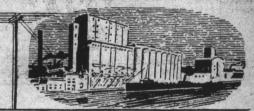
BUSINESS FARMER



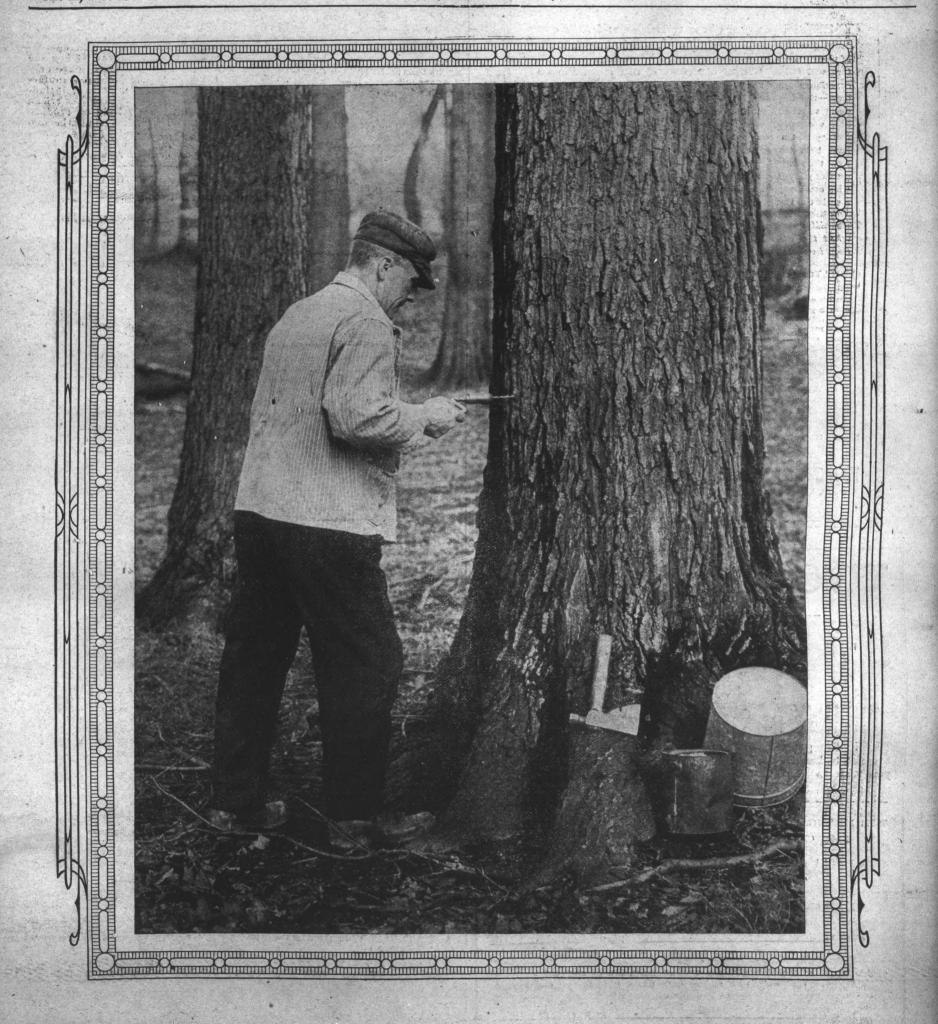
An Independent
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SATURDAY, FEBRUARY 17, 1923

\$1 PER YEAR



In this issue don't miss reading: Dr. David Friday's "Agricultural Program for an Industrial State"—The Long Desired "50-50" Sugar Beet Contract Has Arrived—Farmers' Week a Big Success

Sailing Under False Colors

CENATOR YOUNG has introduced Senate Bill No. 62 In the Michigan Legislature, known as the "full crew law." Under the guise of a Safety measure, it means really-

An additional tax of \$1,500,000 at least to the users of Transportation in Michigan.

The creation of an artificial demand for more labor.

Waste in man power.

Greater hazards to the men, it is designed to protect, eince it divides responsibility.

HERE is another phase to the issue: In the event of a strike, such as the "outlaw switchmen's strike" of three years ago, complete paralysis of the transportation system will follow, because one clause of that measure makes experience mandatory upon the newest recruit to the train crew the flagman. Had such a law been in full force and effect when the strike referred to occurred, there would have been a complete tie-up of not alone the railroads, but of every factory in the country. Not a pound of farm produce could have been transported to market, nor a ton of coal brought from the mines by rail. There would have followed in its wake greater misery, greater chaos, greater general suffering upon all who are dependent upon transportation—and profiteering on a scale the like of which the country had never seen!

This bill would give to organised labor in times of peace what the country reluctantly gives to the general in the

SENATOR GANNSER'S bill No. 72, requiring automatic fire doors installed on all locomotives means the scrapping of a number of serviceable engines. This bill, too, means higher transportation costs to you, who "pay the shot" eventually.

Send your local representative a "ouse eard" today telling him that these measures are uncommis, unreasonable, unnecessary and

Frank HAlfred.

Detroit, Mich., February 4, 1928.

Pere Marquette Railway

TWO YEARS FOR \$1

if YOU act at once!

and the coupon below will renew you own subscription for TWO YEARS FROM DATE OF EXPIRATION.

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This is the greatest offer we have ever made and we do not promise to keep it open over 30 days, so you must act at once, if you wish to profit by this 50% saving!

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THE MICHIGAN BUSINESS FARMER,

_ Mt. Clemens, Michigan

(1) For \$1 enclosed you will enter or renew my subscription to 2 years:

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For \$1 enclosed renew my own subscription as above 1 year and add the following new subscribers name paid-in-full for 1 year:

_ R. F. D. No.__

Current Agricultural News

CLEARING TO START FEB. 19

SERIES of forty-one land clear-A SERIES of forty-one land clearing meetings arranged for northeastern Michigan by N. A. Kessier, assistant land clearing specialist of the Michigan Agricultural College with the co-operation of the Northeastern Michigan Development bureau, will start at Midland February 19. As with the land clearing schools conducted by the college last fall, the Michigan Central and Detroit & Mackinaw railroads are cooperating in this project. operating in this project.

The program at each meeting will consist of movies and a talk on land clearing by L. F. Livingston, land clearing specialist, of the M. A. C., and a discussion of the dairy busi-ness in northern Michigan by E. J. Loonhouts, assistant agricultural agent for the New York Central lines. A part of the land clearing talk which will be of vital interest to the farmers will be that on how explosives, both government and commercial, may be obtained at a lesser cost than heretofore. than heretofore.

All of the meetings will be held in the big white demonstration car which has a seating capacity of a hundred people, and is admirably equipped for the showing of moving pictures. It is expected that this car will be taxed to its capacity at the various places listed in the itinerary.

FARMERS OPPOSE DAYLIGHT SAVING

FFICIALS of the Michigan State Farm Bureau state that the burreau's questionnaire distributed ently among the farmers of the state, clearly shows the attitude of the Michigan farmers as regards var-ious problems affecting rural life.

The majority went on record as opposing the proposed eastern time for the state, the abolition of the primary school fund, and the crea-

tion of county assessors.

The questionnaire showed that the farmers favored a state income tax law calling for a \$4,000 exemption limit, and a progressive rate, the re-moval of the existing corporation tax limits, a minimum two-cent gasoline tax, the primary election law, state and federal laws to abolish tax-exempt securities, and the state regulation of motor busses, and commercial operating over state highways.

POTATO GROWERS AIM FOR GREATER EFFICIENCY

EANS of bringing about greater VI efficiency in Michigan potato production were brought out before the meeting of the Michigan

Potato Producers Association at M. A. C., Farmer's Week.

Thomas Buell, of Elmira, president of the association; Hal B. Fullerton, director of agriculture for the Long Island Railroad, Medford, Long Island: and J. W. Weston, extension specialist in potato work with the M. A. C. crops department, were headliners on the program.

Increase in the use of certified seed potato stocks of high quality was discussed by Mr. Buell, who also pointed out the large amount of Michigan seed stock which is going outside of the state each year. Fullerton told of disease control work being carried out among the Long Island potato growers.

Recommendations that Michigan potato growers aim in 1923 for bet-ter seed, better culture, better grading and better storage were contained in J. W. Weston's address. Weston told of the ways in which the college extension department is en deavoring to bring about greater efficiency in the state potato industry.

TO REDUCE CHASES OF AMERICAN CORN

MATERIAL reduction in the demand for American corn in Germany because of the large potato crop harvested in Germany 1922, is indicated in reports received by the United States Department of Agriculture from its a representatives at Berlin. agricultural

Germany has been importing American corn largely for the manufacture of alcohol, since the Government food regulations limited the quantity of potatoes which could be

potato surplus, permission has been granted German distillers by the Ministry of Agriculture to use potatoes in the production of 60 per cent of the alcohol instead of 20 per cent as heretofore.

Normal exportation of corn from the United States to Germany has totaled about 6,000,000 bushels annually. In 1921, exportations were nearly 13,000,000 bushels, and in 1922 more than 30,000,000 bushels. It is estimated that in recent months fully 75 per cent of this corn was used by German distilleries, leaving little more than the normal exportation for other uses.

The estimated 1923 production of alcohol in Germany is 53,000,000 gallons, so that it will still be possible to manufacture 32,000,000 from potatoes. This will leave only 21,000,000 gallons to be manufactured from each of the state of the tured from other materials, includ-ing corn. Even though American corn is used exclusively to produce this remaining 40 per cent, the distilleries will require only about 8,000,000 bushels of corn in 1923, the Department of Agriculture says.

SHIAWASSEE FIGHTS BOVINE TUBERCULOSIS

WHAT is regarded as the most important and effective step yet taken in Shiawassee county in the fight for the eradication of bovine tuberculosis, has been ordered by the state commission of agriculture, in proclaiming a quarantine against the entrance of any cattle, not tuberculin tested, for dairy or

breeding purposes.

The ban also prohibits the offering at a public sale of any cattle not tested and found to be free from the disease.

A penalty of a fine not to exceed \$500 or a jail sentence of not to exceed six months, is provided for violation of the proclamation.

Testing has been under way in that county for nearly a year and six of the sixteen townships have been inspected. The percentage of re-acting cattle is very low.

MICHIGAN HEREFORD BREED-ERS HOLD ANNUAL MEET

ICHIGAN Hereford Breeder's Association held their banquet and annual meeting at the Kerns Hotel, Lansing, January 30th during Farmer's Week.

The Hereford judging demonstra-tion called at the Stock Pavilion at 10 A. M. was well attended and new breeders were much interested in the good points brought out by Pro-fessor Brown and T. F. B. Sotham during the demonstration of M. A. C. Herefords, two sires four matrons and three steers being used in the

At six P. M. forty seven Hereford boosters set down to a banquet; Michigan Earliripe Hereford Beef being served for the occasion. After all had done justice to the ban-quet everybody joined in the singing of the Hereford song; as everybody on the program was present the in-structive talks were given and enjoyed by all present.

The officers elected for 1923 are Presidents, Frank H. Sanders, Eaton Rapids; L. Whitney Watkins, Manchester; E. V. Morgan, Boon; Warner E. Ramsey, Pt. Hope; and Earl C. McCarty, Bad Axe, Secy.-Treas.—Earl C. McCarty.

MASON CO-OPERATORS PROSPER PAST YEAR

T the annual meeting of the Co-A operative Shipping association held at Mason recently, the former officers of the association were all re-elected as follows: presi-dent, John Coy; vice president, H. W. Lyon; secretary-treasurer, Claude Edgar; manager, L. T. Lasenby. The report of the secretary showed an increase in business amounting to around \$74,000 during the past year. The total receipts of the assoclation for the year were \$312,069-.53, and the total disbursements were \$311,983.93, leaving a surplus on hand at the present time of \$874-.42, this having proved to be one of the best years the association has

SATURDAY FEBRUARY 17th.

VOL. X, NO. 18.

Being absolutely independent our columns are open for the discussion of any subject per-taining to the farming business.

"Hew to the line, let the ohips fall where they may!"

The Michigan BUSINESS FARME

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly Mt. Clemens, Mich.

\$1 PER YEAR

Desired "50-50" Sugar Beet Contract Arrives

Owosso Sugar Company First to Meet Growers' Fight for Square Deal Proposed Years Ago-Big Meeting at Durand Hears Good News

gress of the business of farming in Michigan NOTHER milestone in the proin Michigan was passed last week, when it was announced that an agreement had been secured by a committee representing the growers, with the president of the Owosso Sugar Company whereby that com-pany offers the growers the "50-50" contract so long desired.

Most growers in Michigan will well

remember the organization of the Michigan Sugar Beet Growers Asso-ciation three years ago and the vali-ant efforts made by that small body of enthusiasts, led by The Business Farmer, to secure recognition and an equitable contract from the beet

sugar manufacturers.

At that time the manufacturers, condemned the efforts as "radical," hinted that the men behind it ought to be deported as "undesirables" and refused point-blank to contaminate themselves by exposing themselves in any meeting, open or secret in which the representatives of the organized growers were present.

Since that time a lot of water has run under the mill! Sugar prices have been down in the basement, along with the farm prices of wheat, and a few other staples that fell with a sickening thud when old

man Mars was tumbled over.

Early in the fall of 1922, A. B.
Cook of Owosso, head of the Michigan Grange, who has long been a
leaders in the beet growers fight,
opened negotiations with C. D. Bell, Vice-President and General Manager of the Owosso Sugar Company, who had indicated an interest in the pro-posed "50-50" contract, if he could assured that the growers would be willing to run the risk of a split in losses, as well as a split in profits. Mr. Cook assured him that the farm er was calloused to taking the whole less and possible prospect of having to split the loss for a season would not drive the beet growers panicy.

Negotiations from this point progressed rapidly, because Mr. Bell, represented a sensible company which recognized that the future successful operation of their factory depended pretty largely upon a satis-fied body of growers. The Owosso fled body of growers. The Owosso company was the first in Michigan to lift their heads out of the sands into which they had shoved them like silly ostriches when the growers asso-ciation first loomed on the horizon seven years ago. C. E. Ackerman, of Durand, secretary and undaunted main-spring of the old beet growers association, worked with Mr. Cook, as did D. S. Stewart, St. Johns; Bert Mellinger, Ithaca; and Fred Holland, Swartz Creek.

Meeting Called at Durand

A meeting was called by C. E. Ac kerman, at Durand High School, on Thursday, February 8. Invitations to attend or send delegates to the meeting were mailed to the officers of every local association in the state. About 80 growers came, mostly from Shiawassee, Genesee, and Clinton counties.

Others at the meeting were A. B. Cook, Master of the State Grange, and Mr. Clark Brody, Secretary and General Manager of the Michigan State Farm Bureau. Mr. C. D. Bell, Vice President and General Manager of the Owosso Sugar Company, represented the manufacturing interests. Objects of the meeting were:

Objects of the meeting were:

(1) To announce to the growers
the granting of the "50-50" contract
by the Owosso Sugar Company for
which the Association has been working for the last seven years.

(2) To urge Association members to support the Owosso Sugar
Company and the "50-50" contract

THE "50-50" SUGAR BEET CONTRACT

As suggested by the Michigan Sugar Beet Growers Association and first accepted by the Owosso Sugar Company.

What it is—(three sections of the actual contract being offered Growers, which explains method in which the "50-50" contract

18. The following example is given to show the method above described:

If 160,000 net tons of beets are delivated by the growers to the company, from which 40,000,000 pounds of sugar are made, the extraction for net ton of beets will be 250 pounds of sugar. If the average market price of sugar is determined to be \$6.75 per hundred pounds, the value of sugar produced per net ton of beets will be \$16.88, and the grower will then be paid 50% or \$8.44 per net ton of beets delivered to the company.

14. The company agrees that substantial preliminary payments to growers shall be made per net ton of beets grown and delivated under this contract on the fifteenth day of each month, for beets received during the preceding month. Final payments to be made the grower shall be paid on the fifteenth of February, 1924.

For beets delivered and unloaded by the grower in beet sheds at the factory, an addi-al seventy-five cents (75c) per ton shall be added.

by signing up a liberal acreage, and to talk the "50-50" contract to all

(3) To arouse enthusiasm among the Association membership to work for "50-50" contracts from other companies, and to try to solve other problems of the growers

Beet Raising Conditions

Mr. Cook spoke on the beginning and growth of the sugar beet in-dustry in Michigan from the experi-ments conducted by the late Dr. Kedzie, of the Michigan Agricultural College. How this earnest professor convinced that the beet sugar industry was a promising one for Michigan, and after much effort interested capital in the beet sugar manufacture in the state. From a first factory at Bay City, the industry has grown rapidly to the present time at which there are 17 factories in the state. Some seven years ago the growers became dissatisfied with the prices they were receiving for their beets and sponsored by the Grange and Gleaners, the present state Growers Association was formed. At that time it was figured out that a "50-50" contract was the most just price arrangement between the manufacturers and growers. During the seven years since, the Association has worked toward this contract as an ideal. Finally the Owosso Sugar Company has granted their growers the long fought for "50-50" contract.

The contract is fair, continued Mr. Cook, just what the growers wanted and they should come across with a good acreage. Backed by the "50 contract, sugar beet raising is sure to be a permanently profitable industry. The "50-50" contract is the best one out, better than \$7.00 a ton with 6 cent sugar and \$1.00 a ton raise, for each cent raise in

Cook concluded by saying, "Give the "50-50" contract a trial this year, and watch results."

Mr. Ackerman, Durand, formerly Manager of the Beet Growers Asso-ciation, at present a member of the Board of Directors, carefully explained the "50-50" contract as follows: The grower delivers his beets and sees that the weights and tare is cor-rect. At the end of the season's run rect. At the end of the season's run of the factory, the total weight of beets brought is figured, and the total output of sugar. The total output is divided by the total beet tonnage, and the average yield of sugar per ton for the season found. The average price of sugar at New York for the months of Oct., Nov., Dec., and Ján., is figured, relying on daily market quotations of a reliable market reporting firm. Each grower is paid that average New York price for the four months for one-half the sugar yield from his beets. The pay received for the sugar is split 50-50 between the grower and manufacturer, hence the name "50-50" contract.

It is the simplest form of contract. The grower can follow market quotations and figure his own price as well as can the manufacturer. To insure fairness on the part of the manufacturer, the Owosso Sugar Company has offered to have a certified public accountant audit their books at the end of the seasons and furnish the Growers Association with a report of the tonnage of beets bought and the yield of sugar. The Growers Association also has permission to station men in the factories during the campaign to tally the sugar production.

Mr. Ackerman explained how it was decided seven years ago that a '50-50" contract would be most just. The grower and manufacturer have about equal investments. To grow a ton of beets, however, requires six times as much labor as is required to manufacture them. On the other hand, the manufacturer takes much greater risk than the grower. cannot turn his equipment to other uses as the grower can, and he has no other enterprises to fall back on in case the sugar business proves un-profitable. The factory has the by-products, which are sometimes, however, so low in price that it hardly pays to handle them.

The increase in price to the grower under the "50-50" contract over that under the old contract was pointed out. The old rate was \$7.00 a ton with sugar at 6 cents, and a raise of \$1.00 a ton for each rise of one cent in the price of sugar. The "50-50" rate for 6 cent sugar, assuming the sugar yield to be average, 250 lbs per ton, the sugar from a ton of beets would be worth 6 times 250 or \$15, of which the grower gets one half or \$7.50, an increase of 50 cents a ton over the old rate. Should sugar ton over the old rate. Should sugar increase in price one cent a pound, the "50-50" rate increase would be one-half of 1 times 250 or \$1.25, as against an increase of but \$1.00 under the old rate. So the grower is sure of at least 50 cents a ton more with six cent sugar, and \$1.25 in-crease per ton instead of \$1.00 for every cent increase over six cents.

Mr. Ackerman predicts that sugar certainly will not go much below 6½ cents this year, and may be higher. That will mean \$8.25 to \$8.50 a ton for beets under the "50-50"

"A better contract cannot be made than the "50-50" contract," declared Mr. Ackerman. "It is the right solu-tion of the beet price question!"

The grower furnishes his own labor under the "50-50" contract. The Owosso company will furnish labor at a 5% charge, making a 45-55 split on the sugar price. Or they will loan growers money at regular

interest rates to pay for labor if they wish to hire their own.

Mr. Ackerman spoke of the possibility of other companies coming across with a "50-50" contract. The Association should work for state-wide "50-50" contracts for growers. The Continental Sugar Company, operating three factories in southern Michigan, have already offered a "45-55" contract.

Mr. Ackerman doubts if the Michigan Sugar Company, operating seven large factories in the state, will come across with a "50-50" contract. The company is said to be controlled by eastern capitalists whose holdings are largely cane interests, and Mr. Ackerman believes the trust will dispose of its holdings in beet sugar factories and confine its capital to cane sugar rather than meet the growers demand for a "50-50" con-

Since the Owosso Sugar Company has taken the lead in offering "50-50" contracts, it is hoped other com-

panies will follow.

Mr. C. D. Bell, Vice President and General Manager of the Owosso Sugar Company, told the meeting of the manufacturer's side. Mr. Bell spoke of the efforts of the Association to get a '50-50" contract. "It seems to me that Mr. Cook or Mr. Ackerman have interviewed me seven times a day every day for the last seven years in behalf of a "50-50" contract, until we have finally given it to them." Mr. Bell, who is responsible for the "50-50" contract offer of the Owosso company, mitted that it seems to be the fairest basis for a growers contract. manufacturers will profit in that the growers will try to raise better beets with a higher sugar content, for they will be paid for the sugar which the factory gets out of their beets. A factory must be equipped with efficient machinery which will recover all the sugar from the beets before it can afford to offer the growers a it can afford to offer the growers a "50-50" contract. The Owosso Sugar Company spent \$350,000 last year for better machinery before they could offer a "50-50" contract. They now recover from 30% to 40% more sugar from the beets than by the old process. Mr. Bell concluded with the statement that the "50-50" contract will net the grower higher pay for his beets than any other contract out. beets than any other contract out.

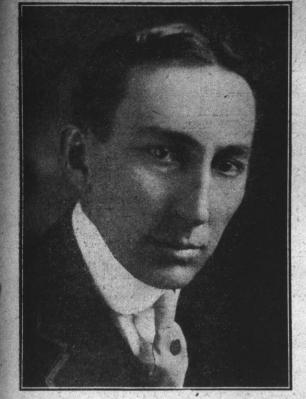
Mr. N. C. McBride, of Burton ooke on "Industrial Relations." spoke For farmers and maunfacturers to make a satisfactory bargain, there must be a profit for each. Mr. Mc-Bride believes that sugar beets is one of the most profitable crops at the present time. There is prospects of a sugar price rise, the "50-50" contract assures the growers a square and the tariff is satisfactory. Michigan consumes more sugar than she produces, so a market is assured. High freight rates will act only as a protection.

takes a chance of losing all his profit by selling when the market is low, but a beet grower with a "50-50" contract is not affected by price fluctuations. With a "50-50" contract, the growers and manufacturers vill have the best industrial relations, their interests will be the same, and they share equally in the profits. Beet growers with the the new contract now have the best assurance of a profitable crop they have had for years. Beets are a money making crop at present prices, and the prospects are that the prices will go higher. Mr. McBride concluded by assuring the growers that they would get a square deal from the Owosso Sugar Company, and recommended the "50-50" contract over any other.

Farmer's Week a Big Success

Big Round-Up of Farm and Live Stock Organizations at East Lansing Lauds Work Being Done at Agricultural College

By GEORGE IRVINE



DR. DAVID FRIDAY President Michigan Agricultural College and acknowledged as one of the foremost economists in United States.

LTHOUGH the fountain of youth has never been discovered, about four thousand farmers of Michigan found a fountain of inspiration and new ideas in the 1923 Farmers' Week at M. A. C. The Farmer's Week visitor this year found himself in the predicament of a spectator at a three ring circus, there was so much to see and hear that it was impossible to take in

The outstanding idea impressed the Farmer's Week throngs was the necessity for lower cost of production of farm products. Pre-ident David Friday, who needs no introduction to Michigan farmers, in his opening address predicted that there will be a steady decline in prices for at least a few years. His prediction was seconded by Dr. G. F. Warren of Cornell, the noted farm managment expert, in an address later in the week. If the farmers of Michigan hope to present they must Michigan hope to prosper, they must produce their crops, livestock, poult-ry products, milk, and fruit at a lower cost than now prevails. Mr. Friday believes there are wonderful opportunities for cutting the production costs of farm products in Mich-

An idea new to many farmers, that of a policy for agriculture for the state and nation, (see page 6 this issue) was the subject of President Friday's first address to the Farmer's Nicola and the subject of President Friday's first address to the Farmer's Nicola and Inchiance. Week audience. Michigan's policy for agriculture should be to lower cost of production by better methods and by the use of better seeds and livestock; to make farming suffici-ently renumerative and attractive to keep an intelligent and highly cultared class of people on the farms. A thorough survey of markets is also needed, Reclaiming of waste land, in President Friday's opinion, is a great waste of time and energy at the present time when land can be bought within ten miles of most of

the cities of the state for the value of the improvments on it. He also brands agitation for for a farm" "back to the farm" movement as foolishness. There are enough people

on farms now.

The vital importance of tuberculosis eradication was impressed on the livestock men by Dr. W. J. Kiernen of the Bureau of Animal Industry, Washington. This mat-ter was also discussed at several of the live stock association meetings, and resolutions were passed requesting an appropriation by the legislature to make possible the im-mediate resumption of this work which is now halted in Michigan for lack of funds.

Rep. Sidney Anderson of Minnesota, an agriin Congress, gave cultural leader some good advice on marketing farm products. Produce what the consumer wants, standardize your products, and market as near home as possible was Mr. And-erson's word to the farmers of Michigan.

Dr. Friday Discusses Taxation

Dr. Friday gave his viewpoint on that vital question of the hour, taxation, in a talk before the Michigan Press Association at the close of the week. We cannot hope for a lowering of taxes, in Mr. Friday's opinion, for we will continue to de-We cannot hope for a mand public improvements at the same rate as in the past. Mr. Fri-day's plan for a more just placing of the burden of taxation provides for the removal of the upper valuation limit in the corporation tax, the enactment of the gasoline tax, and a reduction in the general property tax of about 25%.

Regarding the gasoline tax President Friday said "I believe that the gasoline will pass, although it is not entirely equitable

Dr. Eugene Davenport, formerly Dean of Agriculture at the University of Illinois, told of the conditions necessary to a permanent agriculture. If the farmers of our country, are to be land owners, a farm must yield a sufficient income to provide the farmer a comfortable living and a large enough surplus to enable him to pay for the farm in twenty years. If farm incomes prevail below this level, the land will revert to a landowning class and will be farmed by a

tenant or peasant class.

How Russia, through changing conditions in the Black sea area, has lost her supremacy among nations for world export of wheat and other in the supremacy are also be a supremacy among nations. cereals, and how it has resulted in making the United States the greatest exporter of these products, was explained by Louis G. Michael, foreign agricultural economist for the

United States department of agriculture.

Mr. Michael's statements had the authority behind them of eight years research and agricultural experi-mental work in the countries of

southeastern Europe.
"When the countries of the world awake sufficiently to realize they are interdependent on one another in the economics of agriculture, then pros-perity for the world can be assured and the present state of unrest find an end," said Signora Oliva Agresti of Italy, in an address to some 5,000 farmers Thursday afternoon. The annual meeting of the Michi-

gan State Farm Bureau was held at the College during Farmer's Week, there being 126 voting delegates present. The only changes made in the officials of the Bureau were in the president's office, where Walter Phillips of Decatur succeeds James Nichol, and in the election of one new member to the Board of Direct-

new member to the Board of Directors, V. Gormely of Newberry.

The Housewives Congress for farm women was an important feature of the week. Several prominent women addressed the Congress on home making, clothing, and nutrition. An interesting talk by Bess Rowe, Field Editor, revealed the fact that most Editor, revealed the fact that most farmer's wives in Michigan are satisfied with their lot. The results of a contest Miss Rowe has recently conducted show that a large percent-age of farm women of Michigan are willing to have their daughters marry farmers. Milinary, clothing, and nutrition exhibits in the Wo-men's Building of the College were an additional source of interest and information to the women visitors.

The annual meetings of most of

livestock breed associations were held during Farmer's Week this year for the first time.

The County Agent's Conference boosted 100% attendance, this year. Talks by members of the agricultural faculty and of the research department gave them the latest information on college and experiment station activities. The County Club Agents were also out to a man for their Conference. State Leader R. A. Turner reviewed the work of the past year and outlined the program for 1922. for 1923.

Grain and Potato Shows

Two new Farmer's Week features this year were the grain show of the Michigan Crop Improvement Assocition, and a potato show. Both were well supplied with entries by state growers, and were prominent points of interest to the farmers.

The Horticultural Show displayed an even greater collection of apples than usual; thirty-eight were entered. Allegan county won first place in county collections. The Round-Up Poultry Show attracted considerable interest and a large number of entries from breeders of the state.

The central idea running through all exhibits this year was lower cost of production. The Michigan exhibit at the International Livestock and Grain Show at Chicago last fall were re-assembled by the Farm Crop Department as their exhibit for Farmer's Week. A large wall exhibit showing how Michigan cheapens production by growing alfalfa, it proved one of the most attractive of the ex-

A pig feeding exhibit showing the value of skim milk, by the Dairy Department attracted much interest. Two pens of pigs, one fed on corn alone and the other on corn and skim milk were of such difference in milk were of such great difference in size that it was almost unbelievable

that they were from the same litter.

A record attendance viewed the campus parade, Thursday afternoon, when the student body and all movable equipment and live stock appeared in a procession which extended for more than a mile and a The parade was the biggest and most impressive ever put on by the college, M. A. C. officials said.

Educational exhibits by every department of the college filled all available space. All the engineering shops, and laboratories were open to the visitors throughout the week. and student guides were ready to show and explain the equipment. All

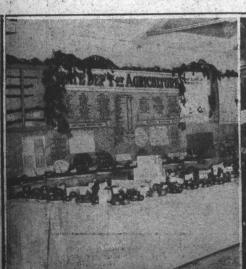
show and explain the equipment. All machinery was kept in operation most of the each day.

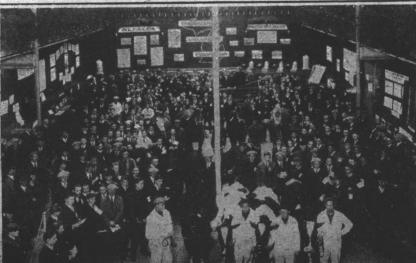
That Michigan 'ranks foremost among the several states of the union in agricultural education was plainly demonstrated, it was agreed by numerous leaders of agriculture who visited M A C during the fifth who visited M. A. C. during the fifth annual Farmer's Week. At the final check of the total registrations of visitors at the college during the week, it was reported that close to 4,000 names had been recorded.

The drop in attendance at the 1923 Farmer's Week of about 20% from that of last year's, due to the almost impassable roads in the central part of the state during most of the week, is by no means discouraging when we consider that the next largest Farmer's Week held this year, that of Iowa, had an attendance ranging from 300 to 800. Had road conditions been more favorable in the central part of the

state, it is believed the total registration this year would have far exceeded that of any previous year. The heavy registration of the first two days was attributed to the fact that the early comers are usually dependent on railway transportation while the attendance during the last few days is swelled by motorists who drive 40 or 50 miles to the exhibits and return the same day. It was a cut in the latter class of visitors which has tended to keep the total figures for attendance about equal to a year ago.
The Michigan Farmer's Week is

by far the largest and best annual state wide convention of farmers ever held; and is yearly becoming of greater benefit to Michigan farmers as a source of new ideas, broader views, and a better understanding of farming conditions.

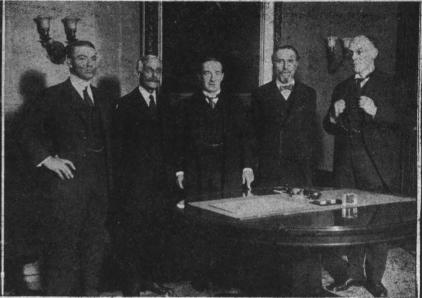






PICTURES FROM FAR AND NEAR





Philadelphia Mummers hold belated New Year parade.—Philadelphia paid belated tribute to King Momus by turning out a record crowd recently to view the postponed parade of New Year Mummers. Prizes were given away for the most fancy and comic displays. The above shows the prize-winning cape in the fancy division. Over 100 attendants were required to carry it.

British debt commission finally arrives.—After years of delay England finally sent over the above group whose duty it was to strike a bargain, the best they could drive with their Uncle Samuel. They found Uncle Samuel was a hard-hearted money lender, because he insisted on their paying the billions they owe us sometime, even if it takes forty or fifty years.





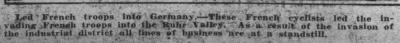


Youngest lawyer in New York State.—Miss Roberta Levy, who at the age of 21 holds the rare distinction of being the youngest lawyer in New York State. At present a member of a Brooklyn, N. Y. law firm, Miss Levy is pretty and up-to-date in every way. She is a graduate of the Brooklyn Law School, but had to wait 2 years for admission to the bar after graduation because of her age.

He refuses to be handicapped.—Karl Herman Uhlhaus, 72 years old, is a living example of optimism. Crippled by the loss of his hands, he was nothing daunted and began to learn to use his feet. He has taught hundreds of German crippled soldiers how to work without their hands. Photo shows him reading a letter which he holds with his feet.

A new photograph of the Duke of York.—He's a fine looking chap, is the second son of King George of England, and its no wonder the girls all like him. It has been rumored in London, where such things generally start, that the Duke of York is paying court to the charming Lady Elizabeth Boews Lyon and she may be using the title of "Duchess" as a prefix before long.







"League of Notions" winter carnival in New Hampshire.— To complete a perfect day of winter sports these merrymakers engaged in a fug-of-war contest and made it one of the features of the carnival held at Jackson. New Hampshire:

(Copyright Keystone View Company)

An Agricultural Program for an Industrial State

IT NO LONGER interests people greatly to be told that the farmer is dissatisfied. That fact has been beat in upon the public mind during the last eighteen months through both the spoken and the written word until we feel a little like an audience that has been listening to a snare drum sole. The farmer has had abundant cause for dissatisfaction. His prices have fallen more than the average. He finds it difficult therefore, to maintain his customary standard of living, to say nothing of meeting the debts he may have incurred in the optimistic days when Europe was ruining its monetary system and its financial standing to pay him, as well as other producers fabulous prices for the things it wanted.

What the country wants to know

What the country wants to know now is how the farmer is to be got out of his present situation and restored to prosperity. Not the prosperity of wartime, for that comes only several times in a century, but a stable and dependable state of well-being such as he enjoyed from 1898 to the outbreak of the war in 1914. American agriculture suffered more seriously during the depression of 1894 to 1896 than during these last two years. Yet in the spring of 1900 Ray Stannard Baker, who knew the agricultural situation well, opened his book Our New Prosperity with these paragraphs:

A witty Western writer, summing up the marvels of growth, expansion and prosperity of the year 1899 in the United States, made this telling climax: "And every barn in Kansas and Nebraska has had a new coat of paint."

As anyone who knows the great unpainted West of 1896 and 1897, with its bare, weather-stained houses, its dilapidated barns, its farm machinery standing out in the rain, its ruinous boom-towns, its discontented inhabitants crying out for legislation to relieve their distress this bit of observation raises a picture of improvement and smiling comfort such as no array of figures, however convincing, could produce.

Nor did agricultural prosperity cease with 1900. During the next fifteen years the gross value of farm products more than doubled. 1899 they amounted to \$4,700,000,-000; by 1914 they stood at \$9,800,000,000. The number of people engaged in producing this product had increased by only 10 per cent, while the volume of farm products increased by more than 30 per cent. Prices of farm products had risen more than 50 per cent, while the wholesale prices of other commodities had increased less than 30 per If the farmer was prosperous in 1900 he must have been well off indeed by the outbreak of the European war. The problem that interests the public is how this march of agricultural prosperity can be re-

The Farmer as Exporter

There are those who believe that agricultural improvement will come through political action. But the fact that the increase in well-being which preceded the fifteen years before the war came about without any political action whatever, casts doubt upon the efficacy of the legislative measures that politicians have been willing to enact for the farmer's benefit. It is dawning upon the rural community that political relief can aid him but slightly. In the long run some benefits will undoubtedly accrue from the legislative measures that have been passed, but immediately they will avail the farmer little. Neither badgering speculators, nor regulating packers, nor providing credit facilities that enable the farmer to borrow money to be repaid in the far-distant future, will help him materially.

The root of the farmer's immediate difficulty is not to be found in the nature of our credit structure; nor in the speculative markets that have developed out of the experience of the past for the marketing of his produce; nor in the nature of the institutions that manufacture and distribute our meat products. His

By DAVID FRIDAY

PRESIDENT MICHIGAN AGRICULTURAL COLLEGE
(Reprinted from the Saturday Evening Post, Copyright 1923 by the Curtis Publishing Co.)

IF you are fed-up on the clap-trap mouthings of cheap politicians who pose as willing Moses to lead the farmer out of the wilderness into which their business was forced this past two years, read this article by Dr. Friday.

If you believe, as The Business Farmer does, that there has been too much brainless legislation and too little real business action proposed by the leaders in the farming business, you'll like Dr. Friday's article.

Those who would rather listen to flag-wavers or read wonderful theories of a rarming millineum, which sound nice, are swallowed easily, but only serve to get us deeper in the hole, will not like what Dr. Friday says, because he writes without gloves on.

If you want to know what has happened and what is going to happen, particularly in Michigan, you'll consider this article, which we have reprinted in full, worth its weight in gold to the industry of agriculture.

present trouble arises rather out of the disheveled industrial situation in those foreign countries that have bought his product heretofore. It was the foreign situation which brought about the fall in prices in 1920 and 1921. Almost simultaneously industrial depression struck our home industry. The consequent fall of productive activity and of purchasing power among our industrial groups accentuated the downward movement of agricultural prices.

Nor does production for the for-eign market promise the farmer much for some years to come. In the disheveled state of European industry agricultural production is more nearly normal than are manufacturing and mining. Agriculture differs from other industries in one important respect: Business depression always reduces the output of nanufactures, mines, industrial con-struction and building operations, but it has practically no effect upon the acreage of crops planted or upon the average yield. We have seen again during the last few years that the farmer does not lower either his acreage or his activity when prices are falling and times are hard. At such times he tries to make up fall in prices. Those of us who lived through the depression of the '90's as farmers flouted the idea so commonly put forth during the winter of 1920-21 that agricultural acreage and output would be reduced because of the price decline. Nothing of the sort happened; it never

European agriculture is not different from ours in this respect. The war and proceeded, with their famflies, and with their sons who had returned from the armies and from the disturbed industrial centers, to till their fields. These were not so fertile as they had been in 1913 and 1914; the work animals were poor-er; the quality of the seed had been deteriorated but the farmer pro-ceeded to utilize his labor and re-sources to the full. The result is a more nearly normal state of production in agriculture than in other lines of industry. Europe is not so well supplied with agricultural products as she was before the war or as she would like to be. But she is better supplied with these products than with the manufactures she must send us in payment if she is to buy farm produce in America. Europe is in no position to large quantities of American agricultural products at high prices. produce a surplus for export which must be sold on the European market, and that portion of the product sold at home will not bring a high er price than that which goes abroad.

In view of this situation, one of the means for getting the farmer out of trouble is to take him as far as possible off the international market. For though the home market suffered from the business depression that extended from the latter part of 1920 to the spring of 1922, the purchasing power of the people has now been restored with the revival of industry. Never before has the nation had such activity in the building trades as during the past year. This bids fair to continue for

duction of automobiles defeats al previous records and industry generally is enjoying a revival of pros-perity. Though this may slacken somewhat after the building boom has spent itself, there can be no question of its existence at present. Large production, complete employ-ment of labor, rising profits, wages and prices are the order of the day. The best evidence available indicates that the total wages and salaries paid by government and by indus tries other than agriculture amounted to \$38,000,000,000 for the year 1920. They fell in 1921 to \$30,000,000,000. They cannot be less than \$33,000,000,000 for the year 1922, and will probably be larger in It is doubtful whether these payments were ever as large as \$18,-000,000,000 in any prewar year. The purchasing power of the inhabitants of our cities and towns is, therefore, adequate to absorb a large volume of agricultural products at prices materially higher than those of the prewar period.

Purchasing Power of Home Markets

Nor do wages and salaries constitute the entire income of the people living in cities and towns who buy and consume the products of our farms. They are less than three-quarters of that income. Rents, interest and profits make up another \$12,000,000,000 of income for the urban dwellers. When this is added to the wages and salaries we have a total spending power in our cities and towns of \$45,000,000,000 for 1922. If prosperity continues for 1923 it will amount to even more. As a consequence of this revival of purchasing power among our people the gross value of the farmers' product will be almost fifteen billion dollars for 1922 as against twelve and one-third billions in 1921, and less than ten billions in 1914.

Our town dwellers have, therefore, \$7,000 of spending power for each of the six and a half million farms in the United States. No other agricultural population in the world has within its own nation any market remotely comparable with this in purchasing power. In states like Michigan, which have become predominantly industrial during the last decade, the urban purchasing power is even larger. Though the United States as a whole has two and one-third persons living in town for every one on the farm. Michigan has three and one-third. The townspeople of that state have a net income which amounts to more than \$11,000 for every one of its 196,000 farms. Besides this they have access to an urban population of 3,000,000 people in Hilnois and Wisconsin through the cheap transportation by water. The total income which the farmer of Michigan may tap by venturing less than 100 miles outside the boundaries of his state is adequate to consume his entire product at prices that would make him prosperous.

him prosperous.

The problem of getting the Michigan farmer out of difficulty and establishing him once more in a state of prosperity has for its setting this disparity between urban and rural population in the state and this

growth of purchasing power among our industrial population. Neither the foreign situation nor the high freight rates that now prevail on our American railroads need cern him greatly. If he will adjust his production to the needs of this consuming population the high transportation costs may serve him as a' protective tariff wall. For Michigan, like our Eastern industrial commonwealths has now a net import of farm products. No one can come in-to this market to compete with the farmers unless he pays the prevailing freight rates. The great mass of our producers for the home market can reach the consumer over good roads with motor trucks. The automobile with motor trucks. The automobile is one of the few things that can be bought more cheaply now than in the prewar period. In this manner the farmer avoids paying a wage for ratiway labor and a price for coal con-sumed which are twice as high as in the prewar period. The farmer who grows wheat finds the international market impover shed and has been forced to sell for a dollar a bushel or less The grower of potatoes finds the national market overcrowded this year. But the grewers of early tomatoes for the local market were receiving \$2.50 a bushel when the grower of ever early potatoes was re-

ceiving only thirty-five cents.

The product of Michigan's vineyards was five or six tons of grapes
an acre. The price was sixty dollars a ton.

The hope of our Michigam farmer must lie, then, in the development of production for his home markets. Thus will he escape at once both the ruinous competition of an impoverished foreign market and the high freight rates that are necessary to cover the labor and fuel costs that have been saddled upon railroads and to provide the investors who own these transportation systems with a paltry five per cent return.

The same situation prevails in many of our other states that have a mixed industrial and agricultural population. In the New England and Middle Atlantic States we find almost eleven persons in cities and town for every one on the farms. Ohio has four; Illinois five; and Deleware and Maryland, including the District of Columbia, have three and one-third and five and three-quarters respectively. The Pacific States have four and one-half. In the remaining states there are, on the average, only one and one-fifth townsfolk for each person on farms. Thirteen states have more people on farms than in cities or towns.

Adjustments Difficult

This situation is of such recent development—in the Great Lakes basin at least—that agriculture has only partly adjusted itself to the new conditions. Twenty years ago the population on farms and in urban communities in Michigan almost evenly balanced. The towns had one and a quarter persons for every one on the farm. In 1910 the ratio had risen to one and three-quarters and now it is three and a third. have had an industrial revolution in the Middle West since 1900, and Michigan has enjoyed more than its share of it. The wages and salaries paid by manufacturers in the state have multiplied by ten during the last two decades. Twenty years ago the income of the total population of the cities and towns of the state amounted to less than \$2,000 for each farm; in 1910 it had become almost \$4,000 and today it is \$11,000. Yet during these twenty years the acreage of a crop like strawberries has fallen 20 per cent, when it should have doubled.

The manner in which the farming industry is organized always makes adjustment to a rapidly changing market situation a slow process. The number of people engaged in Michigan agriculture approximates 350,000. There are 196,000 farms. We have, therefore, less than two persons working on the farm. What shall be produced and what methods of production shall be employed depend upon the decision of almost 200,000 men, each one of whom is not only manager of the farm but is ordinarily its principal laborer as

well. It is inevitable that a man chared with the aduous work of the field should rarely possess either the knowledge of the market or the managerial sense of necessity for adjustment and change which characterizes industries like manufacture.

This difference in the organization

This difference in the organization of agriculture and other industries is one of the chief facts that underlie what is commonly known as the agricultural problem. It is the principal reason for the failure of agriculture to reduce its output in times of de-pression and falling prices. When curtailment of demand has reduced the price of manufactured products to the point where they no longer cover the cost of labor and materials and leave a profit, the manager ceases hiring labor and purchasing materials until the curtailment in the output of commodities has raised their wides commodities are selected. their price once more above cost, or until wages and material have fallen far enough to make production at a profit possible once more. profit possible once more. But the farmer is at once capitalist, manager and laborer. He cannot dismiss himself without a net loss. He purchases few materials produced by others than himself. His farm is quite as much a tool which he utilizes to sell his labor as it is a capital investment which might yield its owner a living without working.

Diversity of Output

It is clear that the individual farmer cannot undertake any adequate analysis of the market situation which will keep him informed of the varying opportunities it affords. Our state contains cities that have grown from 13,000 people to more than 90,000 during the last twenty years. It is small wonder that production has not adjusted itself to the changed demand that this growth has brought. The co-operative market-ing organizations in the agricultural field have grown largely out of this necessity for adequate market analysis. They perfirm their most useful function in keeping this analysis up to date and in combining the producers into a compact organization such that the volume of output may be adjusted to needs. The Department of Agriculture and the extension divisions of agricultural colleges must assist in this task in all our industrial states

The inflexibility of agricultural production which grows out of the nature has been supplemented by another set of forces which impeded the adjustment of production to mar-kets. From 1915 on, the European demand for American food products carried the prices of cereals, meats and other animal products, such as condensed milk, to unheard-of heights. Even at these high prices Europe stood ready to take all we could supply. In an industry where the manager owned his plant and equipment and furnished more than half the labor, there was no necessity for adjusting production to the changed situation. War and war prices were a sedative which made him content to remain in old paths. Transportation costs, controlled as they were by public authorities, long lagged behind the general price level, as did the level of wages. Today agriculture in the Middle West faces a situation that gives little promise of increased prices for the commodities that enter the international market. Transportation rates are high, and relief must be attained by removing the farmer as far as possible from the international market.

The extent to which this can be done in any state depends upon one further factor—that of diversity of output. Fortunately Michigan is in an enviable position in this matter. an envisible position in this matter.

It grows all the important cereals except rice, and all the forage crops.

It is among the first few states in its output of small fruits. It produces in commercial quantities all the tree fruits except citrus fruits. It is one, fruits except citrus fruits. It is one of the principal producers of both beans and sugar beets. It has a large production of dairy products, and is not unsuited to the production of meats. In such a state there is no need to dispair because the foreign market is poor or because the cost of transporting agricultural products to market is burdensome. What is needed is a thorough analysis of the market possibilities and an adaptation of production to the local demand. To this end the Agricultural College and all organized forces of (Continued on page 18.) יויריי ונון וווווןן

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WHEN WRITING ADVERTISERS MENTION M. B. F.

The Hunted Woman Croup

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

SYNOPSIS

SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache, the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terriffic blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous, the Blacktons, at whose place they are to stay during their stop. Later they secure horses and supplies and start off into the wilderness accompanied by Donald MacDonald who believes he knows where the grave of FitzHugh is located.

(Continued from Feb. 3 issue)

E doesn't know whether he buried his wife or left her her lying on the sand of the cave. He doesn't know floor of the cave. He doesn't know how he got out of the mountains. But he did, and his mind came back. And since then, Joanne—for a matter of forty years—his life has been spent in trying to find that cave. All those years his search was unavailing. He could find no trace of the little hidden valley in which the treasure-seekers found their bonanza of gold. No word of it ever came out of the mountains; no other prospector ever stumbled upon it. Year after year Donald went into the North; year after year he came out as the winter set in, but he never gave up hope.

"Then he began spending the winter as well as the summer in that forgotten world—forgotten because the early gold rush was over, and the old Telegraph trail was travelled more by wolves than men. And al-ways, Donald has told me, his be-loved Jane's spirit was with him in loved Jane's spirit was with him in his wanderings over the mountains, her hand leading him, her voice whispering to him in the lonliness of the long nights. Think of it, Joanne! Forty years of that! Forty years of a strange, beautiful madness, forty years of undying love, of faith, of seeking and never finding! And this spring old Donald came almost to the end of his quest. came almost to the end of his quest. He knows, now; he knows where that little treasure valley is hidden in the mountains, he knows where to find the cave!"
"He found her—he found her?"

she cried, "After all those years—he found her?"

"Almost," said Aldous softly.
"But the great finale in the tragedy
of Donald MacDonald's life is yet
to come, Ladygray. It will come when once more he stands in the soft white sand of that cavern floor, and sometimes I tremble when I think that when that moments comes I will be at his side. To me it will be terrible. To him it will be—what? That hour has not quite arrived. It happened this way: Old Donald was coming down from the North on the early slush snows this spring when he came to a shack in which a man was almost dead from smallpox. It was DeBar, the half breed.

"Fearlessly McDonald nursed him. He says it was God who sent him to that shack. For DeBar, in his feverish ravings, revealed the fact that he had stumbled upon that little Valley of Gold for which MacDonald had searched through for forty years. Old Donald knew it was the valley, for the half-breed raved of dead men, of rotting buckskin sacks of yellow nuggets, of crumbling log shacks, and other things the mem-ories of which stabbed like knives into Donald's heart. How he fought to save that man! And, at last he

succeeded. "They continued south, planning to outfit and go back for the gold. They would have gone back at once, but they had no food and no horses. Foot by foot, in the weeks that fol-lowed DeBar described the way to the hidden valley, until at last Mac-Donald knew that he could go to it as straight as an eagle to its nest.

When they reached Tete Juane he came to me. And I promised to go with him, Ladygray—back to the Valley of Gold. He calls it that; but I—I think of it as The Valley of Silent Men. It is not the gold, but the cavern with the soft white floor that is calling us."

In her saddle Joanne had straight-ened. Her head was thrown back, her lips were parted, and her eyes shone as the eyes of Joan of Arc must have shone when she stood that day before the Hosts.

"And this man, the half-breed, has sold himself—for a woman?" she said, looking straight ahead at the bent shoulders of old MacDonald.

"Yes, for a woman. Do you ask me why I go now? Why I shall fight, if fighting there must be?" She turned to him. Her face was

a blaze of glory.
"No, no, no!" she cried. "Oh,
John Aldous! if I were only a man,
that I might go with you and stand with you two in that Holy Sepulchre —the Cavern—— If I were a man, I'd go—and, yes, I would fight!"

And Donald MacDonald looking back, saw the two clasping hands across the trail. A moment later he turned his horse from the broad road into the narrow trail that led over the range.

CHAPTER XV

From the hour in which she had listened to the story of old MacDonald, a change seemed to have come over Joanne. It was as if she had risen out of herself, out of whatever fear or grief she might have pos-sessed in her own heart. John Al-dous knew that there was some deep significance in her visit to the grave under the Saw Tooth Mountain, and that from the beginning she had been fighting under a tremendous mental and physical strain. He had expected this day would be a terrible day for her; he had seen her efforts to strengthen herself for the approaching crisis that morning. He believed that as they drew nearer to their journey's end her suspense and uneasiness, the fear which she was trying to keep from him, would, in spite of her, become more and more evident. For these reasons the change which he saw in her was not only delightfully unexpected but deeply puzzling. She seemed to be under the influence of some new and absorbing excitement. Her cheeks were flushed. There was a different poise to her head; in her voice, too, there was a note which he had not noticed before.

It struck him all at once, that this was a new Joanne—a Joanne who, at least for a brief spell, had broken the bondage of oppression and fear that had fettered her. In the narrow trail up the mountain he rode behind her, and in this he found pleasure even greater than when he rode at her side. Only when her face was turned from him did he dare surrender himself at all to the emotions which had transformed his soul. From behind he could look at her, and worship without fear of discovery. Every movement of her slender, graceful body gave him a new and exquisite thrill; every danc-ing light and every darkening shadow in her shimmering hair added to the joy that no fear or apprehension

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could overwhelm without him now. Only in these wonderful moments, when her presence was so near, and yet her eyes did not see him, could he submerge himself completely in the thought of what she had become to him and of what she meant to

During the first hour of their climb over the break that led into the valley beyond they had but little opportunity for conversation. The trail was an abandoned Indian path, narrow, and in places extremely steep. Twice Aldous helped Joanne from her horse that she might travel afoot over places where he considered dangerous. When he assisted her into her saddle again, after a stiff ascent of a hundred yards, she was panting from her exertion, and he felt the sweet thrill of her breath in his face. For a space his happiness obliterated all thoughts of other things. It was MacDonald that brought them back.

They had reached the summit of the break, and through his long brass telescope the old mountaineer was scanning the valley out of which they had come. Under them lay Tete Jaune, gleaming in the morn-ing sun, and it dawned suddenly uping sun, and it dawned suddenly upon Aldous that this was the spot from which MacDonald had spied upon his enemies. He looked at Joanne. She was breathing quickly as she looked upon the wonder of the scene below. Suddenly she turned and encountered his eyes.

"They might, follow?" she called.

"They might-follow?" she asked. He shook his head.

"No danger of that," he assured her.

MacDonald had dismounted, and now he lay crouched behind a rock, with his telescope resting over the top of it. He had leaned his long rifle against the boulder; his huge forty-four, a relic of the old Indian days, hung at his hip. Joanne saw these omens of preparedness, and her eyes shifted again to Aldous. His .303 swung from his saddle. At his .303 swung from his saddle. At his waist was the heavy automatic. She smiled. In her eyes was understanding, and something like a challenge. She did not question him again, but under her gaze Aldous flushed.

A moment later MacDonald closed his telescope and without a word mounted his horse. Where the descent into the second valley began he paused again. To the north through the haze of the morning sun gleamed the haze of the morning sun gleamed the snow-capped peaks of the Saw Tooth Range. Apparently not more than an, hour's ride-distant rose a huge red sandstone giant which seemed to shut in the end of the valley. MacDonald stretched forth a long arm in its direction.

"What we're seekin' is behind that mountain," he said. "It's ten miles from here." He turned to the girl. "Are you gettin' lame Mis' Joanne?"

Aldous saw her lips tighten. "No. Let us go on please."

She was staring fixedly at the sombre red mass of the mountain. Her eyes did not take in the magnificent sweep of the valley below. They saw nothing of the snow-capped peaks beyond. There was something wild and unnatural in their steady gaze. Aldous dropped behind her as they began the gradual descent from they began the gradual descent from the crest of the break and his own the crest of the break and his own heart began to beat mare apprehensively; the old question flashed back upon him, and he felt the oppression that once before had held him in its grip. His eyes did not leave Joanne. And always she was staring at the mountain behind which lay the thing they were seeking. Her face hed they were seeking. Her face had not paled. Its coulo, was like the hectic flush of a fever. Her eyes alone betrayed her; their strange in-tensity—the almost painful steadi-ness with which they hung to the distant mountain and a dread of what was to come seized upon him. Again he found himself asking questions which he could not answer. Why had Joanne not confided more fully in him? What was the deeper significance of this visit to the grave, and of her mission in the

mountains?

Down the narrow Indian trail they passed into the thick spruce timber. Half an hour later they came out into the grassy creek bottom of the valley. During that time Joanne did not look behind her, and John Aldous did not speak MacDonald turned north, and the sandstone mountain was straight ahead of them. It was not like the

other mountains. There was something sinister and sullen about it. It was ugly and broken. No vege-It was ugly and broken. No vegetation grew upon it, and through the haze of sunlight its barren sides and battlemented crags gleamed a dark and humid red after the morning mists, as if freshly stained with Aldous guessed its effect upon Jo-anne, and he determined to put an end to it. Again he rode up close beside her

"I want you to get better acquainted with old Donald," he said. "We're sort of leaving him out in the cold, Ladygray. Do you mind if I tell him to come back and ride with you for a while?"

"I've been wanting to talk with him," she replied. "If you don't

"I don't," he broke in quickly "You'll love old Donald, Ladygray. And, if you can, I'd like to have you tell him all you know about—Jane.
Let him know that I told you."
"I will," she said.
A moment later Aldous was telling
MacDonald that Joanne wanted him.

The old mountaineer stared. He drew his pipe from his mouth, beat out its half-burned contents, and thrust it into its accustomed pocket.
"She wants to see me?" he asked.

"God bless her soul—what for?"
"Because she thinks you're lone-"Because she thinks you're lonesome up here alone, Mac. And look
here"—Aldous leaned over to MacDonald—"her nerves are ready to
snap. I know it. There's a mighty
good reason why I can't relieve the
strain she is under. But you can.
She's thinking every minute of that
mountain up there and the servery mountain up there and the grave behind it. You go back, and talk. Tell her about the first time you ever came up through these valleys—you and Jane. Will you, Mac? Will you tell her that?"

MacDonald did not reply, but he dropped behind. Aldous took up the lead. A few minutes later he looked back, and laughed softly under his breath. Joanne and the old hunter were riding side by side in the creek bottom, and Joanne was talking. He looked at his watch, He did not

look at it again until the first gaunt. red shoulder of the sandstone mountain began to loom over them. An hour had passed since he left Joanne. Ahead of him perhaps a mile distant,

was the cragged spur beyond which according to the sketch which Keller had drawn for him at the engineer's camp—was the rough canyon leading back to the basin on the far side of the mountain. He had almost reached this when MacDonald rode

up:
"You go back, Johnny," he said,
a singular softness in his hollow
voice. "We're a'most there."

voice. "We're a'most there."

He cast his eyes over the western
peaks, where dark clouds were shouldering their way up in the face of the sun, and added: "There's rain in that. I'll trot

on ahead with Pinto and have a tent ready when you come. I reckon it can't be more'n a mile up the canyon."

"And the grave, Mac?"
Is right close to where I'll pitch
the tent," said MacDonald, swing-

the tent," said MacDonald, swinging suddenly behind the pack-horse Pinto, and urging him to trot. "Don't waste any time, Johnny."
Aldous rode back to Joanne.
"It looks like rain," he explained.
"These Pacific showers come up quickly this side of the Divide, and (Continued on page 29.)

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NOTIFY HIGHWAY COMMISSION-ER REGARDING CULVERT

Who should I notify if a culvert in a quarter line is out, making the road unfit to travel? Same has been out all summer. I have notified the Highway Commissioner of same but he fails to repair same.—C. E. R., Sanilac, Michigan.

The statute provides that it is the duty of the Highway Commissioner to see that the road is kept in reasonable repair, safe and fit for pub-lic travel and in case he neglects this duty, after receiving your notice you should then bring this matter to the attention of the township -H. H. Partlow, State Highway Department.

PAYING TUITION

Does the district have to pay the tuition for a child if the application was filled out and filed with the director on or before the fourth Monday of June and the child remained in the district until November 16, 1922? At this time the parents moved to Lake View, Michigan, but the child was attending Owosso high school.—J. W. S., Lake View, Mich. -The question apparently arises because the parent is now living in a school district that maintains a legal high school and if the child were at home no tuition would be chargeable.

Section 1 of the tuition law, which is Section 5380 of the compiled Laws of 1915, found on page 320 of the 1921 school laws, provides in part as follows:

"The district board or board of education of any school district which does not maintain a high school shall have authority and is hereby required to vote a tax suffic-ient to pay the tuition to any high school which is approved by the superintendent of public instruction of any children of school age residents of said district at the time of giving notice as hereinafter provided.

The parents of the child in this case were living in a district which did not maintain a legal high school at the time of making application for tuition. The statute quoted pro-vides that if that is the case the district must pay the tuition for that school year. The fact that the par-ent may move into a district that maintains a high school would not relieve the district where the appli-cation was filed from the payment of high school tuition, if the parent continued to send his child to another high school.

This construction of the tuition law is in accordance with justice both from the standpoint of the child and the district. If a child has entered high school it might cause an interference with his work if he were required at any time if the parents moved into a high school district, to change high schools. It might be also that the child could hetter attend some other high school than the one in the district where his parents had moved. There might be several reasons why this would be true. Further, if the parent is living in the district at the usual time of making application the child's name is on the census list of the district and that district will draw primary money for the follow-ing year, regardless of where the par-ent may move. If the parent has any property in the district it would be on the assessment roll and subject to tax. You will see, therefore, that there is no hardship to the district because it is obliged to pay the tuition.—W. L. Coffey, Dept. of Public Instruction.

LINE FENCE DISPUTE

I own a farm along the corpora-tion line of the village of Portland. There is no street laid out along the line. I and the man I bought of, had the County Surveyor, survey it out. There are corner stakes at each end one-half mile apart. It is on a section line. Then I stretched barb-ed wire and fastened it to trees about a rod from the line on my farm.

Now a party has bought an acre of land on contract. The place has been worked a good many years, and

plowed to the line. Now he has grubbed out the extra land, and claims the fence is the line, and has cut the trees the wire was fastened has planted corn right up to the fence so that my stock can reach through the wires and eat it. Would those wires be called a line fence? How long would it have to be there to be an established line fence? I have filled in between the trees with stakes and posts to hold stock. I put the wires all along the corresponding line. Would I have to deal with the party on the place or the man that holds the deed?—C. V. P., Portland, Mich.

—You do not state in which one worked and claimed the rod of fence to the corporation line. To gain title by adverse possession to the rod strip of land it requires something more than just laying idle and growing up to weeds. If your title by deed goes up to the section line it would require some overt act claiming title to the strip adverse to the title by deed and it must be continuous and without interruption for 15 years. two strand wire fence may be a line fence but not a lawful fence. A line fence is the line between two properties and may be marked by any line even though that line may not stand the test of a lawful fence. If you claim to own the strip of one rod of land and another has taken possession and not necessarily with the man who owns the adjacent land. His contract to the purchase of one acre may not include the strip but only to the section line. I think you will need to consult with a good attorney to explain to him just what the facts are so he can tell you what your rights are.-Legal Editor.

MUST BUILD SHARE OF LINE FENCE

I own an apple orchard and it is open on two sides to public high-ways that is no fence. There are two farms that join to my farm on the two sides. I have no stock and no need for a fence. Does the state require me to share the expense of fencing?—J. H., Holland, Mich.

-Chapter 68, of the compiled laws of 1915 provide a method whereby abutting property owners of improved lands may compel you to con-struct and maintain your portion of the line fence between your orchard and the adjoining property owner. There is nothing in the law however that requires you to construct highway fences on the two sides of your orchard abutting the public highway.—H. H. Partlow, State Highway Dept.

COMMON LAW MARRIAGE
I understand that if a couple
live together as man and wife and
pass for the same, it is called a
common law marriage after a few years say 10 or 12 years. In case such couple should separate, does a divorce have to be obtained before the parties are free same as in a lawful marriage? Can a common law wife claim any of a man's property if he has no other heirs?—C. D. H., Muskegon, Mich.

-The law is that if a couple live together for a period of two years or more and hold each other out to the world as man and wife, it is a common law marriage and it would be necessary for either of them to secure a divorce; their children would be legitimate and the wife could inherit propert y from the man or the man from the woman.-C.

LAND CONTRACT

In regard to a land contract, what right has the second party to the timber on the same farm. Here is the condition of the contract: "It is expressely agreed as a part

of the consideration that first parties may have their fire-wood for their own domestic use from the premises herein conveyed for a period of 15 years from the date hereof, they to cut the same from dead and down or dying timber and to clean up tops and leave the premises in a good and workmanlike manner." There is not anything stipulated for sec-









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ond party. The first party goes in and takes his first choice of the down timber, cuts some that would make lumber and cuts about 25 cerds of wood when it was customary to cut about 15 cords the first year, even leaving some two year old wood in the woods. What can second party have to say?—E. W., Woodbury,

-If the purchaser in a land contract takes possession and occupies the land under the terms of the contract, and is not in default in his payments, he has the right to the use of the timber on such land, so long as he does not cut and sell it in excessive quantities so as to amount to waste. He may hold the seller to his contract to use only such wood as is required for domestic purposes, and may recover from him for any wood in excess of this amount, or in vio-lation of any terms of the contract. The fact that the seller takes the

choice of the down timber does not alone make him liable, however, so long as he is permitted by the contract to cut down such timber.

—Assistant Legal Editor.

EXPENDITURE OF COUNTY
ROAD FUNDS
I would like to know through the

columns of your paper if the Board of County Road Commissioners have the authority to spend the good road money for other purposes other than to construct and maintain high-ways?—A. E., Waltz, Michigan.

The county road law specifically provides for the purchase of right of ways for relocations of highways, for the purchase of lands for gravel, borrow or other necessary material to be used on the highway, also they are given authority to pay for the services of a Deputy County Clerk when such clerk is necessary by reason of the volume of work. They are also given specific authority to employ such servants and laborers as may be necessary and may purchase such machines, tools, appliances and materials as shall on their judgment be necessary or conveni-for the proper carrying on of their

The statute further provides that the Board of County Road Commissioners shall have all the authority in respect to roads, bridges, culverst, in respect to roads, bridges, culverst, etc., which is vested in highway offices in townships and the statute specifically provides that township commissioners shall provide a suitable place for the storage and proper housing of all tools, implements and machinery that are owned by the township. It would therefore follow that Boards of County Road Commissioners are vested with the authority to purchase land and erect the necessary buildings for housing and storage of their equipment and for making necessary repairs incident to such equipment. dent to such equipment.

I believe this constitutes their au-

thority for the expenditure of money with the understanding of course that the superintendents, engineers and the construction of bridges are included in the above — " " plow, State Highway Department.

ANYONE KNOW WHERE TITUS CHAULKLIN IS?

Some time ago we published a request from Mrs. Bergman, R. 1, Gulliver, Michigan, in this department. She desired information regarding her nephew, Titus Chaulklin, whose home address is Ensign, Mich. In June, 1922, he worked for a motor company in Muskegon. She received a letter from him at that time and he advised he was about to move. he advised he was about to move. Since that time none of his relatives have received a word from him. They are afraid something has happened to him. He is 5 feet 5 inches tall, 21 years old, and dark complexioned. His mother is nearly heart broken and any word from a reader who knows anything about where the boy is will be appreciated. Address boy is will be appreciated. Address your letters to Mrs. John Bergman, R. 1. Gulliver, Michigan.

DEPARTMEN EDITED BY J. HERBERT FERRIS

FOR YOUR PROTECTION!

THE following Fire Insurance Underwriters rules should be pre-served and studied. The proper installation of a radio set is not a fire hazard—but if the rules are not followed, you may lose your insurance, no matter what the cause of fire may be!—Radio Editor.

FOR TRANSMITTING STATIONS

Antenna g.—Antennas outside buildings shall not cross over or under electric light or power wires of any circuit of more than six hundof any circuit of more than six nund-red (600) volts or railway trolley, or feeder wires, nor shall it be so located that a failure of either the antenna or of the above mentioned electric or power wires can result in a contact between the antenna and such light and power wires.

Antennas shall be constructed and installed in a strong and durable manner and shall be so located as to prevent accidental contact with light and power wires by sagging or swinging.

Splices and joints in the antenna span shall, unless made with ap-proved clamps or splicing devices, be soldered.

Lead-in Wires-h-Lead-in wires shall be of copper, approved copper-clad steel or other metal which will not corrode excessively and in no case shall they be smaller than No. 14 B. & S. gage.

Antenna and counterpoise con-ductors and wires leading therefrom to ground switch, where attached to buildings, must be firmly mounted five (5) inches clear of the surface of the building, on non-absorptive insulating supports such as treated wood pins or brackets equipped with insulators having not less than five (5) inch creepage and air-gap distance to inflammable or conducting material. Approved suspension type insulators may be used.

i.—In passing the antenna or counterpoise lead-in into the building a tube or bushing of non-absorptive material shall be installed so as to have a creepage and air-gap distance of at least five (5)

porcelain or other fragile material is used it shall be installed so as to be protected from mechanical injury. A drilled window pane may be used in place of bushing provided five (5) inch creepage and airgap distance is maintained. inches to any extraneous body.

Protective Grounding Switch— j.—A double-throw knife switch having a break distance of four (4) inches and a blade not less than one-eighth (%) inch by one-half (½) inch shall be used to join the an-tenna and counterpoise lead-ins to the ground conductor. The switch may be located inside or outside may be located inside or outside the building. The base of the switch shall be of non-absorptive insulat-ing material. Slate base switches are not recommended. This switch must be so mounted that its current-carrying parts will be at least five (5) Inches clear of the building wall or other conductors and located pre-ferably in the most direct line between the lead-in conductors and the point where ground connection is made. The conductor from ground-ing switch to ground connection must be securely supported.

Protective Ground Wire-k.-Antenna and counterpoise conductors must be effectively and permanently grounded at all times when station is not in actual operation (unattended) by a conductor at least as large as the lead-in and in no case shall it be smaller than No. 14 B. & S. gage copper or approved copper-clad steel. This ground wire need not be insulated or mounted on insulating supports. The ground wire shall be run in as straight line as possible to a good permanent ground. Preference shall be given to water piping. Gas piping shall not be used for the ground connection. Other permissible grounds are the grounded steel frames of buildings and other grounded metal are the grounded steel frames of buildings and other grounded metal work in buildings and artificial grounding devices such as driven pipes, plates, cones, etc. The ground wire shall be protected against mechanical injury. An approved ground clamp shall be used wherever the ground wire is connected to pipes or piping.

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eb. 3rd issue) T was essential to produce a seamless wall the cylinder

and four men, Emde, Findlater,

Hartner and Martin, set to Martin, set to work to find a method of doing it. This they did by placing the point of the cone to one side, so that the defect was located on the spot where a two-inch hole had to be drilled for the valve seat. Production was started under this method, but another de-lay was experienced because of the slow method of cutting the tubes. Emde set to work again and designed and built a shear to be used instead of a steel saw. The result was that 4,000 cylinders a day were produced. In other plants the valve housings, intake and exhaust were acetylene of the cylinder. Emde with a companion, Riemenschneider, worked out a method of butt welding which made a superior weld and saved much time. This method was sub-sequently adopted by other makers of the Liberty motor. In all 511,854 cylinders were made by the Ford company. Approximately 125,000 were used at the Ford plant and the remainder delivered to the gov-

The company also turned out 700,000 bearings for the Liberty motor, and these were so superior that the government had placed orders with the company for all the Liberty motor bearings made in this country. Up to the day of the publication of the Hughes statement 400,000 of these bearings had been delivered.

ernment for other Liberty engine

Another important war-time achievement of the Ford company was in the making of caisson axles. The problem was to get away from the solid axle forgings, as these required the drilling of a three and one-half inch hole for seventy-six inches through solid metal. The Ford company made the axles from steel tubing at one-sixth the cost. And every axle passed the govern-

ment test. But Mr. Pipp knew much more about the achievements of the Ford It had delivered 2,000,company. It had delivered 2,000,-000 steel helmets, 8,000 caissons, more than 8,000 trucks and 25,000 Ford cars and 6,000 ambulances, several hundred of which were given free. Nor was that all. Much experimental work had been done on three-tool tanks and a smaller than resectable. two-man tank. More than a million dollars' worth of work had been done in producing special devices for the British navy, and the Ford chemical department had co-operated in the making of gas masks. Motion picture reels for the Liberty Loan, the Red Cross and other patriotic uses were made by the company and supplied to the government in sufficient, quantities to be used all over the country. Other motion pictures were sent to the American forces on every fighting

How much of this information he would be warranted in publishing as an answer to the Hughes criticisms was the problem that confronted Mr. Pipp. However, time pressed and he set to work, and a statement was completed on Monday morning. Just as he for Monday morning. Just as he finished his labors Mr. Ford, who was in the room, started to the tele-phone. "I want to get Emde," he explained. "I want to tell him not to worry." Emde, it is true, was born in Germany, but he had been a naturalized citizen of the United States for many years.

'Let me read this statement to

"Let me read this statement to you first," urged Mr. Pipp. "Then I can give it to the papers. Any delay in getting it published may mean your defeat."
"If this candidate has to go through this sort of thing to get into the Senate I don't want to go there," said Mr. Ford, "Wait until a tank to Emde." After considerable delay he got Emde on the wire. "Don't worry, Emde," said Henry Ford, "I have seen the papers. I know you; I have watched sou work and I know you are flonest and faithful. If they try to hans you they will have to hang me first. I am going to see that you got a square deal."

The Truth About Henry Ford By Sarah T. Bushnell

Helping America During World War—Chicago Tribune Libel Suit

(Copyright by Reilly & Lee Co.)

When Mr. Ford had finished his conversation with Emde, Mr. Pipp induced him to read the statement. Mr. Ford approved it and Mr. Pipp sent it to the newspapers. It was too late; the Monday noon papers gone to press and it was these editions that the Ford managers had relied upon to undo the harm wrought by the Hughes statement, for they circulated throughout the state. The statement did get into the night editions, but these have little country circulation, and the papers that reached the rural districts on election morning carried the Ford statement tucked away where comparatively few saw it. It is probable that many who read the Hughes statement never saw Ford answer.

This was as follows:
"Our policy is to make men, not
to break them. In times of panic great injury and injustice are often try to keep our heads.

"We would not allow injustice to

be done to an old, trusted and valued employee, even though he was born in Germany. The results speak for themselves. Mr. Emde, referred to as the special example in the Hughes report, has been with us a little over twelve years, and he is a most able and excellent engineer and has always given perfect satisfaction. Not one word could be found by Mr. Hughes or anyone else with regard to Mr. Emde's actual work. We in the plant know that he gave valuable assistance and many suggestions with regard to the development of the Liberty motor cylinders, which being furnished to all the manufacturers, with a saving of three hundred and forty-five thousand dollars a month to the government

over former orders.
From the beginning of the war we have taken the greatest precaution. * * * We have had no interference with our work that could be in any way traced to enemy aliens. * * * The United States Marshall can speak for himself as to our organization and work with regard to that. Mr. Ford was a witness before Mr. Hughes, but he was not asked a single question with ref-erence to enemy aliens, Mr. Emde or anyone else."

Under the Ford reply was printed statement from the United States Marshal:

"We have had less trouble with enemy aliens in the Ford plant than in any other large plant. If there is any blame with regard to the Forn plant, it should be on the marshal's office and not on the Ford people. The Ford company did not employ a single German alien without a permit of the marshall's office.

Friends who dropped in to see Mr. Ford that day still expressed confidence that he would be elected, but as he and Mr. Pipp left the campaign headquarters together campaign headquarters together Mr. Ford said to his companion, noticed that you did not join with the others when they were insisting that I would win tomorrow. "No," replied Mr. Pipp. "I

"No," replied Mr. Pipp. "I think you have plain sailing. I think you have a fair fighting chance, but only a fair one."

"But that wasn't what you said Saturday."

"No; if the election had been held Saturday you would have won. But today is Monday and it's a different story."

"Do you mean that you think the Wilson letter—"

"In my estimation," interrupted Mr. Pipp, "the Wilson letter cost you ten thousand votes. You could spare that many. There were peo-ple in Michigan who had forgotten all about party lines; they only remembered that you were a candidate and they wanted to pay you the highest honor they could. The Wilson letter jerked them up. reminded them that they were Republicans and that you are running as a Democrat. I would wager that letter cost you their votes. You could spare ten thousand votes, but

you can't spare many more."
"Then you thing the Hughes

statement—"
"The Hughes statement will work more havoc than anything else could have done. People will not have time to learn the truth. If I could have got a reply out in for it to reach every voting precinct it would have helped some. Up-state and in the rural districts they won't see tomorrow's papers, you can be perfectly sure that they'll get word of the Hughes report. If they don't see it themselves some one will pass it along. The gossip that you're keeping a German working in your cylinder German working in your cylinder department will reach them. Coming from a man of Mr. Hughes' prominence it will carry weight. I know that last minute rumors often turn the tide. In my opinion you have a fair fighting chance. You may pull through by a narrow margin. You probably will lose by between five and ten thousand votes."

The first election reports gave the state to Commander Newberry by 7,567 votes. The official resome eighteen months later, changed the figures somewhat, but not the result. Mr. Pipp had been

The results of that contest were far reaching. If Henry Ford had won there would have been an equal number of Republicans and Democrates in the Senate and the Vice-President, a Democrat, would have cast the deciding vote where there was a tie. Moreover, the Rewould not have had the chairmanships of all the commit-tees. Finally, but for the Repub-lican majority of two in the Senate the League of Nations might have been endorsed.

The many good Americans who are opposed to the League feel that it was fortunate for the country that Commander Newberry was elected. Many others, firm be-lievers in the League, regard the outcome of the Michigan campaign as a defeat, not alone for Henry Ford but for the hope of permanent Certainly the whole nation, was involved in that contest. It was not until a short time ago, on May 2, 1921, that the case was finally disposed of by the decision of the United States Supreme Court Washington, which set aside the conviction of our Commander Newberry in the Michigan District Federal Court and declared uncon-stitutional the Corrupt Practices act under which he had

been indicted. There are those who say that Mr.

Hughes never made the statement attributed to him, and that he would not have stooped to such campaign methods had he been aware of the Republican committee's plan. "That statement was held back until the last minute so that was held back until the last minute so that 'Mr. Hughes would not have an opportunity to deny it," they

His defeat brought to Henry Ford, no doubt, a feeling of relief. He had made the best fight any candidate could make. He was surprised and hurt by the eleventh-hour methods of the Republican organization. For himself his considered was eleven to had fought as science was clear; he had fought a clean fight and had not stooped to underhand methods. Long before were recounted and the official election figures filed he had received several citations from the United States War Department, which meant much more to him than a seat in the United States Senate. The citation which gave him the most pleasure is printed herewith:

To Ford Motor Company,

Detroit, Michigan:
"In accordance with the recommendation of the Director of Air Service a certificate of merit has been sent to you under separate cov-

er. "The citation by the Director of

"The citation by Air Service is as follows:
"THIS COMPANY PRODUCED LIBERTY-12
COMPLETE LIBERTY-12 MOTORS OF UNUSUALLY GOOD QUALITY. THEY ALSO PRODUC-ED ALL CYLINDER FORGINGS USED BY ALL PLANTS IN THE MANUFACTURED OF LIBERTY MOTORS, AND THEY INVENTED AND DEVELOPED SPECIAL MA-CHINERY AND PROCESSES FOR THIS PURPOSE. THIS PLANT WAS 100 PER CENT ON WAR

WORK.
"The Chief of Ordnance also made similar recommendation and cita-

'IT IS VERY GRATIFYING TO ME TO BE ENABLED TO TRANSMIT THIS VISIBLE RECOGNITION OF PATROTIC WAR SERVICE.

GEO. W. BURR, Major General, Assistant Chief-of-Staff."
This proved that Henry Ford, in his own field, had done all that any living man could do for his country. Without doubt he had been the medium of saving the lives of many soldiers.

The strangest thing about this Senate race was that Mr. Ford was not a Democrat. He was and is a Republican. He made the race for Senator because he belived in the principles for which President Wilson was standing. With the exception of that one campaign, and the time when he voted for the re-election of Woodrow Wilson, he has always voted the Republican ticket. Yet he was the storm cen-ter of one of the bitterest political battles that ever has been waged.

CHAPTER VII. The Chicago Tribune Libel Suit

Shortly after the time of the

Ford-Newberry canpaign an east-ern writer came to Detroit to secure material for a book dealing with Henry Ford and his achive-ments. He failed to secure the "copy" he wanted and for that or some other reason gave out a story dealing with Mr. Ford and the American flag that had no foundation in fact. The story was widely circulated among newspapers throughout the country and was, throughout the country and was, also, the subject of much editorial comment. It should be said that many newspapers printed the original telegram from Detroit in good faith, merely as a matter of news. and with no thought at the time that the article was untrue.

The editorial comment that the "fake" story provoked was, however, extremely savore in

The editorial comment that the "fake" story provoked was, however, extremely severe in many instances and especially in some of the papers which had opposed Mr. Ford's senatorial candidacy. Those familiar with Mr. Ford, his work and his aims, knew, of course,



Three close friends, Henry Ford, Thomas A. Edison and the late John Burroughs. The death of John Burroughs broke up this trio of world-renden men who spent many happy hours together.



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Montgomery Ward & G

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that he was not an anarchist and had no sympathy with anarchists, yet sharp-penned editorial writers made the charge against him. Mr. Ford waited patiently, but the attacks continued. Finally, his patience exhausted, he placed the matter in the hands of his attorneys, who sent letters to the of-fending papers, but no retractions

were printed.

At length Mr. Ford and his advisors decided that in defense of his good name he must act. The leading paper among the group that had attacked him most bitterly was selected and suit for libel was started against it in the Circuit Court for Wayne County at Detroit. This paper was the Chicago Trib-une. It had challenged his patriotism, had termed him an ignorant idealist and had linked his name with the names of noted anarchist leaders whom Mr. Ford did

not know and with whom he never had had any connection whatever. A more absurd charge probably never was brought against a well known man than the allegation that Mr. Ford was an anarchist. At his great plants in Detroit an Americanization school had been maintained for five years, one of the primary purposes of which was to instill respect for American principles in the minds of the foreign-born employees of the Ford company. This school had prepared thousands of immagrants for the duties of citizenship. Mr. Ford, himself, had done great things for his country in the critical days of the war and the beneficial results of his example and influence were farreaching. He was a member of the Episcopal church, attended services regularly and was by instinct as well as by training a champion of law and order, of patriotism and truth. He knew little and cared less about history, although he played a part in its making, and concerned himself with what could be done today for the good of his fellow, more author the south history. fellow men, rather than with what had transpired in past ages. He enjoys books on philosophy and science and is a close read of Tolsterice and is a close read of for-stoy. Darwin, Maeterlinck and Emerson. A volume of Emerson is always to be found beside a couch in the library where, after dinner, he frequently spends much time reading before a huge fire-

In bringing suit against the Chicago Tribune Mr. Ford's position was simply this: He disliked the idea of protracted litigation and all the attendant publicity, but he was no coward, and once he had decided that he must act, act he did and vigorously. He reasoned that in order to secure adequate satis-faction from the paper that had libeled him he must demand a sum that would make a lasting impression on the press of the country, hence the million dollars asked in the bill filed by his attorneys. He believed that his suit would have a salutary effect upon the press in general and serve as a warning that

"free speech" does not shield the slanderer. He felt too that he was championing the cause of other men similarly wronged, but not so well equipped financially for a long and expensive struggle in the courts. He was not fighting the newspapers; he was fighting falsehood.

Elaborate preparations for the suit were made on both sides. Al-fred Lucking, former member of Congress, and senior counsel for Mr. Ford, was assisted in the presentation of the case by Judge Alfred Murphy, who resigned from the Wayne County bench to enter the case. The case came to trial in the summer of 1919 at Mt. Clemens, where it was sent on a change of venue from Detroit. Among the attorneys for the Tribune was Elliott G. Stevenson, who had been counsel for the Dodge brothers in their suit against Mr. Ford a few years before. Mr. Stevenson is an expert in cross examination, adept in the ridiculing of a witness, ing him off his guard and disconcerting him with sudden and unexpected questions. Report reached pected questions. Report reached Mr. Ford and his lawyers that Mr. Stevenson had boasted that he would force Mr. Ford to read aloud in court long documents and extracts from books with which the inventor was unfamiliar. Mr. Ford was determined to do nothing of the kind. Upon the day when he was on the witness stand he carefully neglected to take his glasses to court, and whenever documents were presented to him to read he refused to do so. It was following one such refusal that Mr. Stevenson, with profuse apoligies, blandly said to the witness:
"Mr. Ford, I dislike to ask you

this question, but I have heard that you cannot read or write. Is it true?"

Counsel for Mr. Ford were on their feet instantly with vigorous objections to the question and the argument was sharp and bitter. To say that a boy who had grown up on a Michigan farm under home conditions such as had marked the childhood of Henry Ford, was illiterate was, of course, absurd. Mr. Ford's friends believed that the sole purpose of the question was to supply a basis for a sensational newspaper story that would be widely circulated and thus further wound the inventor.

(Continued in March 3rd issue.)

INTERESTED IN FORD STORY

INTERESTED IN FORD STORY

Dear Mr. Slocum—It is with great pleasure that I enclose \$1.00 for the renewal of my subscription to your very valuable paper. We have found it almost invaluable. We are very much interested in the Ford history, and would be disappointed should we miss a single number. I consider it one of the best farm papers published. Long may it live and prosper—Prof. F. W. Scott, Commissioner of Municipal Market, Ypsilanti, Michigan.

NON'T WANT TO MISS A COPY
Your paper surely is of great help.
We don't want to miss a single copy of
it if possible.—Mr. Andrew Kallungi,
Houghton County, Michigan.

_ MUSINGS OF A PLAIN FARMER _

ROSE early, being tired of the to her, and the good neighbors; who A bed where I spent most of my time since last October, being ill with typhoid fever.

Was given a dish of oat meal porridge spread thick with brown sugar, which I crave.

As the sun became higher I was bundled up and then hobbled to the barn. My wife wishing me to look at the stock and mows.

It was fine to see the horses. I elieve they knew that I had been absent.

Stood gazing up the silo chute, wishing my leg was equal to my eye.

Returned to the house, weak of leg. Commended my wife on the fine condition of the stock; thanks

have been most kind. Was ordered to my couch, my wife being firm about my rules of exer-

cise, more so than the good nurses at the hospital. Was aroused for dinner which I attacked with vigor, having an ap-

petite like an ostrich. Spent the afternoon smoking a bit and gazing out on the fields which

will soon need my hand. Made a few plans for next crop season, which I hope my health will

Was busy this evening assisting my daughter with her problems, which muddled my brain and I retired to my cot, very tired but thankful that have been spared.—A. P. Bellerd





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"The Farm Paper of Service"

FARMER MUST PROSPER TOO!

T takes no prophet to scan these facts and foretell an early collapse of the present city prosperity unless the farmer soon gets his equitable share. This present prosperity is a sham, because it is the opulence of some at the depletion of others, the profits of unfair and therefor ruinous trade. Half this country cannot long run riot in plenty abstracted from the capital of the other half. The source will run dry. The way out? Only the slow integration of farmers into powerful economic groups and a recasting of the whole system of agricultural finance and marketing. This is a national need and a national duty."-Gray Silver, Washington Rep. American Farm Bureau.

A THEST FOR LEGISLATORS

F we had been consigned to Lansing in either the house or senate by the voters of our district, which we will assume was largely rural we would set for ourselves a sort of laboratorytest to which we would put each bill that came up. for our vote. Perhaps we would even have it printed up on cards so that we could hand them out to the persistent lobbyist, male or female and thus save ourselves many an ear-full of absolutely meaningless information or advice.

We would print in two colums and under heads as follows:

VOTE "YES" Lower Taxes Lower Salaries Lower Expenditures Less Jobs Less Officials Less Legislation

VOTE "NO" Higher Old Tax Any New Tax Higher Salaries More Jobs More Officials More Legislation

And under these classifications we believe we could easily arrive at a sane answer for any bill which would come up in Lansing during the present session.

Only last week nearly five hundred business men, representing practically every industry, came to Lansing as a "committee-in-boots" to beg for, insist on or fight to a finish for-EXACTLY WHAT THE FARMERS OF MICHIGAN ARE DEMANDING- LOWER TAXES! Thus, for once, are the people on both sides of the town line demanding the same thing.

Every man in Lansing who has been sent there by popular vote has promised to lower taxesevery man among them from Governor down, has promised on his word NOT to increase penditures. Pretty soon, the people of Michigan are going to call a "show-down" and they are not going to be satisfied with anything but a hard-boiled proof that these pre-election promises have been lived up to.

THE "50-50" CONTRACT ARRIVES!

FVERY beet grower from Messers. Cook and the fact that their seven years of honest endeavor to have the manufacturers of beet-sugar in Michigan see the necessity of a square-deal, has borne fruit.

The owners and managers of the Owesso Sugar Company are to be congratulated on the fact that they were the first to see the light and ac-

knowledge the grower as a partner in the problem of placing Michigan sugar in the markets of the world, at a price which will make the continuation of the industry economically sound.

The Business Farmer hopes that before another issue goes to press we will be able to announce the names of other manufacturers who are willing to give the plan a trial for two or three seasons at least.

We importune the beet-growing farmers to stand by the word and the spirit of this contract to the letter. When a man shows you he is willing to work with you, that is your opportunity to show what you are made of. There is no indication but what this will be a profitable year for the manufacture of sugar, but if by any chance this contract should not prove as profitable because of a slump in the sugar-market or some other unforseen reason, let the beet-growers show the stuff they are made of-it will be an object lesson for big business who now make the easy claim that farmers are "good fair-weather sailors!"

There are a dozen branches of the farming business that ought to be operated on a 50-50 basis-perhaps this will be an opening wedge in

We are more than happy that The Business Farmer played its part in getting the producer and the manufacturer of beet-sugar into working harmony-now let's make it unanimous!

THE DEATH PENALTY IN MICHIGAN

S often as the legislators meet at Lansing comes forward from its depths the skeleton of "capitol punishment." We thought this had been the subject of enough school-room debates to settle it, pro and con, for all time to come, but like Abel's ghost it haunts us always!

When that crazed criminal, "Gypsy Bob," already serving a life-sentence for two terrible murders, jumped from his pew in the prisonchapel and stabbed the warden of Marquette prison to death, inflicting almost fatal wounds on the warden's son and a guard, we said: "that man should be killed!" and the state echoed with the demand that such a dangerous member of society had no place among living men.

When, within the past fortnight, a man was released from Jackson, who had by mistake of justice, been serving a sentence for a crime which he did not commit, we said "how fortunate that he

was not hanged for the crime!" That seems to be the whole answer to this problem of society's right to take the life of the murderer. If we know that a man or a woman is guilty of a murder which has been planned and executed in cold blood as was the warden's slaying by "Gypsy Bob", then why should we let that being live as a constant menace to others? But, if there is any possibility of innocence, what right have we to take that which no power on

FARMERS' WEEK AT EAST LANSING

earth can replace—life?

WHATEVER has been your own personal opinion of the annual Farmers' Week at the Michigan Agricultural College in former years, prepare to change it for unless your opinion was formed this year, you are drawing your conclusions regarding it from the days before Dr. Friday was brought to head our institution.

Not that other Farmers' Weeks have not been filled with worth-while meetings and worth-while speakers, but this year's Farmers' Week, showed the guiding hand of a man who was determined that the farmers who braved the February elements to come to East Lansing should have some insight into what was going on in the world to influence their business.

On one program Dr. Friday, introduced a man who was the avowed representative of "big business," as represented in the ownership of the great railroads of these United States. This man defended present-day freight rates and apologized pace with the high-prices of farm produce during war-times, nor had they come down when prices hit the toboggan. A great many farmers and others who heard all or part of this talk criticised Dr. Friday for his allowing such a speaker. Cornered, however, by the thinking business farmers in attendance, these critics had to admit that what the farming business of America is suffering most from just now, is a horde of headless, loud-talking politicians who say only what their farmer readers or listeners want to hear, NOT what they ought to hear.

It is a pity and a wonder, that more farmers do not avail themselves of a day or two at East Lansing, during Farmers' Week each year. It comes at a time of year when farmers can most easily leave their daily work. It serves to break

the long monotony of the winter. It's a good thing to do for mother or the older bys or girls at home. This year they had a registration of between three and four thousand, probably sixty per cent of whom were men and women who earn their living from farming exclusively. All the live-stock and crop improvment association meetings were well attended.

If the college wants an attendance of ten thousand farmers next year, The Business Farmer offers the following suggestions: (1) Aggressive advertising and publicity, the same as is given the state and county fairs. (2) Special trains on every road into Lansing, leaving the end of the line early enough in the morning to arrive in Lansing for the first meetings of the day and return at night after the evening meeting is over. The special fare and a half rate should induce a large crowd, if they were not obliged to stay over night in Lansing. (3) For this purpose one big day, say Thursday, in which morning, afternoon and evening meetings were devoted to the top-notch speakers. Association and other meetings all on other days.

Farmers' Week can be made the biggest thing in Michigan for the farming business and this first year under the direction of Dr. Friday, with the help of his very able staff, was a long step in that direction.

FARM LOAN ACT JUSTIFIED

THE Billion dollar mark in loans to farmers through the federal farm loan system is in sight. At the close of business December 31, 1922, the total of loans closed by the federal land banks and joint stock land banks since organization was \$890.506.782. More than 250,000 farmers have borrowed at these banks. The federal land banks lend in every one of the fortyeight states, while the joint stock land banks operate in thirty-nine states.

The federal land banks, co-operatively owned, furnished the farmers of the country more than \$681,000,000 of credits, while the joint stock land banks supplied \$209,000,000.

While the first loans made through the system were placed in 1917, it was in 1922 that it experienced its largest growth, when nearly \$350 .-000,000 of loans were made, of which nearly \$230,000,000 were through the twelve federal land banks and over \$120,000,000 through the joint stock land banks. The great volume of business since organization justifies the expectations of the farmers of the farm loan act, and is evidence that the farmers use extensively both branches of the system.

THE JOINT STOCK LAND BANK

ROM the published reports of the total loans made by both branches of the Federal Farm Loan System. it is apparent that Michigan has been laggard in its use of the facilities offered by the Joint Stock Land Banks.

Out of a total of \$10,579,640 borrowed by farmers of Michigan from the inception of the system to December 31, 1922, only \$59,600 had been borrowed from the Joint Stock Land Banks, altho in states like Iowa and Illinois, the same report shows that more money has been borrowed from these than from the Federal Land Banks, altho they are both operated under control of the same act.

There are advantages, which were well planned by the framers of the Farm Loan System to both divisions of this service. It is obvious that the farmers of Michigan are not acquainted sufficiently with both systems, to judge between them. We will be glad to answer questions of our readers who are contemplating loans from either

The appointment of Honorable L. Whitney Watkins of Manchester, to be commissioner of the state department of agriculture, filling in the unexpired term of John A. Doelle, who leaves to become associated with the Federal Land Bank at St. Paul, will meet with the approval of most Michigan. Mr. Watkins will not resign his position on the Board of the Agricultural College, nor should he. This will mean that practically all of his time will be devoted to the farmers problems at Lansing. The Business Farmer assures Mr. Watkins of an earnest desire to co-operate in making his department all that it should mean to the farmers of this state.

The story is told of the down-south coon dog that sat out in front of a store howling pitifully. A traveling man asked the village-loafer what made the dog howl so. "Sure, Sah," he replied, "that 'er darg is a'sittin' on his own tail, but he's too dorned lazy to get offen it!" There are some senators who find it easier to how! than to make efforts necessary to actually help the farming business.

What the Neighbors Sau

DR. FRIDAY MISQUOTED?

N a recent issue of M. B. F. you published an article on the whole milk situation of Detroit district in which you made reference to Dr. Friday's decision which gave the producers \$3.00 per cwt. for milk during December.

Such advance in price was not only fair and just but lent encouragement to many who had become

agement to many who had become discouraged.

Recent reports that he favors a cut of 50c per cwt, to the producers in order to give Detroit consumers milk at 12c per qt.

Dr. Friday allows that in several districts producers are receiving \$3.40 to \$3.60 per cwt. whilst con-sumers pay but 12c. Knowing as he must, what conditions of laboring classes are better in Detroit than any other industrial center of the U. (Men as a whole boasting of high wages received.)

We fail to understand why he chooses to favor Detroit dealers and consumers at the expense of the

farmer who is struggling against great odds to make ends meet.

If Dr. Friday is really interested in the welfare of farmers, we feel confident he will use his good office in our behalf that we also may become something more than mere servants for Detroit consumers.—J. B. Younglove, Monroe County, Mich.

—The inference that some city papers gave, that Dr. Friday would give the consumers 12c milk at the ex pense of the producer was not correct. Dr. Friday, represents the farmers of Michigan first and in his present investigation, he hopes to prove that the cost of distribution is unjustified and should be split in a saving to the consumer, which would increase the demand for milk and a greater price to the producer, which would increase the production.

AGAINST CHANGING PRIMARY SCHOOL LAW

DLEASE print the following resolution in the Business Farmer at yeur earliest convenience: Whereas: Two bills will be pre-sented to the present session of our State Legislature for changing the Primary School Law.

Whereas; The present law is an equal benefit to all.

Whereas: The proposed change would benefit some, and harm others.

Therefore; Be it resolved that the Fayette Grange No. 1368 of Fairbanks Township, Delta County, here-by puts itself on record as being opposed to any change in the present Primary School Law, and that we respectfully urge our representatives respectfully urge our representatives in the legislature, Hon. Edward R. Carter, and Hon. Frank Bohn to oppose any change in the present Primary School Law, and that copies of this resolution be sent to our above named representatives.—Fayette Grange No. 1368, Marie Peterson Secretary son, Secretary.

MANISTEE BEETS STILL IN GROUND

THE sugar beet question is again about to get another airing out.

I wish to inform you that the farmers of Manistee township had the pleasure of growing sugar beets last year and some of them made barrels of money and others are going to make barrels of money when they die their crops in the spring. they dig their crop in the spring.

One of my neighbors contracted e-half acre and he raised one full wagon load which netted him \$5.00 and some odd cents, others did equally as well. Another farmer done his weeding with a spring tooth harrow and planted corn for a nurse crop. The best field of sugar beets that was grown here is left in the ground for the company to come and get them, but the company has not come; \$5.50 per ton was their price.

One day, last April, the agent called on me accompanied by one of our farmers, a member of the Grange, and a "knocker" of the Farm Bureau, and tried to write me a contract for beets. We had a real conversation and it ended up when told him to go back home and fix things up with the fellows that were disatisfied and by doing so he would get the required acreage. He in-

dependently rich in growing beets and now they didn't know what they wanted, so I had to tell him what the growers wanted and when they got it (a fair deal, 50-50) to come and see me. He bid me good bye and we shook hands over a barbed wire

I wish to ask one question: "Are the beet growers organized?" The reason I ask is because I talked the matter of growing sugar beets with our county agent as he was in favor or having them tried out here at \$5.20 per ton. He insisted the growers were not organized and said that he would organize them here, but there's one thing I am sure of when it comes to organizing the sugar beet growers here he will have to get out a bench warrant to find the growers.—Joe Switalski, Manis-tee County, Mich.

PAY EACH WHAT HE EARNS WOULD like to say a word in behalf of "Mr. Warnock" of

Presque Isle county. I think he has struck the nail on the head. When everything is run economically, and for the benefit of all not for few, then the people in general will have some heart to work. Let everyone get paid for what they produce. If it's \$5 or \$10 per day let it be that and no more, and those that do not work with hand or brain, that is, those that are able to perform a day's work, and those that will not work, shall not eat. Not let a few "stalwarts" be the means of impoverishing the many, same as our system is composed to-day. A few rides the backs of the many, get their living by the sweat of some other one's brow. You can call it what you are a mind to but that is the only remedy.—S. H. Slagle, Harrietta, Mich. —Over in Russia right now they are

A cover in kussia right how they are having an interesting experiment right along the line which Mr. Slagle suggests in his letter above. Everything was usurped by the revolutionary government. The rich olutionary government. The rich class or so-called aristocray of Russia was driven penniless into the streets from their homes and palaces. The czar, his family and many, many thousands of men and women and children were murdered in cold and children were murdered in cold blood. The government took over all industry and incidently, demanded of the peasants, who filled the soil, a part of all they raised. All men were supposed to be equal. The government took all and provided all. Incentative, ambition and success are unknown in Russia. How has this Utonia worked out?

has this Utopia worked out?

The communists have killed more people in their five years in power than the czars did in fifty. money is valueless. America has been feeding 11,000,000 starving Russians and more than that num-ber have died unfed. Conditions in Russia can hardly be described. Many hundreds of misled persons, who believed everything was wrong in these United States, left here and got into Russia one way or another. Once in awhile one of these deluded persons escapes out of Russia or smuggles a letter home to friends. If you have any idea that a revolution would make the United States a better place to live and work in if any red-flag waver has touched home in your heart with one of his lies, go to a library and get all the information you can on what has happened in Russia. It ought to cure the sensible people of the world from following hair-brained fanatics for several generations to Step by step, America is leading the world towards the perfect form of democratic government, but a jump towards the millenium will land us where Russia is today—in the scrap-

An apt definition of poise is: The quality that keeps a hostess smiling when a departing guest holds the screen door open and lets the flies in.—Everybody's Magazine.

As it is getting difficult in many countles to find qualified men who care to serve as commissioner of schools, may we not have some articles from people living in countles having women commissioners who are getting good results? Subscriber, Petersburg, Mich.

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Edited by FRANK D. WELLS

SOME NEW APPLES

THE Delicious may still be classed among the new varieties, though it is now widely known deservedly popular. The large and deservedly popular. The large demand for the trees which nurseries have reported make it evident that within a brief time the fruit will be one of the common apples in the Great Lake district, but that need discourage no one. It is impossible that the supply will equal the demand for years to come.

While the fruit has received most attention as a dessert apple, it has other uses as well. It is not trat enough for sauce and pies, but for baking it has few equals. Indeed, if anything can bring the baked apple into the place it deserves on the American table it will be this

The tree is a good grower when on heavy soil, but not one of the early bearers. However, if one has thrifty stock of any kind he need not wait long, for the Delicious responds generously and quickly when top worked. This is something that has not received the attention it denas not received the attention it deserves. Large trees of undesirable varieties, so long as the wood is sound, can by grafting be changed into profitable members of the orchard in three or four years. There are many such trees. The coming spring will be a good time to begin.

Golden Delicious The Golden Delicious is correctly named, in so far as the apple is concerned, but names so nearly alike for two distinct varieties are liable to cause confusion. The apple is a golden yellow and the flavor fine. Really, it seems as though it might

have stood on its own merits, stead of borrowing from another variety by having 'Delicious' tacked upon it.

Te most persons the Golden Delic-To most persons the Golden Delicious is known as a highly advertised possibility. Those who have really become acquainted with it have found the fruit a high quality and a good keeper. The tree is a wonderful grower and an early and abundant bearer.. When top-worked on strong stock it has produced apples the second year of grafting.

the second year of grafting.

The value of the tree for a commercial orchard is still in doubt. mercial orchard is still in doubt. Such a rapidly growing and early maturing tree may be short lived, or it may be a poor bearer as it grows older. Too much should not be expected, but it may fall far short of the claims made for it and still be a desirable variety. That it will take the place of the time tried Grimes Golden remains to be seen.

Whitten

The Missouri Agricultural Experiment Station has brought out a new apple, the result of cross fertilization 13 years ago by Dr. J. C. Whitten, using pollen of the Delicious upon Ingram blossoms. The variety has been named the Whitten. It is said to possess the size and shape, sweetness and aroma of the Delicious, also the firmer and jucier Delicious, also the firmer and jucier flesh of the Ingram, a combination which is hard to improve upon. By some special freak of fortune, late-blooming is added to the other de-

sirable qualities.

The Whitten is a promising variety, but is not to be recommended for commercial planting until further test has been made, for which purpose scions or to be distributed among the apple growers of the state. The results of the coming four years will be awaited with interest. The variety may prove a valuable addition to the list of apples, or it may develop weak points that will make it useless. After so many years of waiting it is certainly to be hoped that the propagator will not be dissappointed.

ROOT GALL

TS root gall injurious? The nurseryman says it is not, the or-chardist says that it is, and each prove his point by examples.

Several years ago a Michigan nur-seryman selected the worst speci-means of gall he could find among his peach trees and planted them on sandy ground. They grew, bore

three good crops, then were killed by a severe winter. After standing seven or eight years they were pulled out. No galls were found on the

A similar test was made by a Missouri nursery. Two rows of apple trees were planted, one composed of badly diseased specimens, the others being clean. After twenty years there was no difference between them.

A pioneer nurseryman of Michigan stated that when he began business in the early fifties, trees with bunches of fibrous roots were at a premium. Nobody had heard of gall in those days.

Infected trees had been planted that had developed into thrifty, pro-ductive orchards that had stood for

ductive orchards that had stood for 60 or 70 years.

Against this evidence the orchard man puts his experience. Some of his trees have been weak, sickly or have died, the first or second year after planting. On digging them up he found galls on the roots, sometimes many and large, so that it is hard to convince him that they are harmless. harmless.

From the evidence thus far submitted it may be concluded that the gall may kill a tree or it may not. If it can easily be cut or broken clean from the root and the tree is otherwise healthy and viborous it will probably overcome the disease, but it is not safe to plant a tree with a large gall at the crown or on a main root, which has become insparable from the wood. Such trees are liable to die the first or second year.

It is unlawful for nurserymen to send out trees with galls on them and pay for such stock cannot be collected. But these much abused gentlemen should not receive too much blame. Reputable firms carefully guard against sending out undesirable stock. Nevertheless some desirable stock. Nevertheless, some trees will be overlooked by the best of sorters.

The nurseryman has many troubles of his own, so it is no more than fair to suppose that the poor fellow is doing the best he knows how. If anything is wrong with his stock he should be treated honestly and given a chance to make good.

BUSH EVERBEARING STRAW-

Can you tell me anything about

Can you tell me anything about the Bush Everbearing Strawberry? Do you think it is worth planting? Is it really a strawberry or what is it?—R. A. P., Akron, Ohio.

—The strawberry in question we have not seen, but reports regarding it are not favorable. Are any of our readers acquainted with this "wonder?" If so, we shall be pleased to hear from them. Meanwhile, go slow in planting it.



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UBLISHER'S DES K

DID McRAE "SELL" YOU OR

SINCE last November we have had under investigation the Warren McRae Farm Agency, of Logansport, Indiana, who judged by the number of inquiries that have come from our readers, must have been carrying on extensive advertising, principally by mail, to the farmers of Michigan.

When the first of his circulars was sent us by a reader, we read them, saw that they resembled a class of so-called "farm agencies" who usually advertise under assumed names as "farm buyers," so we wrote asking for their references and also the names and addresses of Michigan farmers who had sold farms through

their agency.

Some weeks passed and a letter finally arrived from Mr. McRae, in which he stated, "this is a new agency and has only been operating a few weeks. We have not made any sales as yet, but have see" a very good proposed to have see". very good prospective buyers." A bulletin of farms offered for sale was enclosed and we wrote the four Michigan farm owners who had, presumably accepted Mr. McRae's proposition and sent him \$10 each, to have

him list their farms.
One answered: "I have not sold my farm, nor had any prospective buyers from the Warren McRae Farm Agency, however it was late in October when I listed with him." Another: "I have not heard a word from Warren McRae since the listings were given, nor of any of his so-called buyers he writes about!" The third answer said in part: "I was overloaded and needed the money badly, therefore the ridiculously low price, as it was cash that I wanted and still do want, as I must sell this property to save some other property. So he sent me a special delivery letter asking me if I still had the 880 acres and if so he would send me a buyer. ***But he would send me a buyer. ***But I have not sold it yet and the buyer has not arrived!"

Mr. McRae's letters, which many of our readers have sent in are really very clever. One letter starts off, with the address and Dear Mr. Blank filled in by a typewriter on an imi-tation typewritten letter, signed in ink, supposedly, by none other than Warren McRae himself:

"Dear Mr. Blank:—
"The writer had the pleasure of visiting your section a short time ago and was very much impressed with your farming community; also the low price

that farm land was selling for.
"Upon his return to this
State he got several of our good Indiana farmers interested in your neighborhood. These are all good farmers and hard workers, but want to get away from the high-priced land. Most of them have several thousand dollars to invest and will be ready to do business within the next sixty days.

"If you are looking for good, quick sale, kindly fill out the enclosed listing form and return to me with the regular list-ing price of \$10 and I will send the buyer direct to you and noti-fy you when to expect him so you can meet him at the station. In case the first one does not buy, please let me know and I will keep on sending you buyers until you do make a deal.

"I do not care to charge this listing fee, as I make my profits on commissions, and would not have to do so if every one was on the square and meant business, but as we do not have a representative in your section we simply have to protect our-selves against triflers, curiosity seekers and men who try to get twice what their property is worth. This listing fee is simply a guarantee of good faith and will be returned to you when your property is sold.

"I only want a limited number of farms in your section for my clients that are ready to buy at once. When this number is listed the above offer will be withdrawn. Some of these buy-ers will want possession at once and others in the Spring. The time to sell is when the buyers are ready to buy. If you are going to be one of the lucky ones act at once."

Mr. McRae certainly lets no grass grow under his feet, for when our reader did not rush his hard-earned ten-spot back by the next mail, he received this letter dated only three days after the first.

"Dear Mr. Blank:-

"Mr. M. A. Brown is very much interested in Michigan farm lands and is doing to take a trip with his car some time within the next couple of weeks

through your section.
"Mr. Brown is a well-to-do farmer living in the Northern part of Cass County, Indiana. His son and a couple of friends will go to Michigan with him. Mr. Brown does not want to buy a farm for himself, but will help the other boys select a good farm home. He also informed me that there are other men in his neighborhood that are looking for farms in a cheaper section. I will call on these men at once and try and get them interested in your section as the land is a great deal cheaper there than it is here.

"Some of the people that I have interested in Michigan farms were under the impression that most of the farms that I have listed were misrepresented because I did not personsented because I did not personally inspect them myself, but when I explained that I charged a listing fee and that no one would pay a listing fee unless they really meant business and were anxious to sell, they were satisfied and are willing to

spend their money to make the trip and investigate. these people does not buy please let me know and I will keep on sending you buyers until you make a deal.

"Please hurry your listing along as I would like to get a

few more listings in your section before sending the buyers."

Very truly yours, Warren McRae.

We would be interested to know if any of the readers of The Business Farmer, have sold their farm thru the McRae agency, to Paul Paulinski, of Logansport, Mr. McRae's home As recently as January 11th, Mr. McRae wrote one of our readers:

"Mr. Paulinski of this city has just recently sold his farm for \$400 per acre and we have him interested in Michigan as he wants to buy where land is cheaper than it is here and where land will increase in value. Mr. Paulinski is mostly interested in a well improved farm with good buildings and will pay cash for anything that suits him. He also will consider a couple of small cheap farms that can be bought right for speculation. Mr. H. L. Skinner has also just sold his farm and will be leaving for Michigan within a few days. We have several renters that will be buying Michigan farms

between now and March 1st."
But the most recent disclosure,
vouched for by one of our readers, is that Mr. McRae is so determined not to loose his postage, that if you do not send him \$10, he gets impatient and cuts his regular listing fee to \$5, and then—becoming desperate at your lack of appreciation of his

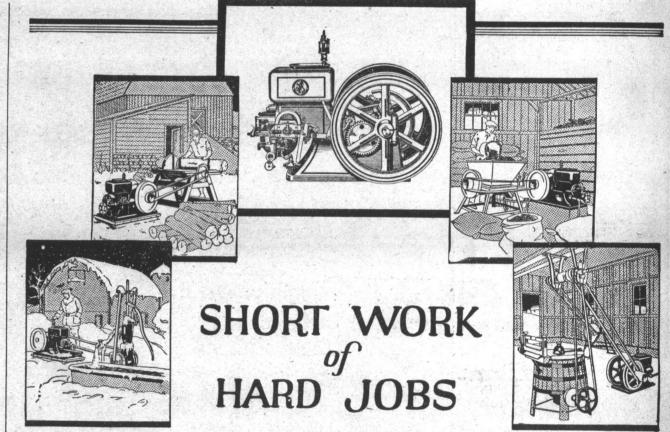
offer to turn your farm immediately into golden cash, he cuts his listing fee to \$2.50! But read our subfee to \$2.50! scribers letter:

"I am a subscriber of your paper and like it very much. I would now like to ask a favor of you. Could you find out for me if the Warren McRae Farm Agency, Logansport, Ind., is a swindle or are they working in good faith. I received a letter for them last Sept. claiming they had been in this locality and were delighted with condi-tions here, etc., and with a list-ing fee of \$10 would guarantee a sale within 90 days, for which they charged 2½% commission. The \$10 to be taken out of the commission at the time of sale. ommission at the time of sale.

I filled out the blank for listing but told him I would deposit the \$10 here in the bank in his name. If he sold the farm within 90 days I would give him the \$10 besides the commission, and if he sold it within 60 days I would give him \$15 besides the commission, but I could not send him the \$10 as I must protect myself from fraud.
"They did not answer this let-

After a little while I received another letter saying that for a certain number of days they had cut the listing fee to \$5 and urged me to act quickly as they knew of men with means who wished to buy farms. I did not answer this letter. After a while I received another letter saying that for a certain time cut the listing price to \$2.50. I filled out another blank tak-ing more pains and telling things I neglected in the former.

(Continued on page 23.)



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agriculture within the state are directing their efforts. When the program has been carried out the industrial cities and towns of the state should be more abundantly supplied with food products of a higher quality than they have ever enjoyed be-fore. These should be furnished to them at prices that are reasonable and that will pay the farmer a profit far greater than he could make by producing for the foreigne market.
This is Michigan's program for taking her farmers off the international market.

The other source of relief for the farmer is to be found in his costs of production. These are, upon the whole, far larger than they need be in view of the advance which scientific agriculture has had and of the meth-ods which our best farmers are practicing. An industry may prosper, even when prices are falling, provided it can reduce its costs. The automobile industry is a good example; it is selling its product at less than prewar prices, yet is is one of the most prosperous lines of business today.

Though it is impossible to prove absolutely that the prices of agricultural products may fall during the remainder of this decade, it would be the sheerest folly to base any agricultural program upon an assumption of rising prices. Even now prices of agricultural products are twice as high as they were during the '90's, and 60 per cent above the decade of 1900-0'9. They are 38 per cent higher than they were in the five-year period of 1910-14. The gross value of agricultural output in 1922 is 65 per cent higher than in the half-decade 1910-13. Though the prices of farm products may attain a level slightly higher than at present, there is no reason to expect any pronounced or constant rise during the remainder of this decade. Profits must be increased, if at all, through the reduction of costs.

Checking Up Hens and Cows

Fortunately this is quite within the mounds of possibility To anyone unacquainted with the technic of scientific agriculture and with the practices of our best farmers, it is startling to learn the wide range of difference that prevails among the productive units with which the farm-er carries on his business. An ordinary flock of one hundred hens normally contains thirty that lay no eggs whatever. A man trained in poultry can discover these by inspection. If these hens are segrated the seventy remaining ones will lay as many eggs as did the one hundred. The average production of such a flock will be about 600 dozen eggs a year. Obviously the mehe elimination of the culls has increased the average production per hen from six dozen to almost nine: and it has decreased the cost of production by approximately one-third. Furthermore, your poultry expert will find ten hens out of the fock whose everage erg producthe flock whose everage egg produc-tion is around twelve dozen. If these hens are segrated and supplied with a cockerel of a high-producing strain the chicks from these eggs will not contain more than 10 to 15 per cent of culls. If this process if culling is repeated during a period of three years the average production of the flock will increase from six dozen to more than ten dozen eggs, and the cost of production will be correspondingly reduced.

There are further important economic differences between the output of an ordinary flock of hens and of one that has gone through this process of evolution. A hen that lays only six or seven dozen eggs will produce most of them during the months from March to June inclusive. Even the crows lay eggs at this season of the year, and it is the season of overproduction and low prices. The hen whose production amounts to twelve dozen or more a year will produce a substantial portion or her output during the months from November to February. This is the season of the year when the demand for eggs must now be satisfied largely out of cold storage eggs, and fresh-laid eggs bring a fancy price. The output of a hen that lays twelve dozen eggs will ordinarily sell upon the market for three times as much

as that of the one that produces only

six dozen.
Michigan has 10,000,000 hens, and Michigan has 10,000,000 hens, and they now produces 60,000,000 dezen eggs. It has on its Agricultural College faculty one of the ablest poultrymen in the world. There is no reason why a like number of hens should not be producing 100,000,000 dozen eggs by the end of three years. To accomplish this we must have a tremendous company of advertion mendous campaign of education which shall aim to reach practically all the 196,000 farmers in the state. This will cost \$50,000 a year for the next three years; and the legislature will be asked to appropriate this amount within the next few months. Surely there can be no question about the wisdom of the expenditure, for if the program succeeds in accomplishing only half what is hoped for, it will increase the income of the

farmers from this source alone more than \$6,000,000 a year.

At this point someone is sure to raise the objection that such a campaign of efficiency in production is self-destructive for the farmer because it will increase production to the point where the decline in price will offset the decrease in cost. Though this will benefit the consumer it does not necessarily help the poultryman; indeed his last state may be worse than his first. And this might be the case if this were a program for the whole United States; but we are formulating a program for only a single state. Besides this, the methods here outlined will probably be applied quite universally within the next decade. The road to success for any one state in such a situation is to enter upon the program first and to push it more vigorously than anyone else, for a general improve-ment in the methods is bound to lower prices. Profits can be maintained only if the reduction in costs proceeds as rapidly as the fall in prices. Time is of the essence in this situation, so that those who start earliest on a campaign for cost re-duction will find that their profits are increased. Those who reduce their costs only when they are forced to do so by competition will suffer a decline in profits.

The situation in the dairy industry illustrates well the possibilities of reduction in costs. The State of Michigan has 800,000 dairy cows two years old and over. They produce 3,600 pounds of milk, on the average. The total output for the state, therefore, is somewhat under 3,000,000,-000 pounds. This average of 3,600 pounds is made up of cows that give 20,000 pounds of milk a year, and of others that give 16,000 and 12,000 respectively. There are large herds in the state that average 10,000 to 12,000 pounds of milk a cow. No man is considered a successful commercial dairyr an unless his output averages 6,000 pounds an animal. And yet it must be quite obvious that if there are many cows which produces 6,000 pounds of milk or more, at least half of all the cows of the state must yield less than 3,000 pounds, in order to bring the average down to 3,600. These cows that give so low a yield are being fed and cared for at a loss. Much could be accomplished to increase production and de-crease cost through better feeding; but no phenomenal decrease in the cost of milk can be obtained until 400,000 scrub cows that are now grafting upon farmers' time and effort are eliminated and replaced by animals of superior breeding.

Raising the Average of the Herd

To accomplish this is undoubtedly a slow process, for it involves testing all our dairy herds with a view to discovering the unfit individuals. Two hundred thousand cows are so poor that they can be eliminated simply by inspection. If we can induce our farmers to sell these for beef during the next year or two, and to practice better feeding, we shall probably produce as much milk with the 600,000 cows remaining as we are now getting from the larger number.

But the great improvement must come from superior selection and breeding. It is nothing more or less than a problem in engenics. These grafters, or scrub cows, are what they are very largely because they are the offspring of scrub sires. Fort-unately, monogomy does not prevail in the dairy industry, so that it is possibly to attack the problem simply through the size. There are at present 24,000 dairy bulls in the state. Of these, 16,000, or two-thirds, are scrubs that are not fit to be fathers scrubs that are not fit to be fathers of dairy cows. If they can be eliminated within the next year or two and replaced by pure-bred dairy sires of good breeding, an immense step will have been taken toward a reduction in the cost of producing dairy products in the future. The Agricultural College, through its extension department and the county agents of the state, has for some time past been planning a state-wide series of half funerals for these acrub sires. bull funerals for these scrub stres. The plan is to have these animals brought to the market and sold for sausage meat, and to leave in each community at least one pure-bred sire of good lineage. There-after there must be an intensive campaign for the elimination of scrub cows and for better feeding. Such a campaign should increase the net profits of the dairy business by \$15,000,000 a year during the next two years, and by twice that amount in four years.

The crux of these programs for the lowering of production costs is the fact that the efficiency of the individnal productive unit varies so widely. This is a stubborn physical fact, the economic implications of which are of tremendous import. The productive capacity of hens varies from 300 eggs down to zero. Even the ordinary flock will vary from 180 eggs to

This variation is by no means confined to the animal kingdom. It holds for seed quite as truly. The holds for seed quite as truly. The necessity for selection there is just as great and the possible results are just as striking as in the animal kingdom. The situation prevails even as between two crops. There are more than 1,500,000 acres on old and established farms in the state of Michigan which do not produce crops worth ten dollars an acre, but which should produce annually thirty dollars' worth of alfalfa. Besides producing a profitable forage crop these old and run-down soils would be renovated and restored. At present there are only 350,000 acres of alfalfa in the state. We must have an aggressive program directed to the sowing of 400,000 acres a year for the next four years. Michigan can raise alfalfa profitably at a price that is no great-er than the cost of freight and handling charges from the points where it its supply as new grown to the point of consumption within the state.

No doubt the reader has questioned before this why it is necessary to formulate programs and legislate public money to put into effect prac-tices that are so obviously to the benefit of the individual farmer. If the question is one of defending the use of public money for the promotion of more economical production of agricultural products the answer must be that an abundant food supply at a cheap price is a matter of public interest for which it is quite legitimate to spend public revenue. It must always be in the public interest, too, that the production of public necessities that go to make up the standard of living; whether food, clothing or shelter, shall be effected with the minmum of toil and labor.

If the problem is not that of de-fense, but of explaining why the farmer has neglected to do of his own initiative what is so obviously to his own self-interest the answer will be found in the nature of the organiza-

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

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

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

tion that prevails in the agricultural industry. The average manufacturing establishment in Michigan employs more than sixty men. Its output is sufficient to enable it to pay for all the materials it uses, and to leave all the materials it uses, and to leave \$150,000 for the payment of salaries, wages, taxes and interest, and to provide for depreciation. What remains constitutes profits. The organization of the farming industry is very different. There are only 35,000 people engaged on our 196,000 farms; and this number includes the farmers themselves. Their average annual sale of products does not, at this time, exceed \$2,500 a farm.

Expert Guidance Needed

It is clear that most of the manufacturing establishments have enough at stake and command an income that enables them to employ man-agers and professional men who shall keep the processes of the establishment abreast of the discoveries made by science pertaining to the line of manufacture in which the concerns are engaged. As long as we have re-search laboratories search laboratories and technical schools we shall have a continually advancing body of knowledge and a supply of professional men who stand ready to sell their services to those who desire the latest advances of science incorporated in the art of manufacture. Ordinary commercial molives move the individuals concerned to avail themselves of the services of these men

But in agriculture, where the farmer is not only manager of the establishment but constitutes its chief laborer as well and where the gross money income is less than \$2,500, it is apparent that the individual farmer will not hire the services of scientsts and other professional experts. Something can be done in this direction by co-operation, but for the most part ordinary commercial processes, under the urge of self-interest, will not insure that the advances made by scientific agriculture are incorporated in the every-day processes of farming. If they are to be so incorporated this must be accomplished in pursuance of public policy and at public expense. Our agricultural colleges are not only institutions of research and learning; they, through their extension departments and the county agents, must render to the agricultural industry a professional service comparable with that which the manufacturer hires upon the market. No industry organized on the small scale that prevails in agricult-

small scale that prevails in agriculture will keep pace with the rapid progress of our modern world unless this public service is rendered it.

In the past the knowledge of the scientist and the practice of the best farmers have been incorporated into the industry all too slowly. The reason has been that the various instison has been that the various institutions charged with this duty have used almost exclusively the methods of education. They have printed bulletins and sent them to those who wrote in concerning their problems. If no bulletin answering the inquiry was available the technical expert in whose field the problem lay wrote to the farmer. If the problem was new and of sufficient interest, field men were sent out to conduct research on the spot. In this manner only a very small number of the managers and operators of our farms have been reached. The average farm still lags far behind the best practice, and has availed itself to a disappointing degree of the best that is known about agricultural production.

Co-operative Effort

Of late the Department of Agriculture and the colleges have supplemented these methods of education by the methods of publicity and propaganda. Michigan expects to rei methods to a large extent in carrying through its program for taking the farmers off the international market, and for reducing their costs of pro-duction. They must have skilled assistance in analyzing their local mar-kets, which have grown so rapidly and become so complex that the average farmer can afford neither the time nor the money for their analysis. They must have continuous and ysis. They must have continuous and effective agricultural research, and they must have a profession of adequately trained agricultural specialists. But beyond this they must be made conscious of the possibilities that await the man who will readjust his production to the new demand

that has grown up at his door. He must be made to realize the wastefulness of his productive methods and the possibility of reducing his costs increasing his product by the practice of better ones. To accomp-lish this the farmers must be organized into groups along lines of their common interest. Each of these groups must set up for itself definite ends for realization.

It is just at this point that the cooperative spirit which has been so greatly in evidence during the past few years will find its chief field of activity and usefulness. People must be made conscious of this program, of its value, and of the importance of the methods through which it will be realized. They will be it will be realized. They will be brought to this state of self-consciousness by co-operative endeavor and discussion. Such a program of publicity and propagonda will be expensive, measured by the standards of the past; but it should return twentyfold every dollar spent. In our endeavor to help the farmer we have poured water into the sand in driblets, as it were. We can never create a river in that way.

Political action plays small part in this program. It may just as well be frankly stated that those who have evolved it have but slight confidence in most of the political action that is being proposed for the benefit of the farmer. The spirit of co-operation and of interest in agriculture

which led people to political action, and which culminated in the forma-tion of the farm bloc, is significant. It has brought about social cohesion among the group and has stimulated an interest in agriculture that will lead to fruitful activity. Every great intellectual movement must have as its motive power a reservoir of emo-tional heat. Considered from this point of view our political activity has been of great benefit. Considered from the point of view of any practical legislative suggestions now before the public the results are bound to be disappointing. We in Michigan shall pin our faith primarily to a program that proposes to take our agriculture off the international market, and that looks to the reduc-tion of costs as one of the chief roads to the maintenance of profits.

BEAVER CULTURE

LTHOUGH the practicability of A beaver farming has not been fully demonstrated, the U. S. Department of Agriculture believes that the business of raising beavers for their fur may develop, under proper control measures, into a profitable branch of fur farming. With as small beginning, the enter-prise seems to promise an advance good returns and even greater possibilities.

A fertile field for beaver culture may be found in connection with projects for the reforestation with conifers of burned or cut-over tim-ber-lands. Many of these areas, cleared by ax or fire and later covered with a second growth of aspen, willow and rin cherry, are for the time considered almost worthless. Over much of the northern border of the United States and still larger areas of Canada where such land is found it is generally unsuited for agricu'ture and would not pay taxes until covered by valuable forest timber, but would supply ideal food for beavers, and if stocked with them could be made to yield an income while the process of reforestation is going on

The animals should not be introwhere their activities may menace irrigation or power ditches, import-ant road or railroad grades, or ag-icultural districts. A suitable food supply and permanent water should be assured.—Dakota Farmer.

THOSE WHO FAIL

The farmer who takes everything out of the soil, and gives but little back to it; the one who neglects to make the home attractive to the young folks, gradually driving them to the city—all these, and then some, are but examples of farmers who fail to render a maximum they they must give.—A. F. Sheldon.

You can not do wrong without suffering wrong.



A Three-Plow Tractor With Ball and Roller Bearings at 29 Points

In developing the McCormick-Deering 15-30, the Harvester Company has produced a tractor which gives maximum service and economy in operation. The features in design of this tractor are the result of field experience gained through 18 years of contact with tractor farming conditions. Ball and roller bearings have been used at the points of high speed or extreme strain, and all other parts have received the same consideration. The resultant smooth-running, modern tractor

meets the many power requirements of the present-day farm.

Practical design, ease of operation and handling, make the McCormick-Deering tractor an ideal three-plow power unit. It also develops a surplus of power to handle a great variety of belt jobs (threshing, silo filling, husking and shredding, feed grinding, etc.) and its smooth, flexible operation and increased speed make it a leader for all kinds of drawbar work.

You will want to know more about this latest McCor-mick-Deering tractor. Ask the McCormick-Deering dealer for complete details or write for our new catalog.

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HER THIRD BIRTHDAY By Sir Milliam Watson (One Hundred Poems)

My tiny lady, can it Be true that you and I On something called a planet Are somewhere in the sky?

-and at such a tearing And madeay speed we've spun, That you with dreadful daring Have thrice been round the sun.

Nay it yet more amazes, That my far-venturing girl Can be as fresh as daisies

After so wild a whirl!

And now 'neath western billow The sun is put to bed And you, too, on your pillow Must lay a golden head.

Ah, tears-they come so quickly For grief so quickly gone! Yet joys have rained as thickly For you to dream upon.

THE CONQUEST OF FEAR

HAVE just finished reading the above named book, written by Basil King and feel that when one has happened upon anything, so reasonable and so convincing, it is selfish not to pass the knowledge of it on, especially as the ideas set forth in the book if put into practice would certainly make many people happier, and as the author says even richer, according to the author.

Anyone and I believe that means every one who fears for his health, his family, or his business, who fears the future, who fears to live or fears to die and who reads this book, with an open mind, will receive some

benefit from it. am going to print a bit from the first chapter but to give an adequate idea of his philosophy would not be possible in this column. We are neither selling nor advertising the book—I am just passing a good

thing along.

"When I say that most of my life I have been a prey to fears I take it for granted that I am expressing the case of the majority of people. I cannot remember the time when a dread of one kind or another was not in the air. In childhood it was fear going to bed, of that mysterious time when regular in life was going on down stairs, while I was buried alive under sheets and blankets. Later it was the fear of school, the first contact of the tender little soul with life's crudeness. Later still it was the experience which all of us know of waking in the morning with a feeling of dismay at what we have to do on getting up; the obvious duties in which, perhaps we have grown stale; the things we have neglected; those in which we have made mistakes; those as to which we have wilfully done wrong; those which we weary or bore or annoy or discourage us. Sometimes there are more serious things still; bereavements, or frightfully adverse conditions, or hardships we never expected brought on us by someone else.

It is unnecessary to catalog these situations as we at all times in our lives have to face them daily. Fear dogs one of in one way and another,

but everyone in some way.

Look at the people you run up against in the course of a few hours. Everyone is living in fear. The mother is afraid for her children. The father is afraid for his business. The clerk for his job. The worker The clerk for his job. The worker is afraid of his boss or his competitor. There is hardly a man who is not afraid that some other man will not do him a bad turn. There is hardly a woman who is not afraid that the thing she craves may be denied her, or what she loves may be snatched away. There is not a home or an office or a factory or a school or a church in which some hang-dog apprehension is not eating at the hearts

of the men, women and children who go in and out.

If, therefore one has the feeblest contributions to make to the defeat of such a foe it becomes difficult to withold it."

This is just part of the opening chapter and from there the author goes on thru 270 pages to give a cure for fear, one that has not only been a curative to him personally but to his knowledge to hundreds of others. He does not claim the ideas are original with him.

They have come from many

A servicable Practical Skirt 2696—This is a splendid model for maternity or invalid service. The side gores and back have platt extensions at the seams. Serge, broadcloth, gabar dine, satin, velveteen and crepe, also wash fabrics are good for this style.

The Pattern is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches walst measure.

Width of skirt is about 2 1-2 yards at the foot, with plats drawn out.



sources some deep in the past, others of so recent a date that the very day or hour when they revealed themselves is known. He has just put these ideas thru the mill of his own mind developed and practiced them and benefitted to such an extent that he has constrained to broadcast them. The dominant idea on which he builds is, that every one is necessary to his Creator and to his community, each one has a part to play and a destiny to work out and there-fore by putting himself in harmony with the plans of his Maker has for him he draws upon such resources as he cannot estimate. He may put himself in a state of mental quiet and trust and draw upon a limitless supply of devine energy, drawing unto himself the health, success and happiness he craves.

BRINGING UP CHILDREN

THIS subject is as old as life itself, animal or human. The dumb animals of the wild train their young and the bear of today is the same in nature as a hundred years

But in the human, well, we hear parents make the remark. I don't know where my children or child got such ideas, I never was that way, showing that there are influences in human life not met with in animal life, or rather these influences are not dealt with in the human as in the animal. A story will illustrate. Preacher No. one, proud father of a little boy called with his wife and boy on preacher No. two who had two children, boy and girl. When bed time for the children came preacher No. two said to his children, it's your bedtime now, put away your play-things and get ready for bed. They things and get ready for bed. immediately complied without any resistance. Whereupon preacher No. one remarked to preacher No. two. will they always do that? to which preacher No. two replied "Will they." We furnish the will, they do the rest. The point is parents do not furnish the will while the child is yet too young to judge and use his will correctly. We furnish them a home, clothes, food; watch over them and guard them against injury, why not furnish them the will while they

are dependent little folks. take temper for will. Temper is a good thing, in steel it is a condition for which steel has been brought by a process of heating, cooling and drawing until we know just what its temper is. Until then it is of no use. So with children. We can help temper them.

Remember that every proclivity a child displays is the direct product of their subconscious mind and this product is in turn the result of repeated that of their forbears

What I am in my subconscious mind up to the age of reason is what as before stated was the oft repeated conscious that of my progenitors. What I am in my subconscious mind after I reach the age of reasoning is what I allow to reach my subconscious mind, thus there is a great work for us to begin at that age, take an inventory of our proclivities and if we find there undesirable ones, supplant them with desirable ones, always remembering the law that two things cannot occupy the same place at the same time. Under-standing and doing this work in myself I can start the work for my children earlier in their life thus saving them much hard work later in life. "It is man's privilege to take part in the process of his own creation." We enter and leave this world without having anything to say about it, but we have all to say about it while we are here and if we do the work above stated while here we will be kept busy. As to the bouyancy of children spoken of by Mrs. Bacon. Be glad of it sister, you cannot guide a ship unless it is under motion.—M. A. Connor, Grand Haven, Michigan.

WHILE Winter still lingers in the lap of Spring we know that in a few short weeks we will have to lay aside our drab winter cloth-ing and blosson out like the crocuses. A little planning and a few patterns chosen from our paper or our splendid new catalog, which by the way has been reduced to 12c will make the accomplishment easier.

Some of our new blouses are very gay. Made of crepe de chine in most

gorgeous colors and designs. Egyptian figures, Paisley-shawl patterns and arebesques that make one gasp and say—what next? I saw one gorgeous colors and designs. tian figures, Paisley-shawl p that looked like a snapshot of the congregation on the tower of Babel, so varied and grotesque were the figures. The windows show many pretty sport skirts of silk, and wool. In cottons, pique, poplin, and gabar-dine are in use as formerly. Vieylla flamel makes a splendid skirt and blouse for summer wear, a plaited or plain skirt buttoned on one side and a blouse such as those pictured in the last issue, will make a practical and pretty outfit. This flannel will neither fade nor shrink and of course wears exceedingly well. It comes in the lovely useda green so much worn this coming summer and in many other colors. I saw one very attractive design, the skirt of of cream colored wool, side plaits all around, worn with a pretty green. crepe de chine blouse. A soft white-hat completed the costume. In cloth suits of dark material one sees the plain straight lines in coat and skirt and long, close sleeve.

UNDER PONTIUS PILATE

My letter to the publishers of this book, about which we had an inquiry, was answered as follows:

Dear Madam:—

We are in receipt of your favor of the 20th regarding the authenticity of the letters published in Mr. Schuyler's book "Under Pontius Pilate." We beg to advise you that the letters are not authentic but are the creation of the late Mr. Schuyler, based on historical documents which came into his possession. We believe they are authentic as far as the descriptions of the happenings are concerned, but they are not translations of actual letters. Very truly,—Funk & Wagnalls Co. Per N. G. D.

CORRESPONDENCE COLUMN

Your offer to print anything that promises to be of mutual is fine, I think our Editor is doing her share in offering those fine patterns, for women and children at that price. Others charge war prices. Would Ye Editor allow us women to send in our favorite quilt patterns and could we have them illustrated? Would we have to send them pieced of cloth? It would help the older wemen pass away many tedious hours, piecing and designing. There is no farm paper that does print quilt patterns and your subscribers would surely be pleased.—Reader.

—We will be glad to make up the patterns sent in, just send a drawing, having all lines carefully and clearly marked using a good ruler so that the lines may be perfectly straight and mark the length of each line in

Notice Please

A pattern here for Mrs. D. Nichols. It was sent to wrong address. A stocking foot pattern and child's romper suit also wrong address. I will forward them if given correct address.

The Michigan Agricultural College is sending out a splendid bulletin on home canning, taking up fruits, vegetables and meats. Full directions are given and illustrations of equipment used. The One-Period Celd Pack method is given preference. Canning, drying and brining are the three methods resorted to in preserving food but the first is recorded. serving food but the first is recom-mended as it keeps the products in a condition more like freshly cooked foods, also they can be prepared for the table so much more quickly. Send to the M. A. C., East Lansing, Michigan, for this bulletin. It is Club Bulletin No. 10.

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Mrs. J. A.,—I read your request for a preparation to make labels stick to syrup cans. We had the same trouble until we used cooked starch, we apply it with a lather brush, the same as used for shaving. The brush can be cleaned afterward. The labels stick now,—Mrs. G. D., Woodland, Michigan.

I would like to find out thru the columns of your paper, the M. B. F., what was the name of the Secretary of the Treasury, under the Lincoln administration, also who originated the idea of the (Greenback money.) It was before my day, but I think it was during the war.

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F. SPRRING FASHIONS

Catalogs 12 cents Patterns 12 cents FASHION BOOK NOTICE

Send 12 cents in silver or stamps for our UP-TO-DATE SPRING and SUMMER 1923 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING.



A Practical Utility
Skirt
Skirt
3871—Here is a pleasing version of the "wrap" skirt, which is made in one piece and closes like a coat, or wrap. The advantage is at once apparent. No disarranged hair or blouse, just ease and comfort in adjusting and removing this skirt. It may be made with or without a back seam. The style is nice for sports materials, as well as for taffeta, moire, prunella and crepe. It is excellent for wash materials.

The Pattern is cut in 8 sizes: 24 26 28

moire, prunella and crepe. It is excellent for wash materials.

The Pattern is cut in 8 sizes: 24, 26, 28, 30, 32, 34, 36, and 38 inches waist measure. A 30-inch size requires 25-8 yards of material 44 inches wide if made without back seam, and 27-8 yards of 42-inch if with the seam. The width at the foot is about 2 yards.



A Desirable Model
2898—Men's and
Boys' Shirt, with
Two Styles of Collar
and with Regulation
or Coat Closing, Suitchle for madras, perpale, linen, cambric,
silk, solsette, or flannel.

silk, soisette, or flan-nel:
The Pattern is cut in 8 sizes: for Men: 36, 38, 40, 42, 44, 46, 48 and 50 inches breast measure, and in 4 sizes for Boys: 10, 12, 14 and 16 years. It requires 43-8 yards of 27 inch material for a 36 inch size.



A Serviceable Practical Model

3939.—Madras, percale, gingham, solsyette, poplin, linen, pique, flannel and silk are nice for this style. The short sleeve is a new feature and fine for warm work.

The Pattern is cut in 7 sizes: 38, 40, 42, 44, 46, 48 and 50 inches breast measure to correspond in sizes, 15, 16 1-2, 16, 16 1-2, 17, 17 1-2 and 18; It requires 3 1-2 yards of 36 inch material for a 17 inch neck size. a titel ha

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to know and will be very glad if some one can tell me, and oblige.—
A sonstant reader of your good paper—Mrs. S. H. Andrews.

—Salmon P. Chase was Secretary of the Treasury under Lincoln. It was he who originated the Greenback

F. Pierce—After the war, the the Kaiser was sent to Doorn, Hol-land, and remains there, virtually a prisoner of war, having freedom only of his house and grounds: . He is obliged most simply.

obliged most simply.

His first wife died since the war and recently he married again, a widow much younger than himself. She has a family of children. The report is current that they do not get along very happily, in fact, that they have virtually separated, living in entirely different parts of the domicle. It is also reported and no icle. It is also reported and no doubt true that his health has failed, that he is broken in mind, spirit and body, practically deserted by his children who entirely disapproved of his second marriage.

Mrs. M. C.—Many thanks for your good letter. You may be sure that when I am in your locality again I shall be most happy to pull that latch string you speak of. I can imagine what your view must be and surely would enjoy seeing it and you.

Does any reader have directions for making hominy with soda? I would like to print them.

Mrs. H.—Peroxide will bleach the hairs and in time kill them. Electricity kills the roots but is rather trying. There are many good and safe depilatories on the market. If you wish I will send you the name of several that can be purchased at any drug store.

RECIPES, ASKED FOR

Corn Starch Cake Corn Starch Cake

2 cups pulverized sugar, ¾ cup of
butter, 1 cup of corn starch dissolved in 1 cup of sweet milk, 2 cups
of flour, whites of 7 eggs, 2 tps of
baking powder, mixed well into the
flour. Cream the butter and sugar,
add starch and milk, then add the
whites and flour gradually. Flavor
with lemon or rose. with lemon or rose.

Panned Oysters 18 to 30 small oysters, 1 tbls but-ter, 1 tbs cracker crumbs, salt and pepper to taste. 1 tps lemon juice, a dash of cayanne. Put oysters on in their own liquor and when they boil up add the other ingredients. Cook one minute and serve on toast.

Oyster Stew

1 quart of milk, 1 pint of oysters,
butter, salt and pepper. Serves four
people. Let milk get hot, then add
oysters aand cook until they shrivle,
add a generous piece of butter, seasoning and serve piping hot.

I will give my way that I have used for years. Having never lost a quart, I clean small casings and fill with sausage, usually the day after butchering. I fill pans and skillets and fill my oven. Then I have my jars sterilized and ready. I cook meat just enough to get the water out, do not brown, fill the cans, use the cooked out liquid to pour over the sausage in the cans. Adding lard if the age in the cans. Adding lard if the liquid runs short. I put on rubbers and caps and boil 30 minutes in my boiler. Then tighten covers very tight.—Mrs. V. Lidgard.

I found the following recipe in a government bulletin on maple sugar making. It has proven very satisfactory. Purchase ungummed labels and apply paste. It does not rust the cans as acid does and it sticks.

½ oz. silicate of soda, 1 oz. corn starch, 1½ pints cold water. Mix soda and starch with a little water, add all of the water and cook in a double boiler until clear. Yours truly.—Mrs. Fred Rowlander.

AWAY WITH SPOTS

Having received so much help from our paper, I feel that I must do my bit to help some others. I am sending some stain removers and hope these will be of help to those inquiring about them. To remove ink—Melted tallow or butter and salt.

To remove oil—A few drops of

chloroform will remove the oil from the finest goods. Place a piece of blotting paper under the spot and drop a few drops of chloroform on soiled spot.

To remove rust stain—Make a paste of cream of tartar and water, cover the spot and hang the article in the sun, when dry brush off, repeat this until the spot is removed.

To remove mud stain—From white goods by dipping in kerosene before washing. From the colored clothes by letting the mud dry, brushing out as much as possible and covering the spot with a mixture of salt and flour, let stand several hours in a dry place and then brush

To remove tar-Rub the spot with lard, let stand a few minutes then rub to loosen tar and wash in the usual way.

To remove axel grease-Put sweet cream on white goods, leave until dry then wash with soap and water.

To remove mildew—Mix two teaspoons of baking powder with the juice of one lemon, apply and let article dry. After drying, wash and hang in the sun.

To remove perspiration stain—If the spots are of recent origin, rinsing with ammonia is usually sufficient: if the stain has been on the goods for some time, treat the stain with oxalic acid and rinse in water.

with oxalic acid and rinse in water.

My favorite cookie recipe is for ginger cookies. 1 cup sugar, 1 cup shortening, 1 cup molasses, 1 cup of hot water, 1 tps. each of soda, salt, ginger, and flour to roll out.

Hermits—drop from spoon: 1 cup of brown sugar, ½ cup of shortening ½ cup each of molasses and warm water, 1 egg, 1 tps soda, 1 tps vanilla, ½ tps salt, ½ tps nutmeg, 3 cups of flour, 1 tps baking powder, ½ cup of fruit or nut meats.

Pancakes—Part buckwheat flour can be used, 1 quart of skim milk,

can be used, 1 quart of skim milk, 2 tablespoonfuls sugar, 1 tps salt, 2 tps. baking-powder, flour to make a batter, 2 tbls of cream will improve them.

prove them.

If the lady will put a spoonful of borax in her starch, her irons will not stick I have written so much I fear you will not want to hear from me again.—Mrs. R. E. Combs.—Indeed we will, and many thanks for all the help in your letter. In last issue there are instructions for caring for a fern caring for a fern.

WHAT IS YOUR MILEAGE?

THE inspiration for the motion picture was finished. picture was finished by a Tired Housewife to whom her hus-band remarked one evening. "You have nothing to do but housework. I don't see why you should always be so fagged out at night."

The wife decided that she would prove to her husband some reason for being tired. In order to do so she purchased a pedometer, hooked it to her belt, gaged to the length of her step, to measure the steps she took about the house.

In one average day's work she had taken 27,840 steps. They covered a distance of nearly eight miles. At the rate she was going she could have walked around the world in less than ten years.

This, of course, did not include the "labor of heart or hands," but it was sufficient to call the attention of her husband to the amount of actual physical energy which was being consumed in her housework and to induce him when he made an addition to the house to include in his plans a model kitchen that would save

A FABLE

Having slept for three months, a boa constrictor woke up with an applitte that respected neither weak nor strong, friend or foe.

respected neither weak nor strong, friend or foe.

As a first victim he eaught a rabbit which he devoured in his usual way, poor bunny being but a mouthful. Having whetted his appetite with this tidbit, the boa constrictor started out on the quest of further victuals. Presently he came to a rall fence and started under it. But the undigested rabbit made a lump which could not pass through the fence.

Too stubborn to back out, the reptile remained in that position until another rabbit came along and was also swallowed by the boa constrictor.

This rabbit went down as far as the fence rail and with his predecessor on the other side of the fence formed a perfect locking arrangement which held the boa constrictor so firmly that he could move neither forward nor back and fell an easy victim to a farmer who came along just then.

victim to a farmer was
then.

Moral: When you're in wrong don't
hesitate to back out before it is too late.

The Walk-Over Man.

zor 3 Cans of Baking Powder

Are Not Worth the Price of One

If they are the "big can and cheap" kind because they may mean baking failures.

THAT'S WHY

CALUMET

The Economy BAKING POWDER

Is the biggest selling brand in the world; its sales are over 150% greater than that of any other brand



Don't let a BIG CAN or a very low price mis-lead you.

Experimenting with an uncertain brand is expensive—because it Wastes time and money



THE WORLD'S GREATEST BAKING POWDER



Buys All the Paper for An Entire Room

Here is a big Montgomery Ward offer! A DOUBLE LENGTH roll of wall paper for only 6c. Enough to paper an entire room 10x12 for as little as 82c! This includes side wall, border and ceiling paper.

Send for our new book of Wall Paper Samples and see the MANY OTHER big values we have ready for you. It shows you our complete new assortment grass-clotts, tapestries, oatmeal papers, leather patterns, fabrics. And all at prices to suit your pocketbook. Among the better grades, we have a big variety for only 50c and up per DOUBLE LENGTH roll. And remember, you get twice as much wall paper in one of our 16-yard DOUBLE LENGTH rolls as in the ordinary 8-yard single roll.

Contains over 100 Actual Samples

Be sure to get a copy of this book before planning your Spring decorating. It
is made up of actual large-sized samples. With
each side wall is shown a sample of the border to
match. Easy and pleasant to select your wall
paper this way.
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today. Ask for Wall Paper Sample Book, No.
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DEMAND

Positively Best Flour Money Can Buy.

A Trial Bag will prove it! Manufactured by The New Era Milling Co., Arkansas City, Kans.

J. W. HARVEY & SON.

Central States Managera,
MARION. IND. the second secon

How Much Money Did You Make Last Year?

Do you know? Did your last year's work show a profit? Accurate accounts are as necessary in farming as in any other business. The Papec way is simple and easy. A few entries daily in our Farmers' Record and Account Book will show you where the money sees and what returns it brings. There are 50 pages for accounts, inventories, breeding records, useful tables, etc.



The new Self-feed Third Roll entirely does away with hand feeding. The new elastic Angle-steel Link Belt assures positive action—and will retain its shape for years. These and other improvements make the 1923 Papec the finest and best Ensilage Cutter ever made, regardless of price. Yet we are offering this splendid new model at a substantial reduction, Your dollars go farther when invested in a Papec. Four sizes: Nos. 10, 13, 16, and 19.

Our Catalog tells all about the laws and the shows how it.

19.

If Catalog tells all about the 1923 Papecws how it will pay for itself in from one to two
rs. Write for it today.

PAPEC MACHINE COMPANY
187 Main St. Shortsville, New York
36 Distributing Stations Enable
Papec Dealers To Give Frompt Service.



Throws



BREEDERS DIRECTORY

Advertisements inserted under this neading for reputably breeders of Live Stock at special low-rates to encourage the growing of pure-preds on the farms of our readers. Our advertising rate is Thirty Cents (300) per agate line per insertion. Fourteen agate lines to the column inch of \$4.20 per inch, less 2%, for each if sent with order or paid on or before the 40th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters, BREEDERS DIRECTORY, MICHIGAM BUSINESS FARMER, MT. CLEMENS, MICH.

SALE DATE

To avoir continuing units we will without oost, list the date of any live stock sale in Bilohigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor. W. B. F., Mt. Clemens

Feb. 17—Poland Chinas. Witt Bros., Adrian

Mich.
Jonesville, Mich.
Peb. 22.—Poland Chinas, A. A. Feldhamp,
Manchester.
Peb. 27—Poland Chinas, J. E. Mygants, St.
Johns.

Peb. 27—Poland Chinas, J. E. Mygants, St. Johns.
Peb. 28—Poland Chinas, Chas. Wetsel & Sons, Ithaca.
Mar. 1—Poland Chinas, Archie Ward, Breckenridge, Mich.
Mar. 2—O. V. Tracey, Ithaca, Mich.
Mar. 2—Botted Poland Chinas, C. Watson, Breckenridge.
Mar. 7—Holsteins, E. E. Butters, Coldwater, Mich.
Mar. 8—Chester Whites, Alexander & Bodimer, Vassar, Mich.
Mar. 10—Holsteins, Muschff Bros., South Lyons, Mich.
Mar. 12—Duno Jesseys, Schaffer Bros., Oxford, Mich.
Mar. 21—Abertleen-Angus, Russell Bros., Mar. 22—Poland Chinas, Sonley Bros., St. Louis.

CATTLE

HOLSTEIN-FRIESIAN

OT. CLEARANCE SALE. WE ARE OFFERING
0 halfers and buils. Heavy producing dams. Sire
as 7 dams averaging nearly 1,100 lbs. on yearly
st. Free from T. B., \$50.00 and up.
WOLVERINE BAIRY FARM
rop.—H. G. Booth

FADINATION FARM, SOUTH MAIN ST. Austra, Mich. Anction Bale, Wednesday, Feb. 21, 1925, 1 P. M. 10 cows milking; 7 heiters; 3 bull alves; 1 registered Percheron stallion; 1 registered Percheron faur. J. F. GLADY, Vassar, Mich.





Every man who makes his living milking cows knows that size is one of the best reasons for Holsteins.

Size Means:

Capacity - Ruggedness - Economic Production - Strong Calves that Live -Ability to Turn Rough Feed Into Milk -More Meat Value at the End of Their Milking Days

Let Us Tell You the Whole Story of the Holstein Cow EXTENSION SERVICE, 230 East Ohio Street, Chicago, Ill.

DISPERSION SALE

35 Pure Bred Holsteins

MARCH 7, 1923

Representing 22 years of selecting and breeding. All but herd sire are direct decendants of two cows bought one in fall of 1900 and one in fall of 1901, one of which won three firsts at Sheboygan County Fair at Plymouth, Wis., in 1905, with N. J. Jelet of Rosendale as judge; first as best Holstein cow shown, first as best of all breeds shown and first as cow giving most milk at fair. A daughter of hers were first over Manage Poets the cow that won first over Meneva Beats, the cow that has won more state and national prizes than any other of the breed. A granddaughter of hers is to be sold in the sale, Neeltji Terzool Segis. She has a 7 day record of 28.46 lbs. butter and 633.5 lbs. milk, milking 99.4 lbs. her best day as a 3-year-old. There are also 2 of her sons to be sold. They are from the herd sire to be sold, Paul Pieterje Wane Princi; his dam has a record of 117 lbs. milk in a day and an average of 107 lbs. for 30 days with 30 lbs. butter in 7 days and 122 lbs. in 30 days. He has two sisters that at 2½ years of age milked 80 lbs. and 75 lbs. respectively and made 22 and 24 lbs. butter each. There are also 13 of his daughters in the sale.

The herd has passed four tuberculosis tests without a reactor and

The herd has passed four theorems tests without a reactor and they will be sold on a 60-day guarantee retest.

The herd is also free from abortion.

W. H. Krouse, Thorp, Wis.; Homer Green, Bronson, Mich.; Auctioneers Write to E. E. BUTTERS, Coldwater, Michigan for Catalog.

AIRY and LIVESTOC

DROVIDE sufficient bone and muscle forming foods, such as oats, middlings, oil meal, digester tankage, skim milk, butter milk, or fine alfalfa hay, to insure healthy development of both sow and litter. The amount of fattening foods such as corn and bariey should be regulated largely by the condition of the

Good rations are: 1. Equal parts by weight of corn and barley, cats and middlings. 2. Nine or ten parts of corn with one part of digester tankage. By feeding fine alfalfa hay in a rack, bulg and growing constituents are added and a larger proportion of corn or barley can be used in these rations. A small amount of roots add variety and acts as a conditioner. Provide plenty of fresh water.

If the sow was in fair condition when bred, she should gain from 50 to 75 pounds before farrowing. The amount to feed cannot be stated amount to feed cannot be stated definitely as much depends upon the individual, but one and one-quarter pounds of feed per 100 pounds live weight is a guide to follow for mature sows. Gilts should have about two pounds per day for 100 pounds live weight.

Do not allow the sow to become overly fat but keep her in strong, healthy condition. She should gain steadily throughout the period of gestation, but especially during the last six or eight weeks.

Give the sow a small amount of wood ashes, charcoal or soft coal ocassionally.

If your sows in the past have farrowed hairless pigs, add 10 grams of potassium iodide to each 100 pounds of feed given during preg-

Exercise is very essential. Give the sow a fair-sized lot to run in.

Provide a clean, dry, well-venti-lated, well-bedded pen. This need not be very warm. If the sows are steaming in the morning, they are being kept too warm. A portable cot gives excellent results and exercise can be induced by feeding at one end of lot and placing cot at the other end.

Do not keep more than three average-sized sows in one regular sized cot (6 feet by 8 feet) especially near farrowing time. They are liable to tramp on one another and cause abortion or kill the unborn pigs.

Do not allow the sow to become infested with lice or other parasites.

SUGGESTIONS ON CARE OF THE Rub her thoroughly with crude oil a couple of times during the winter.

a couple of times during the winter. Put a sow in a farrowing pen about ten days before she is due to farrow. Place a guard rail around pen about ten inches from the floor pen about ten inches from the floor and same distance from wall so she cannot crush the pigs against the wall. Provide a limited amount of short or cut straw for bedding. If floor is cement, cover a portion with hoards to make a warmer hed boards to make a warmer bed.

Allow the sow exercise after being placed in farrowing pen. Lack of exercise causes constipation which causes the death of large numbers of pigs. Control this by regulating the feed rather than by drugs. A small amount of oil meal daily is a good laxative.

The sow should be watched at farrowing time and assistance given. if necessary. If the weather is cold, if necessary. If the weather is cold, put weak pigs in a basket with a covered bottle of warm water or a warm brick for a short time. See that each pig nurses as soon as pos-sible after being dropped. Do not disturb the sow even to feed, for at least 12 hours, but provide fresh water slightly warmed if weather is cold. Feed very lightly with a thin slop at first. Gradually increase the amount as pigs consume more milk. Be very careful to not overfeed at this stage as it will cause digestive troubles in the pigs and may injure the sow's urred.

As the pigs develop, feed the sow more liberally as feed fed through the sow will make larger gains in the pigs than the same amount of feed given direct to the pigs after being weaned. A good ration at this stage is 100 pounds each of

this stage is 100 pounds each of ground corn or barley, oats and middlings with 20 pounds of oil meal. As soon as the pigs begin to eat, start feeding them in a separate trough, where the sow cannot molest them. They may be fed as much as they will eat twice a day of the following mixture: 20 pounds of middlings, 10 pounds of ground cats, 10 pounds of ground corn, barley or 10 pounds of ground corn, barley or rye with sufficient skim milk to make a fairly thin slop. If skim milk is not available, 1½ pounds of 60% digester tankage or 2½ pounds of oil meal should be added to the above ration. If ground cats are fed in fairly large proportions, the hulls should be screened out, as they are apt to cause digestive disturbances.

Remember that a brood sow worth keeping is deserving of close attention. Catering to the individual needs is what spells success with any class of live-stock.—W. E. Edwards, Animal Husbandry Dept., M. A. C.

Breeders Meetings During Farmers' Week

The 15th annual meeting of the Michigan Horse Breeders' Association was held at Michigan Agricultural College on Wednesday, January 31, 1923, in conjunction with the annual Farmer's Week.

A parade of prize winning horses

owned at the college was the first event. This was followed by a judg-ing contest in which the breeders of the state participated.

In the stallion foal class, 1st, 2nd, and 3rd went to C. M. Hicks and Son of Williamstown, Michigan, and 4th to M. A. C. In the yearling class 1st went to M. A. C., 2nd to M. A. Hatch, Okemes, 3rd to L. D. Cock, Williamstown, Michigan, and 4th to M. A. C. John Sharkey of Bellevue tied the ribbons tied the ribbons.

A meeting of the Association followed the horse show. President Ray Whitney of Onondago, presiding. An address of welcome by Dean Shaw, F. T. Riddell of the Farm Management Department, M. A. C., followed with a talk on "The Results of a Survey of Michigan Farms to Determine the status of the horse and Tractor Situation." Addresses by John Sharkey of Bellevue, and John Jacobs of Lansing on the "Supply and Market for Work Horses' followed by Jacob DeGeus, who spoke on "The Supply and Market in Reg-istered Belgians." An explanation of the changes in the Stallion Law was given. All made up a program of unusual interest. The meeting was unique in that no outside talent was used and yet one of the most inspir-

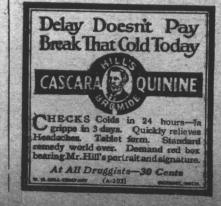
ing meetings ever put on by the Association. The meeting adjourned until 1:30 when after a dinner with the Exchange Club of Lansing the meeting was again called to order for the business session.

Upon motion of John Sharkey of Bellevne a rising vote of appreciation was extended Superintendent Hudson and College authorities for the splendid improvement and work being done with College horses.

Following the reading of the minutes and Treasurers report officers were elected as follows:

President, John Jacobs, St. Johns; Vice-Pres., Jacob DeGeus, Alicia; Sec'y-Treas., R. S. Hudson, East Lansing.

Executive Board: John Sharkey, Bellevue; O. E. Belle, Mason; L. C.



R SALE—MOLSTEIN BULL CALF, 1 old. Dam 28.91 hs. butter, sire 33 hs. 1,100 h. yearly record. Price \$300.00 or exchange for suitable female.

COOK BROS., Fowlerville, Mich.

SHORTHORNS

LADWIN COUNTY SHORTHORN BREEDERS for the best in beef and milk strains. All ages, th sexes. W. S. HUBER, Sec'y, Gladwin, Mich.

ffer one red, low down, thick bull call fifteen as ald, also one roan calf fifteen months old, regain if taken at once, Also a few young with calves at foot.

C. H. Prescott & Sons Herd at Prescott, Mich Office at

Tawas City, Mich. A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangehlossom Family. Fit to head any herd. Younger omes for sale. L. C. KELLY & SON, Plymouth, Mich.

FOR SALE—ENTIRE HERD OF SHORTHORN Cattle. Cows, heifers, and cows with calves by side. Priced to sell. Satisfaction guaranteed. T. B. write now. H. E. LIVERMORE, Romes, Mich.

CENTRAL MICH. SHORTHORN BREEDERS' Assn. offer for sale both milk and boef breeding, all ages. Write M. E. WILLER, See'y, Greenville, Mich.

SHORTHORN CATTLE TUBERCULIN TESTED
Berkshire hogs, both seres,
SIMON G. MAICHELE, Middleville, Mich.

DURHAMS

FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old. I have also a few female Durhams for sale. HENRY J. LYNCH, Mayeffle, Tuscola Ge., Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock as reasonable prices. E. H. KERR & CO., Addison, Mich.

FOR SALE—SIX YOUNG ABERDEEN-ANGUS cows and hetters. Well bred, good individuals. Price \$800.00 F. O. B. Mich. GEO. HATHAWAY & SON, Ovid, Mich.

SPECIAL PRICE ON BULLS, RANGING IN age from 8 to 11 months, until Jan. 1st, 1923.
RUSSELL BROS., Merrill, Mich.

GUERNSEYS

FOR SALE—REGISTERED QUERNSEY HEIP-ers at reasonable prices, also choice bull calves of May Rose breeding. M. W. Wigman, Lansing, Mich., Bex 52.

FOR SALE REGISTERED QUERNSEYS ONE bull ready for service and bull calves. Herd just T. B. tested, no reaction H. F. NELSON, R. 1, MoBride, Mich. GUERNSEY BULL 11/2, YEARS OLD. SIRE and dam A. R. Typy, robust and well bred. 7-8 blood of Norman Missankee Red Nose, Price 3124. Accredited hard. A. M. SMITH, Lake GRy, Mich.

JERSEYS.

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale, Head ully accredited by State and Federal Government. Write or visit for prices and description. GUY C. WILBUR, BELDING, Wich.

JERSEY BULL CALVES FOR SALE. FROM 1 mo. to 12 mo. old. From Sired by Sunburst Arigos Misjesty: Farmen prices. Write your wants to F. S. WELBORN, R. 1, Kalamazoe, Mich.

BROWN SWISS

FOR SALE—REGISTERED BROWN SWISS heifers and cows, also one bull. Herd federal ac-credited. ELEWOOD FARMS, Sebewaing, Mich.

FOR SALE—REGISTERED BROWN SWISS Herd federal accredited. Come and see them or write for what you want. Ervin R. Moore, Ossee, Mich.

RED POLLED

RED POLLED CATTLE and helfom for sale.

ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan FOR SALE—OUR RED POLLED HERD BULL Clay Ella Ladda, and a few beffer caives. PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

POLLED SHORTHORN BULLS 4 TO 12 MOS. Heifers same. O. I. C. and C. White Gilts bred for Spring farrow. FRANK BARTLETT, Drydes, Mich.

AYRSHIRES

FOR SALE REGISTERED AYRSHIRE and bull calves, heifers and heifer calv some choice cows. FINDLAY BROS., R S. Vassar, Mich.

HEREFORDS



PRODUCE YOUR OWN FEEDERS UNDER EARLIRIPE HEREFORD BEEF PLAN guarantees maximum Investigate personally seess of other Michigan

T. F. B. SOTHAM & SONS (Herefords since 1839)

RIVERVIEW HEREFORDS FOR SALE also fow females. WMR. C. DICKEN, Supprise, Mich.

SWINE

14 DUROC SOWS

bred to a son of Big Bone Giant Sensation of Brookwater Farm for April and May farrow; also three fall boars. John C. Dean, Mason, Mich., R. 1.

SENSATION MARSI Our new herd boar.

Hunt, Eaton Rapids; R. E. Whitney, Onondago; Wm. Bird, St. Johns. Favorable action was taken upon

the following matters:
1. A resolution requesting the State Fair Board to make premiums in Horse Classes uniform, ie., giving as large a premium for young ani-mals as for old making a class for brood mares and colts, and putting the book on a par with that of

other states.

2. A request that the Extension Division of the College, through the State Club Leader, give some attention to the formation of colt clubs,

as well as pigs and calves.

3. The discontinuance of the small premium offered at the State Fair by the Association and the money used in Club work if nec-

4. To accept the invitation of Jacob DeGeus to visit the Prairie Farm the date to be set by the Executive Board working with Mr. DeGeus.

5. To put on a banquet in connection with next years' meeting.

Meeting adjourned—attendance
50—R. S. Hudson, Sec'y-Treas.

DUROC BREEDERS MEET
The Michigan Duroc Jersey Breeders Association held their annual meeting on Jan. 30th, 1923, at East Lansing, Mich.
The morning session was a regu-

lar get together meeting, new memwere received and officers for the coming year were nominated.
Mr. C. C. Terrell of New Vienna,

Ohio gave us a very interesting talk

on Duroc Salesmanship and was voted the thanks of the association.

Bob Evans was also on the program, but notified the association that business made it impossible to be present.

The "Lion's Club" then entertained the visitors at a luncheon held in College Gymnasium and Prof. Gardner addressed the breeders and gave the boys lots of encouragement for 1923.

The afternoon session opened at 2:00 P. M. Pres. Foster called the meeting to order and the following

meeting to order and the following officers were elected for 1923:

Pres., O. F. Foster, Pavilion, Mich., Sec'y, and Treas., F. J. Schaffer, Detroit, Mich.; Directors, V. A. Freeman, East Lansing, Mich., Carl Story, Lowell, Mich., N. Barnhart, St. Johns, Mich.

A resolution was then offered by V. A. Freeman that all county as-sociation be made member of the state association and that each county has a representative at the state

meetings.
Mr. N. Barnhart was then elected to represent the Duroc Association at the Mich. Swine Breeders Associa-tion on the 1 ton Litter Club, with full power to act.

The meeting then adjourned and the balance of the day was spent in visiting the fine new hog houses and splendid display of Dairy and Stock Cattle. The poultry exhibit was al-so large and the fine display of draught horses was very complete.-F. J. S., Sec'y.

DID McRAE "SELL" YOU OR YOUR FARM?

(Continued from page 17.) sent no money but made him the same offer as in that of the first letter. I also told him that winter would soon be here and I hoped his rich Mr. Brown and the other wealthy men he spoke of were not setting around and missing opportunities to buy good farms, waiting for him to get a few dollars out of some poor widow woman. I have never heard from him since. He is now running an ad in the Benzie Record published at Beu-lah, Michigan. My neighbor a widow, with a farm teld me yes-terday that she sent him \$5. I am anxious to know if he is a swindle"

From the above, you may take it that Mr. McRae is not exactly living up to his statement to the publisher under the date of December eighth, last, when he said "We are here to stay and expect to build up a nice clean business!"

Settled woman wishes to reduce expenses of trip any place near or north of Omaha, Nebraska. Would accompany corpse. Tel. 65909...-Los Angeles Times.

YOU CAN'T AFFORD TO HAVE SICK OR BACKWARD COWS

Kow-Kare Insures Profitable Dairying for Thousands All Over the Country

Cut out the constant leaks of dairying that result from sick cows and disappointing milk-yield, and you will begin to reap the real profits. Stop looking upon cow diseases as inevitable; they CAN be prevented.

The cow's winter diet is hard on her digestive and genital organs—runs them down. Overfeeding of rich concentrates only agravates the condition. What is needed in to keep the milk-making and digestive organs healthy enough to maintain top-notch production and at the same

Wow Now has the malls.

Kow-Kare has the medicinal properties to accomplish just that. It acts directly on the vital organs of the milch cow, toning up and giving strength. It is this marvelous rebuilding action that has made Kow-Kare famous in the treatment of cow diseases, such as Barrenness, Retained Afterbirth, Abortion, Bunches, Scours, Milk Fever.

We get thousands of let-ters each year, like this one from Jacob Germann, Farm-ingdale, Ill.

"I had three cows this Spring, one had garget, and one had milk fever, and one

DAIRY ASSOCIATION CO., Inc.

LYNDONVILLE VERMONT

Dispersion Sale Registered Holstein Cattle

On Farm 3

Saturday, March 10, 1923

Farm sale at 10:00 o'clock a. m. Cattle sale at 12:30 p. m. 4 bulls, two from 30 lb. dams, two with yearly backing. 50 cows and heifers. 4 thirty lb. cows. 8 others with records from 25 to 29 lbs.

2 daughters of 1000 lb. cows. 5 are now on S. O. Test.
14 daughters of King Ona Champion one of the best bred bulls
in the World, others bred to him.
Catalogs ready March 1st. Herd under State supervision.

(60 day retest guarantee) MUSLOFF BROTHERS, SOUTH LYONS, MICHIGAN (32 miles from Detroit, Michigan.)

Bred Sow Sale of Chester White Swine

MARCH 8th, 1923

Consisting of 37 bred gilts, 2 tried sows and 1 spring yearling boar, all well grown and of the best blood lines to be had. Big type and quality. Cholera immuned. Send for catalog.

ALEXANDER & BODIMER, VASSAR, MICHIGAN

Duroc Bred Sows and Gilts at Private Sale

Also fail pigs either sex. These are sired by or bred to State Fair winners. Prices are low and satisfaction guaranteed. Public sale of bred sows March 9. MICHIGANA FARM, Pavilion, Mich.

PEACH HILL FARM offers choice weanling Duros pigs, either wex. Priced very reasonable. Write us. Romeo, Mich.

MILL CREST DURGOS, PERRINTON, MICH.
We are breeding twenty sows and eighteen gilts
te seen of GREAT ORION SENSATION Yearling, spring and fall boars. NEWTON & BLANK,
Farm & miles straight south of Middleton,
Gratiet Go., Mich.

DUROO JERSEY BOARS READY FOR SER-vine. Sired by Famnie's Jos Orion \$25 each. Will alto C. O. D. Write us now. H. E. LIVERWORE & SON, Romeo, Mich.

CHESTER WHITES

BRED SOWS AND FALL GILTS FOR SALE Also some fall pigs. Pedigrees furnished. WILBUR JONES, Route No. 1, Reese, Mich.

REGISTERED O. F. C. BRED GILTS FOR Male. Weighing 250 lbs. A few fall bars. J. R. VAN ETTEN, Clifford, Wich.

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A CHANGE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROPT CREAMERY HOGFARM, Route 7. Mt. Clemens, Mich.

HAMPSHIRES SPRING BOARS AND BRED gits from 25 sows to select from Place your order now of you may be to late. 10th year JOHN W. SNYDER, R. 4, St. Johns. Mich.

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800 BRED EWES FOR SALE

in lots of 50 or more, black faced, from 1 to 4 yrs. old; no broken mouths, in good condition, bred to Shropshire and Oxford mans to lamb May first. Located 22 miles S. W. of Detroit on Detroit and Toledo electric and Dixis Highway. Telegraph address, Rockwood.

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HIGH CLASS REGISTERED SHROPSHIRE Elwes bred to rams of quality, in lots to suit. Large well covered. Flocks established 1890. C. LEMON & SONS, Dexter, Mich.

SHROPSHIRES 10 REGISTERED EWES.
Choice wooly Rama.
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WHEN WRITING TO ADVER-TISERS MENTION THE M. B. F.

Auction Duroc Jersey Swine

Tuesday, March 13, 1923, 12 o'clock

We will sell Registered Duroc Jerseys consisting of 7 BOARS--35 SOWS and GILTS

Bred to "SENSATION MARSI"

Farm 6 miles east of Oxford on Rochester Road.

Catalog on request free. Mail bids to Mr. R. Clark, Our care.

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Utah Farmer's Simple Method Gives Wonderfully Delicious Flavor and Saves 20 pounds in Every 100

You can flavor your hams and bacon deliciously and save time, money and meat by the easy method successfully used by W. H. Laws, Richfield, Utah. Mr. Laws simply paints his meat

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Send your name to the E. H. Wright Co., 850 Broadway, Kansas City, Mo., and receive, free and postpaid, a new \$1 book, "Meat Production on the Farm," which tells how to cure every kind of meat. This \$1 book is free to farmers only. Write for it today.

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A Remarkable Home Treatment Given by One Who Had It

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In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such rollef as I obtained was only temporary. Finally, I found a freatment that cured me completely and such a pitiful condition has sever returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism. to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and twil send it free to try. After you that long-locked for means of esting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON

MARK H. JACKSON 265J Durston Bldg., Syracuse, N. Y. Mr. Jackson is responsible. Above statement true.





The Children's Hour

EAR Nieces and Nephews:—I do 1) not know what to write this week. My brain does not appear to be working just right I seem to be suffering from a popular disease which quickly spread over the world about two years ago. I am all right during the day at the office but as soon as I get home I sit down and sit for hours and hours in one spot. My loved ones talk to me but I hear them not and then becoming vexed they call in loud tones but still I do not hear and they are obliged to touch me to attract my attention. And still all of this time there are sounds passing into ears beautiful music, songs, talking and also strange noises that are not so pleasant to hear. I contracted the disease from the bite of an insect and while it is said that while one may get better they will never become the same as before. One that contracts this disease desires to sit up until all hours of the night, bed having no attraction for them until around three o'clock in the morning: that is if the disease has secured a good hold upon you. Yes, I was bitten by an insect, a bug in fact, the "Radio Bug," and I have a small receiving set. I am sure all of you girls and boys who have radio sets in their homes know just how I feel. I hope that some day all readers of the Children's Hour will own radio sets so that they can hear the interesting and educating lectures, fine music, songs, and stories, that are in the air nearly all hours of the day and night. Maybe when that time comes we can call each other up just like we over the telephone. It's about time for a Detroit broadcasting station to open one of their programs so I am going to sign off and listen to it.—UNCLE NED.

OUR BOYS AND GIRLS
Dear Uncle Ned and Cousins:-We still take the M. B. F and like it very much. I enjoy reading the Children's Hour. I am in the eighth grade at school and hope I will pass. I thought I would tell you of a day's outing I had in the summer. One nice summer's day mother, sister and I took our lunch and went out in the woods. We stopped by a spring and ate our lunch. After lunch we gathered a large basket full of beautiful flowers and walked through the woods. It certainly was wonderful scenery, trees growing on the sloping banks and flowers growing on the mossy banks along the cool rippling stream. And our cows were lying under the shade of the large maple trees, chewing their cuds. We also saw many beautiful birds such as the robin, canary, bluebird and many Their melodious voices were others. delightful to hear. It was about four-thirty when we reached home. Somewhat tired, but pleased with our day's outing. I will close, with love to Uncle Ned and Cousins.—
Eleanor D. L. Stovel, Hubbard Lake, Michigan.

Dear Uncle Ned and Cousins:-I suppose you will be very much surprised to hear from me as I have not written in so long I expect you have forgotten me. How are all of you? I hope well and enjoying this lovely winter. It is snowing this morning. We've had a lot of snow this winter. I wonder how many of the cousins have ever gone to a spelling match and for a sleigh ride. I mean go to another school and spell against them. Well we went last Thursday, January 18. We went to a school six miles from our school. We just went a little ways off the main road though when we had to get off the sleigh and walk a ways, it was thaw-ing a little and the sleighing had all gone off and left the mud so we would have had a mud ride instead of a sleigh ride if we had stayed on the sleigh, don't you think so? Well we got to the school at last but they were not expecting us and I guess they got afraid and they didn't want to spell very badly so we played a few games and came home. We had a good time though. Nellie Inman, if you are reading this letter I wish you would write to me again or did

that picture of me scare you? hope not, you know you have not written since I sent it to you. Well I will be taking up all of the space if I don't stop. Won't some of the cousins please write to me? I am a girl 14 years old and I am now sick in bed and would like to hear from you. Goodbye everyone. From your niece and cousin.—Audrey Conlin, niece and cousin.—Audre R. 4, Bay City, Michigan.

Dear Uncle Ned:-I have never written before and I only saw one letter from around here, so I thought I would write. What is the matter with our page, is it going to sleep? Lets wake up cousins and write some nice letters. Well I will describe myself. I am 63 inches tall, have dark brown hair and light brown eyes and a light complexion. How many of you cousins wish summer was here I do. We have a big ditch near our place but the ice is no good, there is too much snow on it. This is my first letter and it is not very good but I will write again and that will be quite soon. What! Am I hearing you sigh Uncle Ned? Oh, I did not intend to write a story book. Will Myrtle Baress of Owendals please write to a story book. dals please write to me. Oh, I forgot to tell you my age. I am 14 years old. Please cousins, boys and girls, write to me and I will try and everyone.—Alma R. 2, Owendale, Michigan.

Dear Uncle Ned: - May I join hand in hand in the circle of letter writ-This is the first time I have written to you or any of the rest. I am a farmer's daughter, 13 years old. We have a farm of 40 acres and also took a contract for pickles so this means work. I am attending Hemlock High School now and am in the ninth grade. Some mornings when my partner and I go to school there is ice on our coat collars so you may be sure it is cold. I often wonder why we don't have school in summer and not in winter, because in winter it is too cold to go to school, while it would be warm in summer. Your niece.—Catherine Baker, R. 4, Hemlock, Michigan. Baker, R. 4, Hemlock, Michigan. P. S.—I think it would be a nice

thing for you to put a nmber of words on our page for us to see who can get the most words out of it, if the rest will second the motion.

Dear Uncle Ned:-I am a girl 15 years of age and live on a farm of 800 acres. We came out here from Michigan over three years ago and all want to go back in the spring as we do not like it out here. I am in the second year of high school and I like my school and teachers very well. I think I will have to close now. I enjoy reading the letters in the M. B. F., from the other hove and girls very much Will boys and girls very much. Will some readers of the M. B. F., please send me the piece "How Little Katie Knocked at the Door of Heaven?"— Miss Fairy M. Dunklee, Farmersville, Station, New York, Box 102.

-Dear Uncle Ned: -- May I join your merry circle. My father takes the M. B. F., and I enjoy reading the Children's Hour very much. I have one mile to walk to school and I am in the 5th grade. There are 32 children in our school. We have examinations every month. We have them on Thursday and Friday. I am 10 years old, my birth-day is the 12th of May. I have 7 sisters and 1 brother. We have 5 3 calves, 2 horses and 96 chickens. I live on a 120 acre farm. We have 2 pigs, 2 cats and 1 dog. I remain your niece,—Ida Gill, R. 1, Box 100, Kalamazoo, Michigan.

Dear Uncle Ned:-I have read in the M. B. F., many interesting letters of boys and girls, and enjoyed them very much and thought I would write to you. I have 1 brother and for pets I have a bull dog and a cat. I am 13 years old and in the 8th grade. My birthday is January the I have you all enjoyed way. 9th. I hope you all enjoyed your Christmas as much as I did mine. If I have any twin sisters or brothers I would like to hear from them. If I have no twin sisters or brothers, I

would be pleased to hear from any boy or girl. Love to all.—Ruby E. Smith, Box 138, Webberville, Mich.

Dear Uncle Ned:-Here again. How are you and all cousins? I am fine. I was home from school one week and I started again I live on an 80-acre farm. For pets I have 1 dog and 2 cats. My dogs name is Shep. My father takes the M. B. F., and I like it very well. I have 3 sisters. My two greatest sports are skating and skiing at which I have a very good time. My birthday comes May 1st, and I will be 16 years old. I have light hair and eyes and I am 5 feet and 1 inch tall. Have I a twin? Your friend.-Frank Stimax, Box 101, Engaldine, Michigan.

Dear Uncle Ned—May I join your merry circle? I will be 13 years old next Sunday and I am in the Seventh grade at school. I'm five feet and four inches in heighth and weigh about 90 pounds. I have blue eyes, brown hair and light complexion. I live on a 40-acre farm and we have 4 cows and 4 horses and 8 sheep. We have about 200 hens and 6 turkwe have about 200 hens and 6 turkies. How many of the girls know how to knit? I do. I am knitting my little niece a scarf. She was 5 years old last Sunday. I got a ring, a sweater, two pencils and tablets, a air of stockings, and shoes, a book of "Timothy's Quest" and candy, and nuts last week. Miss Bernice Drew. Hubbardston R 3 Bernice Drew, Hubbardston, R. 3,

Dear Uncle Ned-Is there enough room for another cousin? I will tell you about myself. I am 13 years old, in the 8th grade. I weigh 80 lbs: I have brown hair, brown eyes, fair complexion and wear glasses. My birthday is July sixteenth. Have I any twin sister or I have 3 sisters and 2 Uncle Ned did you ever brother? brothers. go coasting, well if you didn't you have missed a lot.. I am sending you a story. Will sime of the cousins write to me? Your neice.—Francis Nielsen, Coral, R. 2, Box 4, Mich.

Once upon a time some boys were playing at the edge of a pond in which lived a family of frogs. The boys amused themselves by throwing stones into the pond so as to make them skip on top of the water. The stones were flying thick and fast and the boys were enjoying themselves very much; but the poor frogs in the pond were trembling with fear.

At last one of the frogs, put his head out of the water and said, "Oh please, dear children, stop your cruel play! Though it may be fun

for you, it means death to us!"
Always stop to think wether your fun may not be the cause of another's unhappiness.

Yes, I have coasted and it sure is great fun—that is if you don't tip over and get a lot of snow down your neck. Your story is fine.— Uncle Ned.

THAT WOOD-BOX

H, gee whiz. That wood-box makes me sick. I have to trot, and trot and trot, To fill it stick by stick. And then it simply disappears Within the big stove door, And Ma she up and hollers out for me to get some more.

No matter where I want to go Or what I want to do Why Ma looks in the woodshed and at the wood-box And if the wood ain't piled up high, And split up nice and fine, She frowns and tells me, "No Siree, You cut up wood till nine.

And if the sun's a shinin' bright And you have got some ski's, You wish the darned old wood-box Was in Halifax, by gee.
You see the other neighbor boys
Go rearin' tearin' by. And someone whispers, "Come on, Jimmie, Can't you get out on the sly."

Then if you mutter to yourself And out the door you slips, When you get back you have to go And pick up all the chips. And pick up at the emps.

And so I say, most every day
When time is on the wing:
My goodness, gracious, MEROY ME.
PLL be GLAD when it comes spring.

—Mrs. Charlotte Byers. 923

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FARM MECHANICS

CARE AND REPAIR OF THE FARM TRACTOR

A CERTAIN amount of time regularly employed should be given to the care and repair of the farm machinery. It is now the acceptable time to investigate the ills of the iron family and remedy them for their maximum efficiency in the

The tractor, of all modern farming tools, is perhaps the least understood and will be considered first. The tractor, after each year's use, should be given a thorough examination for wear and defective parts. In ordinary usage, connecting rod bearings, piston pin bearings, rings and pistons will show signs of wear, which should be attended to at this time. A competent repair man is desirable for this work as a job poorly done is worse than no job at all. A manufacturing company should be better able to furnish competent help at this season than any other time.

However, for the owner mechanically inclined, the following is a suggested procedure for the adjustment of loose connecting rod bearings. Remove lubrication oil and necessary covers to make connecting rods and crank shaft accessible. With spark plugs removed, place crank shaft so that pistons are about one-half way on their strokes. Grasp the lower end of the connecting rod for one piston and move up and down and also sidewise in a direction parallel to the crank shaft. The up and down motion will indicate the extent of the looseness which requires adjustment. The looseness will be evident. Do in like manner with the rest of the rods. Assuming that all rods are loose, remove cotter keys and loosen nuts, holding caps of bearings to the body

of the rods. Adjust one by one by first removing cap and then removing liner on both sides of the bearing. The cap is replaced with the remaining liners fastened rigidly to the rod by means of the bolts and nuts. Considerable care should be exercised in making sure that the nuts are drawn tightly against the cap and the liners properly placed. Turn the starting crank and note its ease in turning. If it turns too easily, it is an indication that not sufficient liners have been removed. Remove more until, when assembled in place, there will be considerable effort required to turn the shaft. The adjustment is now too tight. Again remove cap, add a thin liner and readjust. This should be the correct setting. If not, repeat the operation.

setting. If not, repeat the operation.

Now unscrew the nuts by about one turn and proceed to the next connecting rod until all are adjusted. tighten all caps, replace cotter keys with new ones, replace covers and add the required amount of new lubrication oil. Where there are no liners between the bearing halves, it will be necessary to carefully file the cap to eliminate the looseness. When thick liners are used, apply the file to the liner for adjustment. Bearing adjustment is not difficult. It requires a little patience but is worth while.

Just as the tractor will require attention from time to time, so will the various other farm machinery. Proper housing is a great factor in preserving machinery. At least a week each year should be set aside, know as farm machinery week, when each farmer can give his implements the attention that means better service and longer life.—E. C. Sauve, Asst. Prof. Farm Mechanics, M. A. C.



Michigan Farm Bureau Brands include the Best varieties of alfalfa, clover, seed grains and other field and grass seeds. Their Vitality, Description and Purity are guaranteed to be as represented to the full amount of the Purchase Price.

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These conditions are commonly considered the most difficult for Alfalfa production.

We believe this Monroe County Alfalfa is the best strain of Common Alfalfa grown anywhere and that it is thoroughly adapted to Michigan conditions.

For further information write us for our pamphlet or write the Farm Crops Department M. A. C., East Lansing, for their literature

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Farm Bureau Brand Seeds are tagged with our analysis and guarantee which covers the full amount of the purchase price.

ICHIGAN CROPS

HUBAM CLOVER

As we would like to try some of the Hubam clover seed would like to have your advice on this. Whether it is necessary to inoculate and is it advisable to sow it with the grain? Does it withstand the winter? Also about what time to cut it for hay and can clover seed be threshed from this and is it a good soil builder? We have a clay and sand mixed soil.

—J. S. Y., Burr Oak, Mich.

—Hubam may be sown with a grain crop or, when used for pasture and the land is comparatively free from weeds, may be seeded alone. The soil should be well supplied with lime, the seed bed should be well firmed, and the seed should be inoculated.

Hubam is an annual and does not live through the winter. Seeds scattered on the ground during the late fall usually germinates and produces a crop the next season.

In tests conducted here at the Agricultural - Experiment Station practically the same yield has been secured from Hubam as the biennial white sweet clover when sown on the same day. The root system produced by the biennial white sweet clover the first season is much more extensive than that produced by Hubam.

Sweet clover should be cut for hay just before the blossom buds appear, and if cut at this stage the Hubam is not likely to produce a seed crop unless the fall is very favorable.—C. R. Megee, Farm Crops Dept., M. A. C.

VETCH AS A FEED

I would like to get all the information I can about sand vetch as a feed, the time to sow, amount of seed per acre and time to harvest.—

H. E. C. Secord Michigan

seed per acre and time to harvest.—
H. E. C., Secord, Michigan.
—Hairy vetch may be sown with rye and used for seed, pasture or for plowing under. When sown with rye it should be planted about the middle of August using a bushel of rye and from fifteen to twenty ounds of hairy vetch seed per acre.

Hairy vetch is also used with oats

Hairy vetch/is also used with oats for hay in which case it should be sown during the early spring, using approximately two bushels of oats and twenty pounds of hairy vetch seed.

Circular No. 50 on the culture of hairy vetch may be secured through the Business Farmer by addressing Director R. S. Shaw of the Michigan Agricultural College, East Lansing.—C. R. Megee, Farm Crops Dept., M. A. C.

Two ways to work alfalfa into the rotation: Corn, oats, alfalfa, alfalfa; potatoes, wheat, alfalfa, alfalfa.

Club girls baked 370,000 loaves of bread in 1921 in connection with extension club work carried in by extension club workers in the United States.



Seed Department

CROPS

MICHIGAN STATE FARM BUREAU

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FREE To introduce our Pedigreed Everbearing Strawberries we will send 25 fine plants



BABY CHICKS \$10 per 100 and UP

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GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS 50 58: 100, 515: 500, 574 WHITE WYANDOTTES, BUFF ROCKS. 50, 58.50; 100, 516; 500, 575 WHITE, BROWN and BUFF LEGHORNS. 50, 57.50; 100, 514; 500, 505

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HARDY, HEALTHY MICHIGAN CHICKS



We want your business and WANT TO HOLD IT when we do get it and will endeavor to treat you right. Order now right from this ad and GET THEM WHEN YOU WANT THEM. Reference, Holland City State Bank. CITY LIMITS HATCHERY, Box M.

CHICKS \$12.00 per 100 and Up

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, 57; 100, 513; 500, \$80.
BARRED ROOKS, S. C. and B. C. REDS, ANCONAS, B. MINORCAS, 50, \$8: 100, 105; 500, 570. WHITE WYANDOTTES, WHITE ROOKS and BUFF ORPINGTONS, BREPHARDS 381 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, \$8.50; 100, 514; 500, \$55.

Hatched from selected heavy keying flocks that are well fed and cared for insuring strong, thrable chicks that will make a profit for you. POSTPAID TO YOUR DOOK. ORDER DIRECT FROM THIS AD and SAVE TIME, Catalog free, Reference, Geneva Bank.



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g and Healthy. Chicks from selected heavy laying. Hogan tested floobs. ENGLIS: E LEGHORNS and ERGWN LEGHORNS, 50, 57; 100, 512; 500, 522.50, 512; 500, 522.50 b, 512; 500, 512;

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ALITY CHICKS

ig strong, vigorous, well-hatched chicks at following prices: WHITE and BROWN.
ERHORMS, SELECT, 50, \$8.50; 100, \$14; 500, \$77.50. ANOOMAS
ELECT, 50, \$9: 100, \$17; 500, \$82.50. WHITE and BROWN LEGHORMS.
ELECT, 50, \$7: 100, \$13.50; 500, \$65, ANOOMAS, SELECT, 50, \$7.50;
100, \$14.50; 500, \$70. Postpaid to your door and 100%, live delivery grantened drived from this ad early and get them when you want them. Also seding stock and special making Chicks. Get Our Catalog, Reference 2 Banks.

TOWNLINE POULTRY FARM, Box 27, Zesland, Michigan



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Hardy Northern Bred Chicks

Barvon S. C. W. LEGHORRS
Parks Strain BARRED ROCKS
The greetest egg producers known.
Heavy winter kyers See recent et
our pen 16 now at the Michigan
international Egg Laying Contest.
Get Quality children i Reasonable
prices from Holland's piomeer
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BABY CHICKS White and Brown Leghorms, Single and Rose Comb Reds, and Orpingtons, Barrel and White Plymons, Ancouss, and White Wyandette, \$15 per color and up. P. W. STONE HATCHERY, Lack 22, 24, Festion, Mich. F. M. Milliken, Prop.

Cured Her Rheumatism

Knowing from invible experience the suffer-ing caused by risementies. Mrs. J. E. Hurel, who lives at 605 E. Boughs Street, 5-280, Sloomington, II., b. so thankful at having cored investor that one of pure pratitude she is anxious by that M other pufferest just some to put rig. of their betters by a simple way at

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CHICKS KERLIN QUALITY



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CHICKS WE MAVE SHIPPED THOUSAND breeds, free booklet with guarantee and deliver-price. Freeport Hatchery, Box 10, Freeport, Maid



POULTRY SHOW HELD DURING FARMERS' WEEK

EMBERS of the Michigan Branch of the American Poul-try association met in confer-ence three days at M. A. C. Farmers'

Judge Chas. Gibson, Ellwood, Ind., spoke to the association Wednesday on the general care of rabbits, while scientific selection for egg production was taken up by Professor E. C. Foreman of the M. A. C. Poultry department. Professor W. R. Graham of the Ontario Agricultural College told of experiments in poultry nutri-tion carried on at the Canadian college.

college.
On Thursday, C. M. Ferguson, M.
A. C. Poultry Extension Department
discussed how invironment affected
egg production. Professor W. R.
Graham, O. A. C., told of Canada's
National Egg Policy. Different kinds
of poultry feed and the feeding were
taken up by D. E. Hale, Chicago, who judged the Poultry Show

At the meeting on Friday, Professor E. C. Foreman outlined various forms of poultry house construction. This was followed by a caponizing experiment conducted by C. M. Ferguson of the college Poultry exten-

sion department.

Over 400 entries were made for the annual poultry show. The largest entries were found in the classes White Wyandottes, Light Barred Rocks and Dark Barred Rocks making the competition exceptionally

strong here.
One of the attractions of the show was a four-legged pullet exhibited by the college. This bird caused much comment among the visitors. Judging in the various classes was

done by Judge D. E. Hale, of Chicago, one of the best known poultry experts in the country.

POTATOES AS POULTRY FEED

DOTATOES should be boiled or steamed before being fed to fowls and are fed to best advantage when mixed with mash. Since potatoes are quite fattening, they should be fed in limited quantities to laying hens or growing chickens, and should be used in connection with should be used in connection with other feeds. One hundred hens will consume about 10 pounds of cooked potatoes daily, and these potatoes can be used to replace cornmeal in the poultry mash. If so used, an equal weight of potatoes and mash may be mixed together. A laying mash for this purpose may be made of 1 part meat scrap, 1 part middlings, 2 parts bran, and 4 parts potatoes, by weight.—Colorado Agricultural College.

WATCH WHITE DIARRHEA

WHITE Diarrhea is one of the W most deadly diseases we have in the poultry yard. It has attained its present prevalence over the country largely because poultry keepers have failed to take organized steps toward its eradication through the simple means of break-ing up the life cycle of the germ. This is done by the simple expedient of refusing to use any birds in the breeding pen which have had the disease or were exposed to it as

It reaches its greatest activity two or three days after the chicks are hatched, oftentimes killing an entire brood. Some may survive and apparently be in excellent health, but the truth of the matter is that the germs are still in the reproductive organs, where they lie dormant until the fowl commences to produce eggs, and are in the chicks at the time they

and are in the chicks at the time they are hatched. The simplest way in which to stop the disease is to refuse to breed from stock ever exposed to it. It seems to have slight effect upon matured stock.

One way of preventing its spred as much as possible is to theroughly disinfect the incubators and brooders in which chicks infected with it were hatched or brooded before the young stock this season is produced. Do not pack eggs for hatching in straw, chaff, sawdust or any other material likely to become musty. Wiping the shells of the eggs with a cloth dampened in 60 per cent grain alcohol

BUSINESS FARMERS EXC! AMGE Ade Under this Head 100 per Word, per Issue

SARON FOR AT.

FREE COAL.—FOR A FEW HOURS SPARE tim—write today. PEOPLES COAL CO., 1120 W. 35th St., Dept. 71, Chicago, III.

WANTED TO BUY A SECOND HAND.
Perkins shingle mill Must be in good condition.
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SALESMEN, GREAT OPPORTUNITY FOR pushers to make big money selling oils and greases on liberal commission and bonus. Unlimited prospects for men who know how. Old company, Quality products. Attractive prices. Square deal. Write today to Dept. A-22, MANUTACTURERS OIL & GREASE COMPANY, Cleveland, Ohio.

WE PAY \$200 MONTHLY SALARY, FURN-th rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, \$682, Springfield, III.

WANTED POSITION—OUR SUCCESSFUL farm manager, 36 years of age, widower, no children. This man is honest, clean and a hard intelligent worker, Graduate U. of Wis, and life experience as farmer. Address him, HERMAN B. FRANZEN, Akron, Lancaster County, Pa.

AGENTS—SELL WOLVERINE LAUNDRY Soap. A wonderful repeater and good profit-maker. Free automobile to hustlers. WOLVERINE SOAP CO., Dept. ES, Grand Rapids, Mich.

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FARMING BUSINESS FOR SALE—A PURE-bred business in Dunce Jersey Hogs, Short Horn Durhams, Delaine Merino Sheep, Buff Leghorns, Pekin Ducks, Toulouse Genes, which I have built up with the hope of keeping my boys on the farm is for sale, including the perine my boys on the farm is for sale, including the perine my boys on the farm if the miles of Detroit, 20 acres under timber, balance all under plow. Equiped with resistered stock and all machinery, Stocked with resistered stock and all orders coming in every day the resister at three years building a real business the sessible and the state and the same and the business. I am ready will get this farm and the business. I am ready will get this farm and the business I am ready to listen to every propositions do not hesistate to write me. I own this amount and I am ready to listen to every proposition and I am ready to listen to every proposition and I am ready to listen to every proposition and I am ready to listen to every proposition and I am ready to listen to every proposition and I am since re in every statement I have made in this advertisement. I am known to the publisher of the Business Farmer and he has advised me to thus lay all the facts before the readers of this publication hopping that I may find the right man, who is looking for just what I have to offer. Write me fully, at once, if you are interested, address BOX 231, in care of The Michigan Business Farmer, Mt. Clemens, Mich.

200-AORE MICHIGAN FARM WITH FULL equipment; 200 apple trees; handy to town; 90 acres tillage; estimated 50,000 ft. timber, 1,000 cords wood; 10 cm house, big barn, silo, owner mable to operate, by the silo of the silo operate, silo, owner mable to operate, silo, owner mable to operate, silo, owner mable to operate, silo owner implements, 8 hogs, 60 poultry of the modern implements, threshing machine, vegetables included, less than half cash, Debails page 71 Catalog Bargains. Copy free, STEOUT FARM AGENCY, 427KJ Marquette Bidg., Chicago, Ill.

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f40 ACRES 1 MILE FROM TOWN, BEST soil, brickhouse, basement barn, all buildings good. A bargain. Write or call RUDOLPH HASS-LER Sandusky, Mich., R. 4.

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80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for musicust raising. Rent or sell. Inquire BOX 282, care Michigan Business Farmer.

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STRAWBERRY PLANTS SA PER THOUSand Guaranteed strictly first class. 17 reins experience. Our free catalog illustrates and deseribes fourteen best varieties, including three
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RED CLOVER, NICE PURPLE SEED, \$12.50 r bushel. SHULTZ SEED CO., Olney, Illinois.

FOR SALE—NORTHERN GROWN HUBAM Sweet Clover cleaned. Price \$18.00 bn. Write for samples. HENRY BAUKNECHT, R. 4, Midland,

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O. REDS, GOOD LAYING STOCK, FINE or. Hatching eggs, \$6.00 per 100. Limited mber of chicks, \$18.00 per 100. EDWARD CRYDER, Ajamo, Mich.

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BABY CHIX

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Bargain Prices—Write
Quick. Best paying, highest quality, Pure Bred Tom
Barron and Hollywood
White Leghorns—Egg Records 270 to 300
eggs in one year—Brown Leghorns. Anconas,
Banned Rocks, Rhode Island Reds, White Wyandottes. Book orders now—get liberal discount.
Valuable catalog free.

We guarantee to save you money—give
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absolute satisfaction. Write today sure.

SUPERIOR POULTRY FARMS
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HATCHERY CHICK, PRICES:
following hatches: Barred Rocks
and Reds, 50, \$8.50; 100, \$16;
500, \$75. White Rocks, White
Wyandottes, 50, \$8.50; 100,
\$18: 600, \$85. White, Brown,
and Buff Leghorns, 50, \$7.50;
100, \$14; 500, \$65. From
atches due March 12th and 19th
edd \$2 per 100 to these prices,
full live delivery guaranteed, Our flocks
order from this ad. Reference, Farmers
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Strong, vigorous Chicks from selected heavy laying ENGLISH
STRAIN WHITE LEGHORNS and
BROWN LEGHORNS 100,
\$12.50;580,560, THOMPSON 6
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R'S HATCHERY, Bex X, Zacland, Mich.

Peerless Chicks

8. C. WHITE LEGHORNS They are selected king deep-bodied, with arge lopped combs. Liberal discount, Live rrival guaranteed Catalog free. PERLESS MATCHERY & POULTRY FARM, Box 10, Zeeland, Mich.



Pedigreed S. G. W. LEGHORNS

AMERICAN-ENGLISH STRAIN you going to buy them from a hatchery or a BRFEDER. Buy from Michigan's Largest sorn Farm and insure success. We hatch our eggs only. Supply limited. Prices reasonable, faction guaranteed.

Satisfaction guaranteed.

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all about them. It's free.

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QUALITY BABY CHICKS

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KARSTEN'S FARM, Zeeland, Michigan

CHICKS

BARRON'S S. C. W. LEGHORMS, SNEPPARD RECONAS, and FARRED ROCKS, EGGS and CHUCKS FROM SELECTES STOCK.

Our Leghorn flocks are headed by large vigorous makes from M. A. C.; Ancones from Sheppard's 285 hens. Buy from an old reliable positry farm and you will be proud to five the production hens that will bring you a big profit. We quarantee said delivery and prepay shipments. Write for calalogue. Poultry FARM AND HATCHERY BOX R, Byron Center, Mich.

QUALITY White Leghorna, DEAN EGG CHICKS conag. 12 years breeders, 12 years with 40 000 egg batcher. Member Baby Chick Assocs, Send for Folter b and prices. BIG BEAVER, BIRMINGHAM, MICH.

Rhode island Beds, Tompitius strain, hatching eggs and baby chicks. Eggs per hundred \$12.90; chicks per hundred \$25.00. On all oriers for either stock, eggs or chicks of \$15.00 or more, I will give the Rhode Island Journal free for one year. A few good cockerels left. Quality Breeder of Rhode Island Reds, both combs.

BABY CHICKS and HATCHING EGGS direct from our fame at greatly reduced prices, inly 9c up. Barred Rocks, White Legiorns and incomes. Write quick for perfectiveless and special stroductory offer. MODEL POSETRY FAME & SATCHERY, Zectand, R. 4, Sichilgan.

BABY CHICKS—GUARANTEED PUREBRED, all varieties, selected heavy layers, and broilers 12c and up. 10% cash with order, Await disampointment, order now.

GUY BABION, Chesanlog, Mish.

DAY OLD CHICKS SHIPPLE and ROSE IN O.D.E. IN O

If you have a few good hens or cockeres that you don't need you can sell them through an ad in M. B. F.

will destroy any germs adhering to the outside of the shell, and this pre-caution will be well worth the ex-pense and effort.

The disease spreads among chicks through contamined drinking water or mash hoppers, or the droppings. As soon as their is any evidence of it in the brood kill on sight every chick "pasted up" behind and keep the droppings cleaned up in the run several times a day. Be very particular eral times a day. Be very particular to prevent the little fellows becoming chilled.

After the chicks are two weeks old there is practically no danger what-ever of infection. It seems to be most virulent the first two days.

PROTEIN FOR LAYING FLOCK

I want to know what would be the best and cheapest way to furnish protein for chickens. How about steeping alfalfa leaves in hot water for winter feed?—Mrs. G. M.—Alfalfa leaves steeped, but more especially steamed, furnish considerable protein. Steamed alfalfa leaves

able protein. Steamed alfalfa leaves are somewhat bulky for a chicken to properly handle. Alfalfa leaves help, properly handle. Affaira leaves fielp, of course, but as the only source of protein they fall somewhat short. I would keep on feeding steamed alfaffa leaves and in addition would supply protein in some other form. In the winter, pieces of raw meat, such as a dead rabbit, or portion of some any animal that did not die of some any animal that did not die of some disease can be kept hanging in the poultry house where the chickens can pick at it. The probabilities are that with alfalfa leaves and fresh meat together with scaps from the table the chickens will receive sufficient protein. Another good way to supply alfalfa is by using it as litter in place of straw.

The egg production of a flock is almost entirely governed by the amount of protein fed. If a sufficient amount of protein is not fed the chickens cannot be profitable egg producers, therefore under average conditions it seems only wise to feed protein in an excessive rather than in protein in an excessive rather than in a scanty manner. A good ration for laying hens consists of either one quart of oats or one quart of barley fed as scratch feed, that is, it is thrown in the litter as a morning feed. One quart is usually sufficient grain for from 12 to 20 birds de-pending on the breed. The evening meal consists of one quart of corn for every 12 to 20 birds, then in adfor every 12 to 20 birds, then in addition to the scratch feed they should have before them at all times in a have before them at all times in a self-feeder the following dry mash mixture: Equal parts ground oats, ground corn, bran, shorts and meat scrap and tankage. Under average farm conditions it is necessary to buy the shorts and bran and it is always necessary to buy meat scrap or tankage however an investment or tankage, however an investment in these feeds will usually prove profitable in that your chickens will produce eggs in such quantity as to make an investment in such feeds profitable.

ROUP

General Discussion-This disease resembles in its nature colds in man and higher animals. It is not, as far as our present knowledge goes, caused by one specific organisms. Roup is not etiologically related to chicken-pox but may under certain conditions occur as an accompanying disease. On up-to-date farms where chickens are kept under hygienic conditions and are properly fed this disease is seldom seen except under exceptionally bad weather conditions. On the other hand it is rather common where chickens are poorly fed and kept in small, damp, filthy or poorly ventilater coops. It is prob-bable that a number of organisms are instrumental in the production of this disease, and that these organisms, which ordanarily are low in pathogenic power, depend on other influences to lower the resistance of the fowls so as to make a general infection possible.

Symptoms—The primary seat of infection is in the nasal cavities. First a watery discharge is noted escaping from the nostrils. The anatomical arrangement of the nasal cavities of fowls is such as to make cavities of fowls is such as to make damage very inefficient. Consequently the discharge accumulates and gradually thickens, sealing the nos-trils and finally a bulging of the bones below one or both eyes which

(Continued on following page)



BABY CHICKS

Guaranteed Chicks From Select Pure Bred Flocks Guaranteed Chicks From Select Fure Bred Flocks

Kept on free range. Carefully fed and cared for to insure the best of health and vigor.

WHITE and BROWN LEGHORNS, ANCONAC, 50, \$7.50; 100, \$14; 500. \$65.

BARRED ROCKS, REDS, WINORGAS, 50, \$8.50; 100, \$46.50; 500, \$7.50;

Write for prices on 1,000 or more.

EXTRA SELECT from Pure-Bred Flocks, \$2 per hundred higher.

Postpaid to your door, full live count guaranteed. Bank Reference.

Free Catalog. We want your business not only this year but for years to come and we will certainly endeavor to handle your orders so as to merit your continued patronage.

COLONIAL POULTRY FARMS. Box B, Zeeland, Michigan

Michigan Chicks

Guaranteed Michigan Bred and Hatched

WHITE and BROWN LEGHORNS, ANCONAS, 50, \$7; 100, \$13; 500, \$60.
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1,000 Orders at 500 rate.
RHODE ISLAND WHITES, 100, \$18; 200, \$35.
Postpaid, full live delivery maranteed. Strong, vigorous Chicks from select, heavy laying flocks. Order NOW right from this ad. Get them when you want them. I want your business and will try to hold it. Catalog free. Reference, Holland City State Bank.
KNOLL'S HATCHERY, Box L, Hoffand, Michigan



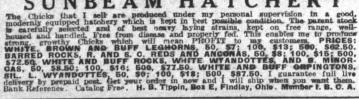
CHICKS WITH PEP, \$11 per 100 and up



Selected Hogen Tested Flocks, Postpaid, full live delivery guaranteed. SUFF ORPING-TONS, WH. and SH. WYANDOTTES, 50, \$9.25; 100, \$48; BARRED and WH. ROCKS, S. and R. O. REDS, MINOREAS, 50, \$8.25; 100, \$48; BARRED and WH. FOCKS, S. and R. O. REDS, MINOREAS, 50, \$8.25; 100, \$46; ANCONAS end HEAVY BROLLERS, 50, \$7.25; 100, \$44. WH., BR. and BUFF LEGMORNS, 50, 57; 100, \$13. MIXED, ALL VARIETIES, \$11 per 100 straight. 9a 500, 500, 600; 1,000 100%, off. Ready February 25th. Free Catalog. Member L. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

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From Hogan tested, well-kept and housed heavy laying flocks arred and White Rocks, Reds, Ancomas, Minorcas: 50, \$8.50; 100, \$1e; 500, \$7: url Orphigtons, White Wyandottes: 50, \$9; 100, \$17.50; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$67.50; 100, \$14; 500, \$14; 500, \$67.50; 100, \$14; 5 Mixed:
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CHICKS, \$10 per 100 and up Postpaid to your door and full live count guaranteed

Varieties Prices en 50 108 300 560 120.00

WHITE, BROWN and BUFF LEGHORNS. 57.00 \$18.00 \$38.00 \$62.00 \$120.00

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BUFF MINOROAS. 50, \$43: 100, \$25. MIXED CHICKS FOR BROILERS, 50, \$6; 100, \$11; 500, \$50. Postpaid, Full live delivery guaranteed. Hatched in the best possible manner from god, vigerous, pure-bred, heavy laying flocks on free rangs. Carefully selected and packed to go safely. No catalog. Order right from this ad. and anva time. Reference, Citizen's Status Bank. For take no characs.

THE EAGLE NEST HATCHERY, Box M. Upper Sandusky, Chickers of the control of the contr

Egg Bred White Leghorn CHICKS

with our Fameus Impreved
Winter Erg Basket Strain of
S. G. White Lephoms. They are
the selected, long, deep-hodied
typical hens with large lepped
combs, maded to the fameus fieldywood and Beall 250-300 EGG Fedi
greedshes. Allour beseders are culled,
selected, and mated by poultry specialists and inspected and approved as
to their laying ability and health.

Our keepforms are winered.

Our Leghorns are winners at LEADING Egg Laying Contests and Paultry Sinese. Houseard set customers all over the U.S. are reaping a golden harvest our great the Archive of the Contest and hards. Yes Callege talls all about Egg Parking of the Contest and Market Parking of the Contest and Contest Q DEVRIES, Grandview Poultry Farm. Box L Zeeland, Mich.

Good Chicks-Fair Prices Barron Type W. Leg., B. Rocks, S. C. Reds. Pedigreed Chicks from M A. C. codkered matings Utility grads from pure-bred, heavy-laying, free sange inspected focks. Pullets laid at 4 mos., 20 days last year; Gusranteed delivery. Discount on Feb. extens Instructive catalog. Bank reference. Michigan Hatchery & Farms, Box A, Holland, Mich.

DABY CHICKS SELECTED CHICKS FROM the heavy of the baby-chicks industry. Leading pure breeds from heavy experiencing strains. Alive delizery guaranteed. Send for catalogues and prices.

L. VAN HOVEN & BRO., Zeeland, Mich.

Rosewood Farm

Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying WHITE LEGHORNS, BO, S7, 106, 943; 500, 582-58, 1,000, \$12.00, \$100, \$14; 500, \$62-50, \$8.50; 100, \$14; 500, \$67.50. Select RANCON, \$16.50; 500, \$8.50; 100, \$16.50; 500, \$8.50; 100, \$16.50; 500, \$8.50; 100, \$16.50; 500, \$16.50

TIMMER'S HATCHERY



BABY CHICKS From select vigorous, Isrown Leghorns, Amounts, Barred Rocks, pulse 12 cents and up. Guannites 190%, delivery by prepaid post. Get your order in a ory & Poultry Farm, Zoele

CHICKS-Exhibition and Utility strains from America's best, W. and Barred Rocks, Reits, W. and Brown Leginaris, Wannibites, An-cenax Surprising Prices, gastly considered, 13 yee's intichery experising, C-take, HAJGHT HATCHERY, Occas Springs, Mich. in time may force the lower eyelid

upwards and at last close the eye. From this condition the disease has derived the name swelled-head. The

forced to breathe through the mouth. This will dry the tip of the tongue which becomes brownish and hard,

a condition commonly called "Pip," which may be observed in any disease causing the bird to breathe

through the mouth. Other symptoms production and occasionally dullness, sneezing, suppressed

Treatment-As improper feeding

and unsanitary conditions are largely responsible for an euthreak of this disease prompt attention to these matters will usually terminate the attack. Diseased fewls should be

isolated and treated as follows: Re-

move dried exudate covering the nos-

trils and using a medicine dropper or

syringe wash out the nasal cavities with a 20 per cent solution of baking soda. B. F. Kaupp, North Carolina Experiment Station, recommends forcing this solution through the nasal passages into the mouth.

He then suggests the use of hydro-gen peroxide in like manner, the

former solution dissolving the mucus

and the latter cleaning the cavities. Following this treatment he recom-

mends injecting a small quantity of

the following mixture: oil of thyme 1 dram, oil of eucalyptus 20 drops, oil of petrol 2 ounces. It may suffice to remove the crust over the nostrils

and by applying pressure over the sinuses force the exudate out thru the nasal openings. The heads of

the fowls may then be dipped in the

same solution and in the same man-ner as suggested under chicken-pox. Immunization—Knowing as little as we do about the role played by microorganisms in this disease and

having abundant evidence to show that feeding and sanitation may de-termine its seriousness it seems that

one should feel fully justified in con-

demning the use of vaccines or bacterins the value of which no one

J. R. Beach of the California Ex-

periment Station reports a disease

which as to external manifestations

resembles roup very closely. This

disease has been proved to be due to faulty nutrition and may be easily distinguished by post mortem exam-ination. Small, deeply penetrating pustules are found on the base of the

tongue and on the sides of the pha-

rynx. The kidneys and sometimes the liver and heart will be found to be marked with a fine network of white lines which probably represent

tubules filled with urates. Change of diet will correct this malady.

How to Prevent Recurrence When no new cases have appeared

for some time and the diseased individuals seem well, a general clean-

ing of all coops with burning their litter and thorough disinfection of the interior of the chicken-houses

should be undertaken. This includes the isolation quarters. To disinfect

properly one should spray (soak) the

walls, roosts, floors, inclosed runs, eating, drinking and other utensils with a 3 per cent solution of some reliable disinfectant such as com-

pound solution of cresol or a similar preparation and the whitewash if so

desired. In the poultry yard quick-

lime may be used and whenever it is possible to do so the ground should

be turned over by plowing or spad-ing. The isolated birds should, be

kept from mingling with the rest of the flock for at least one month

How to Make Per Cent Solutions

e. g., 2 per cent potassium perman-

ganate, 2 parts pt. perm. to 100 parts

of water. 1 level teaspoonful 4 grams. 1 level tablespoonful 15 grams. 1 level tablespoonful 15 grams. 1 heaping teaspoonful and 1

heaping tablespoonful 5 and 20 grams respectively. 1 full quart milk bottle 1000 cubic centimeters. 1 cubic centimeter 1 grain by weight. 20 grams of a solid or liquid to 1000

grams of water, 2 per cent solution. From these equivalents one should be able to mix up any strength desired.—H. J. Stapseth, Bacteriology Section, M. A. C.

Per cent means parts per hundred.

after recovery of the last case.

nostrils being closed the bird

Feb

PUL

S. C. Hens \$5.00 ence.

PED!

S C. sale JOH!

BUF

iform J. C

BARI Detro ners. THO bred M

CHICKS

THAT GROW, LAY AND PAY Barron English White Leg-horns, Brown Legiorns and

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY Zeeland, Mich.

400,000 Chicks



Big, strong, Well-hatthed Chicks from selected to lay stock on eres range, properly led and housed to properly led and housed to white BROWN & BUFF LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50. BARRED & WHITE ROCKS, S. C. & R. C. O. S. 15; 500, \$72.50. BARRED & WHITE WYANDOTTES, 50, \$9.50; 100, \$16; 500, \$77.50. SILVER WYANDTTES, 50, \$9.50; 100, \$18; 500, 7.50. POSTPAID. guarantee full 100% live arrival ference, Citizen's Bank, Order direct m this ad, and save time. Free circular.

MODERN HATCHERY

K. Mt. Blanchard, Ohle

CHICKS

\$10 per 100 and Up

From good heavy laying flocks on free range. WHITE LEGHORNS, 50, 57; 100, 513; 500, \$62.50. BARRED ROCKS AND REDS, 50, \$8; 100, 515; 500, 572.50. From Extra Select flocks headed by Mich. Ag. College Cockerels. WHITE LEGHORNS, 50, \$85.50; 100, \$15; 500, \$72.50. ROCKS AND REDS, 50, \$9; 100, \$17; 500, \$82.50. Portpaid and full live delivery guaranteed. Order now from this ad. Catalog Free. LAKE WIEW POULTRY FARM, Route 8, Box 3, Holland, Michigan



25,000 Thrifty Chicks Weekly MERIT Write for catalog. 14c and up, prepaid.
12 leading breeds. Delivery guaranteed.

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GET THE PROFITABLE
AND LAYING KIND
They will pay you big. Free
range. Selected. Hogan test Orpingtons, W. & Sil. Wyandottes,
50, \$9.25; 100, \$18. Recks,
Reds, Minorcas, 50, \$8.25; 100,
\$16. Anconas, heavy broilers, 50,
\$7.25; 100, \$14. Leghorns, 50,
\$7.25; 100, \$14. Leghorns, 50,
\$7.100, \$13. Mixed, all varieties, \$11 per 100 straight. Postties, \$11 per 100 straight. Posties, \$11 per 1

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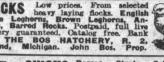
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RAISING GEESE ON SHARES

A loaned B four geese and two ganders, for one year. B is to return the four geese and two ganders at the end of the year. What share of

the profits should each share?-V. A. B., Carson City, Mich.

-The goose raising enterprise which you mentioned as being carried on by two parties, A. and B. is an un-usual one. Poultrymen distributing hatching eggs generally work on the basis that for every setting of eggs released they will have the privilege of selecting one cockerel or pullet when matured. I think in this par-ticular ase that the party B. should receive at least two thirds of the stock produced because he has assumed the responsibility in taking care of the breeding stock and the raising of the goslings.—E. C. Foreman, Associate Prof. of Poultry Husbandry, M. A. C.

MOISTURE FOR HATCHING EGGS DROBABLY no question concerned with the incubation of eggs has called forth the comment and controversy that the moisture question has. Whether it should be supplied to hatching eggs during the incubating period or not, is one of the favorite topics for an annual spring argument among poultrymen and hatchery operators.

There can be no doubt but that where the incubation of eggs takes place under hens that there is more or less an application of moisture to the eggs through external sources. This is responsible, more than anything else, for the currency given the idea that moisture ought to be applied externally from time to time during the incubation period.

We are not absolutely opposed to the application of moisture, for we recongnize that there are times when this is desirable, but, in the majority of cases, it is unnecessary and will do more harm than good. If good, fresh eggs are set—eggs that have not been held more than two or three days and not over a week, if possible, no application of moisture will be necessary unless you are using a very unsatisfactory type of incubator. Nature makes ample provision for the moisture content of an egg sufficient to supply all the needs of the developing embroyo chick during the process of incubation provided reasonably fresh eggs are set. But as an egg ages the moisture content evaporates and the chance of hatch-

ing a good, strong chick diminishes.

Many people advocate sprinkling
the eggs with lukewarm water from time to time during the hatching period. We are absolutely apposed to this direct application of moisture to the shell of the hatching egg because we have tried that method time and again and have convinced ourselves that the state of the shell of the shell of the hatching egg because we have tried that method time and again and have convinced ourselves again and have convinced ourselves that it affects the size of the chick hatched adversely. The more mois-ture applied to the shell of the egg, is due to the fact that the moisture drying off the surface of the shell rapidly, as it is bound to do, draws further on the natural moisture content of the egg and thereby decreases the size of the chicks hatched. Of course, the plan of dipping all eggs in lukewarm water is to be discour-aged for the same reason.

Where moisture must be added in the incubator we feel that the plan of keeping a saucer of water under the egg tray is the best. It is naturally true that a wooden incubator well dried out will absorb considerable moisture as it warms up and unless it comes from some such source, it is bound to come from the eggs placed in the machine. Incubators that have stood idle in a dry place for a whole season will absorb more moisture than those that have been running several hatches.

The moisture question is taken care of by automatic arrangements on many incubators, more particularly on the large mammoth machines used in hatcheries for the large flocks. Some of the smaller machines provide sand trays which are to be kept moist all the time. We see no objection to these provided the sand is kept moist. If it hap-pens to dry out overnight or during the day it will, in turn, absorb moist-ure from the eggs and may do more harm than can be remedied. If you have such a moisture tray, be sure to keep it moist according to directions all the time for the best results. In order to get away from the moisture habit or evil, set absolutely fresh eggs wherever possible.

fresh eggs whenever possible. Eggs set the same day they are laid will hatch larger and better chicks than eggs a week old. The difference is Complete Complete Commercial Sections

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THE HUNTED WOMAN (Continued from page 9.)

they drench you in a jiffy. Donald

is going ahead to put up a tent."
By the time they reached the mouth of the canyon MacDonald was out of sight. A little creek that was a swollen torrent in spring trickled out of the gorge. Its channel was choked with a chaotic confusion of sandstone rock and broken slate, and up through this Aldous carefully picked his way, followed closely by Joanne. The sky continued to darken above them, until at last the sun en above them, until at last the sun died out, and a thick and almost palpable gloom began to envelop them. Low thunder rolled through the mountains in sullen rumbling echoes. He looked back at Joanne, and was amazed to see her eyes shining, and a smile on her lips as she nodded at him.

nodded at him.

"It makes me think of Henrik Hudson and his ten-pin players," she called softly. "And ahead of us—is Rip Van Winkle!"

The first big drops were beginning to fall when they came to an open place. The gorge swung to the right; on their left the rocks gave place to a rolling meadow of buffalo grass, and Aldous knew they had reached the basin. "A hundred yards up the slope was a fringe of timber, and as he looked he saw smoke rising and as he looked he saw smoke rising out of this. The sound of MacDon-ald's axe came to them. He turned to Joanne, and he saw that she un-derstood. They were at their jour-ney's end. Perhaps her fingers grip-ped her rein a little more tightly. Perhaps it was imagination that made him think there was a slight tremble in her voice when she said:

"This—is the place?" "Yes. It should be just above the timber. I believe I can see the upperbreak of the little box canyon

Keller told me about."

She rode without speaking until they entered the timber. They were just in time. As he lifted her down from her horse the clouds opened, and the rain fell in a deluge. Her hair was wet when he got her in the tent. MacDonald had spread out a number of blankets but he had disappeared. Joanne sank down upon them with a little shirter. She leeked them with a little shiver. She looked up at Aldous. It was almost dark in the tent, and her eyes were glowing strangely. Over them the thun-der crashed deafeningly. For a few minutes it was a continual roar, shaking the mountains with mighty reverberations that were like the explosions of giant guns. Aldous stood holding the untied flap against the beat of the rain. Twice he saw Jo-anne's lips form words. At last he heard her say:

"Where is Donald?"

He tied the flap, and dropped down on the edge of the blankets before he answered her.

"Probably out in the open watching the lightning and letting the

ing the lightning, and letting the rain drench him," he said. "I've never known old Donald to come in out of the rain, unless it was cold. He was tying up the horses when I ran in here with you."

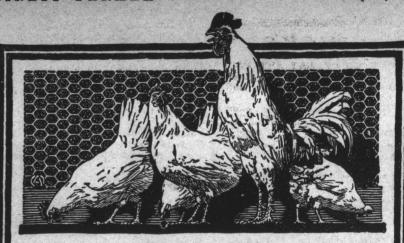
He believed she was shivering,

yet he knew she was not cold. In the half gloom of the tent he wanted to reach over and take her hand.

For a few minutes longer there was no break in the steady downpour and the crashing of the thunder. Then, as suddenly as the storm had broken, it began to subside. Aldous rose and flung back the tent-flap—"It is almost over," he said. "You had better remain in the tent a little

longer, Ladygray. I will go out and see if MacDonald has succeeded in drowning himself."

(Continued in Mar. 3rd issue.)





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ARKET FLASHES

FOOTE'S MARKET LETTER By W. W. Foote. .

GREATER contrast between business conditions in the United States and those prevailin several European countries could hardly be imagined, and re-fraining from getting mixed up in the controversies over there has saved us from all kinds of evils. Furthermore, not only is our home trade showing marked improvement over that of last year, but we are still exporting a great deal of provisions. As to the future, predictions are haz-ardous perhaps, but bankers, manufacturers and merchants believe that sufficient credit will be arranged to admit of large exports of food and other necessities. The railroads report the largest movement of freight ever seen at this season of the year. recent shipments running far ahead of the previous week, as well as far above the corresponding weeks of the last two years. There is a con-tinuance of easy money conditions, and the Chicago banks are making loans on collateral at 434 to 514 per cent. Liberty bonds have sold at advanced prices, while government bonds of leading European countries have sold off sharply, French issues going down materially, with British finances much better than those of continental war countries and promise of an early settlement for payment of the huge loans made by the United States to Great Britain. While the home trade of this country is active and on sound basis, there is no disposition upon the part of merchants to load up heavily with com-modities, and farmers should not look for any boom. It is encouraging to know that savings in the banks of this country have shown a large increase during the past year. Lab-or is well employed at high wages, and this means large consumption of meats and other food. Despite the greatly increased marketing of hogs this season, the stocks of lard and hog meats in this country are unusually small, the prices are higher than last year.

Large Sales of Grain

Only a short time ago it was very generally expected that a renewal of war in Europe would bring about much diminished exports of the sev-eral grains and flour, but thus far has failed to take place, and such shipments have been running much ahead of a year ago. Besides liberal exports from North America of wheat breadstuffs, Germany and Norway have been large buyers of rye, and other countries have taken a good deal of rye, which is much cheaper than wheat. Exports of corn and oats are smaller than they were a few months ago, and price fluctuations in oats are usually with-in narrow limits, sales being made at an advance of several cents above the prices current a year ago. Wheat, while advancing in price within a short time, is selling well below the prices of a year ago, and rye is cheaper than last year, but barley is higher. Corn is controlled mainly by home influences, and its unusually large consumption on the farms is mainly responsible for its selling nearly 20 cents a bushel higher on the Chicago Board of Trade for May delivery than a year Reports from most parts of the corn belt are that corn is plentiful, and farmers are in no hurry about parting with their surplus stocks at ruling prices. Late reports are that Germany is buying Russian rye at much below the American prices. is impossible to forecast the future, but farmers who market their grain at fair profits are not likely to regret it. May wheat has been selling in Chicago at \$1.12½, compared \$1.31% a year ago. May corn sells at 76½ cents, comparing with 59 cents a year ago; and May oats at 45½ cents comparing with 40½ cents last year.

Large Supply of Hegs
The Department of Agriculture a short time ago reported the number of hegs in the United States as unusually large, and the heavy receipts in Chicago and other packing points

Cold snap causes wheat prices to advance, market firm. Other grains follow trend of wheat. Beans advance 15c with demand brisk. Eggs steady. Butter not wanted and easy. Potatoes quiet. Cattle slow and prices unsteady. Hogs active but lower. Sheep quiet.

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

out this statement, supplies running far ahead of a short time age and a year age. The Chicago packers, in common with those of other packing centers, want a great many hogs to convert into fresh pork products and lard and cured meats, and there is a very large call in the Chicago market for hogs to ship to eastern packing points, but the large receipts have put prices much lower. The bulk of the hogs sell within a range of about 50 cents per 100 pounds, with prime light bacon hogs going highest and the best heavy butchers are selling 35 cents below Hogs are selling at much lower prices than in recent years, and so long as this keeps up it will be difficult to check the downward tendency of prices. The mar-ketings are largely of well matured hogs, weights being much heavier than in past years, causing killers to pay a good premium for the lighter offerings. Looking ahead, it may be said that all the indications are that large numbers of hogs will continue to be marketed, forcing prices gradually lower, and the best authorities advocate marketing hogs averaging from 200 to 250 pounds, as corn valued at feeding points at 60 cents a bushel makes rather dear feed. Provisions are having a large consumption in this country, as well as abroad, exports continuing much heavier than a year ago. Stocks of lard in western packing centers are much less than a year ago, but stocks of cured hog meats are far heavier, while prices for provisions are higher. Recent hog sales on the Chicago market were made at \$6.85 to \$8.70, comparing with \$8 to \$10.25 a year

Beef Cattle Plentiful

Farmers are feeding many more cattle than usual, and they are shipping them to market after short feeding, the offerings on the Chicago and other markets including an unusually small proportion of long-fed steers and fat yearlings. Much of the time supplies are too large, causing declines in prices, but quite recently they have been on a more curtailed scale, and this caused an upward turn in Chicago prices for fat beeves. The choicer steers sold for \$10 to \$11 per 100 pounds, with a good class at \$9 and upward, the bulk of the steers crossing the scales at \$7.75 to \$10.25, and common to medium at \$5.40 to \$7.50. Most of the cows and helfers found buyers at \$4.50 to \$7.50, and calves sold at \$6 to \$13.50, most of the light veal calves fetching \$11 and over. The stockers and feeders had a fair sale at \$5 to \$8, the desirable kinds selling at \$6.50 and over.

Lambs Sell High

Despite occasional breaks in prices in the Chicago lamb market, sales are made all the time at far higher figures than in most former years, marly under pre-war val and Michigan sheepmen are making generous profits on well finished consignments of lambs, yearlings and sheep, while feeding lambs sell as high as the best killers, with nowhere near enough offered to meet the demand. Wooled lambs are selling in Chicago at \$13.50 to \$13.25.

As we predicted the wheat market has advanced. To date the price has advanced 4 cents over that of a fort-night ago and it is in a position to advance further. The opinion entertained by the trade in general is that the trouble in Europe will soon be settled, which means that Europe

will soon be bidding in the American market for supplies. The market was firm all of last week. Supplies were fairly large but dealers only fed the market what it could take care of. Domestic demand is small at present and business from the sea-board is practically nothing; how-ever, it is reported that there is a heavy shortage in Europe, and al-though Europe's financial condition is handicapping her at present, the bulls in the market think there will be a way out and that American grain will find the way to Europe. They expect congress to do some-thing to improve Europe's buying power in this country.

Prices
Detroit—Cash No. 2 red, \$1.39;
Detroit—S1.39; No. 2 mixed, Chicago No. 2 hard, \$1.231/2;

No. 4 hard, \$1.19%. Prices one year ago—Detroit, No. red, \$1.42; No. 2 white and No. Detroit, No. mixed, \$1.39.

CORN

Corn has followed the trend of wheat during the past couple of weeks and prices are somewhat higher. Advances at Detroit amounted to 4 cents. Although demand has been light there has been consider-able bullish talk about this market, observers believing the supply will be light. Farmers seem ready to sell at prevailing prices and some dealers are disposing of their stock.

Prices Detroit—No. 2 yellow, 80½c; No. 3, 79c; No. 4, 77c; No. 5, 75c. Chicago—No. 2 mixed, 75c; No. 2 yellow, 75@75%c; No. 2, 74c. Prices one year ago 1 2 yellow, 60c; No. 3, 55c. Detroit, No.

OATS

This market made a weak attempt to follow wheat and corn but it fell rather flat. Demand has improved slightly and the supply is small, but enough to take care of present demand. The tone of the market is

Prices

Detroit—No. 2 white, 50c; No. 3, 48½c; No. 4, 47c.
Chicage—No. 2 white, 45¼@46½c; No. 2, 44@45¾c; No. 4, 43% @ 44c.

Prices one year ago—Detroit, No. 2, white, 43c; No. 3, 49% c

RYE

Rye remains unchanged with little doing in the way of demand or re-ceipts. The market seems to be in a rut and there is no indication as to whether it will leave the rut and if it does which way will it go, up or down. The future trend of this mar-ket depends considerably on the outcome of the European troubles.

Prices Detroit-Cash No. 2, 90c. Chicago—Cash No. 2, 87 1/2 @ Prices one year ago-Detroit, Cash

No. 2, \$1.00.

BEANS

Elevator men throughout the state reported the middle of last week that the bean market was lifeless, that they could not dispose of their stocks very readily and that they were payvery readily and that they were paying the farmer from \$6.75 to \$7 per hundredweight. The market ruled easy for a few days but before closing Saturday the price at Detroit advanced 30 cents bringing the Detroit price back within 10 cents of what it was two weeks ago. Although deliveries increased when the market weakened there were not enough receipts to bear the trend. Prices

Detroit—C. H. P., \$7.60 per cwt. Chicago—C. H. P., \$8.15@8.50 per cwt.

Prices one year ago-Detrolt, C. H. P., \$5.50 per cwt.

POTATOES

The quantity of potatoes in the 35 late potato states on January 1 of this year is estimated by the United States Bureau of Agriculutral Economics to have been 125,290,000 bu or 29.7 per cent of the total production of those states. These figures include these for sale for local consumption as well as those available for shipment, but do not include the stocks necessary for family consump-tion on the farms where produced nor those retained for seed. One year ago the stocks amounted to 90,023,000 bushels and two years ago, 107,991,000 bushels. Of the total stocks on hand this year, Michigan held 12 169,000 anothers or 10.5 gan held 13,169,000 pushels, or 10.5 per cent, according to the report is sued by Verne H. Church, U. S. Ag-ricultural Statistician and L. Whit-ney Watkins, Commissioner of Agri-

culture. This represents 34.8 per cent of Michigan's crop.

The Dept. estimate caused the market to weaken at some points in the east and declines in prices were made in some instances. made in some instances. Western markets were steady as the car shortage continues to hold up receipts and prices have made only slight changes during the past couple of weeks. Holders of potatoes should not be-come too anxious and unload all of their potatoes at once. Indications are that the potato market will enjoy a more healthy condition than at

present.

Prices Detroit-Michigan, \$1@1.10. Chicago — Wisconsin, 90@95c; Michigan, 80@85c.

Prices one year ago Detroit,

HAY

Hay markets generally show very little change. A general duliness has been shown with holders anxious to realize. Snow and colder weather exerted little influence in demand conditions. Prices generally are steady to a little lower. A stronger feeling is reported in New York market at present, but higher prices have not been realized.

Prices
Detroit—No. 1 timothy, \$16@
16.50; standard \$15.50@16; hight
mixed \$15.50@16; No. 2 timothy, \$14@15; No. 1 clover mixed, \$14@

Chicago-No. 1 timothy, \$19@21; No. 1 clover, \$12@14; No. 1 light clover timothy and clover mixed, \$17@18.

New York—No. 1 timothy, \$24; No. 1 light clover mixed, \$24; No. 2, \$22@23.

Prices one year ago—Detroit, No. 1 timothy, \$19@20; standard, \$18@19; No. 2 timothy, \$17@18.
Alfalfa—Chicago, No. 1, \$23@26.

WOOL NOTES

The seaboard wool markets have not displayed the activity expected after the recent showing in New York and sale of finished goods by some of the prominent manufactur-ers in the United States. The prices at which these fabrics were offered were less than had been anticipated by the trade; as a result of this the prices for weel have not changed materially. More attention is being directed to weel of the medium as 14 Blood and % grades such as ¼ Blood and % Blood and if any hardening tendency is noticed it is for these grades. may be said that the market is mod-erately active with prices fairly

WEEKLY MARKETGRAM U. S. Bureau of Agricultural Economics

Washington, D. C., for the week ending February 10, 1923. FEED—Markets steady for transit feeds. March, April, and May bran offered at \$2 below prompt shipment

inqu meal and men \$26. dling Chic \$52 phis feed No. D but :

Feb

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prices. Cottonseed meal weak, demand dull, offerings plentiful. Linseed meal about \$2 lower, demand light. Gluten and hominy feed quiet, inquiry and offerings light. Alfalfa meal draggy, prices lower. Receipts and stocks generally good. Movement fair. Quoted Feb 9—bran \$26.50, middlings \$26.75, flour middlings \$28.75, rye middlings \$25. Minneapolis; gluten feed \$42.65 Chicago; 34 percent linseed meal \$52 Minneapolis, \$50 Buffalo; 36 percent cottonseed meal \$40 Memphis; \$41 Atlanta; white hominy feed \$30 St. Louis, \$30.50 Chicago, No. 1 alfalfa meal \$25 Kansas City: DAIRY & POULTRY PRODUCTS—Butter markets firm most of week but are weak at close. Prices have advanced to 2½ over a week ago. The firmness during the week was due to speculative support, altho interest primarily was lacking in face of the holiday Monday the 12th, and anticipated heavy receipts following this, but little interest in foreign butter now. Closing prices 92 score butter: New York 49c; Boston 49½; Philadelphia 50c; Chicago 49c. Cheese markets partly stedy to weak. Decline occurred on Wisconsin

Cheese markets partly stedy to weak.

Decline occurred on Wisconsin Decline occurred on Wisconsin cheese boards Monday, but trading interest is still lacking in view of further declines. Prices on Wiscon-sin primary cheese markets Feb 9: Twins 24 % c; Flats 25 % c; Daisies 25 % c; Double Daisies 25 % c; Long Horns 25 % c; square prints 26c.



Week of February 18

THE week beginning February 18 promises to be quite cold for the season in Michigan.

The warmest period of the entire week will occur about Wednesday and possibly again at the close of the week, while the coldest period of the seven days in question will come during the very early part of

During Sunday and Monday and probably Tuesday the weather is expected to be fair in Michigan but during these latter days the temperature will be rising. These conditions will be due to the eastward advance of a southwestern storm that will bring with it much rain, sleet or snow according to latitude and or snow according to latitude and particular portion of any stated town in relation to the storm center.

We expect that this will be one of the greatest moisture carrying storms of the month and Michigan will re-ceive its share of the burden as the passes which will be during middle part of week. Locally there will be severe winds, sleet, ice storms and

No sudden change to colder is expected immediately following in the wake of this storm although the temperature will drop and live stock

should not lack attention.

There is a probability that storminess will again effect Michigan about Saturday with more rain, sleet or snow and strong winds.

Temperatures Below Normal

During the next three or four weeks the temperatures will average colder than normal and during this same period there will develop some severe sleet and blizzard storms.

Week Ending February 25

The opening days of this week promises to bring Michigan a decid-ed rise in temperature.

The weather will have become threatening, the winds increasing and before Wednesday general rain or snow may be expected in the state. During the storm there may also be some steet but in any event we fig-ure that storminess will be severe enough to cause delays or hinder-ances to traffic and business in at

least parts of the state.

Following close on the heels of this storm there will be a cold wave.
This decided drop in temperature is expected to hit this state about

middle of week.

For the balance of this week, with
the possible exception of Saturday,
temperatures will remain cold in

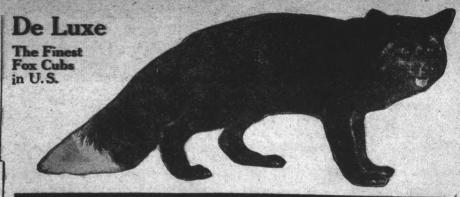


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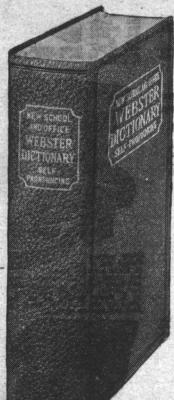
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