifeless, too limp to rustle in the breeze. Only once or twice in a lifetime does the forest dweller see poplar leaves curl up and die er see popiar leaves curl up and die like that, baked to death in the sum-mer sun. It is Kiskewahoon (the Danger Signal). Not only the warn-ing of possible death in a holocaust of fire, but the omen of poor hunt-ing and transling in the winter to ing and trapping in the winter to

come Miki and Neewa were in a swamp country when the fifth of August came. In the lowland it was sweltering. Neewa's tongue hung from his mouth, and Miki was panting as they made their way along a black and sluggish stream that was like a great ditch and as dead as the day itself. There was no visible sun, but a red and lurid glow filled the sky-the sun straggling to fight its way through the smothering film that had grown thicker over the earth. Because they were in a "pocket"—a sweep of tangled country lower than the surrounding country—Neewa and Miki were not caught in this blackening cloud. Five miles away they might have heard the thunder of cloven hoofs and the crash of heavy bodies in their flight before the deadly menace of fire. it was they made their way slowly It was they made their way slowly through the parched swamp, so that it was midday when they came out of the edge of it and up through a green fringe of timber to the top of a ridge. Before this hour neither had passed through the horror of a forest fire. But it seized upon them now. It needed no past experience.

(Continued on page 17)



Can You Solve This Movie Puzzle?

On the Movie Screen above are the names of 10 Movie Stars rearranged. The operator played a joke on the audience, and you'll admit it was a good one.

TO SOLVE THE PUZZLE, rearrange the letters in the funny sentences on the screen so that they will spell each actor's or actress' name. For example: No. 10 is Betty Compson. If you can name all ten stars you can win the Oakland car or \$1,000.

Probably you know the names of the most popular stars, but just to refresh your mind we are mentioning below a few of the most famous players: Douglas Fairbanks, Betty Compson, Elsie Ferguson, Norma Talmadge, Antonio Moreno, Charlie Chaplin, William Russell, Gloria Swanson, Anita Stewart, Richard Barthelmess, Katherine MacDonald, Irene Castle, Dorothy Dalton, Harold Lloyd, Eugene O'Brien, Irving Cummings, Wallace Reid and Mary Pickford.

185 "Points" Wins First Prize

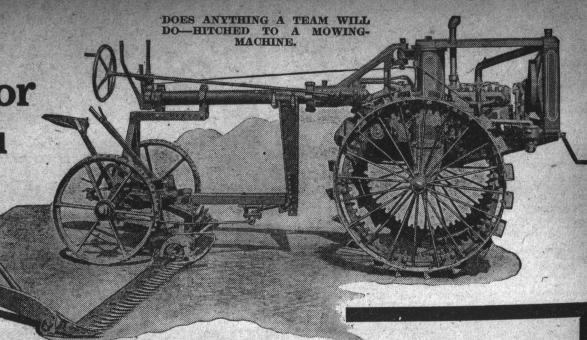
You will receive 10 "Points" toward the Oakland Touring Car or the \$1,000 for each name you arrange correctly, or 100 "Points" if you arrange all 10 names correctly. You can gain 60 "Points" more by qualifying your answer. This is done by proving you have introduced HOME FOLKS, an interesting and educational magazine for the Home, to five people. The final 25 "Points" will be awarded by three judges, not connected with this company, to the person making up the nearest correct list of words from the initials of the first and last name of each Movie Star. But DO NOT send in your list of words now. Send us your answer to the Puzzle first and we will write and tell you how to get up your word list.

Costs Nothing to Try—You Can Win

You will not be asked to subscribe to HOME FOLKS or spend a single penny of your money in order to win. We merely want your help in introducing Home Folks to five of your friends. Just write your answer to the Movie Puzzle on one side of a sheet of paper and PRINT your name and address in the upper right hand corner. The answer gaining 185 "Points" will win the Oakland or the \$1,000. There are 25 Big Prizes in all. In case of a tie, all tieing contestants will receive the same prize. Do your best and you can win. Contest closes May 27, 1922. Answer the Puzzle NOW and send your answer to:

Home Folks Publishing Co. Dept. **Chamber of Commerce** ST. PAUL, MINN.

Guess What
Make of Tractor
this is and You
Can Win It
May 31st



We believe every reader will be interested in a contest in which the prize is a

4 Cylinder Tractor

of the best manufacture which will do practically anything a team will do!

1 12 12 9 19 - 3 8 1 12 13 5 18 19

The name of the manufacturer of this tractor is hidden in the numbers above, for instance the first letter (1) is A, the second letter (12) is L. You must count the alphabet and figure out each missing letter. Write this in the coupon below and we will start you off with 1,000 Votes in the contest for readers of the Michigan Business Farmer.

This Tractor, complete and ready-to-run, will be shipped absolutely FREE to some reader of The Business Farmer who sends in the coupon below with the puzzle solved!



A Tractor That Does All a Team Will Do!

HERE is just the kind of a Tractor you have been waiting for and we have selected it, because it will meet every Michigan business farmers' needs. It will PLOW: 2 to 3 acres a day; HARROW: 10 to 15 acres a day; DISC: 12 to 16 acres a day; PLANT: 8 to 10 acres a day; MOW: 15 to 20 acres a day; POWER DRIVE: from belt pulley, 12 horse power from a steady four cylinder motor, for silo-filling, sawing, grinding, shelling or crushing. Hitches to any machine just like a team of horses. Lets you sit on machine while operating, not ahead of it. So simple and practical that a 12-year-old boy or girl, can operate it and do more than two men with two teams.

The 1 12 12 9 19-3 8 1 12 13 5 18 19 Tractor is built by one of the largest and best known manufacturers in the United States, it will be shipped from their factory at Milwaukee, freight paid to your station and covered by their regular guarantee.

This is your opportunity to win it, wether you are a father, mother, son or daughter—all of the family can help win it, but the first thing is to get the 1,000 votes, by solving the puzzle above, which tells you the name or make of the tractor, we are giving away Free.

ANY READER OF THE MICHIGAN BUSINESS FARMER, MAN, WOMAN, GIRL OR BOY CAN SOLVE THE PUZZLE AND WIN THIS TRACTOR FREE!

ALL you have to do to get started towards winning this tractor, is to figure out the name or make from the above puzzle, write it in the coupon below and get it right into the mails, just as soon as you can. On receipt of this coupon we will enter your name as a Contestant, CREDIT YOU WITH ONE THOUSAND (1000) VOTES and send you full particulars, more than we have room to tell you in this announcement.

You know that this contest, conducted by the Michigan Business Farmer, will be absolutely fair and square. You will have just as good a chance to win this Tractor as any other reader and wether you are a man, woman, boy or girl, we will give you every help to make you the winner.

In case two persons are tied, that is have exactly the same number of votes when the contest closes, we will GIVE A COMPLETE TRACTOR TO BOTH!

The big thing is to get started right away! Everyone in your family can help but the votes must be sent in by only one person from each family.

THIS COUPON COUNTS 1,000 VOTES!

TRACTOR CONTEST MANAGER,

The Michigan Business Farmer, Mt. Clemens, Mich. I have solved the name of the Tractor you are going to give away and I desire to enter the contest, providing it does not cost me one penny to win it Free!

It is an ______ 4 Cylinder Tractor. You are to write me at once, wether or not the above is the correct name of the Tractor and if I have won the 1,000 votes.

NameR. F. D. No.....

SATURDAY, APRIL 29,

Published every Saturday by
THE RURAL PUBLISHING COMPANY, Inc.
Wt. Clemens, Michigan
Represented in New York, Chicago, St. Louis and Minneapolis by
the Associated Farm Papers, Incorporated
Member Audit Bureau of Circulations.

./m. W. Slocum, Jr.
Henry F Hipkins
Milon Grinnell
Grace Nellis Jenney
H. H. Mack
Frank D Wells
J. Herbert Ferris
William E. Brown
W. Austin Ewalt Business Manager
Plant Superintendent
Managing Editor
Farm Home Editor
Market and Live Stock 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: 40e 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 nave 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 Farmeri" It will guarantee honest dealing

Entered as second-class matter, at post-office, Mt. Clemens, Mich. A New Hired Man

S O far as we know the Business Farmer is the first farm paper in the United States to publish a special radio section such as appears in this issue. At first thought, radio in its present stage of development, may seem to have but slight relation to the business of farming. And yet radio is even now bringing to tens of thousands of lonely and isolated farm homes beautiful messages of hope and cheer, the songs and lyrics of great masters, daily crop, weather and market reports, and practical talks on farm and home problems. It seems, indeed, that Alladin, stirring in his grave, may have rubbed his magic lamp and bade it set to work a million geneii for the benefit of mankind. But the radio of tomorrow will be as unlike the radio of today as the automobile is unlike the old high-wheeled bicycle of long ago. It is of the radio of tomorrow and its place in agriculture that we would

Some few weeks ago an article appeared in a popular mechanical magazine describing a small vehicle which could be operated from a distance by wireless signals. This invention moved Herbert Johnson, the great cartoonist, to draw a picture of a farmer sitting at a switch-board covered with knobs and levers by means of which he controlled the movements of his tractor, gas engine, silo filler, and other pieces of machinery about the farm. The prophecy may have been over-drawn. We do not know. The possibility of controlling mechanisms by wireless is known, but the prac-

ticability is yet to be determined.

Great discoveries will be made within the radio field within the next five years. Wireless telegraphy is a product of the last quarter of a century ago and up to 1907 the maximum distance which wireless signals could be sent was only a couple hundred miles. Today, fifteen years later, code signals can be wirelessed to almost every part of the globe. The telephonic possibilities of wireless were discovered about the beginning of the World War, but the receiving outfits now on the market are a product of only the last couple years. No discovery has fired the imaginations of men quite so much as the radio telephone and thousands of electrical engineers are devoting their energies to uncovering new truths about radio and new uses for it. Every one of the million or so amateur radio operators is a potential Edison, Ford, Marconi or Bell, and each is trying to find out something new about radio. That many new things will be discovered and radio developed into one of man's most useful servants there can be no

In the meantime, a radio receiving outfit will return to its owner all that it costs and more in the pleasure he can derive from listening to great concerts and messages by the nation's foremost men, and in the practical value of the daily news and market reports broadcasted by both government and private

Get acquainted with your new hired man, Mr. Business Farmer. He will lighten your burdens and make life more enjoyable.

The Sugar Tariff and the Farmer

HERE are close to two hundred thousand farmers in Michigan. Ten to fifteen thousand of them grow beets from which sugar is made. The other one hundred and eighty thousand are heavy purchasers of sugar. A tariff which would add two cents a pound to imported sugar might or might not benefit the few thousand farmers who grow beets, depending upon the whims of the manufacturers, but it would positively add several hundred thousand dollars to the sugar bill of the rest of the farmers to say nothing of the city

With these facts in mind what stand shall agriculture take on the sugar schedule in the pending tariff bill? Obviously, no one desires to see the beet sugar industry of Michigan or any other state destroyed by the competition of Cuba, but there is a limit to which the many can be taxed for the protection of the few. Experience has shown that the man who grows beets gets very little if any of the increased price of sugar resulting from a tariff. The lion's share goes to the manufacturer. Might it not be if the farmers owned the factories and received the profits of manufacturing as well as growing, they could compete with Cuban without the aid of a high protective tariff? As T. C. Price, president of the Saginaw County Farm Bureau, pointed out in the last issue, the farmer actually gets little if any protection under the new tariff bill which puts a high tax on incoming sugar, but a very low tax on incoming beets. He, too, offers the farmer-owned sugar factory as a solution to the problem. Most of the factories in Ger-. many are farmer-owned or controlled. Is there any reason why the factories of Michigan cannot be similarly owned?

Dame Rumor and Master Slander

"There have been quite a few things stolen around here, and Mrs. A said she would not be surprised if Mr. C had taken them. Mrs. B also said that suspicion rested upon Mr.C. Now Mr. C has heard of what Mrs. A and B have said and threatens to have them arrested for slander. Can they be arrested for telling their opinion? They did not say that Mr. C had stolen anything but that they would not be surprised if he had.—Mrs. A., Cedar Springs, Mich.

O not worry. It is not likely that Mr. C can produce enough evidence of slander to get a warrant for the arrest of Mrs. A and B. If they had deliberately charged him with the crime he could have resorted to law but as they only breathed a suspicion against him he is without recourse. No court verdict could entirely clear his name from the smears with which thoughtless tongues have plaster-

A great poet once said: "Who steals my purse steals trash. * * But he who filches from me my good name takes all that I have and leaves me poor, indeed." A wise saying, as true today as when the world began. A fortune may be made and lost and another gained to take its place, but a good name once stolen, is gone forever. The thief who steals a purse may be caught with the goods in his possession, and punished, but it is easier to apprehend the whirlwind than to silence the voice of slander and overtake the swift chariot of Dame Rumor.

Spring Farm Helps

MICHIGAN taxpayers have an investment of several million dollars in the M. A. C. at East Lansing, which pays dividends to all who avail themselves of the services of the institution. This institution is splendidly equipped to give information and advice upon almost any problem with which the average farmer may be confronted. The Business Farmer has always found the College specialists anxious to be of service and has had frequent occasion to call upon them in behalf of its readers. Under the leadership of Pres. David Friday we may expect to see a broadening, if possible, of the service functions

The Experiment Station, maintained in conjunction with the College, issues anually a number of interesting and extremely valuable booklets on the production of the various crops adapted to the state's climate and soil. Its quarterly bulletin is replete with information secured from actual experiments with these different crops. The following titles suggest, for instance; some of the excellent articles which may be found in that bulletin: "Short Season Hay Crops", "Hardigan Alfalfa", "Hubam Clover as a Field Crop", "Sweet Clover Pasture", "Spring Care of the Ewe Flock", "Lime and Fertilizer Tests", "Frost and Muck Soils", "Fertilizer Trials with Apples" "Michigan Trees Fruit Variaties" ples", "Michigan Tree Fruit Varieties", "1921 Potato Costs", etc.

Farmers who desire to receive copies of this quarterly bulletin may have their name placed on the mailing list by addressing R. S. Shaw, director Experiment Station, East Lansing, Mich. We suggest to our readers that they make more use of the services of the College by asking for bulletins in which they may

be interested.

The Senate Tariff Bill

HE Senate tariff bill makes a very acceptable gift horse for the farmers providing they do not look into its mouth. A casual examination and comparison with former tariff measures would lead agriculture to believe that its long-cherished dreams had come true and that it is at last to sit in the front pew of the world's protected markets. But closer inspection dispells some of these fond

Nearly all of the agricultural items are in terms of specific duties. Reduced to an ad valorem basis at current valuations and compared with the ad valorem rates on commodities of which the farmer is a large purchaser we find that the agricultural schedules are actually the lowest on the list amounting in few if any cases to more than thirty per cent. Of what benefit to the farmer is a twenty-five per cent duty on a world grain like wheat of which we produce a large surplus when he must turn right around and pay a 40 to 80 per cent duty on a majority of things he buys.

The value to the farmer of a tariff on corn and oats is negligible. The duties on dairy products are badly needed and none too high. The duty on sugar is an affront to every American consumer. Michigan is an important sugar-beet growing state, but only ten thousand of her two hundred thousand farmers grow beets. But three and a half million Michigan people are asked to add several million dollars to their sugar bill for the direct benefit of a few hundred sugar-mill stockholders and the very small and questionable benefit of the handful of beet growers.

Stay By a Good Man

ONGRESSMAN L. C. Cramton of Lapeer will be a candidate to succeed himself. He has been representing the seventh district for the past 10 years which of itself speaks well for the man. The party bosses of his district have been trying to unseat him ever since they found out they could not control him. They will try it again this year, but they will fail as in the past. Cramton is a credit not only to his district but to the entire state. His record is clean and his viewpoint progressive. He keeps abreast of the times and the needs of ordinary folks. He still believes in stringent government economy, taxation in proportion to ability to pay, reduction of railroad rates. speedy enactment of an equitable Republican tariff law, early relief and recognition for those who served in the armed forces of the United States and effective enforcement of the 18th amendment. He has been working faithfully along these lines and will continue to do so if re-elected. Good legislators like good hired men, are hard to get, and should be retained as long as possible. Cramton is a good legislator. Michigan and the seventh district will be fortunate to have him on the job the next two years.

Incle Rube Spinach Says:

WE'LL FEEL IT LATER

WELL now jest see where we're at! Right into a big coal strike—everything jest bout shet down tight s'far's coal minin' is concerned an' yet nobody seems to 'shudder — nobody's gettin' scairt about it Why there's lots o' to shudder — nobody's gettin' scairt about it. Why there's lots o' coal in the country—jest let 'em go ahead an' fight it out. Now I wonder how many readers of M. B. F. thinks there's goin' to be a very big fight over this matter. fight over this matter.

On the other hand there's the largest supply of coal on hand this country has ever seen. A supply so large an' so much coal in sight to be delivered, seems like there's no kind of excuse for keepin' the price so high—there is no excuse an' no rea-

Looks like the operators, knowin' this seeks some way—some excuse to keep up the price. When the coal bins, the visible supply begins to diminish, when coal looks like she had gone into hidin' an' there ain't any to be had—when the poor, insignifi-cant consumer realizes he's jest simply got to have some coal, well, 'bout that time the miners an' operators'll wake up an' they'll find operators'll wake up an' they'n find they've got to get a lot of coal goin' in just a short time—rush orders'll come in. They must git the goods, a settlement'll be reached, they can furnish the coal at a little advance in price, the sufferin' public will pay the bill—pay it jest as they have always paid it, grit their teeth, knowin' they are bein held up by a lot of — robbers an' the only thing that'll be gained by this great strike will be the maintainin' of the present outragious price of coal—it is not likely the miners will win—their not likely the miners will win-their their union even may be broken—but—an' here's where I hold my breath-who pulled the strike? Wuz it really the miners? Mebbe now it wuz the operators. Coal, you know, wuz high. Now if you was operatin' a coal mine you'd kinda' like to well how does she look to you? Does it look as if the miners 're to blame er the operators?

With more coal in sight'n this country's ever seen at one time, the prospect for keepin' prices up looked kinda slim—didn't it now? When these same bins are empty. When everybody is hollerin' for coal. Why say now, a little boost in price wouldn't look so bad would it?

Now say, jest look a here about a minute? Jest 'bout how long do you want to be held up by labor unions or operators unions? Do you know the banks of this country can tle your hands so's you can't wiggle —they can stop everything at a minute's notice? The manufacturers can do the same thing—if they say stop, we stop. And the labor unions can kill things deader'n a door nail

can kill things deader'n a door name any time they see fit.

Now I ain't gen'raly a gloomy guy—I don't always preach calemity. I like the sunshine, the brightness of life—I try to see both sides of most everything. I believe there's more good than bad—but I can't see how the grover ment can attend by an' see good than bad—but I can't see how the gover'ment can stand by an' see her people robbed—see 'em skinned by a lot of sharks, whether they be mine operators or mine workers. 'An when you stop to think 'bout it, no matter what the cause of a strike, the dear peepul' pay the bill. In the present strike I am not taking sides —the fact that such a great business is paralyzed an' put out of business is paralyzed an' put out of business while the operators an workers squabble is enough for me and the fact that there are to many miners and a whole lot too many operators is too much for me, and the simple fact that there is a strike on now, will be too much for you my farmer firends, when you have to buy your coal for threshing and to you who use coal for your winter use, An' so I'm jest wonderin' if our gover'ment

I'm jest wonderin' if our gover'ment that could draft five million of our young men and send all of 'em over seas if it saw fit—hasn't the power to take hold of these hold-ups and regulate business, so that you and mebbe I or my neighbor can live without payin' extra tribute to labor or to profiteers? Cordially yours.—UNCLE RUBE,

ODDS AND ENDS
The National Lime Association has issued an instructive bulletin on the "Uses of Lime on the Farm." which every farmer should have. Copies of this bulletin may be obtained free of charge from the association by writing its Washington, D. C. office. Subscribers are requested to mention the Business Farmer when applying for this booklet.

JOBS WANTED—Two readers of the M. B. F. want a job, One says he is an experienced gardner. The other is a farm lad of 20 years, strong and willing to do most any kind of farm work. Names furnished on application to M. B. F. editor.

An Ohlo subscriber who is an auto and tractor mechanic wants to get in touch with owners of threshing machine outfits who make a business of traveling from one state or wheat section to another. Name and address on request to the M. B. F. editor.

Mr. C. T., is a single man who wants to correspond with some maid or widow who wants a home. Widow with small child would be econsidered. All interested should write to the M. B. F. editor. Incidentally Mr. C. T., is one of 145 bachelor or widower farmers who have applied through the M. B. F. for a help-mate or housekeeper.

The U. S. Department of Agriculture has just issued a new Farmers' Bulletin. No. 1255, on "The Production of Peas for Canning," which ought to be in the hands of every pea grower. It can be had free of charge by addressing the Division of Publications of the department, Washington, D. Q. The bulletin describes the methods to be followed in growing, harvesting and handling the crop and discusses the relation that should exist between grower and canner. The pea industry of the United States had its origin near Baltimore, Md. but is now centralized in the Great Lakes region.

Medical authorities are greatly interested in the death of Peter Everson of Connecticut, who died of meningitis as a result of an oat kernel sprouting in his ear.

CAPITAL PUNISHMENT

CAPITAL PUNISHMENT

AM renewing my subscription for three years to the best farmer's paper I know of, I agree with you on most questions, but I think desperate murderers should be executed. I feel our laws are altogether too lenient towards criminals, but the stand you take on all questions affecting the farming class and promoting the general welfare are so sound and just I don't want to do without your paper, yes I feel we can trot along together very nicely.—J. C. Loringer, Mecosta County, Mich.

REDUCED AUTO BATES ON STEAMERS

Effective immediately on the D. & C. Line, a reduction of 15 per cent on rates for carrying all open cars and 25 per cent on all closed cars.

This reduction is in addition to the 15 per cent reduction on all class and commodity rates, including automobiles, put into effect a year ago.

These new reduced rates are practically pre-war rates—although wages, overhead expenses, and other costs of carrying automobiles are not down to pre-war levels.

The rates are now effective on the

The rates are now effective on the Detroit-Cleveland division, and will be on the Detroit-Buffalo division as soon as navigation opens on this route.

GOVERNMENT BULLETINS OF INTEREST IN MAY

The following list of Farmers' Bulletins and Circulars are of general interest to M. B. F. readers during May. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletin or Department Circular:

Farmers' Bulletin 450, Some Facts About Malaria; 602, Production of Clean Milk; 748. Steam Sterillzer for Farm Utensils; 752, Army Worm, or Grass Worm, and Its Control; 762, False Chinch Bug—Measures for Control; 857, Screw Worms and Other Maggots; 872. The Bollworm or Corn Earworm; 896. Rats and Mice; Rodent Pests on the Farm; 975, The Control of Buropean Foulbrood; 879, Preparation of Strawberries for Markets; 1102, The Crow and Its Relations to Agriculture; 1191, Cheese Making on the Farm; 1198, Swarm Control.

Department Circular 25, Home Garden

Department Circular 25, Home Garden Diseases and Insects, How to Control Them, Boys and Girls Club Work; 36, Use of Poultry Club Products; 40, Insect Enemies and Diseases of the Tomato; 47, Stomach Worms in Sheep, Prevention and Treatment; 162, Some Rules for Poisoning the Cotton Boll Weevil.

HAVE WE LOST A FRIEND?

Once in a while, we hear of some-one who subscribed for the Business Farmer, either direct or through an agent, who never received the paper. Other errors sometimes occur that we never hear of. We value our we never hear of. We value our friends more than we do our dollars, so if you know of anyone who has any trouble with our mailing department, please tell them to write us NOW! We want every reader to re-ceive full satisfaction and we are only to anxious to rectify mistakes.

A motorist, stranded by the roadside, telephoned frantically for assistance. "I've turned turtle," he shouted, "Apply at the aquarium," came the answer.—Tit-Bits.



Your Shoe Money's Worth

is just what you get when you buy MORE MILEAGE SHOES. They are built for fit, comfort and long wear. They are made for people who MUST get full value for their shoe dollars.

They are good inside and out. The leather in them is the best. We know leather. We tan it—have been in the tanning and shoe manufacturing business for three generations. The shoes we make "wear like iron," look and feel good. Ask for MORE MILEAGE SHOES at your nearest Hirth-Krause dealer's. If you do not know who he is, write us.

Prize Contest Closed April 15 Winners Announced Soon

If you sent answers, you may be among the lucky ones. Prize winners will be bulle-tined at Hirth-Krause shoe stores on or about May 1st. If you do not know the deal-er in our shoes write us for his name. He is the man who gives out names of prize win-ners.

Hirth-Krause

Tanners and Shoe Manufacturers Grand Rapids, Michigan

Superior Construction Rock Bottom Prices

Spoiled ensilage means wasted time and fodder, therefore the first thing to look to in buying a Silo is to see that it is Kalamazoo Glazed Tile scientifically planned and constructed. Our thirty years' experience in Silo building is your protection.



Kalamazoo Tile and Wood Silos

mean the highest type of construction. Their permanence and reasonable price mean the utmost in economy. Our Glazed Tile Silo is built on the hollow-wall principle, having three air spaces—warm in winter, cool in summer, yet moisture-proof and everlasting. M winter, cool in summer, yet moisture-proof and everlasting.

Kalamazoo Wood Stave Silos are the world's standard in wood silos—have stood the test of thirty years. Made of straight-grained, well-seasoned wood, air-tight joints, deeply grooved, tongued and splined; exceptionally resistant to heat, cold and moisture: Shipped ready to set up without nails or screws.

Both types have the famous Kalamazoo Galvanized Angle-Steel doer frames, continuous doors and safe, convenient ladder.

Send plans or rough sketch for free estimate on Glazed Building Tile for your farm buildings. It means permanence and economy. Investigate the Kalamazoo Ensilage Cutter—None better.

Kalamazoo Tank & Silo Co

Kalamazoo Tank & Silo Co. Dept. 544 Kalamazoo, Mich.

THE AUTO-OILED AERMOTOR A Real Self-Oiling Windmill A year's supply of All

Oil an Aermotor once a year and it is always oiled. Every moving part is completely and fully oiled. A constant stream of oil flows on every bearing. The shafts run in oil. The double gears run in oil in a tightly enclosed gear case. Friction and wear are practically eliminated.

Any windmill which does not have the gears running in oil is only half olled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor pumps in the lightest breeze because it is correctly designed and well oiled. To get everlasting windmill satisfaction, buy the Aermotor.

Write today

AERMOTOR CO. Chicago

Des Moines

The Moines of Chicago

The Moines o

225 STRAWBERRY PLANTS POSTPAID \$2 WHEN WRITING ADVERTISERS 125 Duniap, 100 Everbearing PLEASE MENTION M. B. F.

FOR MILDEW ON ROSES

THIS fungus attacks plants grown in the house and also those grown out-of-doors. It checks the growth of the young shoots and causes the leaves to remain dwarfed and curled, at the same time a white powdery growth entirely covers the affected areas and the plants be-come so weakened that they are of no particular value.

Plants in rooms where there is

insufficient ventilation are often thus affected.

The fungi may be destroyed by spraying the foliage with clear water or with some prepared insecticide, mixtures being commonly soapy mixtures being commonly used. Remove all diseased parts of the plant and destroy them by burning. Sulphur may be dusted on after washing. If after all remedies are used and the growth still appears the plants would better be burned. Start again and with good soil. Plenty of spraying with clear water and planty of air good results. and plenty of air, good results should follow.

It is possible that many plants are diseased when purchased.

The best way to prevent disease is by giving the plants the best living conditions possible. Good clean soil, light, air and water. I have cured plant diseases just by weekly washings in tepid water not medicated at all.

MUCH ADO ABOUT NOTHING MUCH ADO ABOUT NOTHING

NE of our prominent society
women in Michigan has decided
that girls who powder their
noses should be refused recognition
in society and be made to suffer for
their indiscretion. Why does she
not spend her valuable time on
something worth while and when she
might have at least a chance for sucmight have at least a chance for success? In the first place if the nose needs powdering why not powder it? It was never meant to shine, it is too conspicuous. Eyes may shine, teeth be polished and conversation scintillate but noses never. The more subdued and quiet they are the better. May the author of this tirade decide to feed the hungry and clothe the heathen and leave us our powder puffs to use at our own descretion (I'll wager she powders hers.)

REARING OF CHILDREN WAS much interested in Mrs. C.

E. B.'s letter and was also glad to see the M. B. F. devoted a to see the M. B. F. devoted a page of its interesting paper to the use of its patrons, in which they may exchange confidences concerning the rearing of their children. Believing we are never too old to learn I am always glad to receive information on this subject. I am a young mother of twenty-four a young mother of twenty-four years, and it is the greatest desire of my life to teach my children right.

When a young child goes too near a stove, how often do we hear the mother say, "No, no, it will burn you?" and yet later in life, when there are so many temptations which there are so many temptations which come to the young, does that mother keep silent because it concerns matters of sex. I cannot refrain from saying, that if silence has meant to protect the honor and virtue of our boys and girls it has failed in its mission. I say this because we hear the actions of our young people sharply criticised. I think there is a great need of sex training in the home. It is up to the mothers and fathers to set up the mothers and fathers to set up the danger signals along life's pathway, to guide the footsteps of their boys and girls.
When a little child comes to its

parents with the question about its origin, it is one of the first oppor-tunities parents have of starting the child right. However, if they neg-lect this duty of telling the truth and allow them to find out from other sources, the child may get a wrong impression which may prove most serious and the parents have closed the doors of confidence forever between them and the child. They will no doubt seek all information on this subject from their companions rather than from mother or father.

If the parents would spend as much of their time as possible to select good interesting and clean reading matter for their children and in teaching them the sacredness

. 30

The Farm Home A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

Dear Readers: While our issues per month have been necessarily reduced for a short period, I will gladly answer your personal inquiries by mail if you are in a hurry for your reply. A stamped and addressed envelope is a help to me, when so many letters are sent out in a week. Many to whom I have written tell me that I have been of help to them and that is just what I am here for to help and assist when I can. That is the real lov of my job.—Editor when I can. That is the real joy of my job.—Editor.

of their life, love, marriage and the many things of this life, it seems as though much of the trouble which now exists might be averted. I would like to hear from some of the others.

Any one may have a complete sex training in their home by purchasing the following books: "How to Tell the Story of Life," "Perfect Boyhood," "Perfect Girlhood," "Perfect very extensively introduced by home demonstration agents of the United States Department of Agriculture and the State Agricultural Colleges, as a part of the general extension program relating to clothing to assist the rural woman with her sewing problems. So many requests
for further information on the subject have reached the department that Department Circular 207. The

APRIL RAIN

It's raining daffodils;
In every dimpled drop I see Wild flowers on the hills.

The clouds of gray engulf the day
And overwhelm the town;
It is not raining rain to me
It's raining roses down.

It is not raining rain to me But fields of clover bloom, Where any buccaneering bee Can find a bed and room.

A health unto the happy,
A fig for him who frets!
It is not raining rain to me,
It's raining violets.
—Robert Loveman.

Manhood," "Perfect Womanhood,"
"Spooning," "Guide to Sex Instruction," "Self Knowledge," "Heredity
Explained," etc., written by Prof. T. Explained, etc., written by Prof. T. W. Shannon, from the S. A. Mullikin Co., official publishers, Marietta, Ohio, for the small sum of 75c for the cloth bound books and 30c for the paper books. I have written this letter because I am deeply interested in humanity.—Mrs. C. F. M.

NEW CIRCULAR TELLS HOW TO MAKE PAPER DRESS FORMS

TOMEN in very part of the country who have heard of the gummed paper dress forms have been eager for directions for making them. This form has been Paper Dress Form, has been prepared and may be had upon request to the Department of Agriculture,

Washington, D. C.

The foundation of the form is a close-fitting undervest worn over the usual underclothing by the model whose form is to be reproduced. On this are pasted, in two layers, strips of gummed paper such as comes in rolls for bundle-wrapping. Two helpers are needed to paste the strips on the model and the work can be done more rapidly if two others cut and moisten the gummed paper. The circular describes all the materials necessary for making this inexpensive household convenience, and gives each

_AIDS TO GOOD DRESSING___

For, Simplicity, Service and Style

Address Mrs. Jenney, Michigan Business Farmer, Mt. Clemens.

CATALOGUE NOTICE—Send 15c in silver or stamps for our UP-TO-DATE SPEING and SUMMER 1922 CATALOGUE, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE AND COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all reliable hints to the home dressmaker. Patterns, 120 stitches) all valuable hints to the home dressmaker. Patterns 12c.



A Good Costume for Business, Sports or Home 3949-3947. The attractive combination offered here will please every woman to whom the blouse and skirt seem indispensable. With a cape or box coat this will be a splendid street suit. Novelty suiting was used for the skirt and handkerchief linen for the blouse.

used for the skirt and handkerchief linen for the blouse.

The skirt 3947 is cut in 7 sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. The width at the foot with plaits extended is about 2 1-2 yards. A 29 inch size will require 2 3-8 yards of 54 inch material. The waist 3949 is cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches 2 3-4 yards of 36 inch material.

TWO separate patterns mailed to any address on receipt of 12c FOR EACH pattern in silver or stamps.

A Popular Style

address on receipt of 12c FOR EACH pattern in silver or stamps.

A Popular Style 3956. The Middy is important in every girl's wardrobe. For sports wear, school and college there is no garment that quite takes its place. The model here shown is made with a hem facing that may be turned up in belt effect. The sleeve may be in wrist or elbow length. Indian Head, drill, silk or pongee is good for this style.

The pattern is cut in year size requires 2 3-4 yards of 36 inch material.

Pattern mailed to any address on receipt of 12c in silver or stamps.

Pattern mailed to any address on receipt of 12e in silver or stamps.

A Popular Style With New Features

3975. This jaunty model will be very pleasing in crepe satin, in Poiret twill, or serge, and also in pongee, gingham and cotton prints. The waist has cotton long lines, and becoming fulness. The skirt is comfortably wide and in approved length.

This pattern is cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 incl size requires 4 1-2 yds of 40 inch material. The width at the foot is 2 1-8 yards. Plain and contrasting material combined is excellent for this model.



3975)

CANNING FROZEN BEEF
Please tell the lady that inquired about canning frozen beef that it can be done and will keep as well as that canned directly after killing. Two years ago a neighbor delivered a quarter of beef tous the next day after we had butchered our hogs. I could not of course care for it all at once so thought best to let the beef freeze instead of the pork. I think in this particular case the beef was better for having been frozen, for what we ate fresh was very tough and my canned meat was fine. I can mine by partially cooking and then put it in cans and process the usual way, for an hour or two. One can get so much more in the cans this way and I like it just as well. As we do not care for smoked meat I can the hogs shoulders the same way. It makes a delicious cold supper dish in hot weather.—Mrs. J. Little.

CAN SOMEONE SUPPLY THIS? I am a reader of the M. B. F. Will some reader send me the song "Break the News to Mother?" Your friend—S. M. L

step of the process in detail. Illus-

trations accompany the text.

If a woman intends planning and fitting new garments for herself or for a member of the family away from home, remodeling old dresses, or altering ready-to-war clothes. or altering ready-to-wear clothes, she will find the paper dress form exceedingly useful in her sewing room.

TOMATO GROWING

THE Michigan Agricultural College, East Lansing, sends out a comprehensive bulletin, well illustrated, on tomato growing in-Michigan, which would undoubtedly apply to all our North Central States apply to all our North Central States as well. I would advise any one interested to send for this bulletin. I have grown tomatoes in my homegarden for a number of years but feel that I have learned a good deal from the bulletin.

ANSWERS TO CORRESPONDENTS

Reader-The pockets cut in the form of animals on the children's garments come with the pattern.

Mrs. R. E .- You may write to the Reference Department, Detroit Public Library, Woodward Ave., Detroit, Mich., for information about books, poems or anything else in that line.

Mrs. Lindsay—Will you tell me again the name of the poem or the first line of it written by Ella Wheeler Wilcox?

Mrs. H. L. Iliff, Jackson, R. F. D. No. 1., writes that she has directions for infant's crocheted sweater and

Will Mrs. Clarence Mayes who ordered a catalog send me her full address? The catalog is here but I have not her postoffice address.

Will some of you ladies who wrote to the Art Goods Co. tell me your experience? We want to know if they are not all they claim to be. My criticism of them judging from their letter is, that their prices are too low. One lady wrote me that was her opinion also.

Mrs. E. J.-Mrs. Cora. Hine will enjoy any good reading matter, farm papers, magazines, etc.

JELLY ROLL
In March 11th issue of M. B. F. Mrs.
F. G. asks for recipe for jelly roll. I have one which I think very good so will try to do my mite by sending it.
3 eggs beaten thoroughly with 2-3 cupsugar, 1 1-2 cup flour sifted with 2 teaspoon baking powder, pinch of salt, 4 tablespoons boiling water. Pour on well-oiled dripping pan and bake in quick oven. Turn cake down on clean cloth, bottom side up. Spread with jelly and roll up while yet warm, wrapping clotharound the cake to hold shape. With thanks for help received.—Mrs. I. G.

PIE TARTS

2 cups light brown sugar, 1 egg, 1 teaspoon vanilla, 1-4 teaspoon baking powder. Beat egg light then mix in with the rest. Line your gem tins with a good pie-orust and put in the above batter, it makes 15 tarts. The filling raises to the top of tart shells but falls as they cool and everyone surely enjoys them.—A Subscriber.

CHILLI CON CARNE

Take a quart red kidney beans, par boil them for about ten minutes, drain and put more water on to boil 'till nearly done. Take 2 onlons and 1 pound hamburger, fry a light brown, put this in the chilli, 1 pint tomatoes, 1 bottle catsup, and season. Take cayenne pepper instead of black pepper, let cook about 10 minutes and serve.

I am a reader of your paper and couldn't do without it. We like it the best of any farm paper we ever had.—Mrs. T. V.



DEAR CHILDREN: During the past month, I had a very high honor conferred upon me. It all happened at a schoolhouse near Mayville, Michigan, in Tuscola coun-ty and I knew nothing about it un-til the teacher of this school, whom have never met, wrote me the following letter:

"Dear Uncle Ned: We are learning to write letters in school this week so some of the children sug-gested writing to Uncle Ned. I told them that they might all write to-day for their grammar lesson. They were all quite excited about doing it. This explains to you the reason for receiving so many letters from one place."

This letter and the ones the teacher enclosed from the children make me feel very happy. They brought back memories of my school days and the hours I used to spend com-posing letters as did all of my schoolmates and most of these letters were addressed to father, mother, some other relative or a very dear friend or chum. If the girls and boys of today are the same as those of yesterday in this respect, and I believe they are, then they thought of me as they would of one of their dear friends or relatives. This fact alone makes me feel most proud. It is my ambition that every girl and boy reader of M. B. F. will have an affection for Uncle Ned and think of him as one of their uncles whom they have never seen but have written to and heard from. I am sure that nearly all of them write to me and if I but had the time nothing me and if I but had the time nothing would please me better than to sit right down at my desk and write each and every one a personal letter. I know that I would make thousands of beautiful friendships, but as it is I must content myself with one letter at the beginning of our page each week to answer all that I receive.—UNCLE NED.

OUR BOYS AND GIRLS

OUR BOYS AND GIRLS*

Dear Uncle Ned—I am a boy 12 years old I live on an 80-acre farm. We have five cows, a calf. 10 pigs, 3 horses, 125 brown Leghorn chickens, 5 Beigian hares and 8 cats. Pa takes the Michigan Business Farmer and we like to read it. I go to town school about a mile away and, am in the seventh grade.

In winter I go skating on a pond about a mile away, and in summer I help make hay and work, in the garden. My birthday is June 2nd.

We have parties every two months at our school. We have two clubs, "The Sliver Arrow" and "The Sliver Star." Our aim is to see who can get the highest average in spelling for 2 months. The lowest side gives the other side a party. I am on "The Sliver Arrow" club and last two months we won. They gaye us a party last week. I am sending a story which some of you may enjoy reading. Good-bye.— Frederick Reynolds, Waldron, Mich.

Your story is very interesting, Frederick, but we have so little space and so many letters to publish in it that we cannot use your story at this time, maybe a little later we can though, so I shall hold it.

later we can though, so I shall hold

Dear Uncle Ned—I am eleven years old and am in the seventh grade at school. We live across the road from the schoolhouse and we have a man teacher this year. He is a very good teacher. I am not going to tell about our farm and my pets as I wrote about that once before, but I wish to tell my cousins how much more I enjoy reading the Children's Hour since they are getting a little, "pep" into their letters. I am not trying to criticise the page any, but I think it would be nice to write something new besides telling how old we are every time, if we write often, how large a farm we

CASCARA QUININE N disagreeable weather always have Hilla handy. Stops Colds in 24 hours—La Gripps in 3 days. Standard remedy for twe genera-ona. Ne had after effects. Safe and dependable. Demmat red box bearing Mr. Hill's pertrait ad signature.

At All Druggists-30 Conts

W. H. HILL COMPANY DETROIT

live on, how much stock we have, how many pets we have, for it gets tiresome and I think Wyanda Sanborn was right when he said he thought it sounded like bragging. Now I think it would be nice for the boys and girls to tell more about their school and would say something about nature in their letters. Why not ask questions upon nature, about the birds, or animals for some of the readers may have found out the very things you want to know and then they can tell about it when they write.

Well I must close and will some of the boys and girls write to me as I have no brothers or sisters and I get rather lonesome some times. With best wishes to you all. Your friend.—Nadine 11. Delling, Ithaca, R. 1, Mich.

Ing, Ithaca, R. 1, Mich.

Dear Uncle Ned—I am a city girl 16 years of age. I lived in the country one and one-half years ago, but my mother wanted to go to the city because she was sick all the time and when we came to the city my dear mother got sick and she was in bed three months and then she died. She died February 12, 1921. I have 2 brothers and 2 sisters. My sisters are both married, my brothers are not. Since my mother died I am lonesome. I lost all my happiness, I have not many girl friends in the city. I am the housekeeper for my daddy and my 2 brothers. When I lived in the country I had a lot of pets, I wish some of the boys and girls would write to me. I am your friend.—Meta A. Miller, 1103 14th St., Bay City, Mich.

Dear Uncle Ned—We live on an 80-acre farm. We have two horses and two cows. I have two sisters and one brother. We play ball at school, it's lots of fun. Our teacher is reading a book about "Billy Whisker" to us school children. Billy Whiskers is a goat that gets into mischief.—Dorothy Wagner. Mayville, Mich.

Mich:

Dear Uncle Ned—I think Nellie Inman's way of writing letters is dandy. I cannot send you any pictures of me or my pets. I have one picture, a colt, I will send you Uncle Ned.

I am a girl ten years old. My birthday is the sixteenth of August, I have brown eyes, dark hair and dark complexion. I wish some of you boys and girls would write to me.

For pets I have a cat and want to get a dog too, but I have no time to play with cats or dogs now, for I have the baby to take care of for my mother is ill. But I enjoy caring for the baby. The baby is one month and 13 days old.

I have two brothers and one sister. I live on an 80-acre farm in a five-room house. We have nine cows, two horses, five calves, six pigs and about twenty chickens. Hoping to hear from some of you. Your friend.—Amy Palmer, R. 1, Goodhart, Mich.

Dear Uncle Ned—We take the Michigan Business Farmer and we like it very much. I have read the letters your boys and girls have sent you so I thought I would send you one too. We are on a 120-acre farm. We have 7 head of cattle, 4 head of horses, and 20 hens. I am a boy in the sixth grade in school.

John Van Antwerp. Mayville, R. 4, Mich.

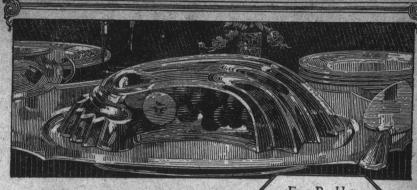
Dear Uncle Ned—We take the Michigan Business Farmer and like it real well. I read the letters real often and like them. I am 14 years old and in the sixth grade. We live on an 80-acre farm. My sister while hunting up north was accidently shot by the girl who was hunting with her. Her lee was taken off fust below the knee. She gets around real well on her new leg now. My mother who was driving to a little town on the same day was hurt. A car drove across the road in front of them and our car went in the ditch. My mother's collar bone was broken and also three ribs. She was in bed for six weeks.—Lillian Bernethy, R. 4, Mayville, Mich.

Dear Uncle Ned—May I join your merry circle? I am a farmer girl 14 years old, and am in the seventh grade. I am going to take the seventh grade examination. My teacher is a man. There are twenty-three children going to this school. We had a social the seventeenth of march. It wasn't a very good day. We have a Victrola for our school. We have thirds of balls to play with. We have lots of fun out doors when the snow is off.

I am five feet four and one half inches tall. I am dark complexioned. I have dark brown hair and brown eyes. I live on a hundred and twenty acre farm. We have four horses and ten head of cattle. We have over sixty chickens. We had quite a few rabbits but most of them died. I don't know how many we have now. I have four sisters and four brothers. My father takes the M. B. F. and I like it fine. Every Saturday I can hardly wait till the paper comes. I like to read the Children's Hour. For pets I have some rabbits and ducks.—Agnes Watkoski, Traverse City, R. 5, Box 61. Mich.

OTHER LETTERS RECEIVED

Gladys Klein, Gladwin: Nellie Mover, Hastings; Leona Nuffer, Franklust; Bernice Miles, Clifford; Mable Campbell, Traverse City; Catherine Traynox, Soo; George Eigner, Bay City; Nora O'Brien, Vassar; Geneva Craig, Allen Bernethy, Wayne Walls, Zelpha Beardsley, all of Mayville; Emma Eigner, Bay City; Isabell Craig, Adelaide O'Brien, Vassar; Sadie S. M. Watkoski, Lucile H. Fouch, Traverse City; Esther Caisters, Cass City; Mabel and Ethel Schneider, Turner; Lunell Lang, Rodney; Florence Halpin, Lapeer, R. 2, Michigan.



ESSERT is the climax of a meal and should be chosen with such care that one rises from the table with the delightful feeling of having dined perfectly.

When the appetite has been satisfied with the meat and vegetable courses, bring on a dainty dish of fruit Jell-O with cream to add a last fillip, and to bring luncheon or dinner to its ideal conclusion.

Free Booklet A Beautiful Jell-O Book will be Sent Free to any address upon request.



America's Most Famous Dessert

The American Offices of The Genesee Pure Food Company are at Le Roy, N. Y. The Canadian Offices are at Bridgeburg, Ont.



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 Salicy-



MEN WANTED IN EVERY TOWN AND farming community in Lower Michigan. Big Money, easy work. Whole or part time. No. soliciting. O. TURNER, Powers, Mich.



sell our tires under a

To introduce the best automobile tires in the world Made under our new and exclusive Internal Hydraulic Expansion Process that eliminates Blow-Out-Stone-Bruise -Rim-Cut and enables us to

10,000 MILE **GUARANTEE**

We want an agent in every community to use and in-troduce these wonderful tires at our astonishing

low prices to all motor car owners. Write for booklet fully describing this new process and explaining our amazing in-troductory offer to owner agents.

Hydro-United Tire Co. Dept. 189 Chicago, San Francisco, Pottstown, Pa

FINEST PASTURE

When used alone for pasture GRIMM alfalfa is unexcelled for your hogs and chickens. It has proven to be 'just right.' Mixtures to be just right. Mixtures for permanent pasture should contain at least four pounds of Genuine, Scarfied GRIMM seed per acre. Cenuine GRIMM will stand more abuse and later pasturing than any common alfalfa. It will stand for years without re-seeding. Don't consider former experiences with affalfa until you have tried genuine, certified, scarified GRIMM. You will find it most enonemical in producing for you tatter, healther live stock for larger profits. The seeding cost of genuine scarlified GRIMM is practically the same as common alfalfa, your returns much greater. Due to the great number of orders to fill from a comparatively small supply left, get your order in promptly so we can give you best of service.

Due to the vast amount of common alfalfa, or hadly mixed lots sold on the market as GRIMM, many farmers have been hoaxed into raising poor or ordinary crops. On the other hand, from actual observation, users of GENUINE GRIMM are greatly increasing their profits and becoming more prosperous each year.

You will be assured success by sowing this spring CERTIFIED GENUINE ORIMM seed, produced by co-operative growers organizations under strictest field and bag inspection. We are co-operating to make possible for you to get absolutely reliable GRIMM that will give results.

Idaho Grimm Alfalfa Seed Growers Association. Grimm Alfalfa Seed Producers Assn. of N. Dakota



WRITE AT ONCE

MICHIGAN STATE FARM BUREAU

These free booklets on Farm Sanitation

tell you how to prevent disease among livestock and poultry and describe in detail the many uses of

KRESO DIP No.

(STANDARDIZED)

Parasiticide and Disinfectant

No. 151-FARM SANITATION. Describes and tells how to prevent diseases common to livestock.

No. 157_DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.

No. 160-HOG BOOKLET. Covers the common hog diseases.

No. 185_HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.

No. 163-POULTRY. How to get fid of lice and mites, also to prevent disease.

Write for these booklets.

Animal Industry Department

PARKE, DAVIS & CO. DETROIT, MICHIGAN

KRESO DIP No. 1 IS SOLD IN ORIGINAL PACKAGES AT ALL DRUG STORES



BINDER TWINE our low 1922 price. Chib orders and car lots specialty. Farmer Agents wanted. Samples circular free. THEO. BURT & SONS, Melrose, Ohlo

WANT TO SELL LIVE STOCK? AN AD IN M. B. F. WILL DO IT FRUIT and ORCHARD EDITED BY FRANK D. WELLS

MORE ABOUT THE ELDERBERRY THE following contribution from a reader of the Business Farm-er will be welcomed by many. The elderberry is attracting an un-usual amount of attention at pres-

"Being very much interested in small fruits, I feel like paying due tribute to the elderberry

"I have found from experience that the elderberry can be taken from the field or swamp and transplanted to the garden with excellent results. all small fruits, to be at its best it needs rich ground and thorough cultivation until well, started.

"Two years ago I got two roots from a nursery, took two from the field, planted them side by side. Last summer the berries were fine on the field bushes and immense in size of flours, bunch and berry on the nursery stock.

"I know of a number of places where wild efderberries grow along fences of cultivated fields and gard-ens. In each instance the fruit has been very large, yet black and of delicious flavor. When properly cooked the elderberry makes most palatable sauce and pie.

"These are straight facts, no nurseryman's imagination."—Mrs. E. L. Johnson, Huron County, Mich.

It seems strange that so promising a fruit as the elderberry should have been neglected as it has been. Bailey, in his "Evolution of Our Nation's Fruits," mentions the first attempts at improving it in 1890, which were apparently not seriously undertaken. The berry has been too plentiful in its wild state. Now since it is becoming harder to get every year its value is likely to be appre-

BLUEBERRIES AND CRAN-BERRIES

Inquiries for blueberry plants have been received, which would indicate that the fruit is getting considerable attention. Cranberry considerable attention. plants, too, are wanted. Both these fruits ought to be produced in abundance by Michigan growers. They grow here naturally, all they need is the proper encouragement. A well-kept cranberry field ought to be

valuable property.

Why do not those who have the plants advertise them in the Business Farmer? The inquiries reness Farmer? The inquiries received would indicate that there are

many possible customers.

NOTES AND COMMENTS

Watch for the green aphids on the early leaves of the apple. Don't waste arsenate of lead or any of the poisons on them. Give them nicotine Tobacco will cure them in plenty. Tobacco will cure them of indigestion for all time to come. Black aphids on the cherries are no better. Give them the same dose and do it early, before the leaves curl, otherwise the spray does not get to them. It must touch them in order to kill.

If the plum trees do not bear, try grafting some of the limbs with a different variety. It may be that close pollination is needed. That is true of some plums.

The names of varieties are not always well chosen and lead to confusion. The J. H. Hale peach is an example. It is easy for one unfamiliar with varieties to leave out the J. H. when writing an order. This gives the nursery man an opportunity to substitute Hale's Early, a peach of a widely different type. Then the customer will be sadly disappointed, while the nurseryman's conscience will not be hurt very much. So it is with the R. I. Greening. Unless the whole name is writ-ten the trees may prove to be North Western Greenings, a variety good in the extreme north, but not de-sirable where the old Rhode Island Greening succeeds. One man ordered Star's Delicious. The trees came to him billed as Starks and being unfamiliar with varieties he accept-ed them. They proved to be true to name as shipped, Starks This

variety is thrifty, an abundant bearer of showy fruit, but the quality is inferior. Wine apple and Winesap are other possibilities for confusion. There are several sweets and pippins. So it is well to be careful in ordering varieties of fruit. Nurserymen make miskes enough at best. Don't help them to make any more.

The two varieties of everbearing commonly grown are Progressive and the Superb. The latter is the more productive, both of plants and fruit, but the quality far inferior to the Progressive. Really, it would seem as though the only excuse for eating the Superb would be because the other could not be had. Some promising new varieties are now being tested and soon it may be known what they are worth.

HOW I BUILT A FLOCK ON NO CAPITAL

MANY times I have read accounts in farm magazines and papers, of wonderful flocks of moneymaking hens, and it fired not only my curiosity but also ambition. But as I was a teacher in rural schools I never had a chance to put it to the test. In 1920 I married a farmer and we went to live on a newly acquired farm, under a newly acquired mortgage. We had perhaps 9 or a dozen antique hens of all breeds and colors. I did not pay much attention to them until my bank account began to dwindle and no money was forthcoming as yet from the farm. Then I remembered the wondrous tales I had read of money in poultry. I had nothing but a de-lapidated, leaky old barn to house my chickens, but by covering one of the lofts over the big granary with straw and putting in roosts, putting in windows out of the rest of the barn, I contrived a "coop" with air enough to prevent T. B. We picked up an old Belle City incubator that had originally cost \$5 or \$6, and my husband rebuilt it and covered it with a wood jacket, and we were ready for our eggs.

I bought R. I. Red eggs at market price, and one setting of Barred Rocks. My eggs cost for 4 settings about \$10 or \$2.50 each hatch. The machine did very well. I got as high as 100 chix from 140 eggs. Then I began to lose them. I just let them out and put some old hens that had set at the same time with them. Then a family of weasels found them and destroyed a lot. I sold the cockerals as soon as they were big enough (2 or 3 pounds) and by hard labor and many heart aches I managed to get 115 pullets and 10 roost aged to get 115 pullets and 10 roosters to keep. Then I sold the others along and managed to make off of my investment of \$10 between \$50 and \$60, besides my flock.

This spring I am selling 20 to 30 dozen eggs a week. I have bought a 220-egg incubator on the monthly payment plan, from one of our hardware merchants, paying \$5 a month. am hatching chix with both incubators at 10c each, and I am paying for my incubator and intend to put in a flock of thoroughbred R. I. Reds this summer. At the present price of eggs I clear about \$6.00 a hundred on my chix.

At one our nearby towns I can get eggs from thoroughbreds for \$6

per hundred and sell at \$14 per hundred when hatched.

I have no exceptional chance as four of my neighbors make a business of raising chix. I undersell them and am getting all the orders I can handle. My advice to amateur poultry raisers is to get government bulletins on poultry. A postcard will bring the information that experts

To show the good they do let me tell you of an incident. This spring Roup got in all the flocks, my own included. One man killed 70 of his pullets, another paid \$10 for medicine from a doctor, after he lost 250. I looked up my bulletins and found that 1 tablespoon of Sodium Sulphife to 1 gallon of drinking water would prevent and cure. I got one pound for 25c, it stopped the Roup. I lost four in all, owing to not knowing the Roup until it got a good start.

I am proud of my flock, but shall be prouder when my big reds are replaced with thoroughbreds. Mary Jane, Linden, Mich.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience

in her own words:
"Gentlemen: I see reports of so many losing their litttle chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 687 Waterloo, Iowa, for their Walko White Diarrhes Remedy I used two White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. feathler than ever perore. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect ways only in the property of the control of t few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose Mrs Ethel Rhodes, Shennandoah, wa, writes: "My first incubator Iowa, writes: chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterlee, the Walker Remedy Co., Waterloo, Iowa, for a box of their Wako White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Dirrhea Remedy entirely at our riskpostage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove— as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko-give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO., Dept. 687,
Waterloo, Iewa.
Sond me the () 500 regular size (or () sconomical large size) package of Walko W Diarrhea. Remedy to try at your risk. Send if your positive gunantes to instantly refund money if not satisfied in every way. I am closing 50c (or \$1). (P. O. money order, cl or currency acceptable.)

Name		220			 	
				STAN S		
Thomas		250				

You must make a profit in Dollars and Cents to succeed in the threshing

The purchase of profitable ma-hinery is the most important step ne successful farmer or thresher-

Red River

machinery is PROFITABLE to own

Economy and ease of operation — the superior quality of its material and workmanship — its long life — and its ability to get the best jobs because it does the best work are what makes RED RIVER SPECIAL machinery profitable

It Saves the Farmer's Thresh Bill

Its good work makes a profit for both thresherman and farmer.

Roller bearings on cylinder and wind stacker shafts save on power—an added profit for you.

Hire or own a Red River Special.

It Will Make Money For You Write for Free Circulars

Nichols & Shepard Co. Un Continuous Business Since 1848) Builders exclusively of Red River Special Fbreshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines.

Battle Creek, Michigan \$







The Experience Pool

CUT WORMS
Who has had any experience with peison bait? What were the results?—L. M. F., Coloma, Mich.

STONE PICKER

I think I can help Mr. G. M. in regard to a stone picker. I know it is a back-breaking job to lug stones all day. I have used one of the following machines and will be glad to send anyone interested a diagram in detail: detail:

I use a tongue and two strong horses in my machine. A cross bar at the rear of the tongue has six spring drag teeth fastened to it which dig up the stone back of this and attached to it is a catcher resembling a scoop scraper and larger with holes to let the dirt out.—Carl DeWitt, Wheeler, Mich.

MY EXPERIENCE WITH KUDZU FOR the benefit of F. F. M. of Metamora, Mich., and other M.

B. F. readers, regarding Kudzu.
In a 1922 catalogue of Burgess
Seed & Plant Co., of Galesburg,
Mich., I find a double page ad of
Kudzu, terming this plant to be a
"wonderful perennial legume,"
thriving under very adverse conditions, like poor, acid soils, enriching
them more quickly than in any other
known way. known way.

Plants sufficient to start with an acre are to be had for \$85, being set in checks 10 feet square, coming to maturity in third year.

It is claimed to thrive as far north as Noya Scotia. Personally, I would be something the results and the start of the scott.

prefer using the results on plat at M. A. C. for a basis of reckoning results, in Michigan.

Have any of our readers ever used

spirits turpentine treatment in cases of bloat in cattle? Three table-speensful in quart of water, warmed, used as a drench, gets results, sav-ing the uncertainty of the knife or loss by a delayed veterinary surgeon. For calves, use two spoonsful.

Farmers' Service Bureau is one of

the finest departments of the M. B. F.—W. P., Cheboygan County Mich.

METAL SILO EXPERIENCE

I SEE an inquiry in your paper to someone who had a metal silo. We have a Ross metal silo that has been giving good satisfaction for five years. They are much handler than some others on account of ladders inside and out, besides it has swing doors that never bother.
Silage does not freeze any worse than in any other type of silo.

They are as near to being indestructible as any silo made, with the exception of the metal roof. We lost two roofs before we got one that

would stay.

The best and surest way to put a roof on these silos is to make a plate from good hard plank cut so as to form a hexagon shape, bolt together and bolt to silo with wagon box irons, then bolt rafters in same way to plate. Put on roof boards and shingle or some prepared roofing. We used our old steel roof, this makes a very strong roof, also you can fill your silo fuller with a

gambrel roof. I forgot to say that when these siles do freeze they will thaw out in a quarter of the time that some do. Any person thinking about a sile of this kind, make one of their Sunday drives this way and see this one.—Roy C. Reid, On Trunk line, Metamora, Mich.

KEEPING OFF CROWS

I note that a reader asks for a remedy to keep crows from pulling corn. I have a field joining woods where crows nest and roost. I plant my corn then make three or four small wind mills using bright tin for a weather vane and nail the standard on fence posts. Am not troubled with crows, When they go over my field they fly high.—Wm. H. Wilson, Calhoun County, Mich.

PYROX FOR CROWS

Reading in your great farm paper notice Mrs. L. M. F., Elkin, Mich., asked for a sure remedy to prevent crows from destroying corn. I used Pyrox last year and had very good results. It is much handler than coal tar. The way I mixed it was 2 table-spoonfuls of Pyrox thinned with a little water, have it so it looks like cream, then pour it over a peck of corn in a wooden pail. Stir it with a stick till all the kernals are coata stick till all the kernals are coated. The corn absorbs the moisture. You can plant it right away and nothing will touch it, not even the wire worm. But keep it away from chickens as it is poison. The Bowker Insecticide Co., 111 West Washington St., Chicago, III., handle it.—John C. Tarvis, Van Buren County, Mich.

NOMADS OF THE NORTH

(Continued from page 10)

The cumulative instinct of a thousand generations leapt through their brains and bodies. Their world was in the grip of Iskootao (the Fire Devil). To the south and the east and the west it was buried in a pall like the darkness of night, and out of the far edge of the swamp through

of the far edge of the swamp through which they had come they caught the first livid spurts of flame.

From that direction, now that they were out of the "pocket" they felt a hot wind, and with that wind came a dull and rumbling roar that was like the distant moaning of a cataract. They waited, and watched, struggling to get their bearings, their minds fighting for a few moments in the gigantic process of changing instinct into reasoning and understanding. Neewa, being a

ments in the gigantic process of changing instinct into reasoning and understanding. Neewa, being a bear, was afflicted with the near-sightedness of his breed, and he could see neither the black tornado of smoke bearing down upon them nor the flames leaping out of the swamp. But he could smell, and his nose was twisted into a hundred wrinkles, and even ahead of Miki he was ready for flight. But Miki, whose vision was like a hawk's, stood as if fascinated.

The roaring grew more distinct. It seemed on all sides of them. But it was from the south that there came the first storm of ash rushing noiselessly ahead of the fire, and after that the smoke. It was then Miki turned with a strange whine but it was Neewa now who took the lead—Neewa, whose forehears had ten thousand times run this same wild race with death in the centuries since their world was born. He did not need the keenness of far vision now. He knew. He knew what was behind, and what was on He did not need the keenness of far vision now. He knew. He knew what was behind, and what was on either side, and where the one trail to safety lay, and in the air he felt and smelled the thing that was death. Twice Miki made efforts to swing their course into the east, but Neewa would have none of it. With flattened ears he went on north Heewa would have none of it. With flattened ears he went on north. Three times Miki stopped to turn and face the galloping menace behind them, but never for an instant did Neewa pause. Straight on — north, north, north—north to the higher lands, the big waters, the open plains.

(Continued in next issue)

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY-THE ACT OF CONGRESS OF AUGUST 24, 1912, of the Michigan Business Farmer, published weekly at Mount Clemeus, Michigan, for April 1, 1922. 1. That the name and addresses of the publisher, editor, manages ing editor and business managers are: Publisher, and the state of the publisher.



PROSPERITY

The seed you sow for profit must economically produce for you a ready marketable product. This standard requires seven qualities, PURFITY, that you may not sow for a field of alfalfa and suffer a loss from an inferior crop. HIGH GERMINATION, to insure you a proper catch. HARD-HIGH GERMINATION, to insure you a proper catch. HARD-INESS, to enable your crop to live through severe climatic conditions. LONG LIFE, that you may receive maximum yield from one seeding over a long pentod of years. AN ABUNDANT CROP that you may harvest the maximum yield each year. HIGH IN FOOD VALUE, a torage and pasture, producing table to the condition of th

If the seed you sow fails in any one of these points your labor and money is wasted, your profits are gone. On the other hand genuine certified GRIMM alfalfa from reliable sources will insure you all these points. It will help you become more prosperous as it has over 100,000 other famers. It will belp bring to you those things you are working hard for every day. Fertile fields, fatter the stock and poultry, abundant dairy products, more eggs larger savings, better bank credit, finer stock barns and equipment, a more comfortable home and living for you, your wife and family.

Rememberthe seeding cost of certified senuine GRIMM

Idaho Grimm Alfalfa Seed Growers Association Grimm Alfalfa Seed Producers Assn. of N. Datas



WRITE AT ONCE

MICHIGAN STATE FARM BUREAU



USE CARBOLA in your hen houses as well as in your stables. Thousands of expert poultry farmers who have used it for years would not do without it. Carbola is a white paint and disinfectant combined in powder form that is ready to use as soon as mixed with water. Applied with brush or spray pump. Will not clos sprayer, and doesn't flake, blister or peel off. Can be applied to wood, brick, stone, cement or over whitewash. Destroys disease germs, lice and mites and helps prevent their development.

ARBOLA

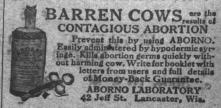
Is Used Instead of Whitewash and Disinfectants in Stables Dairies
Hog Houses Cellars
Poultry Houses Outbuildings Makes work easier to do

Saves time, labor and money Gives better results

18.00

Hardware, paint, drug or seed dealers have Carbola or can get it. If not, order direct —prompt shipment by post or express.

CARBOLA CHEMICAL CO., Inc. 299 Ely Ave. Dept X Long Island City, N.Y.



WANT TO SELL LIVE STOCK? AN AD IN M. B. F. WILL DO IT

m

wh

spr

the

ing

the

tain

on

sucl

or I

sess

actu

acti

plai

poss

be t

own

wise

deri

to p prov

filled

as a

the s

we a

woul

fish

is the

strea

ground use 1

encor

H





(SPECIAL ADVERTISING RATES under this heading to honest breeders of live stock and poultry will be sent on request. Better still, so out what you have to offer, let us put in type, show you a proof and tell you what it will cost for 13, 26 or 52 times. You can change of a coropy as often as you wish. Copy or changes must be received one week before date of its e. Breeders' Auction Sales advertised 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 olaim the date for you. Address, Live Stock Editor, M. B. P., Mt. Clemens

May 10 — Shorthorns, Central Michigan Shorthorn Breeders Association, Greenville,

June 21—Shorthorns, C. H. Prescott and Sons, Tawas City, Michigan.

LIVE STOCK AUCTIONEERS

Andy Adams, Litchfield, Mich.
Ed. Bowers, South Whitley, Ind.
R. L. Benjamin, Weukesha, Wisconsin
Porter Colestock, Eaton Repide, Mich.
Harry A. Eckhardt, Dallas City, Ill.
C. S. Forney, Mt. Pleasant, Mich.
John Hoffman, Hudson, Mich.
John P. Hutton, Lansing, Mich.
John P. Hutton, Lansing, Mich.
J. R. Love, Waukesha, Wisconsin
L. W. Love, Waukesha, Wisconsin
L. W. Lovewell, So. Lyons, Mich
D. E. Rack, Ft. Atkinson, Wisconsin
D. L. Perry, Columbus, Ohio
J. I. Post, Hillsdale, Mich.
O. A. Ramussen, Greenville, Mich.
Guy C. Rutherford, Decatur, Mich.
Harry Robinson, Plymouth, Mich.
Wm. Waffle, Coldwater, Mich.
S. T. Wood, Liveroool N. Y.

PURE BRED LIVE STOCK AUCTIONEERS
WM. WAFFLE
Coldwater, Mich
Hudson, Mich
In the block.
In the ring WMM WAFFLE
Ocidwater, Mich
on the bleck.

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
indges. 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 Actioneer 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

o veryone.
I specialize in selling Polands, Durocs, and Insters. Let me reserve a 1922 date for you. Vitis 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 Aaggie Korndyke-Hengerveld DeKol bull from a nearly 19 lb. abow cow. First prize junior calf, Jackson Fair, 1920. Light in color and good individual Seven months old. Price \$125 to make reom. Hurry!

Herd under Federal Supervision.

BOARDMAN FARMS

JACKSON, MICH. Holstein Breeders Since 1906

FOR SALE—TWO BULL CALVES, A HOL-tein and Durham about 3 months eld. Both have heavy milking dams. Not registered. \$50 each if taken at oncs. CHASE STOCK FARM. Mariette. Mich.

SOLD AGAIN

Bull calf last advertised sold but have 2 more hat are mostly white. They are nice straight felows, fired by a son of King Ona. One is from 17 lb. 2 yr. eld dam and the other is from a 6 lb. Jr. 3 yr. eld dam, ahe is by a son of friend Hengerreid De Kol Butter Bey, one of the great bulls.

JAMES HOPSON JR., Owesso, Mich., R 2.

FOR QUICK SALE WE ARE OFFERING your choice of nearly 50 purebred Holsteins, Nearly all cows and heifers. Bred well, yearly records, free from t. b. Priced right. Breeder since 1918. Write us your wants, WOLVERINE DAIRY FARM, Gladwin, 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.

HOLSTEIN CALVES, 7 week³ old, 31-32nds pure. Tub. Tested, \$25.00 each, crated for shipment anywhere. Satisfaction guaranteed. EDGEWOOD FARMS, Whitewater, Wis.

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

stein cows. Fair size, good color, bred to good bulls and due from July to December. Most-ly from A. R. O. stock, prices reasonable and every one guaranteed to be exactly as represented.

M. J. ROCHE Pinckney, Mich.

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

THREE REGISTERED HOLSTEIN-FREISIAN bulls ready for service. Sire D. D. Aitkens, herd sire King Ona. Dams also purchased from Aitken. C. G. JACKSON, Birmingham, Mich.

HOLSTEIN COWS AND HEIFERS OF GOOD breeding. Take your choice, Tuberculin tested herd.
C. Volz, R 3, Saginaw E. S., Mich.
Val. Phone X1932.

SHORTHORNS

REGISTERED SHORTHORN CATTLE, DU-Horses. Quality at the right price. CHASLEN FARMS, Northville, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.
J. A. Dogarmo, Mulf. 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 ser Mastodon, Clansman, Emancipator breeding gilts bred for spring farrow. See them.

POPE BROTHERS CO

Shorthorns and Poland Chinas, We are now offering two ten-months-old bulls, one bred heifer, and two ten-months-old heifers.

SONLEY BROS., St. Louis, Mich.

Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write t JOHN LESSITER'S SONS, Clarkston, Mich.

RICHLAND SHORTHORNS

ANNUAL SALE JUNE 21st AT THE FARM

30 HEIFERS 15 BULLS Plan to attend. Write for catalog. Special prices on Bulls in order to make room for this sale.

C. H. Prescott & Sons Office at Tawas City, Mich. Frescott, Mich.

ATTENTION SHORTHORN BUYERS

If you want a real herd bull, or some good heffers bred to Perfection Heir, write me Satisfaction guaranteed S. H PANGBORN & SON 3 ml. east. Bad Axe, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages both sexes. W. S. HUBER, Sec'y, Gladwin, Mich.

SHUKIHUKN DALL

BY CENTRAL MICHIGAN SHORTHORN BREEDERS ASSOCIATION

AT FAIR GROUNDS, GREENVILLE, MICH. WEDNESDAY, MAY 10, 1922

Sale 1 P. M. 20 Females, 5 Bulls Show 10 A. M.

Auctioneers. HUTTON & RASMUSSEN

For Catalog Address, M. E. MILLER, Sec'y. Greenville. Mich.

MILKING STRAIN SHORTHORNS

Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.

LUNDY BROS., R4, Davison, Mich.

POLLED SHORTHORN BULL AND HEIFER Calves, Heifers safe in calf. \$25 up. Wolverine oats, 60 bu, sacks free FRANK BARTLETT, Dryden, Mich. (P)

ELMLAWN SHORTHORNS & BULLS, 2 to \$100. 2 2-year-old heifers, calf by side. HARRY CROSBY, Grand Blanc, Mich

FOR SALE SHORTHORNS—BOTH MALE AND Female, 2 nice young cows. 2 young bulls for service. Best of breeding. JOHN SCHANNENK, Jr., Cheboygan, Mich.

FOR SALE—TWO REG. SHORTHORN BULLS one year old. Ready for service. Tuberculin tested. Sired by Orange Goods (795761). Dams giving 40 and 45 lbs. of milk per day.

M. B. HALLSTED, Orlon, Mich. (P)

ANGUS



ACHIEVEMENT

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

EDGAR OF BALMENY THE SIRE SUPREME

At the International Live Stock Exposition, where gathers each year the elite
-- Morth American Cattledom to compete for the covetous awards, five more
honors have been bestewed upon the "get"
of Edgar of Dalmeny,
You too may share these honors. A buil
by this world fameus sire will prove a
most valuable asset to your herd

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 Inter-Herd headed by Bardell 31910, 1920 International Jr. Champion.
Dr. G. R. Martin & Son, North Street, Mich.

REGISTERED ABERDEEN - ANGUS-BULLS, Heifers and cows for sale.

Priced to move. Inspection invited.

RUSSELL BROS., Merrill, Michigan

GUERNSEYS

GUERNSEYS

OF MAY ROSE AND GLENWOOD BREEDING.
No abortion, clean federal inspected. Their
sires dam made 19,460.20 milk, 909.05 fat.
Their mother's sire's dam made 15,109.10 milk
778.80 fat. Can spare 3 cows, 2 helfers and a
beautiful lot of young bulls.
T. V. HICKS, R 1, Battle Creek, Mich.

FOR SALE GUERNSEY BULLS READY FOR % of bleed of my heifer Norman's Missuikee Red Rose, World Champion G. G. Sired by her are. Dams fininshing splendid A. R. Records.
A. M. SMITH, Lake Olty, Mich.

REGISTERED GUERNSEY BULLS

prices. Dr. W. B. Baker, 4800 Fort St. W. Detroit, Mich

HEREFORDS

SOTHAM'S EARLIRIPE HEREFORD BEEF CONTRACT nsure Your Getting Highest Prices For Young Hereford Out of the proceeds of such you pay no Commissions,

stble price: This "sotham's Earliripe Hereford Beef Contract" guarantees you.
"Earliripe Hereford Beef" producers in over fifteen Michigan Counties.
"Earliripe Hereford Beef" is out in many of Detroit's finest ma.kets.
Write for further information or investigate personally.

T. F. B. SOTHAM & SONS

(Cattle Business Established in 1835)
SAINT CLAIR : MICHIGAN

FOR SALE, Choice Hereford Bulls, bargain prices. A. L. SMITH, Eckford, Mich. Farm eight miles south of Marshall, Mich. (P)

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE, and bull calves, helfers and helfer calve some choice cows.
FINDLAY BROS., R 5, Vassar, Mic.

JACKSON COUNTY'S CHAMPION MILK AND BUTTER COW

ETHERLAND Helen Marshall 2nd was bred, raised, developed and is owned by the Evergreen Dairy Farm, Vernon E. Clough, proprietor, Parma, Mich.

This cow at the age of 6 years, 5 months and 3 days has just completed a thirty-day record of 2110 pounds milk and 79.338 pounds but-



ter fat, equivalent to 99.172 pounds butter. In her 7 best consecutive days she produced 518.4 pounds milk and 25.57 pounds butter. Her best day of milk was 80.7 pounds, her best day of butter was 4.19 pounds. These records are strictly official, being conducted by Chas. A. Stevens, official supervisor from the Michigan Agricultural College.

At 5 years of age this cow made 7 consecutive days 490 pounds milk and 20.385 pounds butter, and at 3 years of age she made 395 pounds milk and 15.44 pounds butter.

She comes from good breeding, half-sisters having two among the ten highest in the county. Her sire traces back to several noted strains, including the DeKols and Pietje. Pietje Queen DeKol making 42.26 pounds butter in seven days and several others making about 35 pounds.

Her dam has just finished a yearly record of 22.921 pounds of milk and 895 lbs. butter. The year previous she made in 10 months 16,281 lbs. milk and 654 butter making 39,102 pounds milk and 1549 pounds butter, a total of 1 year and 10 months. She is at present owned in Canada but was previously owned by Mr. Clough being one of his foundation cows. This helps to show that his herd of 22 females from the beginning has come from good breeding.

Other features about the herd are that every animal of milking age has an A. R. O. record and that 7 at the present time are on the long time test. His herd is also on the accredited list, being State and Federal tested for tuberculosis. — (Signed) Chas. A: Stevens, Official Supervisor.

VETERINARY DEPARTMENT

DR. W. AUSTIN EWALT, EDITOR

BOTS OR WARPLES

Would you tell through the columns of the M. B. F. if there is any cure for grubs in cattle? I have 8 yearlings and their backs are all covered with grubs.—G. B., St. Clair, Mich.

There are two kinds of bots which infest American cattle. They represent the larval stages of the heelfly. The adult flies are about half an inch long and resemble bees somewhat in appearance. They appear in warm weather and lay their eggs in the open, upon cattle, often frightening the stock, making them nervous, and even causing them to stampede. It is maintained by some authors that the flies puncture the skin in laying the eggs; other authors deny this, maintaining that the cattle lick the eggs. from the skin, so that the infection is thru the mouth. Young bots are found in the wall of the esophagus; older bots appear under the skin at various parts of the body, especially,



FAI 0 We just a you paper hire H a farm the h would bill an protec — Subs If , under

B's ho tated. throug of A's safegu to rec sustai The applica

pensat labore tories denied fellow

22

0-

5

ls

ls

e

le

d 5

g,

đ

5 ly

đ

18

2

a

is

7

g

1-

ıď

h

e-

h

m

10

1g

is 10 10

n re

s; at ly

along the back. The bots are in the body by October or before, and they appear under the skin along the appear under the skin along the back by January or soon after, here they grow until March, April or May, forming these lumps. When matured, the bots work their way out, fall from the cattle, burrow into the ground and remain there as pupae for about a month, when the adult fly issues. The adult fly does not bite. These bots can, and perhaps should be squeezed out and a little Tr. iodin, or alcohol applied to the wound. However, unless they are present in great numbers they will

DERANGEMENT OF STOMACH

Can you tell me through your paper what causes my 5-year-old cow to vomit about once a week? I feed her good clover hay and corn stalks, equal parts of ground oats and corn might and morning.

—B. J. N., Bichmond, Mich.

Some derangement of the stomach. Give one tablespoonful soda bicarb, disolved in a little warm water three times daily for a week or so and the vomiting will cease.

I have some last fall pigs that are acting strange. When I feed them they will take a mouthful and then they will fall over on their back but in a minute get up and begin eating again. Can you tell me the cause and what to do for them?

L. M., Amador, Mich.

You know a hog is a hog and if he eats too fast he surely will choke, feed them so they wont be able to hog it all down at once and you will have no more trouble.

FISHING ON POSTED LAND (Continued from page 5)

"That in any of the navigable or meandered waters of this state where fish have been or hereafter may be propagated, planted or spread at the expense of the people of this state or the United States, the people shall have the right to catch fish with hook and line during such seasons and in such waters as are not otherwise prohibited by the laws of this state.

'No action at law shall be maintained against persons entering upwaters for the purpose of such fishing, by the owner, lessee or persons having the right of pos-session of adjoining lands, except for actual damage done. In any such action the defendant under a proper notice may dispute on the trial the plaintiff's right to either the title or possession of the land complained to be trespassed upon."

Hence, no adjoining property owner may post, enclose or other-wise protect a navigable or mean-dering stream in such a manner as to prevent the use of that stream as provided above. If a stream is so filled with brush and other debris as are some of the trout streams of the state, that it cannot be invaded, we are of the opinion that no one would have the right to trespass up-on adjoining property in order to fish within the stream. However, it is the clear intent of the law to make all navigable and meandering streams of the state public fishing grounds, and efforts to restrict their use by private land owners are not encouraged.—Editor.

FARMER'S LIABILITY IN CASE OF INJURY TO EMPLOYE

We have been taking the M. B. F. just a short while but like it fine. Will you please let me know through your paper about law? That if A should hire B to work by the month or day en a farm and B got hit and had to go to the hospital and was unable to work would A have to pay for his hospital bill and any of his wages? Is the labor protected on the farm same as in factory?—Subscriber, Houghton Lake, Mich.

If A had never elected to operate under the workmen's compensation law he would not be required to pay B's hospital expenses or any portion of his wages while he was incapaci-tated. However, if B were injured through any fault of A's by virtue of A's failure to provide the proper safeguards about B, B might be able to recover in court for the damages sustained.

The only difference between the application of the workmen's com-pensation law with respect to farm laborers and men who work in factories is that factory employers are denied the defense that the injury was caused by the negligence of a fellow employee and that the employee had assumed the risks in-current but incidental to or arising from out of his employment, or arising from the failure of the em-ployer to maintain safe premises and suitable appliances. While, as I say, these defenses are denied the factory employer, the farmer may still avail himself of them in defending an action on the part of an employee to recover damages for injuries sustained.—Editor.

ADOPTING A CHILD

I am thinking of adopting a child between two and three years of age. Could you give me full particulars regarding the same?—H. C., Vestaburg, Mich.

A person desiring to adopt a child must appear before the judge of probate for his county and sign a declaration of adoption. The court determines whether the applicant is a fit person to have custody of the child, and if it is so determined issues the order of adoption, with the consent of the parents or guardian of the child who must sign the order. If the child is to be adopted from a public institution the child is to be adopted. from a public institution the order of adoption must be signed by the superintendent.-Editor.

LIABILITY OF FRATERNAL IN-SURANCE HOLDERS

I contemplated taking out life insurance in the Modern Woodmen of America, a fraternal beneficial society, but an old line agent informed me that in case the above fraternal society "busted" the society could come back on the members and levy personal property or real estate in order to make their claims good. Please advise.—E. S., Morenci, Mich.

A member of such associations is governed by the certificate, applica-tion, Articles of Association and By-Laws of the order. In event that it becomes necessary in order to pay losses, the company may levy extra assessments or may increase the amount of their assessments. The association could not, however, in order to collect these assessments levy upon personal property or real estate owned by the member. In event the assessments were not paid, his certificate would be can-celled.—L. T. Hands, Commissioner of Insurance, Lansing.

MIXTURE FOR PERMANENT PASTURE

What mixture of grasses may be sown with eats or barley to make a permanent pasture, the soil being a clay loam?—M. N.T., Pigeon, Mich.

The following mixture is quite satisfactory for permanent pasture on clay loam soil:

Timothy 3 lbs., red clover 3 lbs., alsike 2 lbs., Kentucky blue grass, 4 lbs., white clover 1-2 lb.

The above amount being sufficient for one acre. Sweet clover is often times of value when included in the above mixture.—C. R. Megee, Associate in Farm Crops, M. A. C.

GUERNSEY BREEDERS JOURNAL Where can I get the Guernsey Breeders' Journal and how much does it cost a year? Can you send me a sample copy?

—R. M., Bay Shore, Mich.

The Guernsey Breeders' Journal is published at Peterboro, N. H. The subscription price is \$2 per year. The publishers will probably be glad to send you a sample copy on request.—Editor. -Editor

JERSEYS

FOR SALE—TEN REGISTERED JERSEY Heifers from three months to one and one-half years old. Sophia's Tormentor breeding. Herd under Federal and State supervision. A. H. DONALDSON, Fenton, Mich.

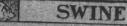
GLADWIN COUNTY PURE BRED LIVESTOCK ASSOCIATION. Hereford, Shorthorn, Jersey and Holstein cattle; Duroc-Jersey, Poland China and Hampshire sheep.

A place to buy good breeding stock at reason-lie prices.

ble prices.
FRED B. SWINEHART O. E. ATWATER
Secretary

RED POLLED

TWO YOUNG RED POLLED BULLS FOR sale. Sired by Cosy Ells Laddle. He took the prize at six State Fairs.
PIERCE BROS., Eaton Rapids, Mich., R 1



POLAND CHINA

FOR SALE, REGISTERER BIG TYPE PO-land China Spring pigs. Sired by Pankow's Monster, the offspring of Disher's Monster and damed by Defender's and Master's offspring. Can furnish trios, Order early, prices reasonable. Chestnut Dale Jersey Farm, Edward Pankow Montague, Mich., R 1. (P)

L. T. P. C. \$15-\$20-\$25 Apring pigs at above prices Top fall gilts bred for summer farrow, priced right.

HART & CLINE
Address F. T. Hart, St. Louis, Mich

Pig Type P. C. Soar Pigs, they can't be beat in Michigan Sired by Big Bob Mastoden and Peter A. Pan a son 1.075 Peter Pan. C. E GARNANT, Eaton Rapids, Mich.

Attention! Farmers and Breeders
As we have had numerous inquiries regarding the use of our boars on brood sows, outside of our own, we wish to announce that we have reserved three boars of the following breeds for this purpose:

Berkshire, Poland China, O. I. C.

These pure-blood, registered boars are from prize winning stock and are the correct type... SETROIT CREAMERY CO., HOG FARM Mt. Clemens, Wich. Located one half mile west of Gratiot on Nunneley Road.

FOR SALE, LARGE TYPE-POLAND CHINA

boar pigs. Sired by F's Clansman 391211, Michigan's 1920 Gr. Champion boar, and by Smooth Buster 395823, Michigan's 1920 1st Jr. Yearling Boar, Immune by double freatment. Priced to sell. Write or see them. Free livery to visitors.

A. A. FELDKAMP

Manchester, R. R. No. 2 Mich.

POLAND CHINA BRED GILTS

Bred to Hillerest Liberator by Liberator Leader the 1920 Grand Champion and to Big Prospect by Liberator Buster the 1921 Grand Champion, They will start you right in the breeding industry. Exceptional bargains. Write for prices. for prices.

F. B. LAY, HILLCREST FARMS
Kalamazoo, Mich.

L. T. P. C. NOTHING MORE TO SELL AT present. I thank you.
H. O. SWARTZ, Schooloraft, Mich.

DUROCS

FOR SALE FINE GILTS DUE TO FARROW in April and May,
HARLEY FOOR & SONS
Gladwin, Mich., R 1.

HERE I AM AGAIN FOR SALE—March and April, Piga, Reg. to buyer. Sired by Youneda Model Orien and Orien Col. Dams. Farmers prices. Heavy boned tyle. Shipped C. O. D. Write for prices before buying. V. Libgard, Hesperia, Mich.

PEACH HILL FARM

TRIED sows and gilts bred to or sired by Peach
Hill Orion King 152489. Satisfaction guaranteed. Come look 'em over.
Also a few open gilts.
INWOOD BROTHERS
Romeo, Mich.

AM SELLING A GREAT OFFERING OF DUROC BRED SOWS AND GILTS

March 4th. mostly mated to Orion Giant Col., a son of Ohio Grand Champion, Get on mailing list for chalog.

W. C. TAYLOR, Milan, Mich.

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 Enc 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.

BRED GILTS ALL SOLD—BOOKING ORDERS for spring pigs sired by Fannie's Joe Orion and Pathfinder Orion. Farmens' prices. H. E. LIVERMORE & SON, Romeo, Mich.

WE OFFER A FEW WELL-SRED SELECT.

God spring Duroc Bears, also bred sows and

Gilts in season. Call or write

MONAUGHTON & FORDYCE. St. Leuis, Mich.

HILL CREST DUROCS—BRED SOWS ALL sold. A fine line of boars, weighing from 150 pounds up. Farm 4 miles south of Middleton, Gratiot Co. NEWTON & BLANK, Perrinton, Mich.

FOR SALE—SEPTEMBER GILTS—OPEN OR bred, sired by A. Model Orion King. Call or write. CHAS. F. RICHARDSON, Blanchard,

FOR SALE: ONE DUROC SOAR FROM
Brookwater breeding stock. Cholce spring pleaJOHN CRONENSWETT. Carleton, Mich.

DUROCS AM BOOKING ORDERS FOR March pigs, for May delivery, 12 to 15 dellars, registered. Satisfaction or money back.

B. E. KIES, Hillsdale, Mich.

DUROC JERSEY BRED GILTS WEIGHING 325 to 350 mponds, May farrow; price \$50 00. JOSEPH SCHUELLER, Weldman, Mich.

THE FINEST DUROC JERSEY HOGS in Michigan. Nearly 100 to choose from. Bred Sows, Gilts, Fall pigs, either sex. Write us your wants. Farmer prices onts. Farmer prices, SCHAFFER BROS., Leonard. Mich., R 1

HAMPSHIRES

HAMPSHIRES, A FEW GILTS TO OFFER. Place your order for spring pigs.
J. W. SNYDER, St. Johns, Mich.

O. I. C.

REGISTERED O. I. C. BRED GILTS FOR June and July farrow. Also a few service June and July farrow. Also a sew source.

J. R. VAN ETTEN, Clifford, Mich.

O 1 C's. LARGE WHITE, QUIET, PROLIFIC, easy feeders. Ours will please you. Choice Sow or Bear Pigs, wt. 50 lbe, \$15, Registered Order at once MAPLE VALLEY STOCK FARM, North Adams, Mich.

BIG TYPE O I C PIGS 8 WEEKS OLD GMATAINTEED.

E. V. BILYEU, Powhatan, Ohio

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. Donr. Mich., T. S.



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

CLARKE U. HAIRE, West Branch, Mich.

\$10.00 BUYS A FINE DELAINE MERINO flowe Lamb 1 year old, \$15.00 buys flow with lamb by side, These prices are right. LAPHAM FARMS, Plnckney, Mich, (P)

PET STOCK

COLLIE PUPPIES

FOR SALE—PURE BRED COLLIE PUPPIES, natural heelers. The dam is one of the best for stock. Also watch dog. The sire a high bred predistered dog. Males \$7.00. M. E. BROWN, Jonesville, Milch.

SIL'ERCREST KENNELS Offer For Sale Pure-bred Collie puppies; white also sable and white. Natural hellers. W. S. HUBER, Gladwin, Mich.

SHETLAND PONIES

have a few good Shetland Ponies for sale ces ranging from \$75.00 to \$100. Write JOHN FARMER, R 2, Stockbridge, Mich.

HORSES

ESTABLISHED 1879

The most complete selection in America of these popular breeds, international and state fair winners. STALLIONS AND MARES

Write today.

BELL BROS., Wooster, O.

SPECIAL SALE DUROCS

Fall pigs, either sex, sired by Michigana Orion Sensation and Michigana Demonstrator. Can furnish pairs and trios not related. Price \$20 and \$25, registered in your name. Also few sows and gilts bred for April, May and June farrow.

MICHIGANA FARM, PAVILION, MICH.

OWOSSO SUGAR CO.'S

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

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

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

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

ALICIA, Saginaw County, MICHIGAN

POULTRY BREEDERS DIRECTORY

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

POULTRY



PURE BREED PRACTICAL POULTRY

Here is an egg producing poultry stock such as the larmer poultry woman wants it is proving out in actual buy it.

te, Brown, and Buff Legherns; Anconas; & Minorcas; Barred, Buff and White Rocks; de Isiand Reds; Wyandottes; Orpingtons, stock is celled and bred on the pilan of the Agricultural College, and all the Hens in Breeding Colonies are practical egg-producing out will send for the pilan of the Agricultural College, and all the Hens in Breeding Colonies are practical egg-producing

ens.

you will send for a description and egg record
this Prue Breed Practical Poultry, you will
ad stock that it will pay you to buy. Buy Day
d Chicks this year and see the results you

will get.

We shall have 5000 Eight-weeks and Thromoths Prilets to sell in May, June and July and the placed now be shall our breeds. Orders can be placed now be sellets. We will send you description a STATE FARMS ASSOCIATION BOX B47, Kalamazoo, Mich.

SINGLE COMB BROWN, WHITE AND BUFF Leghorns, R. I. Reds, White Wyandottes and Barred Rocks. Eggs, stock and chicks in sea-son, Write for prices. Cedar Lawn-Poultry Farm, Dansville, Mich. R1

Top Quality Chicks, Spanish, Minorcas, Rocks, Reds. Wyandottes and Orringtons.
TYRONE POULTRY FARM, Fenton, Mich.

R. C. BR. LEGHORN EGGS \$1.50 for 15; \$8:00 per 100. Pekin duck \$1.50 for 8. W. Chinese goose eggs 40c each. MRS. CLAUDIA BETTS. Hillsdale, Mich.

PLYMOUTH ROCK

ARISTOGRATS

BARRED PLYMOUTH ROCK
Best strain in America, Foundation pen
headed by pen brother of Holterman's
Prince Narrowbars IV Bargain price to
M. B. F. roaders only \$3.00 for setting
of 15, postpaid. Satisfaction guaranteed. R. W. BRANDT Saginaw, W. S., Mich.

BARRED ROCK EGGS for hatching. Norman heavy laying, prize winning strain. MRS. JES-SIE B. DEAN, Mason, Mich., R 1.

BARRED ROCK BABY CHICKS \$16.00 per hundred; EGGS \$6.00 per hundred LAPHAM FARMS, Pinckney, Mich. (F)

KNIGHTS WHITE ROCKS

Baby Chicks \$20 per 100; Eggs \$1.50 per 15; \$8.00 per 100. Bred to lay, ROBERT E. KNIGHT, New Baltimore Mich. (P

JOHN'S BIG BEAUTIFUL BARRED ROCKS are hen hatched, hen raised 30 eggs \$3.50; 50 for \$5.00 (light or dark metsings) postage paid. Carculars.

JOHN NORTHON, Clare, Mich.

BUFF ROCK EGGS by Big 10 lb. males winners and Hogan tested heavy layers, bred winners and Hogan for 30 years. J. C. CLIPP & SONS Saltillo, Ind.

LEGHORNS

S. C. BUFF LEGHORN BABY CHICKS.
We have just the one breed.
J. W. WEBSTER, Bath, Mich.

C. BUFF LEGHORNS, 8 GOOD LAYING hens and one cockerel \$16.00; hatching eggs hens and one cockerel \$16.00; hatching five cents each.

E. R. CHAMBERLAIN, Homer, Mich.

PURE BRED S. C. WHITE LEGHORNS eggs for hatching at \$7 per 100; \$4 per 50 or \$1.50 per 15 postbaid.
MRS. N. MORAN, Rapid City, R 1, Mich.

LEGHORNS

Single Comb Buff Leghorns, 1000 Chicks for April first delivery. It will cost you just 2 cents to find out my plan how to get 10 Baby Chicks FREE. LAPHAM FARMS, Pinckney, Mich.

AMERICAN ROSE COMB WHITE LEGHORNS Cockeres and eggs. Reasonable, FRANK KORCAL, Plerson, Mich.

POUND PULLETS (8.C. W. L.) HATCHED for May 15th delivery. Finest lot we ever raised. No sickness, No crowding. Satisfaction or money back. Will lay in August and all through the fall season when eggs are the highest.

MORSE LEGHORN FARM, Belding, Michigan

WYANDOTTE

Helmbach's White Wyandottes. Exhibition and utility Heavy layers. R. C. Rhode Isand Reds, Bally Chicks, Hatching eggs, Catalog. C. W. Heimbach, Big Rapids, Mich.

WHITE WYANDOTTE BABY CHICKS
\$16.00 per hundred; Eggs \$6.00 per hundred,
LAPHAM FARMS, Pinckney, Mich. (P)

RHODE ISLAND REDS

WHITTAKER'S RED OHICKS Both Combs.
W Blood tested for white disarrhoea Michigan's greatest color and egg strain Catalogree. Interlakes Farm, Box 4, Lawrence, Mich

ROSE COMB RHODE ISLAND REDS. Hatching Eggs reduced to \$1 per setting MRS. AL BERT HARWOOD, B. 4, Charlevoix, Mich. (P.

S. C. R. I. REDS PURE BRED STOCK.
None better, few as good. 10 husky cookerels
for sale. G. C. CLARK, Caro, Mich.

RHODE ISLAND REDS, TOMPKINS STRAIN, Hatching eggs and baby chicks. Eggs per hundred, April \$10; May, June, July \$8. Ohicks twice the price of eggs. Both combs. WM. H. FROHM, New Baltimore, Mich., R1.

tatching Eggs, one of the best general purpose reeds today, excellent layers. Price \$2.00 per titing of fifteen. W. J. Allen, Manchester, Mich.

CHOICE, SINGLE AND ROSE COMB RHODE Island White Cockerels for sale, \$4.00 each.

JOHN J. COLBERG, Munger, Mich.

ANCONAS

3000 EARLY APRIL HATCHED BUCKEYE ANGONA FARM

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., Pittsuburg, Pa., Hagerstown and Cumberland, Md. Cks, Hens. Ckis, Pul. and Mated Pens always for sale. Eggs and Baby Chicks in season. 100,000 Incubator capacity, Write us and get the best.

S.C. ANCONAS CONTAIN BLOOD WORLD Famous Sheppard Strain, \$1.50 per 15; \$2.50 per 30; \$6.00 per 100. HERMAN POHL, Folwer, Mich.

C. ANCONA HATCHING EGGS, SHEPPARD strain. \$1 00 per 15. P. F. HELSER, Dowagiac, Mich., R 6.

ORPINGTONS

Buff Orpingtons—Cook & Byer's Strain, Madison Square winners. Eggs, Pens 1 and 2 \$3. Pens 3 and 4 \$2. A. J. Brewbaker, Elsie, Mich. (P)

ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season.
AUGUST GRABOWSKE Route 4, Box 41.

LANGSHAN

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

HATCHING EGGS

LISTEN DO YOU WANT HATCHING EGGS LISTEM from the working booklet from postal brings booklet from THE KLONDYKE POULTRY YARDS Millington, Mich.

EGGS FOR HATCHING—BARRON STRAIN. S. C. White Leghorns, bred-to-lay, \$1.50 for 15; \$6.50 for 100; prepaid. * OECIL W. BOVEE, North Star, Mich.

EGGS 51 SETTING, Parcel Post Pald. Thorbuff Rocks, White Barred Rocks, White Rocks,
Buff Rocks, White Wyandoettes, Anconas, Buff
Minoreas, White Leghorns, Brown Leghorns,
Rhode Island Reds, Buff Orpingtons. PHILIP
CONDON, West Chester, Ohlo.

WHITE ROCK EGGS FOR HATCHING Blue Ribbon winners. Write for prices and in-formation. Mrs. Roy Oakes, Hartford, Mich.

RINGLET BARRED ROCK EGGS FOR HATCH ING-15, \$1.50; 100, \$8.00; prepaid. MRS GEO. WEAVER. Fife Lake, Mich.

OUALITY BARRED ROCK EGGS—15, \$1.50 50, \$4.00. Park Strain. Postpaid; guaranteed Mr. J & R. A. WILSON, R. 2, Kingsley, Mich SICILIAN BUTTERCUP EGGS—\$1.50 per 15. Chicks 15c each. R. I. Reds: \$1.25 per 15 eggs. Chicks 10c each. L. K. PRAUSE, Maple Oity, R. 3, Mich.

Silver Spangled Hamburg 15, prepaid. EVERETT ROWE, R. 2, Grass Lake, Mich. (P)

SILVER SPANGLED HAMBURG EGGS BY the 190 \$8,00; one setting \$1.75. Wonderful layers; won first money at State Fair, 1919, and second money at State Fair, 1921. Great foragers and very handsome. MRS. G. A. PROCTOR, Vassar, Mich.

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 296.
Anconas, Wyandottes, Minorcas, Orpingtons,
Safe delivery. Prepaid. Prices right. Free
catalog

HOLGATE CHICK HATCHERY, Box B. Holgate, Ohio.

EGGS

Baby Chicks for HATCHING
Thoroughbred varieties of Tom Barron English White Leghorns, S. C. R. I. Reds, Parks Barred Rocks. Big. Strong and Healthy Chicks from tested heavy producing stock, correct in plumege and color as well as being EXCELLENT LAYERS. Our prices will interest you, Write for them. We GUARANTEE safe arrival of our Strong and Vigorous Baby Chicks. FIRST COME FIRST SERVED, so we advise to place with us your order as soon as possible. Write AT ONCE for our interesting catalog. It is FREE. BRUMMERS POULTRY FARM, Holland, Mich.

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

BABY CHICKS, 20 breeds, 110 up. Pure bred atock.. Prices on request. English Leghorns too. MIDLAND HATCHERY, Midland, Mich. (P)

EXTRA GOOD CHICKS

and now on more eggs next winter. Order chicks om pure bred record layers. Tom Barron White ghorns, Brown Leghorns, and Anconas. Post-id anywhere. Catalog free. Ask for May and inte prices.

QUEEN HATCHERY

ZEELAND, MICHIGAN

Baby Chicks

Build up your flock with pure bred chicks that lay early and often, best quality. Leghorns, Rocks Reds, Wyandottes, Anconas, Minorcas, Orpingtons. Silver Spangled Hamburg Eggs \$2.00 per setting. We deliver at your door. Get our price list and free catalog.

J. G. PHILPOTT R. 1, Box 74 Port Huron, Mich.

BABY CHICK PRICES SMASHED

ENGLISH AND AMERICAN LEGHORNS now \$12.50 delivered. Anoonas \$15.00, Special prices on larger shipments. Net ordinary stock but genuine egg pedigree stock. Our quality can't be beat at twice the price. Our free catalog will will prove it.

PROGRESSIVE POULTRY FARM

BOX L

MICHIGAN

WHY NOT

ANCONAS & WHITE LEGHORNS

full description and prices.

QUALITY HATCHERY, Box A11, Zeeland, Mich.



Now is the time to order your chicks. You want the best and at the right price. We supply "efficiency chicks"—Reds, Rocks Wyandottes, Leghorns, and at pre-war prices. Quality can't be beat. We ship them by parcel post, prepaid, and guarantee delivery. You take no chance. Send for owr catalogue for full information.

DAY OLD CHICKS

CLYDE CHICK HATCHERY, Box 5M, Clyde, O. **BABY CHICKS**

O Buff Leghorns, one of the largest beks in Michigan My price is in reach of i, only \$15 00 per hundred. Detroit win-ors, none better. LAPHAM FARMS, Pinckney, Mich

NABOBK Baby Chiek

1½ MILLION CHICKS Postage PAID 95 per FOR 1922 cent live arrival guaranteed MONTH'S FFEED FREEF 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.

BABY CHICKS

200.000 for 1922, Shepards Anconas, English type White Leghorns and Brown Leghorns and Brown Leghorns and Brown two prices when you can buy direct? Our chicks are from two reasons for fine quality and reasons for fine quality and control of the c



BABY CHICKS BARRON STRAIN

BINGLE COMB WHITE LEG-HORNS. Also beavy laying S. C. Brown Leghorns and Anconas. Chicks, \$7.25 per 100; \$67.50 per 500; \$18.00 ROSE AND S. C. R. T. REDS, CENT LIVE DELIVERY GUARANTEREPAID AND INSURED PARCEL order direct from this ad and save

STAR HATCHERY Holland, Mich.

Orystal Poultry Farms Choice Baby Chicks. From best heavy laying, stan-dard bred stock. 36 leading breeds, Thousands of satisfied customers. Reas-onable prices. Circular free

7910 W. Franklin Ave., Cleveland, O.

BABY CHICKS

FROM SELECT, HEAVY LAY,
ING HENS IN S. C. WHITE AND
BROWN LEGHORNS, BLACK
MINORGAS, ANCONAS, BARRON
ROCKS AND RHODE IS. REDS
Prices: S. C. White and Brown Leghorns,
\$12 per 100; S. C. Anconas, \$12 per
100; S. C. Anconas, \$12 per
100; S. C. Anconas, \$12 per
100; S. C. Anconas, \$12 per
100; S. C. Anconas, \$12 per
100; S. C. Anconas
110; S. C. Anconas
110;

POULTRY

CHICKEN POX

A disease broke out among our chickens since Christmas and it seems to be spreading through the whole flock. They seem to be in perfect health until a day or two before they take sick. Then their comb turns sort of a brownish color and they have spots on their tongues and stand around gasping for breath, and finally their eyes swell shut. They won't eat all the while they are sick. Can you tell me what to do for them?—H. S., St. Clair, Mich.

You evidently have an infection of Chicken Pox among your poultry. This disease has been prevalent this past year. The affected fowls should be isolated and given individual treatment. The whole flock should be given Epsom salts at the rate of one pound per hundred birds. The cankers of the tongue and in the throat of the affected birds should be cleansed and treated with a solu-tion of one part Iodine and two-parts glycerine.—E. C. Foreman Associate Professor of Poultry Hus-handry M. A. C. Foreman bandry, M. A. C.

CHICKS HAVE TROUBLE IN BREAKING SHELLS

Will you please let me know what is the matter with my eggs. The chicks develop but seem to be unable to break through the shell. I have had considerable trouble with them this year. I use an incubator, but have never had that trouble before? Also please tell me where the Early Bird incubator is manufactured if possible?—Mrs. E. M. T., Stanton, Mich.

This trouble is usually due to either low vitality breeding stock or faulty incubation. If the breeding stock has been closely confined throughout the winter or if the male birds have been injured due to frost, or other causes, the germs seem to lack vitality, and develop with a lack of "pep" to complete the hatch. Nutrition is also one of the big problems that influences the hatchability of the egg. If the birds have been forced under artificial lighting or have been over stimulated in production by a heavy feeding of meat scraps, similar results are liable to occur. Green food is essential to high hatchability of the egg and the lib-eral feeding of -corn in the ration is also beneficial.

Of paramount importance is the

constitutional vigor in the breeding constitutional vigor in the breeding stock. The birds should be large and well developed. Late hatched chicks producing small eggs very seldom give satisfactory hatches. One of the greatest problems in incubation is the available supply of moisture and fresh air. If the machine is operating in a room that is artificially heated, too much evaporation occurs during the incubation period, which affects the vitality of the embryo, and causes low hatch-

the embryo, and causes low hatch-ability of the egg.

We ordinarily recommend locat-ing the incubator in the basement where the moisture conditions and temperature conditions are usually ideal for this work.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.
The "Early Bird" incubator is not

listed in any of the buyers' guides at our disposal. It is either an obscure trade name or else is no longer manufactured. If you are in the market for an incubator we shall be pleased to put you in touch with reliable manufacturers.-Editor.

ORIGIN OF BRONZE TURKEYS Can you tell me in what country the Bronze turkey originated? — Reader, Oakland County.

The Bronze turkey is a native of America and was domesticated by the ancient civilized people of Mexico and Peru. It was imported by breeders about the middle of last century. Occasionally, new blood was introduced from captive wild stock.—E. C. Foreman, Associate Professor of Poultry Husbandry, M.

SIMPLICITY INCUBATOR CO.

I have an incubator with no name on that needs repairs. It is a round galvanized tin with water tank and lamp on the side. The egg tester has the name "Simplicity" on it. I will be greatly obliged if you could find me the name and address of this firm.—Mrs. A. N., Mason, Mich.

Undoubtedly your machine was made by the Simplicity Incubator Company, of Indianapolis, Ind. —



Our 11th year.
Brown Leghorns
English Type
White Leghorns.
GREAT
LAYERS.
Large white
eggs.
100 per cent safe
arrival guaranteed
Get our prices
at once. We save
you money.

WOLVERINE HATCHERY

ABY CHIX The Old Reliable Breeds

S. C. White Leghorns Barred Rocks Anconas S. C. Brown Leghorns

Here we are, just a few hours from your door, with baby chix from the best breeds. Our growth from one small incubetor to 22,000 egg capacity has been steady, and denotes honest dealing. Get our prices on, chicks from our healthy, free range, heavy laying stock. Send to-day for handsome catalog in colors. CITY LIMITS HATCHERY & POULTRY YARD, Route 5, Box 11, Holland, Mich.

CHICKS FROM MICHIGANS OLD RELIABLE HATCHERY



White Leghorns, Anconas, Barred and White Rocks and R. I. Reds, the popular laying stmins. High record, expert Hogan tested flocks only. Preference given early orders, Chicks delivered by insured Parcel Post, and full count strong live chicks guaranteed. 14th season. Fine instructive poultry catalog and price list free. Place your orders now you that we deserve your business. Write rolland HATCHERY, R. 7, Holland, Mich.

DAY OLD CHICKS

Order your Baby Chicks now from selected heavy laying strain single comb White Leghorns, English strain Brown Leghorns, Anconas and Reds. Send for price list.

HILOREST HATCHERY, R 2, Holland, Mich.

BABY CHICKS

FULL LIVE COUNT GUARANTEED

From hens of Heavy Laying Strains White and Brown Leghorn and Anconas, 50, \$7; 100, \$14; 500, \$67.50 Barred Rocks and S. C. Reds, 50, \$8; 100, \$16; 500, \$77.50. Prepaid Percel Post right to your door. Order now WINSTROM POULTRY FARM & HATCHERY Zeeland, Mich.

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

Guaranteed Chicks



Strong, healthy, day old chicks from prize winning heavy laying S. C. Anconas. Prize winners at the big shows and leading Egg contests. Chicks and Eggs from prize pens and carefully mated heavy laying flocks. Also chicks from record laying flocks of WHITE on BROWN LEGHORNS and BARRED ROCKS. Postpaid anywhere. Catalog and price list free. MONARCH POULTRY FARMS

Zeeland, Mich.



CHICKS

from stock that is true to name in both plumage and type. Selected each year for health and high egg production. LEGHORNS, ROCKS, ORPINGTONS, WYANDOTTES, and MINOROAS Descriptive catalog free Got it before ordering elsewhere before ordering elsewhere, Ind.

DAY OLD CHICKS

From the heart of Michigan's Baby Chick Industry section. The two heaviest per breeds, Leghorns and Anconas. Send. for

JAMESTOWN HATCHERY JAMESTOWN, MICHIGAN

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 Designey Guaranteed To your door by Prepaid Parcel Post THE ULL HATCHERY, Box 502 New Washington, Ohlo,

BABY CHIX, MARCH AND APRIL DELIVERY. Prices: Barred Plymouth Rocks, R. I. Reds, Black Minorcas, White or Brown Leghorns, 25 for \$5.50; 50 for \$10.00, or 100 for \$17.00, parcel post prepaid. 100 per cent delivery guaranteed. Our 12th year producing the kind of ohix that please. Get our prices on 500 or 1000 lots. Green Lawn Poultry Farm. R3, Fenton, Mich.

READ THE CLASSIFIED ADS

IN

M. B. F.'s BUSINESS

FARMERS' EXCHANGE

of 1-

r

e

11

d te 1.

on a-on ne ly

BABY CHICKS

WE HAVE THE BEST LAYING BREEDS ON EARTH Barron English Whiet Leghorns, also American White Leghorns, S. C. Brown Leghorns and Anconas, 25,000 large strong super-hatched chicks per week from Hogan tested flocks culled out semi-annually by our poultry

targe strong super-narched chicks per week from Hogan experts.

17 YEARS OF CAREFUL BREEDING FOR EGG PRODUCTION You get the advantage of 17 years of careful breeding which brought our flocks up to their present high standing.

Our wonderful winter layers are headed by large, vigorous and pedigreed sired males of exceptional quality.

THOUSANDS OF SATISFIED CUSTOMERS MAKE BIG MONEY Mr. F. L.: Hess, Cichcago, Ill.; writes, "I averaged 112 eggs a day from 140 of your pullets and sold \$158 worth of eggs in February.

Mrs. Wyttenbach, Amherst, Ohio, writes, "I sold \$357.30 worth of eggs in two months from 200 pullets of your stock."

RAISE GOOD STOCK AND REAP A GOLDEN HARVEST Intellegent chick buyers of today take no chances with ordinary stock, Our enormous output enables us to sell these money makers at a price that positively cannot be equaled.

WE SHIP SOME 400,000 CHICKS EACH SEASON

We ship by PARCELS POST, PREPAID, and guarantee 100 per cent live delivery. Send for our catalogue and prices today.

WVNCARDEN HATCHERY BOYR 7 Peeland Mich

WYNGARDEN HATCHERY, Box B, Zeeland, Mich.



BABY

PURE TOM BARRON English White Leghorns PEDIGREED' MALES HEAD OUR FLOCKS

Greatest layers known-All on free range—Bred for heavy egg production. Buy the best and make a success—Write today

Also heavy laying Brown Leghorns and Anconas—All chicks send P. P. Prepaid and Live Ar-rival guaranteed—SEND FOR OUR FREE CATALOGUE TODAY

SUPERIOR FARMS AND HATCHERY, Box 2052, Zeeland, Mich.

BUSINESS FARMERS' EXCHANGE

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 f. I. Lawing week. The Business Farmer Adv. Dept., Mt. Clemens, Michigan.

FARMS & LANDS

EIGHTY-ACRE FARM, ALL CLEARED, good soil, fine buildings, good location, easy terms, CHAS, WUBBENA, Standish, Michigan, Box 954.

120 ACRES NUMBER ONE LAND, BEST of buildings, fruit, timber, One mile to Dixie Highway, station, church, school, 30 miles from Detroit, R. W. ANDERSON, Clarkston, Mich. (P)

68 ACRE FARM FOR SALE. MARTIN

120 ACRE FARM FOR SALE, 70 ACRES under the plow. Clay loam soil. 8 thousand dollars worth of buildings. Cheap for cash or will take small house and lot. For particulars write PETER SAWYER, Whittemore, Mich., R 2. (P)

FOR SALE OR TRADE FOR SMALLER farm, 160 acres, best of soil, good buildings, a dandy stock farm, 35 A. improved, 20 A. seeded. Price \$3000, part cash, balance easy terms. JACOB SWARTZ, Glennie, Mich. (P)

FOR SALE, 110 ACRES, 95 CLEARED, 15 wood. Good commercial apple orchard, fair buildings, Price \$4000. Would exchange for 40 acres in Kent Co. value to \$3200. CHAS. PARKES, Traverse City, Mich.

with 1000 Apple Trees; big fruit income, good, profits potatoes and alfalfa; on improved road close town; 100 acres loamy tillage, 30-cow pasture, about 800 cords wood; 1000 apple trees, pears, plums, cherries, etc.; fine 2-story 11-room house overbooking lake, 14-cow barn, poultry house, etc.; insurance \$3500, Forced sale \$5,000, only \$1500 cash. Easy terms. Details page 95 Illus. Catalog 1200 Bargains. FREE, STROUT FARM AGENCY, 814BE Ford Bldg., Detroit, Mich.

MONEY MAKING FARMS IN ARKANSAS and in other southern states for exchange. If you have any real estate for exchange, write me at once, giving full description of property. JOHN D. BAKER, DeQueen, Arkansas.

40 ACRE FARM TO SELL, 100 RODS TO new brick up to date high school employing seven teachers: 1-2 mile to town of 800 population which has many business opportunities. Inquire of BOX 145, Alba, Mich.

class farm listen—80 acres good A1 land that will mise any kind of crops, wheat, corn, beans, potatoes, sugar beets, Good house, barn and other buildings. Two orchards and well located, 1-4 mile, from school, two miles from town, good market. Must sell on account of sickness. For particulars write to D. A, FOLEY, Turner, Mich.

ACRES ANTRIM COUNTY, FIFTY hardwood timber, Balance closed, and school. Price \$2500. Terms, Address BOX F, care Michigan Business Farmer, Mt. Olemens, Mich.

80 ACRE FARM 2 1-2 MILES railroad station. House, barn, silo, etc. Price \$2800. JOHN CHAMPNEY (Owner) Rapid (P)

BEFORE BUYING A FARM, GET OUR free list of 50 good farms, 5 acres up. De-COUDRES, Bloomingdale, Mich. (P)

40 A. WIS. FARM NEW RICH SILT LOAM soil. Half cleared, buildings worth half price asked. 2.1-2 mi. Co. Seat, on trunk highway. Certified seed potatoes, registered stock. \$2800, half cash. H. B. BROWNELL, 4751 Trumbull, Detroit, Mich.

POULTRY FARM FOR SALE, 25 ACRES, room new bunyalow, new 12x18 garage, close Fenton. Price \$2500, F. F. SPIEGEL, Fenn, Mich.

80 A. SANILAC COUNTY; 2 MILES FROM busiest town in county. Good buildings. Good roads. Best soil. BOX 100, care Michigan Business Farmer, Mt. Clemens, Mich. (P)

40 ACRE FARM FOR SALE, LARGE OR-chards of all kinds of fruit. Up-to-date 10-room house, large barn and silo. All other build-ings good. 1 mile from town. Price right. Write to GUST. DRAHEIM, R. 2, Bloomingdale, Mich. (P)

200-ACRE EQUIPPED FARM NEAR TOWN Fertile, machine worked fields on state road; 50-cow pasture, wire fences; 50 apple trees; 10-roam brick house, 2 bargs, poultry house, sheep barn. For quick sale, \$3600, only \$1400 cash. Catalog free. G. N. GOULD, Harbor Springs, Mich.

FOR SALE—80 ACRES WITH STOCK AND tools, five miles from Saginaw, on Dixie Highway. Ideal fruit farm, part clay, balance sand, clay subsoil. Good buildings, price \$12,500.

A. WILCOXSON, Bridgeport, Mich. (P)

120 ACRES, EATON COUNTY. GOOD buildings, 65 acres cleared. Olivet 4 miles, 83,000 cash, balance terms. John Marthey, R. 1, Saginaw, Mich,

FOR SALE OR TRADE—HOUSE AND 2 lots for 40 or 60 acres near Saginaw or Detroit, Breckenridge, Mich. BOX 291.

FOR SALE—160 ACRES, HALF UNDER cultivation; good buildings; orchard, flowing well, on state road. Write to JOHN SCHORLEG, (P)

FARM BARGAIN CHEAP—80 ACRES RIGH hardwood clay and loam. Oscoda county, 35 acres cleared, near school; mares, 8 dairy cattle, 11 ewes, ram, sow; stock increase in April and May. Immediate possession. Farm tools, crops, everything ready for farming. Enough down to cover stock and tools; balance small payments; discount for cash. HIRAM STEVENS, Luzerne, Mich.

120 ACRE FARM FOR SALE, 2 MILES east of Turner on stone road. One large house, small barn, hen coop 12x24, corn crib and flowing well; 50 acres cleared, rest pasture land in the best farming county. Will sell on easy terms. Reason for selling, poor health. Inquire of JACOB WIEDERHOLD, Turner, Mich. (P)

FOR SALE 95 ACRE FARM, GOOD BUILD-ings, good soil, wood lot, near school. For par-ticulars write owner. CARRIE GIBSON, Lapect, Mich., R. 6. (P)

MISCELLANEOUS

TOBACCO

TOBACCO HOME SPUN—EXTRA FINE Chewing, 10 lbs. \$3.00; Smoking 10 lbs. \$2.00, 20 lbs. \$3.50. PRODUCERS EXCHANGE, Mayfield Ky.

KENTUCKY TOBACCO—DON'T SEND ONE penny, pay for tobacco and postage on arrival Extra fine quality leaf, 3 years old nature cured, Ohewing 10 lbs, \$2.50, smoking 10 lbs, \$2.50, FARMERS' UNION, D123, Hawesville, *Ky.

TOBACCO: KENTUCKY'S PRIDE, mellow chewing or simoking 10, lbs. \$3.00. Mild smoking 10 lbs. \$2.00; 20 lbs. \$3.50. FARMERS CLUB, Mayfield, Ky.

LEAF TOBACCO, 3 YEARS OLD. PAY FOR tobacco and postage when received. Chewing 5 lbs. \$1.50; Smoking 6 lbs. \$1.00. FARMERS' GRANGE, No. 94, Hawesville, Ky.

TOBACCO, KENTUCKY'S NATURAL LEAF, Mild, Mellow smoking 10 lbs. \$2.25; Hand selected chewing 3 lbs. \$1.00 Free receipt for preparing. WALDROP BROTHERS, Murray, Ky.

FREE SMOKING TOBACCO—SMOKE ON US. Write for free sample. HAWESVILLE TOBACCO CO., Hawesville, Ky. (P)

TOBACCO: NATURAL LEAF, SWEET AND mellow chewing, 10 lbs. \$2.75. Smoking 10 lbs. \$2.00. JNO. SANDERSON, Mayfield, Ky. (P)

NURSERY STOCK AND SEED

CERTIFIED RUSSET RURAL SEED POTA-toes grown from Hill selected stock \$5.00 per 150 lb. sack. TWIN BOY FARM, Alba, Mich. E. D. Post, Prop. (P)

EARLY SEED POTATOES. IRISH COBBLER and Early Petoskey. Two grades \$2,50, \$3,00 bu. STARR BROS. R 2, Marshall, Mich. (P)

NORTHERN GROWN WHITE BLOSSOM Sweet Clover seed, scarfied and recleaned, \$6 per bu, bags free, f. o. b. Millersburg, Mich. M. P. TRAFELET. Samples on request.

RECLEANED CLOVER SEEDS FOR SALE.
Biannual Sweet 10c; Medium and Mammoth Red
22c; Alsyke 19c; Hairy Vetch 12c—prices by the
lb. Bags tree also several farm's crop payments,
E. B. FOLLETT. Hale, Mich. (P)

81G BARGAIN—12 LUCRETIA DEWBERRY
No. 1 root plants and 20 Concord grape cuttings
for \$1.50 postpaid. Raise your own apple trees
from apple grafts, 5c each. Get list of other
bargains. Varieties true to name. BEN L.
MARSHALL, Paw Paw, Mich.

STRAWBERRY PLANTS

STRAWBERRY PLANTS FOR SALE SEN-ator Dunlar, Gabson and Dr. Burrill. 400 per hundred, \$3.00 per thousand. Progressive Everbearers \$1.00 per, hundred. \$10.00 per thousand. ROBT. DE GURSE, Ovid. Mich.

100 BEST BLACK RASPBERRY \$1.75; Grape vines 1c up; Asparagus \$7 per 1000, 5000 @\$25; Peach Trees 15c up. Wholesale pr-list free. 100 Everbearing Strawberry, 100 Dun-lap and 25 Extra Early all for \$2; postpaid lower Mich. GOBLEVILLE MICH. NURSERIES. (P)

STRAWBERRIES, 2 LEADING VARIETIES, 1000 Dunlap Plants \$3:25: 1000 Gibson Plants - 000 Westerry Plants \$12:00 FRED STANLEY, 124 Main St. Bangor, Mich. (P)

STRAWBERRY PLAINTS—SPECIAL OFFER:
150 Senator Dunlap, 150 Warfields, \$2.00; postpaid. Senator Dunlap \$4.00 per 1,000; \$2.25
per 500; not prepaid. Satisfaction guaranteed.
Catalog free. Write today. HAMPTON & SONS,
Bangor, Michigan.

BEES AND HONEY

BEE HIVES, SECTIONS, COMB FOUNDA-tion, smokers, etc. Complete outfits for begin-ners with or without bees. Agents for A. I. Root Co. goods in Michigan, Send for catalog. Beeswax wanted. M. H. HUNT & SON, 508 N. Cedar St., Lansing, Mich.

HAY

HAY WANTED: WE DO AN EXTENSIVE
Hay and Grain Brockerage business in
North Carolina, and are always in the
for Hay. Either buy direct, or sell on
mission for your account. We prefer to
direct from the farmer.
Reference gladly furnished.
Wholesale and Commission Merchants.
Selma
North Carolina.

LIGHTNING RODS

LIGHTNING RODS, OLD LINE INSURANCE Companies now giving a 10 per cent discount on our make of rods—making it an agents Harvest, WRITE TODAY, L. D. DIDDIE CO.,

GENERAL

ALL MEN, WOMEN, BOYS, GIRLS OVER 17, willing to accept Government Positions \$135, (stationary or *traveling) write Mr. Ozment, Dept. 355, St. Louis, Mo., immediately.

SEND ME YOUR NAME AND ADDRESS for free pamphlet telling you about Wild Gooss Corn, particularly farmers located in the Northern portion of Southern Michigan. E. F. O'BRIEN Route 2, Box 137, Kalamazoo, Mich. (P)

STEEL FENCE POSTS 11/2"X11/2" ANGLE, 7 feet long. High carbon rust resisting steel. For any fence, 20c each, Immediate shipment. AMERICAN WIRE FENCE COMPANY. 1133

HIDES TANNED OR LEATHER FOR RE-pair work sold direct. Prices reasonable. Let us send eamples. COCHRAN TANNING CO., Green-ville, Michigan.

ad in the been had in his better Apparties day we been the

The last poor year aver in Co

ma

er bef

we

tha The

ren abc

res

for

Nes

and

ern ly ing lam soo

eag of

pac

dur

poin

age

ship

stro wee

only

erec

wee

hog

the

beer

ligh

has men futu

of e

cum that

man

hogs

mar

Edited by H 'H, MACK

MARKET SUMMARY

All grains quiet after recent weak period. Beans and potatoes steady. Demand for butter and eggs good and market is firm. Not much call for poultry. Dressed calves and hogs in fair demand. Hay firm. Cattle in fair supply and market active. Hogs steady. Provisions lower.

(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.)

ROBABLY more progress been made toward the muchcoveted goal of uniform busi-ness activity, during the last fortnight, than during the entire quarter year that immediately preceded the beginning of that period. From all points of the compass, come encouraging reports of increasing business and industrial activity. The men, who are most familiar with labor conditions in the district surrounding Detroit, claim that the problem of unemployment has been solved, at least, to the extent to which it con-cerns skilled labor. A widespread revival of work in connection with the building trades, is reported and as a direct result, the demand for all grades of lumber and builders' hardware is becoming more active and prices are firming-up, perceptib-

TRADE AND BUSINESS REVIEW

ly, in all of these lines.

Basic industries are showing more activity than at any preceding date since the beginning of 1920; productive operations, in connection with steel and iron, are rapidly approach-ing normal, and paint manufacturers report the largest demand that they have ever known. The demand for wool is improving, rapidly, as a result of reported firmness in all for-

sult of reported firmness in all for-eign wool markets.

From the standpoint of the Ameri-can farmer, conditions and the gen-eral outlook are much more encour-aging than on any preceding date since the signing of the armistice, it is universally conceded that Ameri-ca must furnish the food that the world consumes during the next six months, especially, is this true in connection with cereals, meat and lard. In connection with the bulk supply of food products, we are rapidly approaching the period of restricted movement, dire necessity, in the form of maturing financial obligations, has forced the American farmer to cash nearly everything that he owned and the inference is that we are about to enter upon a period of "lean picking."

So much for the producers side of the proposition. How about the consumer? For many months, the rank and file of the American public have been in a pessimistic mood, the scene has changed and a distinct note of optomism is heard on every hand. We are entering upon a period of unprecedented business and industrial activity, the volume in consumption of all staple products dwindled during the recent months of extreme business and in-dustrial depression and, in the same ratio, will consumption records increase by leaps and bounds as the anticipated revival becomes a self-evident fact.

In connection with the trade in cereals, the lateness of the spring which is now considered two weeks behind the normal average of other years, is having a distinct bearing and as a direct result, the movement marketward, during the next 60 days, is sure to be light. The situation, as it applies to the oats crop, is little less than alarming as late sowing generally means a small yield of under-weight grain.

During the first half of April, the New York Stock Exchange has been booming with several old-fashioned "big days" to its credit, steel common, which has always been considered the accurate harameter of reered the accurate barometor of re-turning prosperity after a prolonged period of business depression, has sold above par, several times of late. Call money has been available at 3 1-2 per cent and 30-day accommodation loans, easily obtainable at 4 per cent. Weekly bank clearings \$6,-730,745,000.

WHEAT

The wheat market has been struggling upward against mighty odds and last week reached the highest point of many months. Export business has been very brisk. Im-provement in the southwest has at times caused some weakness but in the main the tendency has been upward and still is. The observer of this market is struck with the des-perate attempts that are made to

55000000	arade	Detroit		
No. 2	Red	+ 1.41	1.47 %	1.59 1/2
No. 2	White			1.48 1/2
		ONE YE		
	No.2 Re		Whitel No.	
Ter.roit	1.37	1.3	5 .	1.35

depress the price, but as we have re-peatedly pointed out, no influences can entirely displace the law of sup-ply and demand. The position of wheat is strong and prices are quite likely to advance with the season.

CORN

The corn market shows considerable improvement and prices are

	Grade	Dote	rolt 1 C	hicago	N. Y.
	Yellow Yellow			.61 1/2	.80
NAME OF	PRICES	ONE	YEAR	AGO	
	No. 2	Yell	Wo. 3	Yell No.	4 Yell
Detroit	CONTRACTOR STATE	1002/2006/00	.67	District Constitution	.64

higher on all large markets. Demand has been good but not voluminous and the market has shown a decid-edly firm tone. Receipts have been light but sufficient in most cases to take care of immediate require-ments. Last week Chicago received 1.108,000 bushels, while shipments amounted to 2,099,000 bushels: Export business was quiet during the past two weeks up to last Saturday when foreigners seemed anxious to buy. Most of the export buying is being done at the seaboard at the present time. The trend of wheat dictated that of the corn market on the opening day of the present week. Prices remained unchanged, how-

OATS

Oats have failed to respond to the improved condition in wheat, despite

	200	Grade	STREET,	Detroit	AUDITORIO DE LA CONTRACTORIO	CONTRACTOR STATE	N. Y.
No.	234	White White White		.43	1/2	39 3/4	.49 1/2
	(85)	PRI	ES C	NE Y	EAR	AGO	
	9	No.2	Whit	e No.3	Whi	of No.	4 White
Detro	it	-1	.44		42 1/2		39 1/2

the fact that the spring promises to be considerably less than a year ago. Better prices in oats, it now appears, will be slow to materialize. Much will depend, however, upon the new crop as surplus supplies have been the lowest in years. There have been excellent reasons why oats should have sold much higher since the first of the year but their failure to advance can probably be ascribed largely to the depressed financial condition and the comparative cheapness of competitive feeding grains.

RYE

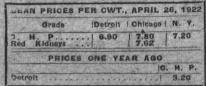
Rye has been quite active during the past fortnight and as a result

prices are higher than they have been for several months. The Detroit market quotes No. 2 at \$1.09 and Chicago at \$1.09.

For the first time in several months barley has shown some activity. There has been no change at-Chicago in price but this grain is 5c higher at Detroit. Present prices are: Detroit, \$1.30 @ 1.40 per cwt.; Chicago, 64c per bushel.

BEANS

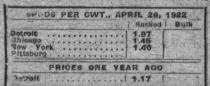
Those who have ben responsible for the erratic price changes in the



Detroit bean market have seemingly "laid off" for the time being, as quotations have been more nearly uniform the past couple of weeks with prices ranging close to the \$7 mark. Taking the country as a whole prices are a trifle lower than they were a couple of weeks back, though the market is steady and there is no evidence of its being oversup-plied. The Christian Breesch Co., at Lansing report that the recent rapid price advances have temporarily discouraged trade and that purchases are confined almost wholly to cur-rent needs. It is reported that the higher prices are again attracting foreign beans to our shores in suffi-cient quantities to affect the market on domestic offerings. The check in price seems to be only temporary, but it serves to give notice that the trade is in no humor to pay fancy prices. It is altogether probable that prices will advance to slightly higher levels before the next crop, but if so the advances will be slow and moderate. There will be a large increase in acreage this year which we gladly welcome. Let us hope, however, that the increase will not be so great as to cause a return of the old, unprofitable prices.

POTATOES

Eastern potato markets are weak, but most of the western markets



from Chicago westward have shown strength the past few days. The old potato season has about 60 days to go, and many things can happen in that time. Farmers in various parts of Michigan report that holdings are the lowest in several years. Remembering what happened last year when there were 50,000,000 more bushels than this year, and discouraged by the government's March report, farmers have pretty well disposed of their surplus supplies. We are really confident that the low point on old potatoes has been reached, and that from now on we shall see a strengthening of the market.

HAY

Prices are higher at Detroit and Pittsburg than they were two weeks

No. 1 Tim. Stan. T	im. No 2 Tim
Detroit 21.00@ 22 20.00@	
Chicago , 26 00 @ 28 New York 30.00 @ 31	23.00 @ 25
New York 30.00 @ 31 Pittsburg 23.50 @ 24 23.50 @	26.00 @ 29
No. 1 No. 1 Light Wix. Clover M	No. 1
Detroit 20.00 @ 21 17.00 @	
Chicage . 24 00 @ 25 23.00 @	25 20 00 @ 24
New York 28.00@29 23.00@	25
Pittsburg 21.50@21 19.00@	20
Control of the Contro	A CHARLES AND A COLOR OF THE PARTY OF THE PA
HAY PRICES A YEAR	AGO
No. 1 Tim. Stan. T	Im. No 2 Tim
Detroit . 20.00@21 19.00@	

19 00 @ 20 17.00 @ 18 16.00 @ 17

WASHINGTON, D. C., April 29.—Northwest division of my weather map includes all north of latitude 36, between meridian 90 and crest of Rockies. High temperatures will prevail in that division near May 7 and the week centering on that date will average much warmer for all that division. Usual weather changes will follow that storm wave; the storm wave near 8 and cool wave near 10. No great importance will attack to that weather disturbance except that good cropweather is expected to include all that division, except those localities that have high ridges south of them. Such tocalities are expected to get a shortage of moisture. The storm intensities of that division and the moisture will begin to increase near May 6, be at their greatest near 9 and gradually decrease to 12. These storms will be of very considerable force near 9 and frosts may be expected near 10 or 11. The reader will observe that these forecasts have been changed from the old methods and are now of a more local hature and more easily understood.

Northeast division covers all north of latitude 36 and east of meridian 90, where the temperature of the week centering on May 5 will average lower than usual for all that division, frosts will threaten near 5 and then will slowly come a great rise in temperatures. Good cropweather will prevail near first of month in that division, frosts will threaten near 5 and then will slowly come a great rise in temperatures. Good cropweather will prevail uting that week but a little shortage of rain where high ridges southward will cut off moisture to condense. The storm forces will begin to increase near May 6, be at their greatest near 9 and fade away near 12. In this division these storm forces will increase the rain, and following the rain, will increase the low temperatures and the frost dangers. Southwestern division covers all south of latitude 36, between meridian 90 and the Rockies crest, also Louisiana and Mississippi. Temperatures of the week centering on May 3 will average higher than usual, rain and c

THE WEATHER FOR NEXT WEEK

FOSTER'S WEATHER CHART FOR

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

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

COLD NORTH

MODERATE SOUTH

age, while at other points no changes are noticeable. The market in general has a firm appearance with demand good. Receipts have been light but indications are that they will increase in the pear future. increase in the near future.

LIVE STOCK MARKET

Not much change in the cattle market has been noted of late and advices from interior points, located in eattle producing districts, indicate that there is still plenty of finished beef in sight. Chicago got 7,000 more cattle last week than came to hand the week before but the close in the steer division was 25 cents higher than the close of the week A liberal run on Monday, April 24, put prices just about on par with those paid on Monday par with those paid on Monday of the week before. A couple of holi-days burt the live cattle trade, last week, but the demand for dressed beef was active everywhere and, in the east, prices advanced from 50 cents to \$1 per cwt. and closed firm. The ton price for story is Chira. The top price for steers in Chicago The top price for steers in Chicago last week, \$9.25, was paid for 1500-pound cattle. The best price in the yearling division was \$9.15. The average quality of the cattle, on sale in Chicago, was decidedly common. Cows and heifers were in active demand all last week and at the close, prices were 25 cents per cwt. higher than at the close of the week before. Stockers and feeders sold well all the week and on the close were about 25 cents per cwt. higher than on the close of the week before. The Detroit market opened the current week with cattle strong and about 25 cents higher than on the close of last week.

Sheep and lambs came to Chicago

in small numbers, last week and the result was steady values for the former and higher prices for lambs. Nearly one-half of the yearling lambs on sale came from Colorado and had not been clipped. The eastern dressed lamb trade was decided-ly active all the week, Boston quot-ing an advance of \$1 per cwt. Spring lambs, from California, are expected

The veal calf market is in the

The veal calf market is in the doldrums in nearly all markets. Chicago has been literally smothered, of late, with Wisconsin stock and packers have been able to buy fairly good calves at \$7 per cwt.

The hog market has held up well during the last fortnight and last week's close was at the extreme high point, both the top and the average, being 25 cents per cwt. higher than that of the week before. Decreasing receipts and a persistent shipping demand gave the market a strong undertone all through the week. For the Chicago market to get only 100,000 in a week is considonly 100,000 in a week is considered a very significant fact. Last week's hog run, in all of the leading

week's nog run, in all of the leading hog markets, was the smallest for the third week in April that has been known in seven years.

Present remunerative hog prices are the direct result of extremely light receipts and not because there has been any important improved. has been any important improve-ment in the general outlook for the future, the fact is, that the volume of export clearances has fallen off, of late and lard is beginning to accumulate. The present would seem to be an opportune time to cash hogs that are ready to go. It has been many-a-day since extremely heavy hogs met with much prompt acceptance as they do now in the leading markets of the country.

The following prices were paid at the Detroit stockyards Tuesday, April 25th.

Best heavy steers\$7.00@ 8.00
Best handwy't butches \$7.00@ 8.00
Best handyw't butcher steers 7 25 @ 8 25
Itality light butchers concare
Best cows
Best cows 500@ 575
A DO CO
Cutters 3 00 0 550
Canners 9 00 0 00
Bologne bulls 450@ 550
Bologna bulls 4 00 @ 4 50
Feeders 5 50 @ 6 50
Stockers 5 00 @ 6 00
Milkers and springers40 00 @ 75 00
Butter and Butter of 1
Veal Calves
Best grades\$9 00 @ 10 00
Culls 4 00 @ 7.00

BUFFALO LIVE STOCK MARKET The receipts of cattle Monday of this week were 105 cars, including this week were 105 cars, including 5 cars left from last week's trade. The market opened strong to 10c higher on medium weight and weighty steer eattle, which were in good supply; butcher steers and handy weight steers were in good supply, sold strong; heifers were in more light supply sold strong; heifers were in sold strong; heifers were in the strong halfs. very light supply, sold strong, bulls very light supply, sold strong, bulls were in good supply, sold steady, all grades of cows were in good supply, sold 25c higher, stockers and feeders were in very light supply, sold 25c higher, yearlings were in light supply, sold strong. Top on heavy cattle was \$8.75 for four (4) loads of good quality, fat, Ohio cattle averaging around 1400 pounds.

17,600 head of hogs were estimated for Buffalo today and with liberal supplies in the west and Chi-

tiberal supplies in the west and Chi-cago reporting 45,000 head and that proved too heavy for trade require-ments and buyers had control of the price adjustment. The market opened 35 to 50c lower than Saturday's close, with the bulk of the mixed, medium and heavies selling at \$11.00; with about five bunches at \$11.00; with about hee bunches selling up to \$11.05 to one of our local packers. Yorkers, \$11.00 to \$11.10, with three bunches reaching \$11.15; pigs and light yorkers, \$11.00 to \$11.15; roughs, \$9.00; stags mostly \$5.50 down.

The receipts of sheep and lambs

The receipts of sheep and lambs today were called 8600 head. The market opened strong on lambs and market opened strong on lambs and also sheep. Wool Stock: Choice wool lambs sold from \$16.50 to \$17.00; culls, \$13.50 to \$14.50. Chipped Stock: Choice lambs. \$15.50 to \$15.75, which was 65c higher than Saturday's close; culls, \$12.50 to \$13.50; yearlings. \$11.50 to \$12.50; wethers. \$8.50 to \$9.50; which was wethers, \$8.50 to \$9.50; which was 50c higher; ewes, \$7.50 to \$8.50; with a few handy weight western ewes up to \$9.00.

The receipts of calves today were estimated at 3900 head. Choice calves sold from \$8.75 to \$9.00, which was from \$1.00 to \$1.25 lower than last week's close; throwouts also sold lower, the bulk of the 120 to 140 lb. throwouts, selling at \$7; heavy throwouts, 160 to 190 lbs., \$5.50 to \$6.50; heavy fat veal calves, \$6.50 to \$7, as to weight and quality.

MISCELLANEOUS MARKET QUOTATIONS Detroit, April 25 BUTTER—Best creamery, in tubs, 36c

per lb. EGGS Fresh, current receipts, 24 1-2 @25e; fancy storage packed, 28@29c per doz.

APPLES—Steel's Red, \$3.25@3.75;
Baldwin, \$2.75@3; western boxes, \$3.50
@4.50.
DRESSED HOGS—Small to medium,
12c; heavy, 10@11c per lb,
DRESSED CALVES—Choice, 11@12c;
medium, 10c; large coarse, \$@9e per lb.

(Continued from page 9)

because of her immodest ap-

The conferring upon woman the right to use the ballot was a proper thing to do, but with this right in her possession, woman will, inevitably, have to lose some of the courtesies which American manhood has been accustomed to pay to American womanhood. And this is to be regretted as it will result in man's loss, also because of the powerful incentive to noble manhood is the rendering of proper courtesy to woman, and that because she is a woman.

The writer, now past 80 years of age, remembers to dear ones who have past from arth, one sister who was, for years a medical missionary at Swanton, China, and recalling the memory of those dear ones, and recognizing the true value of association with the dear ones, yet on earth, feels that he has full warrant for the expression of his views, as . Daniells, Shiawassee County, Mich.

CROP REPORTS

CROP REPORTS

OSCODA—Some farmers are plowing and hauling manure on high ground, but those living on low and heavy soil can not get on ground for at least two weeks. Not much farm produce being bought or soid. Hay is scarce, many need more hay to put out crops. Some for sale but is being held for a higher price.—C. K. April 20.

ST. 308EPH—Colder here. Some snow last night, froze ice night before. Too bad for early fruit. Heavy winds and lots of rain early part of week, Blew over a barm and did damage to trees and telephone lines. Farmers are plowing, working on roads and repairing their fences and buildings. Some have sowed clover, Automobile show in Sturgis Saturday.

15th. Rye has gone to 20c bushel. Other prices remain the same. Eggs has raised from 18c to 22c.—Mrs. H. C. Hoitz. April 21.

MIDLAND—On Wednesday last we had a rather severe snow storm; however, the ground was too warm to allow it to remain. It is somewhat cooler now than during the past week, but we hope it will warm up again soon. The gravel roads are in good condition. Some building is being done and nearly everyone is blasting stumps.—C. L. H., April 21.

WEXFORD—Well

21.

WEXFORD—Well we had another young winter. Farmers hauling manure, plowing and fixing fences. Hay is in good demand, local dealers can not get

it fast enough. Grass is growing nicely. Buds are beginning to hurst. Dressed hogs have gone up a little. They are around 13 and 14c. Pienty of wet weather coming this way. Seeding is coming on great and more being sown.—W. A. J., April 21.

GRATIOT—Our county agent. C. P. Pressley, is getting a machine with which he can test our soils in the field in a short time. The late spring has held spring work back. We are just beginning to plant oats. A few beets are being contracted. Wheat is looking well excepting spots where ice sheets smothered it. Pasture, hay and alfalfa are well advanced for the time.—Carl C. De Witt, April 21.

COMPLETE DISPERSION SALE

of the herd at the CHASLEN FARMS, Northville, Mich.

50---Head Pure Bred Shorthorns---50

MAY 11th, 1922

Sale Commences at 1:00 P. M.

Auctioneers: Col. Carey M. Jones, Chicago

and Col. L. W. Lovewell, South Lyon, Mich.

Standard Four Cords, 10,000 miles STANDARD GUARANTEE 7,500 Miles Buy direct from us, note well the seving. Prices absolutely the very low-

rd	tires are all	firsts, nev	st grade v fresh	stock. W	less anywh	ere. Thes	e Stan- ds.
zes 8x3 0x3	Non-Skids \$ 7.75	Oversize Cords	Heavy Tubes \$1.35	Simon	Heavy Non-Skids \$13.95 17.95	Oversize Conds \$22.45	Heavy Pubes \$1.90
0x3 0x3 0x3 0x3 0x4 0x4 0x4	7.45 9.75 10:95	\$ 11.95 15.95	1.35	34x4 32x4 1/2 33x4 1/2 35x4 1/2 36x4 1/2 35x5	18.45 18.95 19.45	25.95 26.45 26.95 27.95	$\begin{array}{c} 2.10 \\ 2.15 \\ 2.20 \\ 2.25 \end{array}$
x4 x4		20.95 21.95	1.80	36x4 1/2 35x5	19.95 22.45	28.95 33.95	2.30

We ship C. O. D. on approval—Send r money.

AMERICAN RUBBER TIRE CO., 1506 Mennepin Ave., Minneapolis, Minn.

Amazing New Discovery Quickly Kills Them All. Not a Poison.

Rats, Mice, Gophers—in fact all Rodents can now be wiped out easily and quickly. Imperial Virus will do it. This new discovery, is a fluid, true Virus. Entirely harmless to humans, poultry, stock, pets, etc.



Infects Rodents only. Greedily eaten on bait. Sets up burning fever. The pests communicate it to others and all die outside, hunting air and water. Imperial Virus is put up in sealed bottes thus insuring full strength and potency. Only safe, sanitary method to overcome these costs. Platect your Poutity, especially Baby Chicks and Egg Hatches.

YOU CAN GET YOURS FREE

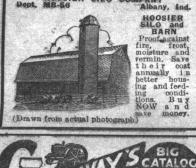
flere's how! Send \$1.00 today (currency, M. O; Checks, etc) and we will give you by return mail, postpaid, two regular, full sized (double strength) \$1.00 bottles of Imperial Virus, Use one to rid your place of these pests, and sell the other to a neighbor, thus getting yours free. Special inducements to represent us.

If more convenient, send no money, just your name and address to Imperial Laboratories, Dept. 487, 2110 Grand Ave., Kansas City, Mo, Pay postman \$1.00 and few cents postage when two bottles arrive. Gumainteed to do the work to your entire satisfaction within \$0 days or your \$1.00 will be cheerfully refunded.

toosier Building Tile

FOR SILOS, HOUSES, BARNS AND ALL PERMANENT BUILDINGS

Those patented corner braces (exclusive HOOSIER features) make this tile the strongest most efficient block on the market. Excells all others in load-bearing capacity, HOOSIER THE as etandeard, five-wall, clincher-joint, five-clay glazed blocks, Prices are reduced to pre-war level. Put your farm on a PERMANENT basis with HOOSIER TIDE dwellings, poultry houses, heg barns, sloe, etc. They solve the upkeep problem. Write for literature and prices. Estimates furnished free, Tell use type of building you need. Set our special general proposition. Get us type of building you need.
Get our special agent's proposition.
HOOSIER SILO COMPANY
Dept. MB-56



HOOSIER SILO and BARN Proof against fire, frost, moisture and vermin. Save their cost

LOWAY SCATALOC

Business Farmers' Exch

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

FARMERS ATTENTION—TIME AND LA bor saved by using the Automatic Check Attachment. Rows your corn both ways without the use of cable. Agents wanted. E. C. McNITT, Bangor Mich.

GOVERNMENT NEEDS RAILWAY MAIL crks, \$133 to \$192 month. Write for free ecimen questions. COLUMBUS INSTITUTE, cimen questions.

Columbus, Ohio.

EGGS—HOW TO DETERMINE SEX, HOW to keep fresh 12 months. How to me ke hons lay more eggs year round. Send 50c for my receivts A. J. TUCKER, Wauwetosa, Wisc.

HELLO CIRLS! AM A YOUNG MAN OF 29 I wish to correspond with some nice lady. AR-THUR THOMPSON, Johnsonburg, N. Y.

WANTED MAN WITH TEAM OR AUTO to handle S. M. Co. Products in some choice vacant tarritory. For particulary address, SAGINAY MEDICINE CO., Sagingw, Mich. (P)

LARGE OIL COMPANY NEEDS SALESMAN Michigae. Refinery to consumer direct liveral commission. Prompt settlements. No delivering. No collecting Experience not necessary. Tellilow Orleck Refining Works. 1177 Mallers Bldg., Chicago.

FOR SALE, BUCKEYE TRACTOR DITCHER, enternillar type wheels. Digging wheel nearly new. Machine in good running order. Other interests force sale. ORVILLE BLUEED, Perrington, Mich

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE M. B. F.

WANTED GREAT DANE DOG MALE PUP. VERNE K. DARLING, Carland, Mich.

WANTED WOOL

Write for our prices before you sell your wooll

VREELAND FUR CO.,

445 Jefferson Ave., West Detroit, Mich.

TOO LATE TO CLASSIFY

GOLDEN LACED WYANDOTTE EGGS FOR telling from prize winning stock, \$2.50 per hatching from prize winning stock, 15 FRANK J NIQUE, Thomas, Mich.

SEAL ESTATE IN ARKANSAS AND OTHER Southern States for exchange for Michigan property. If you have any real estate of any kind for exchange write me at once with full description and lowest price, etc. JOHN D. BAKER, De Queen, Arkansas,

SO-ACRE FARM. CLAY LOAM SOLL. FAIR buildings. Half improved: Piled. Deep well, Orchard, Write owner. KENNETH MARSHALL, Coleman, R. 2, Mich.

orib or silo. Greater food value. Shells 58 ½ pound. FRANK WOODWARD, Clinton, Mich. (P)

FOR SALE—RINGLET STRAIN BARRED Rock eggs. 15 for \$1.00. MRS. O. TERPEN-ING. R 1, Ithaca, Mich. (P)

FOR SALE—REGISTERED RED POLLED Bull 3 years old, a grand individual and stock getter. Price \$100. H. P. BARRINGER, Ar-mads, Mich.



Men's Brogue Oxfords \$398 Give Size and heel foxings. Low pure gum rubber had beel foxings. Low pure gum rubber had been soles. Stylish French las Sizes it to 14. Wide Widths, Order Oxford the been soles. Stylish French las Sizes it to 14. Wide Widths, Order Oxford the been soles. Stylish French las soles. Stylish French las soles. Stylish French las soles are fore of the been soles. Stylish French las soles of the been soles and the been soles are soles as a soles of the been soles. Stylish French las soles of the been soles of

Men's English Model



Narrow Stripe Worsted



Blue Serge Pants Bargains

Be quick! There is bound to be a flood of orders reach us the minute these rousing bargains appear; and even though we have provided tremendous stocks to meet this demand, there's no telling how long they will last. Don't wait a minute. Buy at lowest prices in America. Select what you want and order on approval—at our risk.

Send No Money---Pay When Goods Arrive

Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely give Name and Number of Each Article You Want. Also State Size and Write Your Name and Address Plainly to Avoid Delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain for any reason at all simply return the goods and your money will be cheerfully refunded. ORDER NOW.

SHAROOD CO. DEPT. 96 MINNEAPOLIS, MINN.





Sturdy Scout Shoe



by No. 96A566. Price \$1.59. price and postage on arrival.

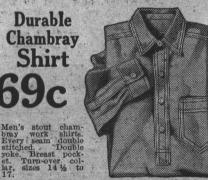


Popular Stitchdown Dark Brown Oxfords stylish. Uppers of mahogany leather. ather insole. Flex-down oak outsoles. Low rubber heels. to 8. Wide widths. Order by No. Send no money. Pay only \$1.98 and arrival.



leather with fancy perforated Strong oak soles and medium that will slways look dressy, brown. Sizes 2 ½ to 8. Black by No. 96AZ75. Ord AZ76. Send no money. Pa for either color on arrival. satisfied. State size.





Order by No. 96B1530. Pay 69c and postage on arrival. State size.

arrival. State size.

Men's shirt of serviceable khaki material made with stoutly sewed seams. Has large breast pocket and durable attached collar of self-material. Sizee 14½ to 17. Khaki color onlf. Order bf No. 98B1531. Send no money. Pay 980 per shirt and postage on arrival. Give size.

Men's good quality black sateen work shirt. Attached collar. Long wearing material. Seams doubt stitched. Sizes 14½ to 17. Order by No. 96B1534. Send no money. Pay 98c and postage on arrival.

Stunning Style Dotted Voile

With Rich Organdy Collars, Cuffs, Sash

This beautiful model in voile is a very striking design—right up to the moment in following fashion's dietates for Spring and Summer. It is also a mode that fortunately becomes every figure and a truly amazing bargain at our smashed price. Send today and judge for yourself.

Men's Hip Boo



money. Pay \$2.48 and postage



30 x 3 Size NOW ONLY

eed but often give 000 to 10,000 miles choice of non-skid of th-tread in 30x3 size others are non-skid price below and postage on arrival.

BARGAIN PRICE L

Guaranteed Inner T

Be Sure to Give Sizes, Colors, etc. | Send all Orders from this Page Direct to Sharood Co., Per Minneapolis,