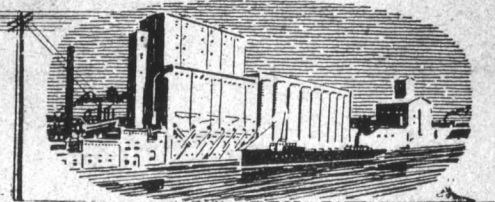


The Michigan BUSINESS FARMER



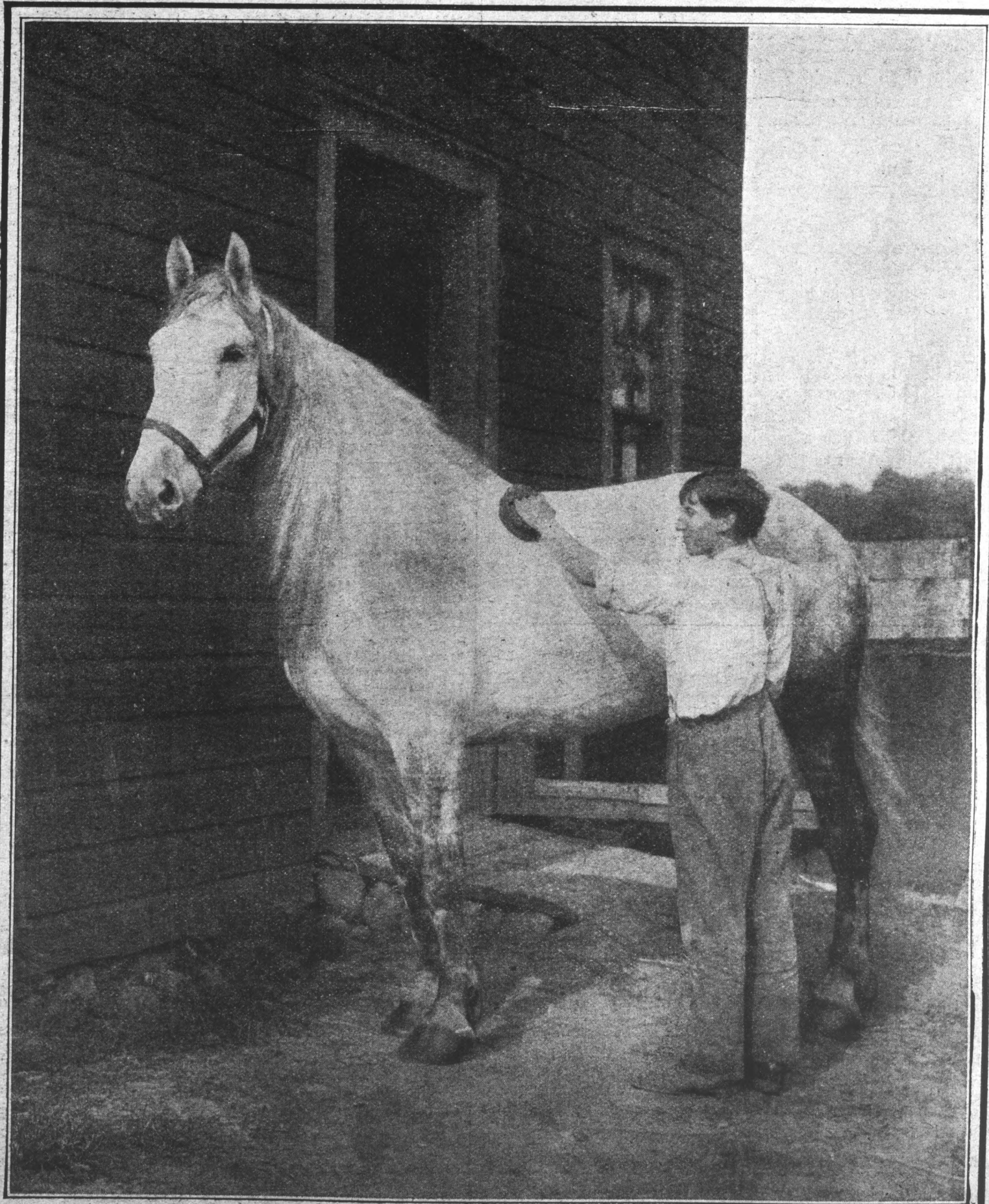
An Independent
Farmer's Weekly Owned and
Edited in Michigan



Vol. VIII, No. 27.

MT. CLEMENS, SATURDAY, MARCH 5, 1921

\$1 A YEAR



Good Care Means Fine Horses.



Loyalty to Public Service

Almost daily something happens, somewhere in this broad land, that strikingly proves the loyalty and devotion of Bell Telephone employees.

Storm, flood, fire, tornado, explosion, wreck are met in a manner that emphasizes the spirit of service underlying the daily work of telephone people.

This loyalty, this thought of "service first", is more than devotion to an organization, great and fine as that may be. It is devotion to the whole telephone democracy, to the millions who form

the telephone-using public.

And it is this same spirit of responsibility to the people which has strengthened thousands of telephone employees during the hard period of after-war reconstruction.

This spirit of service is being handed on to the new employees who have come to help us meet the enlarged demands now being made upon the telephone.

If all the facts were known, workers such as these would receive nothing but appreciation and encouragement from the public.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy One System Universal Service
And all directed toward Better Service

To Extra Good Friends of The Michigan Business Farmer!

WILL YOU, as one of our extra good friends, the folks who believe in this paper and know what we are trying to do for the farming business in Michigan—

WILL YOU—

send us, this week, or better still, right now while you think of it—

—the names of TEN (10) farmers whom you think ought to take the Business Farmer regularly?

We would like to send them a sample copy each week for three consecutive weeks and let them see for themselves and judge for themselves, whether it would be worth a dollar a year to them.

You could do this weekly no greater favor than to thus help us introduce it into thousands of homes where it has never been seen before. And as we have so often told you, our strength to help you is measured by the number of good subscribers on our list.

Just send us a list of ten farmers' names on a penny postal or in a letter and sign yourself

"An Extra Good Friend of the Michigan Business Farmer"

We will then do our part and never forget the favor you extended.

Every new subscriber's name we add means a bigger, better and stronger paper to work and fight in your interests!

Most sincerely,

THE MICHIGAN BUSINESS FARMER.

Lifting the Lid at Lansing

STATE POLICE

THE Ladies' Aid is still sending in petitions favorable to the State Police evidencing their susceptibility to deception or flattery or both. On no other hypothesis can we explain the position of women's clubs and other clubs and ministers. A leading manufacturer of the state admitted to the writer that the organization was being promoted by the manufacturers as a means for the suppression of labor and that other influences would not be able to withstand the rising tide of public disapproval and that at the same time they dare not come out in the open and show the public what is their interest in the matter, hence the "Colonial Dames," the country preachers and the long-faced, umbrella-toting prohibitionists are chorus trained by some well paid propagandist to sing hallelujahs and peons of praise for this band of labor baiters' Cossacks, as a militant agency of righteousness. Would it not reflect greater credit on our "Colonial Dames" if they should interest themselves in seeing that the several thousand young girls attending our state normal schools were provided with dormitories where they might be subjected to proper discipline or that the children in our



BY SENATOR HERBERT F. BAKER

state school at Coldwater were provided with an adequate supply of milk and butter than to be posed as a smoke screen behind

which autocratic manufacturers can fasten upon the state treasury an agency which they expect to be specially useful to them in suppressing, if not oppressing, labor while they are bringing it "back to normal."

We prohibitionists can see where we are being bamboozled when we contemplate the fact that whiskey is coming across the river at Detroit with little interference and in practically unlimited quantities, that it is being distributed over the state without hindrance on the part of the State Police; and that the supply all over the state is commensurate with the demand of those willing to pay from \$10 to \$20 per quart for it. It is noticeable that in the face of this remarkable distribution of whiskey, few rum runners are being arrested and it has been suggested that these are probably "scabs" who have been found poaching on the preserves of the regular organization and that their arrest, although of rare occurrence is evidence on the part of police officials of their appreciation of the sacredness of contracts.



The Organized Farmer

FARM BUREAU—FARMERS' CLUBS—FARMERS' UNIONS—CLEANERS—GRANGE



MICHIGAN'S HONEY CROP

SUCCESSFUL bee keepers in Michigan who have around 100 colonies of bees have an average annual income of nearly \$3,000 and there are several bee keepers in the state whose incomes fluctuate between \$5,000 and \$10,000 a year, says B. F. Kindig, state inspector of apiaries, in describing Michigan's status in honey production to the state farm bureau.

With but one twelfth of one per cent. of the possible honey market developed, Michigan bee keepers are organizing rapidly in the interests of advertising and a broader distribution of their production. In addition to the Michigan Bee Keepers' Association of 800 members there are 38 county bee keepers associations. These take in a good share of the state's 15,000 producers, who are the proprietors of more than 150,000 colonies of bees, producing ten million pounds of honey each year. The most recent sales development association for the state is the Michigan Honey Producers' Exchange, which will deal in honey and honey containers. It is affiliated with the American Honey Producers' League.

There is said to be little danger of over-production in honey and honey products, owing to the immense possibilities of the market. In addition Michigan honey ranks with the highest in quality, especially with respect to color and flavor. Various agencies advertising Michigan honey point with pride to the outstanding and unquestioned quality of the Michigan apiaries product and always stress the superior flavor as their one great selling point.

With ideal climatic conditions and abundant vegetation of the sort that assures the Michigan bee keeper a good crop every year, and a constantly growing demand for the state's crop, the quality of the honey and the general health of the bees that produce it is jealously guarded by a corps of highly trained state apiary inspectors. B. F. Kindig, state inspector of apiaries, is known as one of the leading authorities on bees in this country. He is assisted in state bee inspection work by P. T. Ulman, chief deputy apiary inspector, R. H. Keltz, deputy apiary inspector, and fourteen county apiary inspectors.

Michigan's annual ten million pound honey crop is made up of 2,000,000 pounds of comb honey, 8,

000,000 pounds of extracted honey and there is in addition 500,000 pounds of beeswax. A remarkable fact is that the quality of the product is quite uniform from year to year, which Mr. Kindig attributes to the favorable climatic conditions which exist in Michigan for the bee keeping industry.

FARM BUREAU NOTES

CHIPPEWA county farmers pay the cream station system an average of 2.36 cents on every pound of butterfat delivered to the manufacturer of dairy products thru those channels," says the Sault Ste. Marie News and Upper Michigan Farm Journal, official organ of Chippewa County Farm Bureau, in urging a more direct connection with the manufacturer as a means of saving money for the farmer. The Chippewa county paper made an investigation of the State Farm Bureau article stating that the quality of Michigan dairy products was constantly deteriorating because the cream stations paid the same for good cream as for poor quality cream and that the duplication of cream stations throughout the state was a burden upon the farmer. The farm bureau urges a co-operative system of cream marketing.

"Less than 25 per cent fire protection is accorded the 3,500,000 timber acres of Michigan," says F. H. Sanford of the State Farm Bureau forestry department in urging that Michigan accept the Snell bill now before Congress which provides that the federal government shall duplicate all moneys appropriated by the states for fire protection and conservation of forests. Mr. Sanford was a delegate from Michigan to the North Central states forestry convention, held at Chicago February 22 and 23. He believes that Michigan's 7,000,000 acres of idle lands would reforest themselves.

Potatoes shipped in an ordinary box car with the shipper signing an interstate bill of lading releasing the carrier from all liability from damage, state, are a total loss if spoiled by a delay in transportation and delivery is a recent Michigan Supreme Court ruling, notwithstanding the general rule that a carrier may not wholly exempt itself from liability for negligence. The case was against the Detroit & Mackinac railroad which claimed it could not furnish refrigerator cars to the plaintiff shipper.

Henry C. Wallace New Secretary of Agriculture

President Harding Follows Tradition and Goes to Iowa for His Cabinet Choice



HENRY C. WALLACE
Nation's Chief Farmer

"JUSTICE of the peace is the highest office ever held by any of our family. I hope that no Wallace ever attains a higher office, or aspires to do so."

When Uncle Henry Wallace of beloved memory stated this wish he could not have known that his son and namesake would some day be drafted to fill the

most important agricultural position in the world—that of secretary of agriculture for the United States. Could Uncle Henry have known that this call came in the hour of agriculture's greatest need, and that the President of the United States turned then to his son as the man best fitted to lead in the solution of the difficult and pressing farm problems, there is little doubt but that he would have amended the wish to cover the emergency. Had Uncle Henry also known that the President's choice met with overwhelming approval by the farmers of the nation and that they likewise turned to a Wallace for their leader, all doubt is gone and those who knew Uncle Henry best are sure that he would have added his blessing.

When Henry C. Wallace took the oath of office as secretary of agriculture on March 4 and became a cabinet adviser to the President of the United States, he undertook

the heaviest burden ever placed upon a representative of agriculture. The problems of peace and reconstruction have become far more difficult than were the grievous problems of wartime, and American agriculture finds itself in the midst of the greatest perplexities in history. The Department of Agriculture will have to lead in the solution of these problems. The selection of Mr. Wallace gives assurance that it will pursue its work vigorously, and that its course of action will be determined by the best counsel available. When I asked Mr. Wallace recently about his plans for the Department of Agriculture, he replied, "There's plenty that needs doing in Washington, but I'm not giving out advance notices. I'd rather let my work speak instead of promises."

It is not, however, difficult to forecast some of the probable Wallace policies, if we read some of his recent writings or study the things said at the Minnesota state fair by Senator Harding, whose speech there Mr. Wallace is credited with having written. So we read about thorough and comprehensive study of crop production and consumption, both here and abroad; researches in methods and mechanics of marketing; studies of the factors which influence agricultural prices; and development of agriculture in a way that will produce both farm prosperity and plenty of food for all the people.

Henry C. Wallace was born May 11, 1866 at Rock Island, Ill., the son of Henry and Nannie Cantwell Wallace. His father was a country preacher in Western Illinois, who farmed

and preached alternately. The family soon moved to Eastern Iowa and later to Central Iowa. The subject of this sketch was reared both in the country and in small towns where the family lived. His early training was received in the public schools. In the middle eighties he attended the Iowa Agricultural College at Ames, then a struggling little school with few friends and without prestige.

In the spring of 1888, young Wallace abandoned college for a farm in Adair county, Iowa, where he lived five years. Shorthorn cattle and Poland China hogs were his specialties, and his operations met with success. He began writing on pure-bred livestock topics for the Breeders' Gazette of Chicago, a fact which brought him to the notice of Dean W. A. Henry of the University of Wisconsin. Dean Henry prevailed upon him to complete his college work, so we find Henry C. Wallace listed among the graduates of the Iowa Agricultural College in 1892. He completed two years' work in one, nearly wrecking his health in so doing.

For two years Mr. Wallace was a member of the faculty of Ames, the late James Wilson then being head of the institution. His duties were mostly in the dairy department, where the records show that he was instructor in butter making, cheese making, dairy cattle feeding and management, and a variety of other things.

In 1894 Mr. Wallace purchased a farm paper and began its publication at Ames. In a few months his father and his brother John went into partnership (Continued on page 17)

Co-Operative Selling Associations Ally with State Farm Bureau

Michigan Fruit Growers' Exchange Already Affiliates and Rumor Says Two More Will Follow Soon



CLARK L. BRODY
New Secretary
State Farm Bureau

A CONVERGENCE of certain great agricultural interests of the state into Michigan State Farm Bureau channels, almost coincident with the election of state farm bureau officers and an executive committee on the commodity control issue, is apparent from the accounts of the last state farm bureau executive committee meeting, held

February 18th. Three great and powerful organizations which, according to the farm bureau, were about to affiliate with the farm bureau under the centralized control plan for fear of losing their corporate identity are now said to be closer to the state farm bureau than they have ever been. One has applied for membership, a second has endorsed the farm bureau and agreed to become a member, and negotiations are pending with the third.

Formal application for membership in the official fruit organization of the farm bureau under the commodity control plan has been made by the Michigan Fruit Growers' Exchange, according to the committee, which is said to have received a telegram from the fruit organization asking that the affiliation be consummated at the earliest possible moment. A committee was appointed to discuss the proposition with the fruit growers.

The Michigan Fruit Growers' Exchange with headquarters at Benton Harbor is Mich-

igan's largest, oldest, and most powerful fruit marketing organization.

At a recent annual delegate meeting of the Michigan Livestock Shippers' Association the state farm bureau was endorsed in resolutions and the livestock organization agreed to become a part of the farm bureau under the commodity control plan. Until such affiliation could be effected in due legal form, the livestock men voted to ask the farm bureau executive committee to permit them to send a representative to their meeting to represent the livestock men in a semi-official capacity.

A second farm bureau committee has been ordered to meet with representatives from the Michigan Potato Growers' Exchange, said to be the largest organization of its kind in the country.

The Michigan Potato Growers' Exchange warehouse system blankets the central and northern part of the state. The organization does a tremendous business annually.

The significance of these actions coming so closely upon the generally accepted idea that the farm bureau would hereafter be governed on a commodity control basis, farm bureau officials point out, is a strong argument for the future prosperity and strength of the organization.

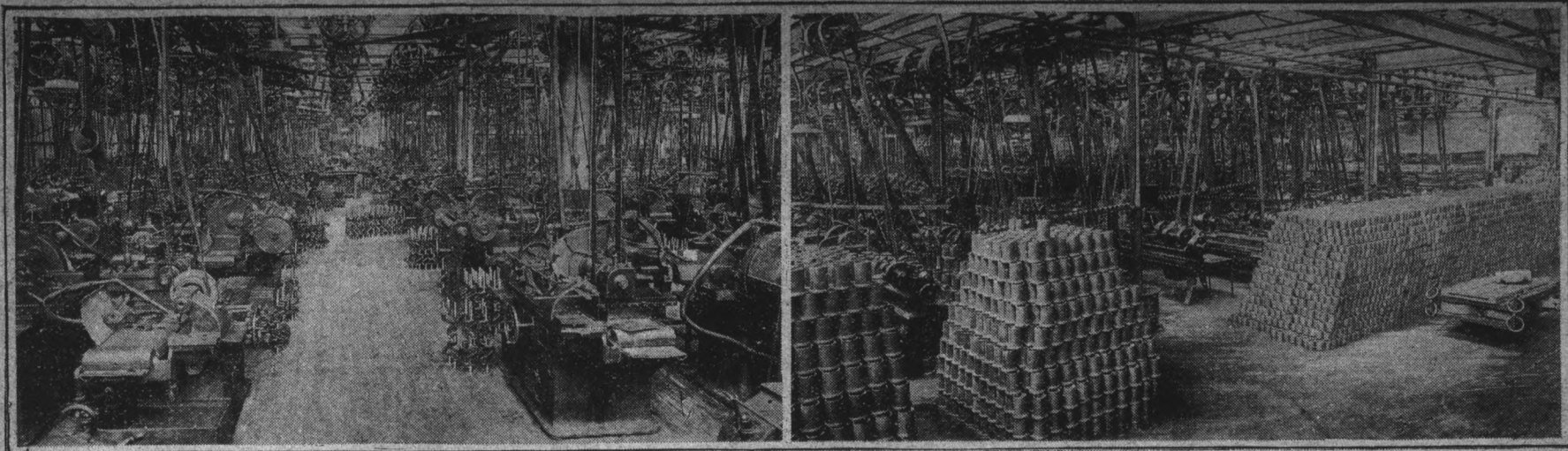
Under the commodity control plan, as understood by farm bureau men, commodity organizations would be supreme in their particular field and would serve all members of the farm bureau wishing to use their channels of marketing in a co-operative manner. Also, members of the fruit, potato, livestock, and all other commodity organizations would have

the use of the other exchanges. Affiliation of these organizations with the farm bureau as official commodity organizations would mean that all their members would become farm bureau members. Eventually the organizations would probably have representation on the state farm bureau executive committee.

Unity and permanency will be maintained in the state farm bureau if the commodity plan is adopted, says the farm bureau men, through a program of organizing the entire membership into co-operative associations. They would be organized on the commodity plan. Members of the co-operative elevator exchange would be able to get service from the livestock exchange and so on. The general service arms of the state organization would be at the service of all the departments.

The plan for having every farm bureau member a member of a local co-operative association cannot be considered a fantastic dream in view of the fact that several counties are already on that basis, says the farm bureau, in pointing reasons why the state farm bureau should continue to add to its strength as a closely knit, powerfully united organization.

Co-operative organizations are being started in the state at the rate of about twenty a month. The extension department of the Agricultural College estimates that something over 25,000 farmers have signed crop contracts whereby they agree to handle all their produce through their co-operative associations and the idea is said to be taking fast in all existing farm (Continued on page 17)



Two views of the confusion of belts and machinery one encounters when passing through the Ford factories

Sixteenth Place to Fourth in Twenty-One Years

Detroit's Remarkable Industrial Growth of Much Importance to Farmers of Michigan

By Wm. STOCKING

THE FARMERS of our fair state should be, and we believe they are, interested in the city of Detroit and its growth. Its rapid rise means much to them in the way of a better market for their products; it means a large demand which results in higher prices. And it means increasing land values to the farmers. Believing you are interested in Michigan's metropolis, we are publishing the following article taken from a recent issue of "The Detroitian":

ONE NEEDS TO GO no further back than the beginning of this century to take the measure of Detroit's remarkable industrial growth. When the Census Bureau's canvass was taken covering the calendar year 1899, Detroit was sixteenth in rank among the industrial centers of the country, with \$67,224,000 of manufacturing capital and \$88,640,000 in value of product. Five years later it was in twelfth place, with \$91,338,000 capital and a product valued at \$128,247,000. In 1909 it was in sixth place, capital \$210,000,000 and product \$252,992,000.

In the next five years it rose to fourth place being surpassed only by New York, Chicago and Philadelphia. Its manufacturing capital had nearly doubled, being then \$405,000,000, and the value of the product had risen to \$569,000,000.

Maintains Position

The Census Bureau's canvas covering the year 1919 was taken in the course of the next year, but it is not likely to be available for use till well along in 1921. From other sources enough is known to give assurance that the city has maintained its place as fourth in rank, that its capital has again more than doubled, and the value of the product was in the neighborhood of a billion and a half.

In 1914, the automobile production was valued at about \$250,000,000, and there were only two other classes of manufactured products of which the value was over \$20,000,000. These were foundry and machine shop products, \$29,465,000, and slaughtering and meat packing, \$20,321,000. There were only seven others that had a production of between

A Ten-Year View of Detroit		
	1910	1920
Area within city limits ..	41	81
Pop. within city limits ..	465,766	1,088,853
Census of school children ..	114,448	222,789
Public school registration ..	61,691	139,604
MUNICIPAL FINANCES, JULY 1		
Assessed valuation ..	\$377,335,980	\$1,699,149,580
Gross city appropriations ..	8,864,738	69,628,223
City tax levy ..	6,837,636	35,086,359
Net city debt ..	7,258,229	26,901,334
BANKING FIGURES, SEPTEMBER STATEMENTS		
Capital and surplus ..	\$19,130,000	\$58,343,500
Savings deposits ..	61,985,874	235,507,963
Total deposits ..	140,183,995	503,944,735
Total resources ..	166,618,226	654,989,759
Clearings for year ..	910,635,005	6,109,313,803
LAND AND BUILDING		
Deeds filed ..	19,270	55,065
Mortgages filed ..	12,130	83,280
Building permits ..	5,498	19,412
Cost Build. Construction ..	\$17,225,945	\$77,737,365
MANUFACTURES		
New Co.'s Incorporated ..	229	331
Subscribed capital of same ..	9,129,486	\$13,194,420
Old Co.'s Inc. capital ..	\$16,511,500	\$71,318,400
Industrial workers ..	113,034	320,000
Value of Mfg'd product ..	\$277,552,000	\$1,500,000,000
FEDERAL BUSINESS		
Postoffice receipts ..	\$2,193,647	\$6,031,442
Internal Rev. receipts ..	5,725,941	304,184,392
Imports, fiscal year ..	13,763,200	91,160,552
Exports, fiscal year ..	82,143,633	339,844,490

\$10,000,000 and \$20,000,000, as follows: Brass and bronze products, adding machines, malt liquors, patent medicines and compounds, printing and publishing, soda ash and tobacco manufactures.

In 1919, the automobile production was valued at about \$880,000,000. Brass products, which had amounted to \$14,630,000 in 1914, had risen to at least \$50,000,000 in the latter year. In this product Detroit stands second to Waterbury, Conn., the original home of the brass industry in this country.

Published reports give the output of adding machines for 1919 at over \$30,000,000. All of those above mentioned, except malt liquors were above \$20,000,000 in the latter year, and at least a half-dozen others entered the ten million class. Shipbuilding reached its maximum in 1918.

It is impossible to ascertain the exact

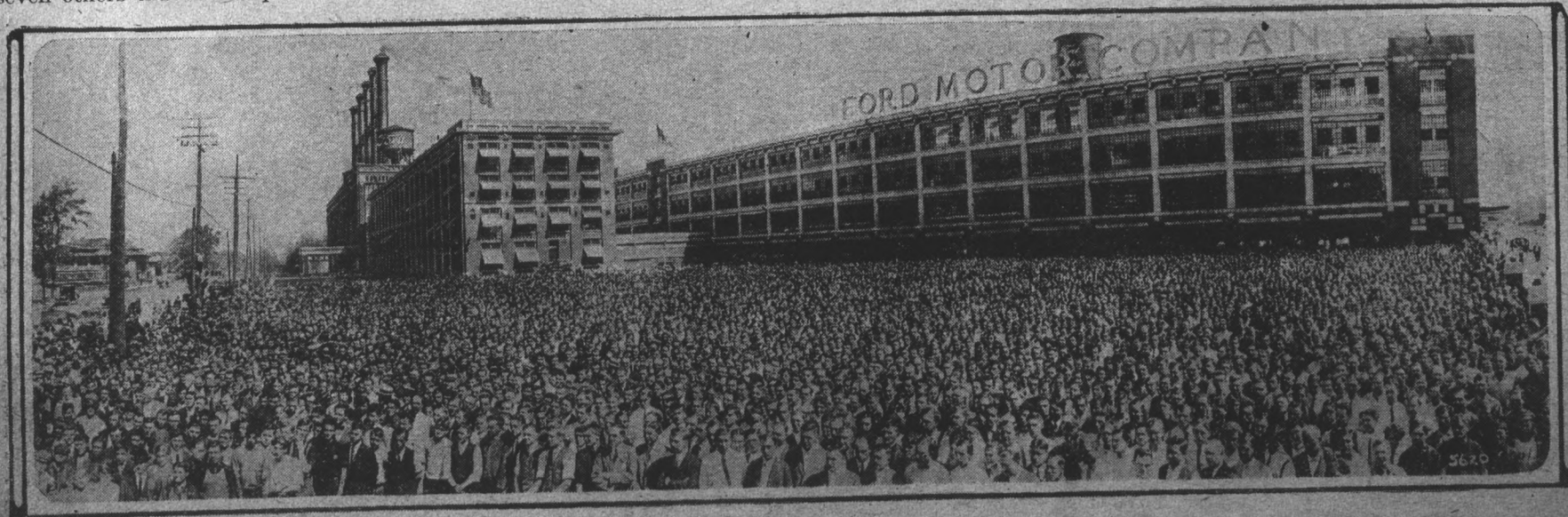
amount of Detroit manufactures that are exported, for the reason that many of the goods destined to foreign countries go through the seaboard ports and do not appear on the books of the Detroit custom house. In the summer of 1920 the Board of Commerce made a canvass of some of the leading lines. The following represents approximately the values of products set apart for export in that year: Automobiles and parts, \$151,650,000; drugs and chemicals, \$4,709,000; stoves and furnaces, \$3,575,000; adding machines, \$3,045,000; paints and colors, \$950,000; marine motors, \$832,000; machinery and small tools, \$786,000; refrigerators and filters, \$767,000; electrical machinery, \$600,000; miscellaneous iron products, \$623,000.

In many lines Detroit manufacturers have not sought foreign trade until lately, as the home demand afforded a sufficient market. The city has now become fairly well organized for export trade, especially with South American countries.

Industrial Employees

Although there is no complete canvass of manufacturing industries except that made by the Census Bureau once in five years, the reports of the state labor commissioner show the annual drift of employment and wages. The Census Bureau, in considering the latter, takes into account only establishments working under the factory system, that is those using power and machinery.

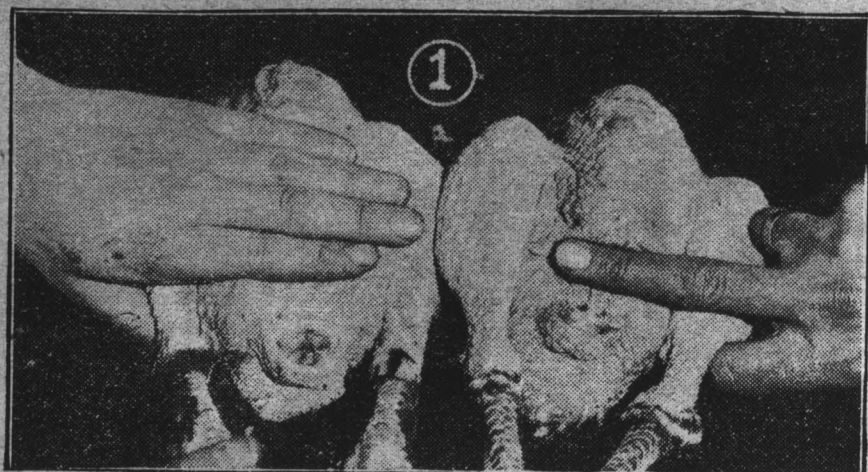
The labor commissioner includes also the hand trades and neighborhood industries, such as blacksmith shops, millinery shops, automobile repair garages and hand upholsteries; also the shop work of the various city departments. In 1909 there was a difference between the two classifications of about 5,000. The number of industrial employees given here is that furnished by the labor commissioner's report. It includes the city proper and Hamtramck and Highland Park, which were first established by the overflow of Detroit (Continued on page 18)



A sea of humans who labor at the Ford Motor Car Company.

How to Cull Poor Layers from the Farm Flock

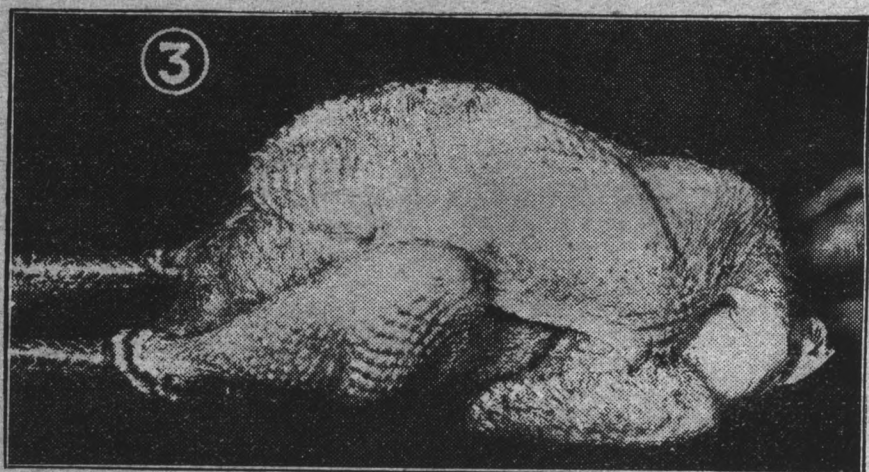
Several Pointers to Remember when Ridding Your Flock of Low Producers



Note that one hen has a breadth of four fingers below the point of breast-bone, while on the other there is barely room for one. The hen on the left is a high-producing hen with good capacity, the other, a low producer.



Note the thickness of the pelvic bone in the bird at the right, as compared with thinness of pelvic bone on the left. The thin-pelvic-bone bird shows also three fingers width between pelvic bones and a four-finger capacity.



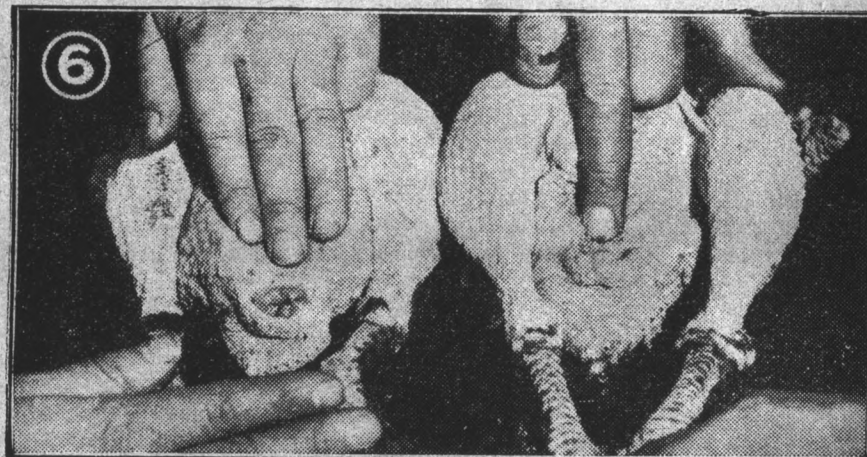
Note the runner type of keel, found in low-producing hens. Note how this makes small capacity.



Note the parallel Type of keel which permits a large capacity. This is found in high-producing hens.



This hen has a flat back and a broken-down abdomen. She is a type of hen to be culled out whenever found.



The bird of small width between lay bones is not in laying condition as is the bird with a width of three fingers.



This is a thin-fleshed cull hen of small capacity—an illustration of the type to be eliminated from the flock whenever found.



High-producing hen with five unmolted primaries. Notice the other five primary feathers in different stages of growth, indicative of high egg production
(By Courtesy of Wisconsin Farmer)

Economists Urges Farmers' Cooperative Banks

American Cooperative Congress Discusses Weaknesses of Present Banking System

"A SYSTEM OF cooperative banks and credit institutions will enable farmers to control their own credit. Credit is one of the machines of production and farmers must control, just as they control their farm machinery." This statement by Dr. Frederick C. Howe, economist and America's leading authority on cooperative banking and credit, was the central theme of a day's discussion of cooperative banks and credit institutions by the American Cooperative Congress in Cleveland, Ohio, on February 10.

The American Cooperative Congress is a sort of institute for the study of cooperative problems. It was formed by a few labor leaders and farm cooperators who want to know the fundamental facts about cooperation, and who employ experts to find out these facts. Dr. Howe is secretary of the committee on banking and credit, and has spent the past year in researches on this question. His reports to the Cleveland convention brought out many new angles to this problem, which is one of the chief questions before farmers and others who are interested in the success of large cooperative enterprises.

"The present banking and credit facilities of the United States are totally unsuited to the needs of the farmers and other producing classes," said Dr. Howe. "Ordinary commercial credit flows to the point of highest returns. There is more money in speculative transactions than in production, hence speculators have command of the present-day banking system. Thirty years ago the banks were fairly well identified with productive enterprises—today they are closely allied with various forms of speculation and are distantly removed from production. I make these statements without malice to anyone, simply stating facts known to every student of finance."

There is no use hoping for the reform of this situation through legislation, according to Dr. Howe. "Banks are mostly owned by the commercial classes, the speculators and middlemen," he said. "These banks are designed to solve the special problems which confront these interests which own them. The railroad banks were created to solve the credit and financial problems of the railroads. I do not see how it will be possible for any legislation to be enacted to compel them to meet farmers' financial needs. The remedy of the farmers seems to me to be perfectly obvious—the organization of a system of farmers' cooperative banks and credit institutions that are adapted to the peculiar needs of farmers. The same thing is true of workmen and

THE SUBJECT of credit is just now uppermost in the minds of most people. The farmers complain that they haven't been able to secure credit for their legitimate undertakings, and the bankers declare that the farmers have been favored, if anything, in the matter of credit. What's wrong? Dr. Howe says the system is at fault, that the present banking system of this country, being based entirely upon the idea of profit-making, is inadequate to take care of the credit needs of productive enterprises like farming. He says the only solution is a system of cooperative banks like they have in Denmark which are owned by farmers, not to make money, but to finance their business. Whether you agree with Dr. Howe or not, the article is worth reading.—Editor.

every other class of producers whose operations are restricted under the present system.

"I am led to these convictions by the experience of practically every country in Europe. In almost every other civilized nation in the world except America the farmers have their own banking system. Their resources are dedicated to their own productive enterprises, and they are controlled by the farmers themselves. There are 65,000 cooperative credit unions in Europe. Prior to the war their turn-over annually was seven billion dollars per year.

"Denmark is the foremost nation in cooperative banking, which is the cornerstone supporting the world-famed cooperative marketing system of the Danish farmers. Cooperative marketing, the success of which was made possible chiefly through cooperative credit, has made Denmark the best nation in the world from certain points of view—particularly, social and industrial. The cooperative bank in Copenhagen is the second largest bank in Denmark.

"The credit unions, known sometimes as Raiffaisen banks, are adapted to the needs of tenants and small farmers. They enable men to buy seed, machinery, supplies, etc. These unions are managed entirely by the members. They do not do a checking business, but keep their money in other banks. Each member pays in a small sum, say \$10, the credit union receives deposits, and these funds are loaned only to members. There are 38 of these credit unions in North Carolina, where they have changed whole communities and wrought wonders in making self-respecting citizens out of poor people formerly at the mercy of the money-lenders. They are especially adap-

ted to the needs of tenant farmers and others of small means."

Credit unions can solve local financial situations only. Dr. Howe thinks, and he recommends the establishment of a system of cooperative banks, modeled somewhat after the ordinary commercial banks to take care of larger needs.

"The banking laws of the United States and the states should be revised to permit the operation of banks on the true Rochdale plan of cooperation," he said. "There are no such banks at present. The closest comparison to this is the new Brotherhood of Locomotive Engineers Cooperative National Bank of Cleveland, recently opened, which is organized under the national bank laws and operated as closely as possible according to the principles of cooperation. The reason that I insist upon the cooperative feature—especially limitation of dividends to say eight per cent on capital, and division of the rest of the profits among the depositors—is that this will keep the motive of service foremost. The resources of such a bank will aid the community rather than exploit it in making large dividends for its stockholders. Banks of this sort can become a part of the federal reserve system and will be of immense value in financing crop marketing by farmers."

An alternative or supplemental institution suggested by Dr. Howe is a finance corporation. It would be organized with large capital subscribed by farmers. It would be like the many kinds of investment banks which are scattered over the country. It would take warehouse receipts and bills of lading on grain and other farm products, on a safe margin. It would use these warehouse receipts and other farm paper to issue short-term securities similar to bonds issued under trust deed. The warehouse receipts would be brought together and the certificates divided into convenient sizes for sale—\$100, \$1,000, \$10,000, etc. They would be sold to private investors. This sort of bank, according to Dr. Howe, would earn its dividends from rapid turnover of its capital. He insists that it also must be organized upon the cooperative basis.

"Credit has a public use," said Dr. Howe, in conclusion. "It must be treated as a public trust. It must be controlled by the producers instead of the speculators and exploiters. It is not the bankers' moves that provides credit—it is the money of the people who deposited it. They have a right to insist that their own money shall be used for their own benefit, and it is to the interest of the nation that that right be exercised."

Michigan Beet Growers Plan United Action With State Farm Bureau

Manager Ackerman Announces Working Agreement With Farm Bureau—Denies Propaganda Spread by Enemies

DURAND, MICH., Feb. 26, 1921.—C. E. Ackerman, General Manager of the Michigan Sugar Beet Growers' Association, one of the largest growers of sugar beets in the state and the man to whom a large share of credit for the 113 locals which were established in 1920, is given, today made the following announcement which is of interest to every grower of sugar beets in Michigan whether or not he is as yet a member of either or both of the organizations mentioned. Mr. Ackerman's statement is as follows:

"The Michigan State Farm Bureau and the Michigan Sugar Beet Growers' Association have agreed on a plan of action which is as follows:

"The Michigan Sugar Beet Growers' Association is to be the recognized institution of organized beet growers in the State of Michigan and will be the Farm Bureau's department as such. All plans will be worked out through this head.

"The plans for the immediate future will be

(Special to The Michigan Business Farmer)

distributing the Association contracts which will be handled through the locals, these contracts will come out this next week. The local organizations will superintend the signing of the contracts and the State Association will be made the sole negotiating agent for any contracts on which the growers will grow beets this year.

"All locals will be furnished with report cards on which they will report the number of signers. Number of acres and for what companies they wish to grow. This will put the Association in shape to report just how we are progressing from time to time. These report cards are to be mailed on Saturday each week by the local secretaries to the State Association at Durand, Mich.

"We have reports that 5,000 Ohio growers are organized and will hold out and are asking what Michigan is doing.

"The Ohio, Indiana and Illinois organizations report that they will not raise beets this

year for the Michigan factories while the Michigan growers stand out for a better price for beets like they did last year.

"All Michigan growers are asked to withhold contracting for beets until they have had an opportunity to consider and see the Association's contract and to stand with the organized growers if it is in any way possible for them to do so.

"Make the Association your agent to get you a better beet contract this year."—Michigan Sugar Beet Growers Association.

Denies Malicious Propaganda

Recently the Business Farmer received some intimation of a rumor which was current in some parts of the state that Mr. Ackerman had leased his farm last season to the sugar company and we immediately brought it to his attention, although we were surprised that any beet grower in this state should give credence to so apparent a piece of "enemy propaganda" we will let Mr. Ackerman answer it in his own words. (Continued on page 9)

How To Manufacture Cream Cheese on the Farm

Neufchatel and Cream Cheese Offer Dairyman Excellent Opportunity for Disposal of Surplus Milk

Would you please print directions in full in your paper for the making of cream cheese on the farm? I am very anxious to get this information so took the liberty to write your paper, which by the way, we enjoy reading.—Mrs. W. E. H., Fillion, Mich.

CHEESES of the Neufchatel group have been produced in the United States almost exclusively by a very few factories whose methods were not readily available to the public and whose extensive and high-priced equipment created the mistaken notion that it is not practicable to make these cheeses except upon a factory scale. The methods of manufacture of Neufchatel and cream cheese and their modifications are, however, simple and the equipment needed for making them in small quantities is not elaborate; therefore an excellent opportunity is offered to produce at low cost a fresh, wholesome, and attractive food for home use. Since Neufchatel and cream cheese may be marketed upon a small scale, they often offer to dairymen an exceptional opportunity for the surplus milk.

The cheeses of this group are perishable, and their selling prices are somewhat higher, pound for pound, than the harder cheese. They are coming more and more into common use, however, because, in addition to their rich flavor and high nutritive value, they may be used with other foods to form many appetizing dishes. When cheeses of this group are to be sent to market, special, though inexpensive, equipment is necessary in order to obtain the greatest efficiency of time and labor in molding them into marketable form. An expenditure of from \$10 to \$25 will provide proper equipment for handling the cheese from several hundred pounds of milk. Such equipment should enable the dairyman to make and market cheese directly to the consumer at less cost and in fresher condition than that shipped from a more distant point. The fact that fresh cheese can be obtained readily will tend to increase its consumption.

The Manufacture of Neufchatel and Cream Cheese

In this article the production of the Neufchatel group of cheese is considered from two points of view, (1) for home consumption and (2) for marketing on a small scale.

Quality of Milk

The quality of milk is the first consideration in the production of good Neufchatel or cream cheese. Milk which is sour or has undergone any abnormal fermentation should not be used. By the use of fresh, unripened milk without any perceptible change in the acidity, the normal fermentations which are necessary for cheese of high quality can be controlled. Milk for cheesemaking should not be allowed to absorb any odors or taints, and the garlic flavor, especially, should be guarded against.

Clean Utensils

Cleanliness of utensils is another essential in producing cheese of high quality. The following system is advised in washing milk and cheese utensils:

1. After using, rinse with cold water.
2. Wash with hot water to which a washing powder has been added. Always use a brush.
3. Rinse in hot water at a temperature above 150 degrees F.
4. Steam or immerse in boiling water for five minutes.
5. Do not dry the utensils with a cloth but place them in a clean place free from dust.

Ripening the Milk

The cheese is made by allowing the acid and rennet, or other curdling agent, to act simultaneously upon the milk. If great care has been used in the production and subsequent handling of the milk, the cheese may be made by adding rennet and allowing the milk to sour normally. A rather rapid development of acid is most desirable, as this tends to eliminate undesirable

flavors, hastens the making process and prevents losses of curd. The lack of uniformity in ripening often requires a more definite means of controlling the acid fermentation, which may be accomplished by the use of a "starter."

The Use of Starters

A "starter" is a quantity of milk that has soured and which contains large numbers of acid-forming bacteria. If the cheese is made in small quantities for home consumption, a starter is probably not advisable. The advantages of a starter is probably not advisable. The advantages of a starter over the natural souring are:

1. It hastens the coagulation of the milk.
2. It suppresses undesirable fermentations that may cause excessive losses of fat and curd.
3. It aids in suppressing undesirable flavors and produces more uniform cheese.

Standardizing the Milk

In making cream cheese for the

market, milk testing about 6 per cent butterfat is most satisfactory. With 4 per cent milk available, if one-third of the quantity is run thru a cream separator and the cream added to the remaining two-thirds, milk testing approximately 6 per cent is obtained. If the milk tests only 3 per cent it will be necessary to separate one-half. This method gives satisfactory results for home manufacture, but for more extensive operations it is advisable to use a Babcock tester in order to standardize the milk accurately.

The following illustrates an easy method of determining the proportions of milk and cream of different per cent of fat needed to make up 6 per cent milk:

Cream and milk on hand—34 per cent cream; 4 per cent milk.

Proportions to be used—2 parts cream; 28 parts milk.

If it is desired to make up a definite quantity of 6 per cent milk, for example, 60 pounds, the procedure

is as follows: 2 added to 28 makes a total of 30 parts of 6 per cent milk. The quantity of 34 per cent cream necessary is 2-30 times 60, or 4 pounds, while the quantity of 4 per cent milk is 28-30 times 60, or 56 pounds.

Making the Cheese

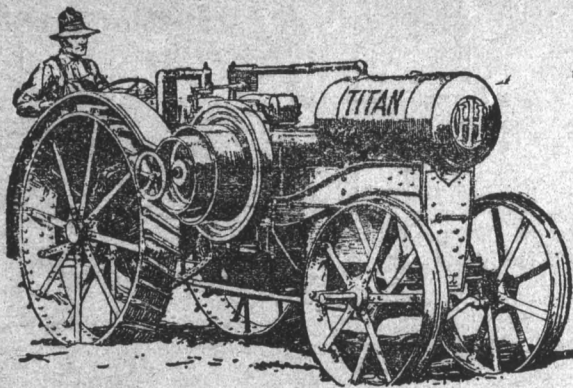
The process described is identical for Neufchatel and cream cheese, except for a few minor differences which will be mentioned.

Setting—Unless otherwise noted, 30 pounds, or about 3 1-2 gallons of milk, is the unit used in these directions; that quantity can be handled conveniently in a shotgun can. For smaller quantities any enameled or heavily tinned pail is satisfactory.

If a starter is added, it is advisable to use a quantity equal to 1 or 1 1-2 per cent of milk; while smaller quantities may be used, the proportions suggested are usually the most satisfactory.

Neufchatel is made from ordinary milk, while the cream cheese requires milk containing about 6 per cent

(Continued on page 19)



Titan 10-20—for Economy Farming

DURING THE YEAR 1921

AND THE YEARS TO COME

TRACTORS come and tractors go but Titan 10-20 continues its steady traveling along the roads of popularity, and in the fields of labor, conquering the most difficult of practical farm tasks.

Theories and experiments in design and construction run their course among manufacturers and among farmers—and leave behind a varied history. But the service record of Titan has been a revelation in the agricultural world. Its record as an efficient farm power unit has been, to state a plain truth, *convincing*.

During its history, Titan sales have swept ahead; this tractor has carried its success into every county and country. Yet, except for minor improvements and betterments, Titan design has remained unchanged. It has stood the test of time, the test of hardest, roughest usage, the test of strenuous competition, so that to date the farming world has invested over seventy million dollars in Titans. Can there be better proof of thorough practicability?

Titan 10-20 is now more than ever *standard* because it is fundamentally simple, enduring, reliable, right. Do not be deluded by initial false economy. Increase the efficiency of your work for 1921 by an investment in this power. The International dealer is the man to see.

INTERNATIONAL HARVESTER COMPANY,

CHICAGO OF AMERICA (INCORPORATED) USA

92 Branch Houses and 15,000 Dealers in the United States



MARKET FLASHES



TRADE AND MARKET REVIEW

ANY IMPROVEMENT which may have taken place in connection with the general business outlook, during the past week, is largely anticipatory rather than real. One of the most important announcements of the season was made during the past week when the American Woolen Co. gave out a price list on woollens for women's wear and for men's overcoatings which averages nearly 50 per cent lower than the scale of values which was the basis of last year's business; that the public has been waiting for an announcement of this kind goes without saying and a large volume of spring business, in connection with the commodities mentioned, may be safely predicted. The activities of American wool buyers in various foreign countries, while our home grown product goes begging for buyers, must be taken as a lack of patriotism and a willingness to do almost anything to save a few dollars.

Industrial conditions in the Detroit district are said to be improving, slowly, several manufacturers, who specialize in Ford accessories, having called in a portion of their men and are operating on limited time schedules with a fair prospect of soon being able to go full speed ahead.

Both the business public of this country and many men in private life have been waiting impatiently for the president-elect to select his cabinet; the list has been completed during the past week and the general verdict seems to be that Mr. Harding did a good job. There was a feeling abroad in the land, that the future prosperity of this great country could be made or marred by the selection of men for Secretary of State, Secretary of Commerce, Secretary of the Navy and the departments of Justice and Agriculture. From the standpoint of business prosperity, alone, the departments of State and Commerce will probably have the most far-reaching influence and men of all parties seem to agree that no better men than Hughes and Hoover could have been found to take these important portfolios. The readers of The Michigan Business Farmer are, of course, very much interested in the appointment for Secretary of Agriculture; if there was ever a time in the history of this country, when the American farmer needed a faithful friend, that time is right now and there is every reason to believe that Mr. Harding has selected the right man for this important trust.

While money seems to be fairly plentiful in the New York financial district as indicated by call money at 6 per cent on the New York Stock Exchange, there is reason to believe that money is tighter in the interior just now, than at any preceding date since the readjustment began. Recent developments, in connection with the international situation, all point to increasing of financial stringency, both at home and abroad.

The January report of our foreign trade shows a very large volume of exports, the total for that month being \$655,000,000, an amount very much larger than for five months of last year. Imports, however, continue their decline, the showing for January being \$209,000,000 which is the smallest for three years and compares with \$533,000,000 which came into our ports from foreign countries, during the month of June, 1920. The above figures simply show that we are rapidly increasing the volume of our credit extensions to foreign countries, incidentally, tying up money that we are sure to need very badly to extend our own business operations before the coming summer is over.

Newspaper reports, from foreign sources, indicate that Europe is suffering from a much more serious business depression than we have yet seen. Of the allied nations, France

Edited by H. H. MACK

GENERAL MARKET SUMMARY

DETROIT:—Grains easy; strength and higher prices expected in near future. Beans steady. Hay firm.

CHICAGO:—Corn and oats steady. Wheat erratic. Cattle higher. Hogs active. Beans firm.

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

seems to be in the worst condition, financially; in fact, the desperate need of money with which to run the country, which the present French administration is struggling with, just now, is casting a pall over the entire European continent.

WHEAT

WHEAT PRICES PER BU., MAR. 1, 1921				
Grade	Det.	Chi.	N. Y.	
No. 2 Red	1.82	1.80 1/2	1.81 1/2	
No. 2 White	1.80			
No. 2 Mixed	1.80		1.77 1/2	
PRICES ONE YEAR AGO				
No. 2 Red	No. 2 White	No. 2 Mixed		
Det.	2.47	2.45	2.45	

The wheat markets had a period of weakness during the first part of last week and lower prices were made only to give way to a stronger tone later but the closing day of the week saw markets very erratic. Detroit was weak all day Saturday and declined 3c while Chicago opened strong but developed weakness before the close. In spite of the offering by our competitors foreigners are on the watch for wheat in this country and any sharp break finds them buying readily. Greece purchased 23,000 barrels of flour in this country last week, it is reported. Millers say the present flour market is poor but better consumption is expected soon. Last week's closing weakness was in evidence at the opening of this week.

Wheat is in a nervous position and will be apt to sudden changes from now on. It is time for crop damage reports to begin to arrive and these reports will play a big part in future prices. Crop damage reports and good export buying would send wheat prices soaring. We believe the market is nearly at the turn in the road and look for better prices in the not far off distant future.

CORN

CORN PRICES PER BU., MAR. 1, 1921				
Grade	Det.	Chi.	N. Y.	
No. 2 Yellow	.70	.65	.69	
No. 3 Yellow	.67			
No. 4 Yellow				
PRICES ONE YEAR AGO				
No. 2 Yell.	No. 3 Yell.	No. 4 Yell.		
Det.	1.54	1.51		

There was a close relationship between corn and wheat last week and the total loss in the Detroit market

was 3c, of which 2c was lost Saturday. The weakness followed into the current week. This weakness is ascribed to large receipts and small demand. The present tone is easy. It is reported that in many sections well-to-do farmers are buying corn from their brothers who are less fortunate financially and holding the grain for higher prices, which we hope will come in the near future. The spread between hogs and corn has narrowed some during the last week and farmers are sending more of this coarse grain to market.

OATS

OAT PRICES PER BU., MAR. 1, 1921				
Grade	Det.	Chi.	N. Y.	
No. 2 White	.47 1/2	.45	.55	
No. 3 White	.46	.43 1/2		
No. 4 White	.43			
PRICES ONE YEAR AGO				
No. 2 White	No. 3 White	No. 4 White		
Det.	.92 1/2	.91 1/2	.90	

Oats have followed the trend of the other grains closely since our last writing and is easy at this time. Farmers have not been offering oats very freely owing to the low price but the past few days have seen more liberal receipts which has resulted in a weaker market. The east bought considerable at higher prices and they are working off their present stocks before bidding for more.

RYE

Rye is lower too, losing 4c on the Detroit market last week and No. 2 cash is now quoted at \$1.55. Rye has been fairly well cleaned up in this country and this year's carry-over will be smaller than last year's.

BEANS

BEANS PER CWT., MAR. 1, 1921				
Grade	Det.	Chi.	N. Y.	
C. H. P.	3.75	4.75	4.90	
Red Kidneys	9.00	9.25		
PRICES ONE YEAR AGO				
C. H. P.	Prime	Red Kidneys		
Det.	8.00	7.25	11.25	

We are sorry to say but there has been another decline in the bean market at Detroit the past week. They dropped 10c per cwt. But the marketing is steadying up and although dull at present everything points to renewed demand in the

near future. New York prices gained 15c during last week.

POTATOES

SPUDS PER CWT., MAR. 1, 1921		
	Graded	Bulk
Det.	1.60	1.25
Chi.	1.20	1.35
N. Y.		1.84
Pitt.		
PRICES ONE YEAR AGO		
Det.	4.80	4.33

Potato prices were higher on nearly all markets last week. Detroit was one of the markets that did not advance but remained at the same price level with a firm and steady tone to the market. Both New York and Chicago markets advanced early in the week and then suffered a slight relapse at the week end but are on the road to recovery. Large receipts caused the weakness. The firm and steady tone of the Detroit market promises well to the farmers of Michigan in the writer's mind.

HAY

Light receipts has been causing a better demand for timothy hay in most markets the past week; on some markets this hay was at a premium. There is a firm feeling in the markets at present.

LIVE STOCK MARKETS

From the opening trade on Monday, until the close on Saturday of last week, live stock prices showed a big gain in all markets. After Monday, of last week, the Chicago cattle trade was an active affair, all grades of killing cattle, except high-grade steers, showing gains of from 25 to 75 cents per cwt. While the prices paid for heavy steers and yearlings looked somewhat higher than those of the week before, some of the gain was the result of a marked improvement in quality. The top in the steer department, was \$10.75 and for yearlings, \$10.50 per cwt. Butchers cattle were in more active demand than for a long time and prices were 25 to 50 cents, per cwt., higher than on the close of the week before. An active demand developed in all markets for stockers and feeders at prices 25 to 50 cents higher than the close of the preceding week. Bulls were 50 to 75 cents higher than the average of the week before and campers gained about 25 cents per cwt. Weal calves gained from \$1 to \$1.50 per cwt., during the week, but little change in the demand for milkers was noticed. Eastern dressed beef quotations were from 50 cents to \$1 per cwt. higher and Chicago wholesalers of meat raised the carcass cost of all grades of beef \$1 per cwt.

At a recent conference between Colorado lamb feeders and representatives of the Chicago packers, the latter agreed to ship out of the country as much of the frozen lamb and mutton as they can find sale for and to also export some of the heavy lambs averaging above 100 pounds, for which there is no demand in this country. A recent government report showed more than 78,000,000 pounds of frozen mutton and lamb in the coolers of the country; this showing has been reduced by the shipment to England of 16,000,000 pounds and as all importations of the frozen stuff have ceased, conditions are sure to improve in this department of the trade.

Early last week, in the Chicago market, prices were marked up for both sheep and lambs, the former from \$1 to \$1.50 per cwt. and the latter from \$1 to \$2 per cwt.; the top for Colorado lambs in Chicago last week, was \$11. Lambs, averaging around 95 pounds sold in Chicago last week for \$10.50; on the close of the preceding week, this kind were only worth \$7.50 per cwt. The average price for all aged sheep, last week, was \$6 per cwt., being \$1.50 per cwt. higher than on the close of the week before. The average price

THE WEATHER FOR THE WEEK

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



WASHINGTON, D. C., March 5, 1921.—During early part of the week centering on March 20 a general warm wave of wide dimensions will cover all the northern Rockies, Pacific slope, and plains sections. It will effect the whole continent as it moves southeastward, will pass east of meridian 90 by March 20, then move northeastward to Newfoundland by March 22 or 23. The warm wave is always considered the first indication of the storm and, in weatherology, is called the first feature, the first third, of the storm. It is safe for you to expect not much

change in crop weather for the next six weeks. But March will be an unusually stormy month; much like the last week in January and the weeks centering on February 7 and 18. More bad, stormy weather is expected in March than in any other month of the winter in those sections where the bad storms of the past four months have been striking. I do not mean bad crop weather, but disagreeable weather for man and the lower animals. I expect the general average of crop weather for March to be good. Most severe storms and most precipitation of the month are expected during the week centering on March 9. Better put your affairs in good condition for that week of bad weather. If you are contemplating outdoors affairs, sea or ocean voyages, and wish to avoid bad weather I advise you not to take up such matters during the weeks centering on March 9, April 22, May 10, June 1.

W. T. Foster

for all fat lambs in Chicago, last week, was \$10 per cwt. or \$1.65 per cwt. higher than that of the week before.

Elloquent with suggestion as to "which way the cat is going to jump" is the fact that during the last ten days, the packers have marked up the price of all pork products from \$3 to \$5 per cwt. Chicago hog receipts, last week, 165,000, were the smallest since the middle of last December; this showing represented a loss from the week before of 34,500 hogs. The estimates on Saturday of last week for Monday's Chicago hog arrivals, were 45,000; the actual receipts were 67,000. For the current week, 175,000 hogs are expected in Chicago.

Detroit Market Conditions

The Detroit cattle trade was fairly active all last week and on Monday of this week, it sure was a "hummer" for all kinds, except canners, common cows and bulls. Packer buyers refuse to pay more than \$5.50 per cwt. for bologna bulls but they do not care to have their bulls very fat because the leaner they are the more water they will absorb during the manufacturing process. A pure-bred Hereford bull, weighing 1,550 pounds, sold for \$6.50 in Detroit on Monday and on the same day an Angus bull, weighing 1,450 pounds, sold for \$6 per cwt. The last two mentioned sales were to the Jews; packers would not have bettered \$5.50 for these bulls both of which were highly finished. The bull sales, recorded above, prove the fallacy of feeding grain to a bull. Best dry cows are worth \$6.50 per cwt.; this kind will make a profitable use of grain while the ripening process is going forward.

Heavy hogs and heavy lambs are almost unsalable in the Detroit market. We are on a level with Chicago on mixed hogs and somewhat higher for lights and pigs.

The MARKET EDITORS MAIL BOX

RAISING GEES

Will you please inform us through the columns of your paper as to the advisability of raising geese on a farm? Can the feathers and down be sold and where?—Mrs. N. P. Charlevoix, Mich.

With respect to clear profit, geese are considered by many the most desirable poultry to raise; they thrive well on pasture without grain and the larger varieties grow into money very rapidly. It is not considered good policy, however, to permit them to run at large with other farm animals as they render the grass less palatable after they have trampled,

back and forth, over it. There is no regularly established market for geese and duck feathers. Ask your local furniture dealer.

PEAS AS FEED

I have several bushel of Alaska field peas which there is at present no market demand. I wish to use these peas as stock food and would like to know what is the best grain to mix with them. I am feeding straw, corn stalks and ensilage for roughage. What is the comparative food value of peas as a food for stock?—R. J. T. Sutton's Bay, Mich.

Ground peas are a very strong and nutritious food and will give best results when ground with a bulky grain like oats or barley. Peas are considered by many as fully equal to shelled corn in nutritive value as a stock food.

MICHIGAN BEET GROWERS PLAN UNITED ACTION WITH STATE FARM BUREAU

(Continued from page 6)

words: "Relating to the story that has been circulated all over Michigan last year that I grew beets, that I rented my land for the growing of beets, etc., I wish to say again as I have said hundreds of times before, that all these stories are just another one of the 'damn' lies that have been told to the beet growers not with the idea of injuring me but for the purpose of befogging the poor beet grower who has been so willing to believe anything told him."

"I have told so many growers that if they listened to all the things they can hear that they would wake up some day and find themselves like the turkey that was dressed by a bunch of college girls. The arrangement was like this. The girls were to slaughter, dress and cook the turked for their male college friends. Of course, none of the girls had the nerve to deliberately kill the bird and so one suggested that they chloroform the bird which they did, and then fell to and deliberately dry picked him. They then laid him away and went out to attend to other things and upon their return they found that the turkey had come to and was walking around in his 'brief' attire and wholly 'dry picked.'"

"I think that many of the growers that have been taking these stories so seriously have also been the victims of the stories 'that beets would be over \$16 per ton this fall. That they would probably be \$18 maybe \$20, etc. That the members of the Association were 'just grafters.' That they were 'no farmers' and were in 'this business' for just the money there was in it. I have told so many if they continued to believe all these things they would be chloroformed just like the turkey and wake up some day and find themselves 'dry picked.' I think some felt that way when they got their 'bonus checks' this month."

"Now for business. I would suggest that you print the names of our directors and request all doubtful growers to write to any banker or any other reliable person living in towns where these men live and ask them about their standing and reliability, etc."

WHY HIS MAIL WAS LATE

Just this week we had a letter from a good friend of The Business Farmer who lives on Route 9 out of Flint. He said he liked the paper fine but he did not get it until Monday, sometimes as late as Wednesday of the following week. We took it up with the mailing department, they couldn't understand it because the Flint mail never leaves here later than Thursday night. Then we discovered that our friend's name was on Route 8, so his paper had been going out in the Route 8 bundle addressed to Flint, had been opened by carrier 8, brought back to the post-office, kicked around for a couple of days and when it finally reached him on route 9 it must have looked like the wall paper from a house in Pompeii.

MORAL: If your paper does not arrive on or before Saturday, write us sending the pink address label. Or if your initials, route number or anything else is wrong with your address label, write us, a penny post will do, addressed to the Mailing Department.

Dairying is most profitable



PRICES for dairy products have held firmly, while the cost of feed has been greatly reduced. Because of this there is relatively more profit than ever in dairying, and many farmers are turning low-priced feed into high-priced butter-fat. An eminent dairy authority says that you can make corn worth \$2 to \$3 a bushel by feeding it to good cows.

And De Laval Cream Separators have done more than any other factor to place the dairy industry on such a firm and profitable basis. They save cream, time and money twice a day, every day in the year. They produce a steady cash income. They have made the market accessible, even though you live 500 miles from a creamery. They keep the skim-milk on the farm to produce another crop of calves, hogs and poultry. They are made so well that 20 to 30 years' service from a De Laval is not unusual. Over 2,500,000 are in use in all parts of the world.

You need a De Laval more than ever. There is a De Laval agent near you—see him.

The De Laval Separator Co.

NEW YORK, 165 Broadway
CHICAGO, 29 E. Madison St.
SAN FRANCISCO, 61 Beale St.

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

HIDES AND FURS

are Cheap in PRICE

So are our PRICES for making FUR COATS, ROBES and LADIES' FURS.

We tan your HIDE and make you a Fine FUR COAT or ROBE for \$15.00, using the best grade of lining

for either job.

LADIES' FUR SETS made from
Get our CATALOGUE. It's FREE
Twenty Years Tanning HIDES
and FURS.
Rabbit, Raccoon, Fox, etc.

—THE—
BLISSFIELD TANNERY,
W. G. White Co., Inc.
Blissfield, Michigan

WANTED AT ONCE

To Fill Orders
On Rats' Hides



For which I will pay for late caught M. Rats. No. 1, \$2.00. No. 2, \$1.50. Kits and damaged at value. No bunch too large—no bunch too small. Send at once to the old reliable.

W. I. JONES, Kimbolton, Ohio

Farm with Dynamite

Use the Might in Dynamite to clear your land.
Use your Brains and save your Back.
Write us prices direct.
BRUNS POWDER COMPANY
Terre Haute, Ind.

The Michigan State Farm Bureau sells

VIRGIN WOOL Blankets

An honest blanket from honest wool for honest people—Direct to the user—by parcel post. Money refunded if not satisfied 100 per cent.

THE AURORA DOUBLE BLANKET

100 per cent Virgin Wool.
In plaids of blue and white, tan and white, grey and white with a neat lock-stitch border.
Size: 72 x 84. Weight: 5 1-2 lbs.
Price: \$9.50 per pair.

THE GEORGE WASHINGTON DOUBLE BLANKET

86 per cent Virgin Wool—20 per cent Cotton Warp.
Light grey with rich brown, blue or pink border bound with white solsetta ribbon.
Size: 72 x 84. Price: \$9.50 per pair.

THE ILLINOIS SINGLE BLANKET

75 per cent Virgin Wool—25 per cent Cotton Warp.
Beautiful small checks—soft and downy—suitable for bed cover or auto robe.
Size: 66 x 84. Price: \$6.50.

THE MICHIGAN STATE FARM BUREAU AUTO ROBE

Solid color—dark, neatly bound—Virgin wool. Will last a lifetime.
Size: 62 x 72. Weight: 4 1-2 lbs.
Price: \$6.50.

Address:
MICHIGAN STATE FARM BUREAU
Wool Department
Lansing, Michigan

Will You Introduce a Friend or Neighbor?

HERE'S AN INTRODUCTORY COUPON—Tear it out and hand it to a friend or neighbor who is not a subscriber. It is worth just 25c to him, because we will send The Business Farmer on trial to any new name for six months, for this coupon and a quarter (25c) in coin or stamps.

25c

This Coupon is worth twenty-five cents to any NEW subscriber introduced by an old subscriber.

The Michigan Business Farmer, Mt. Clemens, Mich.
Friends:

I want to introduce a NEW subscriber and for a quarter (25c) enclosed in coin or stamps you are to send our weekly every week for six months.

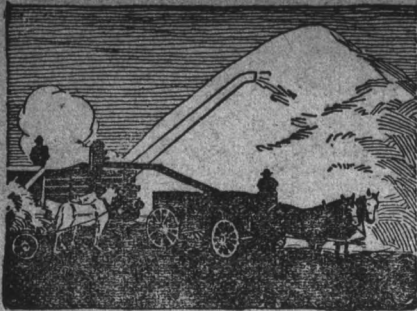
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Saving Grain Costs Less Than Raising It

It costs you good money to raise your grain. You can't afford to take chances on having it wasted in threshing. You needn't worry about waste if your threshing is done with a

Red River Special

It beats out the grain. Its Big Cylinder with the "Man Behind the Gun," its beating shakers, its smooth operation throughout—each means grain saved and money in your pocket.

Ask the Red River Special owner in your neighborhood to do your threshing. Better speak early because he always has a long run—everybody wants him

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Builders exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines.
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Get the beauty and durability of tile in the Lansing "ship-lap" block. Ends overlap—extended shoulders top and bottom—less mortar exposed, better settling of silage—less chance for frost, better looking silo, blocks uniform in shade. Stronger walls. Notched ends on blocks prevent mortar from slipping. Twisted steel reinforcing. Steel hip roof—steel or tile chute—fire proof. Write for Catalog.

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Factories: New Brighton, Pa.;
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Lansing
Vitrified Tile Silo



Grown From Select Stock—None Better—50 years selling seeds. Prices below all others. Buy and test. If not O. K. return and I will refund. Extra packets sent free in all orders I fill. Send address for BIG CATALOGUE illustrated with over 700 pictures of vegetables and flowers of every variety.

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Our selection best varieties for home and market—100 plants postpaid \$2.50; 200, \$4.25; 300, \$6. Home of the Everbears. Introducers of Progressive

Best up-to-date standard varieties (not everbearing, our selection.) 100 plants postpaid, \$1.25; 200 \$2.10; 300, \$2.95. Catalog free.

C. N. FLANSBURGH & SON, Jackson, Mich.



Farmers Service Bureau

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

SWEET CLOVER

Does sweet clover sown in wheat and rye during the months of March and April injure the growth of either grain? Also, when would be the proper time to sow sweet clover in oats?—P. C. L., Mayville, Mich.

Whether or not sweet clover when sown in March or April will be injurious to the growth of wheat or rye will depend to a large extent upon the nature of the soil. If the soil is well drained, contains an abundance of lime and available plant food, and the sweet clover receives plenty of manure, it will make a fairly rank growth and may grow high enough so that considerable sweet clover will be cut when the small grain is cut. On the other hand if the soil is somewhat light or has been cropped heavily and does not contain an abundance of plant food it is likely to prove injurious to the small grain. Would recommend seeding the sweet clover at the same time that the oats are sown.

The seed bed should be well compacted, since loose seed beds are frequently the cause of failure to secure a stand of sweet clover.—C. R. Megee, Ass't Prof. of Farm Crops, M. A. C.

CONSULT AN ATTORNEY

I have lived on my farm thirty years and I bought my land from a certain man. This man built a dam and then he made out a deed and in my deed he reserved the privilege of booming logs, running, rafting and driving in and damming and back flowing said river. The man who had the dam has been out of business for twenty years, as his dam a power dam and they overflowed ten went out. There is a company building acres of my best land, and they claim that they bought water rights from the man I bought my land of. I can't understand why he can sell my land for water rights, after I have paid taxes for thirty years.—J. W., Beaverton, Mich.

The exact wording of your deed would be necessary as would all that has occurred since the dam went out upon abandonment and adverse possession by you. It would also be necessary to determine from the deed for what purpose they might dam the river and measurements might have to be taken to determine whether it has been damed higher than before. Your rights can not be determined from so short a statement of facts. It would be better for you to consult some good attorney who can advise you after a full statement of what you can prove.—W. E. Brown, legal editor.

DIVISION OF STRAW

I have rented a 200-acre farm, paying cash rent. The contract does not reserve anything, not even the straw. Am I entitled to sell the straw off the farm or not?—J. L. B., Clifford, Michigan.

Without a reservation in the lease the straw is to be divided the same as other products of the farm, unless it is money rent, then the tenant has the entire proceeds of the farm including straw.—W. E. Brown, legal editor.

SILVERING MIRROR

Please tell me how to silver the backs of mirrors.—G. D. L., Mt. Pleasant, Michigan.

A sheet of tin foil the same size as the mirror is laid upon a level table and rubbed over with metallic mercury. A very thin layer of mercury is then poured on the tin foil. The glass is then lightly slid along over the foil so as to scrape off any excess mercury. The glass is weighted to squeeze out the excess mercury and left in place for a few days when the tin amalgam is firmly fixed to glass.—Arthur C. Clark, Professor of Chemistry, M. A. C.

WEARING SOLDIER'S OVERCOAT

Will you please tell me if there is any law prohibiting a soldier from wearing an army overcoat without changing the buttons and coloring it?—G. N., Blanchard, Michigan.

I am not familiar with the regulations concerning the wearing of the uniform of a soldier but I think you

could get full information by writing to the War Department, Washington, D. C., and asking for the regulations concerning the wearing of a soldier's uniform.—W. E. Brown, legal editor.

KILLING CHICKENS

Some three weeks ago some of my chickens wandered over in my neighbor's field. He did not make any complaint or notify me. He kills them, takes them home and eats them. What is the law? What can I do?—Mrs. I. B., Reed City, Michigan.

One who kills trespassing chickens is liable for their value; and the owner of trespassing chickens is liable for all the damage they do. The owner must keep them on his premises.—W. E. Brown, legal editor.

WANTS TO RETURN HORSE

On September 23, this year, I had a public sale, and in the sale I sold a horse for \$74.50. The man took her home and kept her a month and one day he came back and said he couldn't work her, but he said he didn't want me to take her back; he just wanted to know what to do to her to make her work. I told him I never did anything to her, she always worked for me, so I took a half day off and went with him to his home ten miles away and showed him she would work all right. Then he kept her another month when he came back and said she wasn't any good. Now I don't want any trouble about this if I can get around it. I would like to know what he can do about it.—Subscriber, Alma, Michigan.

Under your statement of facts there is nothing he can do if you properly defend yourself in any action he takes against you. Men of times threaten a law suit for the purpose of gaining an undue advantage over their neighbor who does not want a law suit.—W. E. Brown, legal editor.

A TIP TO SHIPPERS

Investigation of a large number of complaints listed with us against Detroit Commission firms show that in the majority of cases the commission firms deliberately try to swindle their customers out of a part of their returns. In some instances, however, the fault is with the shipper if he does not receive returns to which he thinks he is entitled. Anyone who ships a crate of poultry or a consignment of hogs to a commission firm in a distant city should first know something about the reputation of the people with whom they are dealing. Moreover, just prior to shipping, the farmer should wire his commission house for the latest quotations. More important than all he should write or wire his commission house the instant the stuff is shipped so that the commission firm may be on the lookout for it. It frequently happens the produce is received in poor condition, with tags missing, and nothing to indicate who it is from. In such cases the commission firm simply must accept the best he can get for the goods and wait until some disgruntled shipper writes in to find out why he hasn't received his returns.—Editor.

ROAD FENCE

Please tell me which side of the telephone poles does a road fence belong and how far from the poles.—O. T. K., Hemlock, Michigan.

Road fences are not located from telephone poles. They are located from the center line of the highway. Telephone poles are to be placed wherever the township authorities direct and always outside the road fence, unless the telephone company purchases a private right of way.—W. E. Brown, legal editor.

PAYING HIGH SCHOOL TUITION

Please inform me through your paper the state law regarding sending a child to our nearest high school. Must the school district pay the tuition in full or only part of it?—Mrs. T. C. McC., Meauwataka, Michigan.

Section 5830 C. L. 1915, provides for the payment of tuition of pupils who have completed the 8th grade. It provides that the district shall pay the tuition, not exceeding \$25 for each pupil.—W. E. Brown, legal editor.

COARSE GRAINS AS FEED

Which grain, corn or oats, if fed steady, will give the most strength to horses?—C. E., Sandusky, Mich.

Oats are more nearly a balanced feed for horses and should be used, especially when horses are doing heavy work. The protein content of oats is about one-third more than that of corn. If your horses are idle they can be fed more corn. The price of each is so low at present that you can afford either one.

If you are feeding clover hay you could use more corn for working horses than if you were feeding timothy hay.—R. S. Hudson, Farm Superintendent, M. A. C.

RENTER'S AND OWNER'S SHARE

I am working a farm on shares. Owner furnishes everything and gives me one third, but though we have a contract to that effect, I feel that I am entitled to a third of everything sold off the farm in way of live stock, from date the contract, as according to the contract I am to leave as much stock (in number) on farm when contract expires as was on farm when said contract was made. In other words A owns farm and furnishes everything. B works said farm on shares getting one third of all increase and such. A has sold a span of colts and expects to dispose of other stock that was on farm when B made contract. Is B entitled to his third of colts and such stock and if not must he make up by leaving the same number of stock on expiration of contract as was on farm when the contract was made?—G. C., Pinckney, Michigan.

Any stock disposed of by owner would not have to be replaced by tenant. Any increase of stock that occurs after you enter into possession that has been disposed of would be subject to the terms agreed upon for division. Stock on the place when tenant went there could not be considered increase.—W. E. Brown, legal editor.

MATRIMONIAL DIRECTORY

What proceedings does a person have to take to start a matrimonial directory and how is it done?—A Subscriber to the M. B. F.

Advertise! And have better goods than you advertise.—W. E. Brown, legal editor.

THE FEDERAL STOCK FOOD COMPANY AGAIN

On June 1st I went to Boyne City and met their agent, a Mr. Coyle, the Company having written me requesting me to do so, stating that they wanted an agent to handle their goods in this territory. Mr. Coyle gave me a very glowing account of the business their agents were doing in other places, stating that their "indemnity bond" was in reality a live stock insurance; that they paid for all losses of cattle, sheep, horses and hogs where their stock salt was fed. Stated that the only stock they did not cover by said bond was horses having heaves and well hogs in a drove where cholera existed, but that after the drove was free from cholera they were then taken.

Mr. Coyle did not use the words "contagious diseases" during our conversation in any only as mentioned in regard to hog cholera. He made this remark several times: "It may seem a funny thing to say, but losses are what we want. An indemnity paid is our best advertisement."

I asked him many questions and one in particular was in regard to loss of young lambs. I did this as I had lost several lambs from no cause whatever that I could see. They would appear to be in perfect health, still I would find dead ones every few days. Mr. Coyle came back with the question, what value I put on such lambs and I replied, "\$3 to \$5 at least." He considered this a very low value and said that all such losses would be paid.

I gave him an order for \$440.00 worth of Stock Salt, giving notes of \$40, \$100, \$100 and \$200 in payment of same.

Mr. Coyle told me that as soon as my order was received at the office

(Continued on page 19)

Helps for Farmers on Income Tax

TREASURY regulations provide that in his return of gross income a farmer shall include "all gains, profits and income derived from sale or exchange of farm products whether produced on the farm or purchased or resold." When he exchanges his products for groceries, clothing or merchandise, he must include in his gross income the value of the articles received in exchange. A farmer who rents his farm or part of his farm on a crop-share basis must report as income the profit from such transaction. Profit from the sale of farm land or live stock must be included. If the land sold was purchased prior to March 1, 1913—the date the first income tax law became effective—the amount to be reported as income is the difference between the fair market value of the land as at that date and the amount received.

Net income, upon which the tax is assessed, his gross income less certain specified deductions. All necessary expenses incurred during the year 1920 in the operation of a farm are deductible items. These include the cost of cultivation, harvesting and marketing of crops, and the cost of seed and fertilizer used. Amounts expended for the cost of feed for live stock may be claimed, but the value of a farmer's own products used for such purpose is not a deductible item. The cost of farm tools used up in the course of the year, wages paid to employees (other than domestic servants), and rent paid for farm lands and buildings (other than the dwelling) cost of repairs to fences, wagons and machinery are deductible items. Also bills paid for horseshoeing, stock powders, rock salt, veterinary services, insurance (except on dwelling) gasoline for operating power, and sundry minor expenses.

Cost of purchase of farm machinery of permanent character, such as a threshing machine, and extensive repairs to farm buildings, such as placing a new roof on the barn, are not deductible expenses, but are regarded as capital investments.

The automobile and motor truck now form a part of farm equipment. The cost of such vehicles is not an allowable deduction, but cost of operation may be claimed if they are used exclusively for farm purposes, and not for pleasure or convenience. Also, in such cases, claim may be made for a reasonable deduction for depreciation of such vehicles.

Losses incurred in the operation of a farm as a business enterprise are deductible from gross income. If, however, farm products are held for a favorable market no deduction on account of shrinkage in weight or physical value by reason of deterioration in storage is allowed. Loss by frost, storm, flood or fire of a prospective crop, or of a crop which has not been sold is not deductible. The reason for this rule is that unless the crop reaches maturity and is harvested and sold, its value is never included in gross income, and the farmer has so much less income to report. The same is true with re-

gard to the loss of animals raised on the farm. However, if live stock has been purchased and afterwards dies, or is killed by order of Federal or State authorities, the actual purchase price, less any depreciation previously claimed, and less any insurance and indemnity recovered, may be claimed. In determining the cost of stock for the purpose of ascertaining the deductible loss there shall be taken into account only the purchase price and not any cost of feed, pasturage or care which has been deducted by the farmer as a cost of farm operation.

General deductions such as for taxes, interest on personal indebtedness, losses sustained in transactions entered into for profit aside from the farmer's regular business, losses sustained by fire, storm or other casualty, bad debts and contributions are explained in instructions on the forms for filing returns.

The term "farm," as defined by Treasury regulations, includes stock farm, dairy farms, poultry, fruit and truck farms, also ranches, plantations and "all land used for farming operations." It should be noted that a business man who operates a farm for recreation or pleasure and not for profit may not, if the farm expenses exceed the receipts, deduct such loss in his individual return of income. In such an instance the cost of farm operation is regarded as a "personal" expense, and therefore is not deductible.

A farmer who keeps his account on the "receipts and disbursement" basis—which means a record of the amount received and the amount paid for expenses—should file his income tax return for the year 1920 on that basis. Another method is the keeping of books of income and expenses on the "accrual" basis, which is required of all persons whose accounts are kept on such basis.

For those keeping their accounts on the accrual basis, inventories are necessary at the beginning and end of each taxable year. The gross profits are obtained by adding to the inventory value of live stock and farm products on hand at the end of the year amounts received from the sale of stock and products and other miscellaneous receipts during the year, and deducting from this sum the inventory value of stock and produce on hand at the beginning of the year, plus the cost of stock and produce purchased during the year.

Farmers may change the basis of their returns for the year 1920 from that of receipts and disbursements to that of an inventory basis. There should be included in the opening inventory all farm products, including live stock purchased or raised, which were on hand at the date of the inventory, and there must be submitted with the return for the year 1920 an adjustment sheet for 1917, 1918 and 1919 based on the inventory method. Upon the amount of these adjustments the tax will be assessed and paid (if any is due) at the rate in effect for each respective

(Continued on page 15)



A FIRE IN THE COUNTRY is almost certain to be a total loss

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A Cozy Furnace consumes no more fuel than required by a large size base burner.

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against all defects in material and workmanship. We ship you the size machine you need and let you use it for 30 days. Then if pleased you can make the rest of the small monthly payments out of the extra profits the separator saves and makes for you. If not pleased, just ship the machine back at our expense and we will refund what you paid. You take no risk. Write for FREE Catalog Folder now.

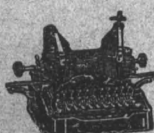
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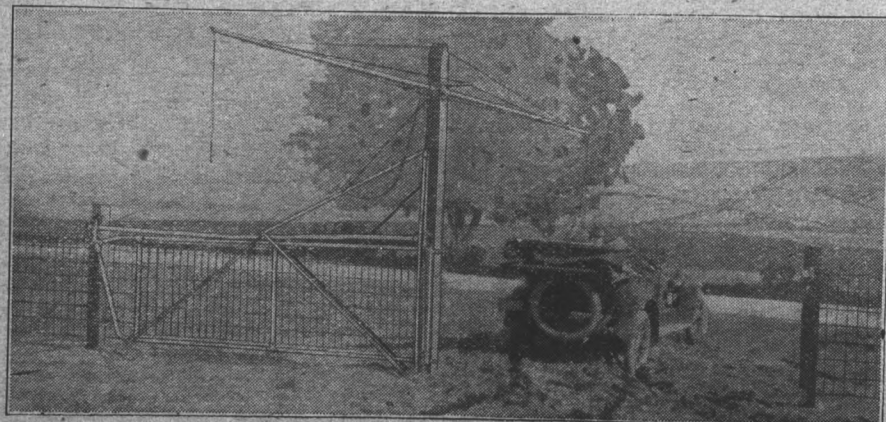
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WE MAKE EVERY MACHINE REQUIRED FOR TURNING TIMBER INTO LUMBER AND ITS VARIOUS PRODUCTS
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The Michigan BUSINESS FARMER

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Bad Milk and Worse Publicity!

MICHIGAN milk producers will not look with a great amount of favor on the sensational publicity which the Washington correspondent of the Detroit News got all 'het-up' over last week and which appeared under the glaring head of "Children of Michigan Menaced by Bad Milk!"

All of which was based on the report of the Bureau of Animal Industry which stated that from a total of 236 owners of accredited herds (that is, those which have passed two annual inspections by government officers without showing any diseased animals in the herd), 94 answers to questionnaires had been received which seemed to indicate that "approximately" five per cent of all the cattle in Michigan "are still infected with tuberculosis and the percentage is even higher among milch cows."

Now the facts as stated may be in accordance with the 94 answers out of 236 whom the department asked. Five per cent of the cattle now on the farms of Michigan may be infected, altho we doubt very much if this average will be as high as any other leading dairy state in the union. We shall investigate these figures and have more to say upon the subject when we have seen the complete analysis.

The point at issue is, that at a time when the consumption of milk in Detroit, our greatest consumer, is at low ebb. When dairymen are at their wits end to know how they can afford to feed and milk their cows at the present prices. When the distributors, to their credit, are spending more than ever in advertising of every kind to increase the consumption of milk in Detroit, an article of this kind should appear when the simplest investigation would have shown that all milk sold in Detroit must be pasteurized and therefore absolutely free from disease germs when it reaches the consumer.

Editorially in the same issue the News seeks to repair this sort of destructive publicity by pointing out the need for the appropriation of \$150,000 which the Michigan Bureau of Animal Industry has asked from the legislature for this years campaign against the disease and even states that "this item might reasonably be enlarged," but for every one who read this editorial comment, a thousand terrified fathers and anxious mothers read the glaring head-line "Children Menaced by Bad Milk" and promptly put milk in the category of ripe olives and spinach. So when Johnny or Clarice ask for their longed-for glass of milk with the next meal, they were given a glass of carbonated ginger-ale or a pint of "less than one-half per cent near beer!"

What if the News and other metropolitan dailies would give equal prominence to an article headed "Milk the Cheapest Food on the Market To-Day" or "Give the Children More Body Building Milk," how long do

you suppose a milk surplus would exist in the Detroit area? And yet, a hundred articles could be built on this line from facts, easily procurable, and from sources the world over, which are based on more than "94 answers to questionnaires sent to 236 owners of accredited herds."

Give the great milk industry the support it deserves, a fair price based on present costs, a consumption of a quart-a-day by every man, woman and child, efficient and economical distribution, and Detroit will have the purest, cleanest and cheapest milk supply in the world and incidentally a market for its trucks and automobiles which will start hundreds of idle factory wheels a humming.

A Michigan Man Secretary of the Navy

EDWIN DENBY, a Detroitier of sterling worth has been given the portfolio of Secretary of the Navy, by President Harding and all Michigan will be proud of this wise selection. Mr. Denby grew up in China, knows the language, the customs and the thought of the Occident, was admitted to the bar in our own state, was congressman and when the great war caught America in its mad whirl, enlisted as a private in the "devil-dog" marines, because he "wanted to be an example" for men young enough to be his sons, who were trying by hook and crook to get soft commissions from whence they could march in the parades and still never get nearer to a cannon's mouth than the ones mounted in the city parks.

We hope, if for reasons of economy alone, that the nations of the world will turn the energy, time and money which is wasted in foolish preparation for wars, into channels which make this a better place to live in and not an easier place to die in, long before Edwin Denby retires from office. But so long as we must build a navy and maintain it, we do not believe a better prepared or more sympathetic man could have been selected to fill this post in President Harding's cabinet.

Waste

A PATHETIC little story was once written of a very frugal man who had fallen into the habit of picking up trifling things which he saw laying in the street. One day he spied a piece of string in the market place. "It might come in handy," he thought, so he picked it up and stowed it away in his pocket. A few minutes later it was rumored around the market place that a purse had been lost containing a considerable sum of money. Instantly some one recalled having

Just to Have a Heart Like His

LOOKS AS though a cyclone hit him—
Can't buy clothes that seem to fit him,
An' his cheeks are rough like leather
Made for standin' any weather.
Outwards he wuz fashioned plainly,
Loose o' joint an' blamed ungainly,
But I'd give a lot if I'd
Been prepared so nice inside.

Best thing I can tell you of him
Is the way the children love him.
Now an' then I get to thinkin'
He is much like old Abe Lincoln—
Homely like a gargoyle graven,
An' looks worse when he's unshaven;
But I'd like his ugly phiz
Best to have a heart like his.

I ain't oversentimental,
But old Blake is so blamed gentle
An' so thoughtful-like of others
He reminds us of our mothers.
Rough roads he is always smoothin',
An' his way is, oh, so soothin'
That he takes away the sting
When your heart is sorrowing.

Children gather round about him
Like they can't get on without him.
An' the old depend upon him,
Pilin' all their burdens on him,
Like as though the thing that grieves 'em
Has been lifted when he leaves 'em.
Homely? That can't be denied.
But he's glorious inside.

—by Edgar A. Guest in Cosmopolitan.

seen the thrifty man pick something up from the street, and notified the authorities who instructed the man to return the purse. But the man protested that he had found no purse and that his find was nothing but a short piece of string, which he produced as evidence. But no one would believe him. They thought it a very cheap alibi. When he explained his habit of picking up little things his neighbors all laughed at him, and said that nobody but a crazy man would pick up a tiny piece of string. The thing weighed on the thrifty man's mind. He was strictly honest, and the accusation that he had found and kept a purse belonging to someone else, worried him. In vain he tried to prove his innocence; in vain he told over and over again the story of the string; everywhere he got the same reception. He was branded as a thief, a rogue and a liar, and soon lost the respect of all his neighbors, and the rest of his life he lived in shame and misery, all because of a little piece of string.

This story is told here because it is quite typical of the spirit of modern times. The thrifty are extremely unpopular in this extravagant era. It is the spend-thrift who gets the hand of applause. There is nothing but scorn for the frugal who wear patched clothes and shoes, and travel on foot or by horse instead of automobile. The penny is a despised coin. No one thinks of saving it any more.

The American people are notorious the world over for their extravagance in both private and public life. It has been estimated that millions of dollars could be saved each year from the sums which are thrown away in the ordinary daily routine of living. And it is quite certain that hundreds of millions could be saved to the taxpayers that are now being wasted by extravagant public officials.

Take the matter of public printing. Thousands of tons of valuable paper are wasted in the printing of reports and bulletins which are sent to people who are either dead or otherwise have no use for them. A watchful public official over at Lansing while rummaging through some of the mailing lists discovered the names of certain people listed as many as ten times, that hundreds of others had moved away, and still others were long since dead and buried. He discovered that thousands of dollars worth of printed matter was being sent to people who had no earthly use for it, and only threw it in the waste paper basket as soon as received. He also found that much worthless data was being published as a part of the Michigan Manual, at a cost of several thousand dollars. As a result of this man's investigations and recommendations the state of Michigan will be saved nearly \$50,000 this year on printed matter. The same situation exists in all other states and in the national government as well. Fortunes are spent every year by the national government in printing bulletins which are put to no more valuable use than to kindle fires.

Let's get back to good, old-fashioned economy in both private and public affairs, and taxes won't be so high.

Your Income Tax

THE HARDEST job the farmer has to wrestle with now-a-days is making out his income tax report. But he is not alone in that respect. Nearly everybody who owns property and a good many who don't are in the same pickle. The big corporations can afford to hire lawyers to make out their reports. They usually save the corporation enough tax to pay for their services. The professional men of the city have ready access to the offices of revenue collectors, but the man on the farm has no such handy help in his time of trouble. He just sits and scratches his head and looks at the consarned thing with about as much understanding as a Chinaman contemplating a Hebrew bible. Assuming that all farmers intend to pay whatever income tax they owe the government, and not one nickel more, we gladly offer to extend our readers any help we can in making out their reports. Call upon us if you get stuck.



What the Neighbors Say



TOM PRICE SAYS:

IT IS WITH pleasure that I read your article in regard to reactionary interests controlling M. A. C. policies. There seems to be a vast number of people of the same ideas as expressed in your article. I hold no brief for the sugar manufacturers as you know, but I do think that most of our troubles in this world come through misunderstanding. We know that school masters prate about the universal applicability of a mathematical problem, how they never vary 2 and 2 are 4 the world over, yet such things only amuse us in practical life because we know that people go to law every day because 2 and 2 are 5 or 3 to them. It all depends on the point of view.

I know full well that if the manufacturers had agreed to meet the growers last spring this would have been settled. Perhaps it is well. Prof. Mumford of Illinois says, "You can't organize the farmers until you get them mad." I believe people realize it more fully now than any time in the history of our nation that there are reactionary interests at work. The worse trouble is that they are invisible, you don't know where they are striking you. We know now why the growers were beaten in Michigan last year. One man comes in at Chicago with checkings on the railroad which showed that thirty thousand tons of beets were sent to the Alma factory. The growers over on Long Island testify that their beets were sent to the Holland and St. Louis people. The same reports were brought from the Toledo district, Paulding, Hancock and various other counties in Ohio. Is it any wonder that they felt sure that they were going to have a sugar campaign in Michigan? They drew more beets from those points under a high railroad rate when coal cars were scarce, when they could have made arrangements with their growers at their factory door if they so wished it for less cost.

The beets grown in Ohio are not as high in sugar content as in Michigan, and yet they ship them in here. It is high time that the farmers wake up and look after their own interests. They don't seem to have as much sense as the wild beasts, who believe in organization and traveling packs, but the poor moss-back goes it alone.—T. C. Price, President, Saginaw County Farm Bureau.

This is interesting information, indeed. Under the circumstances the manufacturers could afford to chuckle up their sleeves. A good joke, even if an expensive one, on the farmers. But rest content. "He laughs best who laughs last."—Editor.

REPEAL THE PRIMARY LAW

IT SEEMS to me that there are good reasons for the repeal of the primary election law. First, I will go back to the time the demand was made for the legislature to enact the law. The claim was made that the mass of the people were calling for "primary reform."

At that time I was a member of a farmers' club, a resolution was sent to the secretary asking the club to adopt it and send it to the committee which was working for the "reform." It was read to the club and a motion made to adopt it. The vote was two for it and none against it. (They did not know the meaning of primary reform,) so it was sent in as unanimous. That is the way the farmers demanded it, two out of fifty.

Now, about its working. In the state each primary election costs something near \$30,000 which is worth saving, inasmuch as it could be done just as well with no cost to the people, and representative men in conventions pay their own expenses, and who can say that we didn't have just as good men to fill the offices when nominated by conventions as we do now? I have talked with a good many men about it and they all

feel the same. We never had so much scandal over the election of a U. S. senator in times past as in the Ford-Newberry campaign. At our primary elections in this township the republicans poll scarcely as many ballots as they do in caucus, and the democrats not near so many. Which goes to show the lack of interest in it.—B. S. F., Byron, Mich.

Well, I'm flabbergasted to find a farmer seriously arguing for the repeal of the primary law. Sure, the Ford-Newberry contest was a scandal from start to finish, but that was in spite of the law and not because of it. No law was ever so good that it isn't violated. Newberry has received his just desserts, and few men are so crazy for public office as to repeat the Newberry method of campaigning. Here we have one conspicuous scandal under the primary law. We remember it because it is of recent origin. Have we forgotten the almost biennial scandals which the old convention system made possible? Don't destroy the primary! The farmers of Michigan still have the power under this system to control elections. Under the convention system their voice is silenced, for seven out of the eighty-three counties can control a state convention.—Editor.

READJUST AND LESSEN THE TAX BURDEN

THE ANNOUNCED policy of Governor Groesbeck, to lessen the present excessive cost of government, will meet with the hearty approval of the taxpayers of Michigan and especially will the owners of real estate welcome a reduction of the tax levy.

The present system, if it may so be called, of raising the necessary money for the support of government, was established when nearly all wealth consisted of real estate while at the present time a very large portion of the wealth is found in our cities and consists, largely, of other forms of wealth and, because of not being readily discovered, is escaping the payment of its just and proper portion of the necessary taxes and this places in real estate, which is always visible, an unjust portion of the tax burden. A readjustment in state affairs, is the demand of the times.

Never has it been so difficult for a goodly portion of our citizens to meet the demands of the present time. Extravagance, in both public and private affairs, has become "chronic" and getting back to a more reasonable and sensible manner of living, is the need of the hour and it is encouraging to know that Governor Groesbeck is being supported in his earnest efforts to improve present financial conditions.

Then man, drawing a fixed salary, has little realization of the difficulty experienced by many of those who toil physically for the means wherewith to meet their daily expenses.

As already stated, the capitalist is, in many instances, escaping the bearing of his just and easily borne, share of the tax-burden and justice

demands a readjustment in this matter.

The statement of what the editor of M. B. F. saw at the Michigan University, and which is told so clearly, paints, in words, a somewhat sad picture, as there existing and which it would seem, calls for immediate remedy. But let the fact be not overlooked that forty per cent of the students at our university are from other states and other countries and that the taxing of the people of Michigan to provide buildings and instructors for the benefit of this forty per cent of the students, cannot be sanctioned by strict justice.

Granted, that the university is not fully equipped and that there are homes also that are not fully equipped indeed, in many homes no luxury is found while many necessities are absent.

Can it be called justice to require of parents, who are laboring to support their family and pay for their modest home, to bear, in addition to their already heavy financial burdens some portion of the cost of educating people from other states and from other countries? A recent financial report states that but a small per cent of the cost, to Michigan, caused by those foreign students, is paid by those students.

It is a trite saying that "Charity begins at home" and it would appear that the heavy tax burden which the people of Michigan are now bearing, should be ample reason for not opening the doors of Michigan institutions to others than her own citizens.

The resolution adopted by the Essex Farmers' Club and the resolution adopted by the Boards of Supervisors of Gratiot county and which resolutions were published in recent issues of THE MICHIGAN BUSINESS FARMER give correct indication of the public sentiment, in the matter of a more economical and just use of the peoples' money.—J. T. D., St. Johns, R 11, Michigan.

Now, J. T., you and I are not going to get into any argument over the University of Michigan. We couldn't anyway, because we agree perfectly with each other. I told Dr. Burton that in my opinion out-of-state students should pay every penny that it costs to educate them. He agreed with me. But here are some facts to consider. We don't want to close our University entirely to foreign students. Analyze what the graduates of the U. of M. have contributed to the welfare of humanity, and you'll agree with me on that point. Suppose we charge them what it costs to educate them, but that will not make amends for our failure to do so in the past, nor remedy the need for certain new buildings which should have been constructed years ago. We must do one of two things: Either close up part of the University or appropriate funds to help carry on the work. I do not believe the University should be given all it has asked for, but I do believe it should be given part of it. I hope our readers will seek to discriminate between what the University must have and what it can get along without, and not shut down so close that it will cripple the institution.—Editor.

EXPLAIN "DISAPPEARANCE" OF SPUD CROP

ANY REASONS for thinking our spud crop should have sold for a fair price had they been fed to the market as needed as these:

The claim was made that our crop was 70 million bushels too large to have them sell for a good price, but the best authority we have on the crop, a man who has not, to my knowledge, made a mistake in estimating the crop in the past 15 years or more says the government report was about 55 million bushels too high. That wipes out the most of that 70 million bushels surplus.

We were informed by the *Rural New Yorker*, a conservative paper, last fall, that 10 to 15 per cent of the crop in the east had rotted. They were affected with dry rot and that never lets up as long as the crop lasts. They will keep right on rotting to the end of the season. This does away with the balance of that 70 million bushels and then some.

A large part of this state never had any poorer crop than we had last summer. Up Grand Traverse way where the big crop was said to be is a mighty small portion of the potato belt, hardly a drop in the ocean by comparison.

Again this open warm winter is almost sure to be followed by a cold backward spring that will freeze out the crop in the South.

Now who says the price of spuds shouldn't go up to a decent figure even with business in the condition it is in?

Jobless men, after receiving the enormous wages they have been getting for several years back ought to be able to buy food for a long time to come. Food prices to the consumer haven't fallen only 10 to 25 per cent, to the farmer they have gone down from 50 to 75 per cent, and on some kinds of stuff, 100 per cent.—A. L. Lambertson, Kent County, Michigan.

Lor' bless you, friend Lambertson, don't I hope you've got the right hunch! Wouldn't I give a year's salary to have spuds hit the dollar mark by April 1st? Now about this flooding the market, you know I've never believed in it. "Orderly marketing" has always been my hobby. Some farmers won't always get the top price, but few of them will get the bottom price either. In time of over-production, normal production and even under-production, orderly marketing of crops yields the greatest returns to the greatest number. Buy say, don't fool yourself about the city workman having any of his fancy wages left to buy food with, for he hasn't. In the first place his wages weren't so fancy as some have pictured. In the second place, it cost him a lot more to live than before the war; and in the third place what he didn't spend for the necessities of life, he spent for moving pictures, silk shirts and the like. There are exceptions to the rule, of course, but the rule is that the average man who has been out of a job for three months, is "busted" flat, and eats his beans and potatoes from hand to mouth.—Editor.

A NEWSY LETTER FROM A FARM WOMAN

WE TAKE the BUSINESS FARMER and find it a very useful paper. We are just plain farmers, with five in the family. My husband is home now only on Saturday evenings and Sunday. It is the first time in our married life of twenty-six years that he has been away from home to work, but seeing a good chance to make money he took it up. I do most of the chores while the boys are at school. Some of my neighbors think it quite unladylike for me to be outside doing a man's work but it doesn't make any difference to me. I carry water to the horses morning and noon and let the stock out during the day. At night the boys tend to the horses but I always look after the chickens. My hens have been laying right along, so we have all the eggs we want. I have never had to pack any eggs and am never without them. I have done nearly all kinds of work out of doors as riding the machinery, etc. I can harness the horses and drive the car, (Continued on page 18)

Musings of a Plain Farmer

ANOTHER DAY is dawning. I go to my labors in about the same spirit as a school boy to his books.

I have placed on my time card this month eighteen days of diligent labor. This is the morning of the nineteenth. I will note same this evening.

Got my milk check today.

I stood the shrinkage.

I wonder who wants to buy twelve good dairy cows, six milk cans and a cream separator? When will the dairy business come back?

The meeting is open. Speak! Say something! This cow is uneasy while I am cleaning her stall. The baby calf is just making her feet. What shall I do with that calf? Raise it for a cow or veal it?

I am troubled with these problems.

I'll sell every hoof and grow beets

and grain. That is also uncertain.

Should I shut off the income from the milk it would force me to accumulate debts and next autumn I would be floundering in an unpaid mass of obligations.

No, I must go on. My equipment calls for dairy farming and should I change now, it would mean certain ruin. Who can advise me what to do?

Most of my neighbors are in the same position as I. We are victims of circumstances.

I will think no more on this business. It gets my goat. The mail is coming. Dinner is ready.

A very good combination.

A meal and a newspaper.

My wife has just aroused me from a two hour nap.

Truly, I am a sluggard.—Arthur P. Ballard, Ubly, Mich.



The Farm Home

A Department for the Women



BLUE LAWS INTERFERE WITH LIBERTY

I MAKE no war whatever on the man who believes that Sunday should be observed as a Sabbath, but I certainly do object to his trying to compel anyone else to observe the day.

When the Lord's Day Alliance or any other association announces that they desire to get legislation that will in effect invade the rights of the individual conscience, and when they give out that they desire a return to the Puritan Sunday, we have a perfect right to investigate the workings of that sort of laws when they were enforced, and we also have a right to expect that once started on such a line of legislation men will not stop until they have all they have ever asked for or wished they might have.

The Puritans did not know or practice even the simplest and plainest principles of religious liberty; all they wanted or understood was to have liberty to do as they themselves thought right, and they laid heavy hands upon those who dared to dissent from their standards.

Modern apostles of a return to the so-called blue laws have no clearer vision than did their prototypes, and when they get the laws called for will lay just as heavy hands on any objecting minority that may be found.

It is just as true today as it was in the days of Paul that if righteousness be by the law then Christ is dead in vain, and without entering at this time into the question of which day of the week is the Christian Sabbath, it can be said with the most positive assurance that if it is "Christian" it should be observed as Christ would have observed it, and the attitude of Christ's followers toward those who do not observe it should be decided exactly in harmony with the way Christ talked and acted toward those who did not follow him or believe on him when he was here on earth as our example. Christ said, "If any man hear my words and believe not, I judge him not: for I came not to judge the world but to save the world. He that rejecteth me and receiveth not my words, hath one that judgeth him; the word that I have spoken the same shall judge him in the last day."

But to many of the professed followers of the lowly Jesus, waiting till the last day for some of their fellowmen to be judged is waiting altogether too long, and these religious enthusiasts like Pharisees of old, want the ones whom they account as offenders to be judged now, and the pains and penalties that God has reserved to himself to give at the end of the journey to be inflicted forthwith. All that is not Christian. Just as truly it is not American, either.—Mrs. Thos. H. Bowron, Huron County.

CLEANING WALLS

AS A SUBSCRIBER I wish to ask advice about my kitchen. Our house is new. The kitchen has white wood finish. The walls and ceiling are white hard finish. The walls and ceiling were a little dirty last fall and I washed them with water. I put soap in the water but not on the wash cloth. After it started to dry it got streaky. Now what must I do with the walls and ceiling, paint or enamel or what must I put on? I like something that will wash easy and which is best for it. Please tell me all about it.—A Young Housekeeper.

It will be necessary for you to have your kitchen walls sanded and then painted with a good enamel paint. The sander comes in cans ready to use and costs about \$1.60 per 1-2 gallon. Give the walls a light coat of the sander and then two coats of enamel and you will

Edited by MRS. GRACE NELLIS JENNEY.

Crossing the Bar

SUNSET and evening star,
And one clear call for me,
And may there be no
Moaning of the Bar
When I put out to sea.

But such a tide as moving
Seems asleep,
Too full for sound and foam,
When that which drew from
out the boundless deep,
Turns again home.

Twilight and evening bell,
And after that the lark.
And may there be no sadness
of farewell
When I embark.

For tho' from out our
Bourn of Time and Place
The Flood may bear me far,
I hope to see my Pilot
face to face
When I have crossed the Bar.
—Tennyson

have a splendid surface that will wash easily. A pretty buff or light tan is good—throws a good light and both shades are cheerful which is always important. Let each coat dry well before applying the next.

MY RECIPE FOR GOOD BREAD

WHEN DRAINING the boiled potatoes at supper I save the water. When cooled I drop in one cake of either Magic or Yeast Foam. Just before retiring I add enough water to make three pints and stir in one seivefull of flour. Cover and sit where it will keep just warm. In the morning after breakfast I add one more quart of warm water, tablespoonful of salt and two spoonfuls of sugar. Add enough flour to make the sponge stiff enough to just drop off the spoon. Let this set for one hour. Now take mixing bowl, put in three heaping selves of flour; make a hollow in the middle and pour in your sponge. I now add two tablespoons of melted shortening. Mix this into a firm cake with the hands and brush over the top with a little melted shortening. Set where it will raise gradually for about three hours. Then take bread board and without the use of any more flour I pull off as much as I want for one loaf and knead into shape without punching it too much. This amount will usually make about six good sized loaves. When I take it from the oven I brush lightly over the tops with a little grease and cover as this will make the crust soft, and will not crumble in cutting.

I certainly agree with our editor when it comes to the question of dress. If young girls would not car-

ry the present styles to excess we would be more comfortable than any generation so far. I think that if some mothers would just set their foot down on these things we could do away with them. But what are we to do when even some older women will appear on the streets dressed up like a figure in a show window and look for remarks from the male contingent? Girls generally follow a leader and when they see this they think that if so-and-so can wear that and get away with it I know I would look better than she does. Too many mothers allow their daughters to dress as they please and if any one remarks about it they only throw up their hands with a sigh and exclaim, "Well she thinks she knows more than her mother and I can't do a thing with her." Whose fault is it, the girl's or the mother's? Girls seem to have the idea that they cannot catch a fellow unless they are strictly up to the latest thing in fashions, but if any of my girls wore "floppy galoshes," as Uncle Rube Spinach says, those galoshes would come up missing whenever my girl ventured out. It is up to the mothers to get busy and put the thought away that their girls are beyond their power while living at home and under her care. Times and styles are continually changing, but a girl's one idea is to dress so as to attract and it must be pounded into their minds that they do not attract when dressed the way they are at present, and no man wants them for a wife even if he does run after a pretty form shown up as much as possible.—Mrs. C. A. B., Hiawatha, Mich.

Some Domestic Needs of the Farm Woman

PROBABLY it would be impossible to find a woman anywhere who didn't think that she had urgent domestic needs of some kind. If it were not for equipment, it would be for help; and if it were for neither equipment nor help, it would be for a smaller or larger house, or something else which bulked as important in her mind's eye.

Not that women are inclined to be dissatisfied, but rather that they are getting out of the old way of following the line of least resistance and are beginning to think and plan along commonsense, constructive, labor-saving lines.

The woman on the farm is much more likely to have crying domestic needs, because of lack of average conveniences, than her town sister. There are several reasons for this, but the two principal ones are the expensive equipment in the way of barns, silos, and machinery necessary to insure an income; and her own inclination to get along for the present with just what she has.

Her very virtues in the way of thrift and patience, are often prone to cause her to sacrifice too much and to be unnecessarily unselfish. There is such a thing as deliberately courting thoughtlessness on the part

of the rest of the family, by continually keeping our own wants and needs too far in the background.

Let us start out with the very true and satisfactory premises that we pay for whatever we need. We pay for it in lost health, lost comfort, lost opportunity, or lost efficiency; or else we do the more sensible thing which is to pay for it in money,—actually buy it, and have the benefit of it. When all is said and done, is there any conservation more important and which affects the welfare of the family more far-reaching than the health, happiness and comfort of wife and mother?

It may mean much more to her to have a sink of the right height in the kitchen, than a new carpet for the occasionally used parlor. A snug bank account gives a feeling of security, to be sure, but if this money has been saved at the expense of the nerves and health of the mistress of the home, who can tell how soon it may have to be spent, in part at least, for doctors and nurses? Good health, a cheerful outlook upon life and a fair amount of leisure time in which to enjoy life, are valuable assets for anyone.

One of the crying needs of the average farm house is an adequate water supply,—preferably running water.

er. In fact, fresh air, pure water and sunshine are nature's freest gifts.

Strange as it may seem, many people who live in the country, and especially the women who are indoors much of the time, really lack for fresh air. Perhaps the sleeping rooms are rather low or have slanting ceilings; or it may be that the windows have stuck ever since the house was painted last time; or perhaps those windows never opened and closed easily, and the house is not completely screened in the summer time; or the bedrooms are not warmed sufficiently that the family has grown accustomed to sleeping with open windows at night in the winter time.

In the wind-swept reaches of the sun-bathed, open country, there should be no economy of fresh air. Draughts are undesirable, but the close, stuffy odor which greets one in so many homes, proclaims a lack of ventilation. Perhaps an extra window is needed to complete the circulation, or an upstairs door opening upon a porch could be arranged, where bedding could be sunned and clothing shaken and brushed, thus saving many steps up and down stairs. In the far west homes are provided with what is called an "airing deck," which is thought as necessary as windows themselves.

The regulation of the amount of fresh air in the home is not one of large expense, but rather of just getting at it. Many times the handy farmer and his men could do most of this work themselves with the aid a short time of a regular carpenter, and quite as often as not there are supplies enough upon the place that could be used.

How seldom we meet the roomy, screened sleeping porch in the country, and yet how often it could be arranged as well as not. Those of us who have lived on a farm, can all remember the dread of going to those hot, upper chambers on a summer night. Perhaps the bed stood in a pocket of dead air in a corner of the room, and we knew that we would awaken quite unfreshed in the morning.

We are only going through this world once, and we might as well be fairly comfortable. Besides, those who sleep well can work much better the next day, and so in a season, the extra cost of sleeping porches or additional windows or doors could easily be made up. We pay for whatever we need.

Without plenty of pure, fresh water, a full measure of health and cleanliness is impossible, and work is made doubly hard by its lack. In practically all farm homes, with scarcely an exception, an abundant water supply can well be arranged. The spare time of the men folks during between seasons and dull days can well be utilized in studying out the solution of the problem, and getting thoroughly posted on the type of plan which others have used successfully under similar circumstances.—Emma Gary Wallace.

(To be continued)

FINE BREAD

AT NOON I take well-mashed potatoes, 2 tablespoons sugar (hastens fermentation,) one quart hot water, (potato water makes bread dark, but is nice.) Mix and let stand till after supper work is done. I use two yeast cakes (dry) as they are not as lively as a few years ago, which also were put to soak in a teacup, as you will want to warm up the potato mixture to milk heat. In the morning it will be a perfect foam. Flours vary so much I cannot tell just how much to use, but put it in and mix in a little at a time until the big loaf will stand up on doughboard. The more it is

LATEST STYLES

and New York Patterns



3486-3381. Ladies Costume. Waist 3486 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 3381 cut in 6 sizes: 24, 26, 28, 30, 32 and 34 inches waist measure. The width of the skirt at lower edge is 1 3/4 yard. To make the dress for a medium size will require 9 yards of 38 inch material. Two separate patterns.

3473. A Good School Costume. Cut in 4 sizes: 8, 10, 12 and 14 years. A 10 year size will require 2 1/8 yards of 42 inch material for the skirt, and 2 5/8 yards of 42 inch for the blouse.

3479. Ladies Undergarment. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. A medium size will require 3 3/4 yards of 36 inch material, or 3 1/8 yards without the yoke.

3490. Child's Dress. Cut in 4 sizes: 1, 2, 4 and 6 years. A 2 year size will require 2 1/2 yards of 36 inch material.

3482. A Smart Dress. Cut in 3 sizes: 16, 18 and 20 years. A 16 year size will require 3 7/8 yards of 44 inch material. The width of skirt at lower edge is about 2 yards.

2930. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 will require 3 3/8 yards of 44 inch material for the dress, and one yard for the plastron.

3485. Ladies Apron. Cut in 4 sizes: small, 32-34; medium, 36-38; large, 40-42; extra large, 44-46 inches bust measure. A medium size will require 7 1/4 yards of 27 inch material. The width of the skirt at lower edge is about 2 yards.

3488. Ladies Waist. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size will require 2 3/8 yards of 44 inch material.

Michigan Business Farmer,
Mt. Clemens, Mich.,
Pattern Department.

Herewith find cents for which
send me the following patterns at 12c each.

M.....

Pattern No. Size

Pattern No. Size

mixed the better, or better yet, grease the board and potato masher with grease and pound it to finish. Do not put in salt until ready to mix into big loaf, as salt keeps yeast from rising. By adding another quart of warm water to the foaming yeast it will make 5 loaves. The way to get beautiful bread is to always have the dough both in big loaf and loaves in a dish which makes it do all its rising up, and not let it flatten out a bit. I use a tin pail I bought for the purpose. Also on windy days or cold days I put a basin in my boiler, put in some hot water from the teakettle, replenishing it when necessary to keep it warm, sitting my pail of bread on the basin to keep it out of the water. Cover. No drafts from opening doors should reach the bread, and (if the pail is greased, and top of bread also, no shortening is needed.) Your bread should be out of the oven by noon. Scalded sweet milk makes a very nice wetting instead of the extra water. Please try and report results.—M. C. Thompsonville, Michigan.

HOUSEHOLD HELPS

TO MRS. Jenney I would like to send greetings and hope she makes a huge success of the Home Department. Here is just a hint or two for the page. When cotton blankets have become thin and worn in the centers I take the borders and make fine petticoats for the little girls.

In making cabbage salad if one adds a little ground up fresh apples and a few raisins it makes it more tasty.

If you have no eggs add a teaspoonful of corn starch to your cakes and they will be quite light. Also for frosting take one cup of granulated sugar, half cup of thin cream and half spoonful of butter, boil until it becomes a soft ball in cold water and whip until it becomes the consistency of fudge and spread between and on top of cake.

To clean water bottles or vinegar jugs that have become discolored from the liquids take a handful of fine pebbles and shake in the receptacle with a little strong soap and warm water and they will become quite clear.

Guess this is enough for this time and wishing the M. B. F. the best of luck.—Mrs. C. A. Byers, Schoolcraft County.

HELPS FOR FARMERS ON THE INCOME TAX

(Continued from page 11)

year. Where it is impossible to render complete inventories from beginning of the taxable year 1917, the Bureau of Internal Revenue will accept estimates which substantially reflect the income on the inventory basis for each year. The inventories must not include real estate, buildings, permanent improvements or other assets subject to depreciation.

Farmers whose net income for 1920 was \$5,000 or less should make their individual return on Form 1040A. Those whose net income was in excess of \$5,000 should use Form 1040. To the form used should be attached Form 1040F, the special form for the use of farmers. Full instructions for making out the forms are contained in each.

Revenue officers are visiting every county in the United States to assist taxpayers in the preparation of their income tax returns for the year 1920. The date of their arrival and the location of their offices will be announced through the press, or may be obtained on inquiry of offices of collectors of internal revenue and branch offices. This advisory service is without cost to the taxpayer. Forms for making returns of income for 1920 will be mailed to persons who last year filed a return for the preceding year. Failure to receive a form however, does not relieve a person of his obligation to file his return and pay the tax on time.

The tax may be paid in full at the time of filing the return, on or before March 15, June 15, September 5 and December 15. Heavy penalties are provided by the revenue act for failure or willful refusal to file a return and pay the tax within the time prescribed.

YOU don't use as much of Calumet as you do of most other Baking Powders. It has more than ordinary leavening strength. You save about half.

You don't pay a big price for Calumet. It's sold at a moderate price—that represents another saving.

You don't feel uncertain as to results. Bakings never fail—because Calumet never falls below the proven standard of "Best by Test."

Use only half the amount usually required

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BAKING POWDER



"BEST BY TEST"

It possesses the highest quality ever put into a Baking Powder. Contains only such ingredients as have been officially endorsed by United States Food Authorities.

For weeks, for months, it keeps as fresh and full of strength as the day it left the Calumet Factories, the World's Largest, most Sanitary and Modern Baking Powder plants.

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

Calumet
Gold Cake
Recipe

Yolks of 8 eggs,
1 1/4 cups of granulated sugar, 3/4 cup of water, 1/2 cup of butter, 2 1/2 cups pastry flour, 3 level teaspoons Calumet Baking Powder, 1 tablespoon of vanilla. Then mix in the regular way.

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CREAM
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A SOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for \$24.95. Closely skims warm or cold milk. Makes heavy or light cream. Different from picture, which illustrates larger capacity machines. See our easy plan of

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Bowl a sanitary marvel, easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan.

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Write to A. L. Rice, Inc., Manufacturers, 13 North St., Adams, N. Y., and a free trial package will be mailed to you, also color card and full information showing you how you can save a good many dollars. Write today. (Adv.)

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Hot-Water, Copper Tank, Double
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Safety Lamp, Deep Nursery. With
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With this Guaranteed Hatching Outfit and my
Guide Book for setting up and operating, your suc-
cess is assured. Save time—Order now—Share in my
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DEAR CHILDREN: The month of many holidays is over and March, the month which brings the winds that moan around the corners of the house at night when we are by the fire, is here. It will not be many weeks before the trees will begin to leaf out, birds of all kinds will return and many other signs of the nearness of spring will be with us. I think spring is the most beautiful season of the year and I love to get out in the garden with a spade and a hoe and dig up the dirt and get it ready for the planting of the seeds. The new-turned earth smells so good, doesn't it?

Among the letters this week you will find one from a boy living in the east. He lives at Franklinville, New York. His father takes the M. B. F. and he reads all the letters from the boys and girls and decided to write. I am pleased that he likes our page and hope when he writes again he will tell us about the country where he lives and also more about himself and the farm he lives on.—**UNCLE NED.**

OUR BOYS AND GIRLS

Dear Uncle Ned:—I thought I would write you a few lines. My father gets the M. B. F. and I like to read The Children's Hour. I like it best of all. I am a girl nine years old. I go to school every day. I have three-quarters of a mile to walk. I am in the fourth grade. My teacher's name is Mr. Wm. Goetz. I like him fine. He is a good teacher. All of the children are having examinations today. I hope I pass for I want to be in the fifth grade next year. There are

four in the grade I am in. Their names are Eva Clark, Bernice Forrest, Lille Forrest and myself. We have one hundred acres of land. For pets I have three cats. I have four brothers and one sister. They are all married but one boy and myself. Their names are Tom, Delaney, Everett, Burt and Bell. I am writing to a girl. I saw her name in the M. B. F. Her name is Leona Meyer. Well I have not so very much news so I will close with love to all.—Virginia McBride, Brimley, Mich., R. F. D. 2.

Dear Uncle Ned:—I am a girl ten years of age. I am in the fourth grade at school. My teacher's name is Alice Merrill and I like her very much. I have a twin sister and one brother and their names are Helen and Boyden. My father takes the M. B. F. and likes it fine. We have one hundred and sixty acres of land. We have four horses, thirteen cows, twenty-one calves, two pigs, and about seventy chickens. For pets I have two cats. Well as my letter is getting long will close with a riddle. As I went through the garden gap, who should I meet but Dick Redcap! A stick in his hand, a stone in his throat, if you'll tell me this riddle, I'll give you a goat. Answer: A cherry. Your friend—Marion Kimberly, Howell, Mich., R. F. D. 1.

Dear Uncle Ned:—We got the Business Farmer today and I saw where other children's letters were sent in so I am writing. I am twelve years old and I am in the sixth grade. I have two brothers. One was sailing all summer and just came home this month. He is 19 years old. My other brother is 14 years old. He is in the ninth grade. We keep cows, chickens and horses, and we have a farm. My father is manager of the co-operatives and my mother is a housekeeper. Well Uncle Ned I have told you all about ourselves.—Thelma Town, Millersburg, Mich.

Dear Uncle Ned:—I am a boy fourteen years old and in the seventh grade. My schoolhouse is checkered, red and white. I live on a dairy farm and our farm contains four hundred and four acres.

We have about 33 cows. I have three pets, a cat, a dog and a calf. My dog's name is Shep. He is yellow and white, and helps me to chase the cows. I have three sisters and three brothers. My sisters' names are Bertha, Martha and Nora, and my brothers' names are Hershel, Glenn and John. I will write more the next time.—Ward Ellis Hann, Franklinville, New York.

Dear Uncle Ned:—I am a girl nine years old and am in the third grade at school. I am going to try to win the prize for the best New Year resolutions. Mine are: I am going to school every day; make my bed every morning; clean my teeth every morning; be kind to all; obey my teacher, father and mother; and be happy all the time. This summer I am going to have a garden. We have a little calf. He was born the 15th of February and his name is Johnny Valentine. I wish you would put your picture in the paper so I could see what my uncle looks like. I will close with a riddle. What is the difference between an engineer and a teacher? Answer: The engineer minds the train and the teacher trains the mind. I wish some of the boys and girls would write to me.—Virginia Jewett, Mason, Mich., R-5, Box 1.

Dear Uncle Ned:—Some time has elapsed since I wrote you last. Thought I would write you a few of my New Year resolutions. You know I have a new baby sister. We call her Mariam Arlene and I have resolved to help mother all I can to take good care of her. I am going to Sunday School every Sunday that I can, and do the very best I can in my school work. We are more anxious each time to read the M. B. F. Hoping this is not too late to enter your contest. Your niece—Marguerite Mae Peters, Hanover, Michigan.

Dear Uncle Ned:—Will you please jump over and let a new piece enter your circle? I am a girl fourteen years old and in the eighth grade at school. I like to go to school. I have two sisters and three brothers. Their names are Barbara, Esther, Albert, Gregor and Ray-

mond. My father takes the M. B. F. and likes it very much. I am always anxious to read The Children's Hour. We have one horse, two cows, two calves and one pig. For pets we have a cat named Snowball, and six doves. I live one mile from school and go to school every day. Well as this is my first letter, I will not make it too long. I will close. I will answer all letters. From your niece—Rosaine Schafer, Fowler, Mich., R.F.D.3.

Dear Uncle Ned:—I am a girl ten years of age. I am in the 6th grade at school. I have two brothers and one sister. My New Year resolutions are: Help my father and mother all I can; be kind to my teacher; go to Sunday school every Sunday I can; be kind to dumb animals; and never tell anything that is not true.—Arvilla Davis, Clare, Mich.

Dear Uncle Ned:—I am a girl nine years old and in the third grade. I have one sister and one brother. My sister teaches school and my brother is married. I live on an 80 acre farm. My father takes the M. B. F. and likes it very much. For pets I have four cats. Their names are Blackie, Brighteyes, Tiger and Punch. Tiger weighs 13 lbs. I wish some of the girls would write to me.—Dorothy Ayers, Saranac, Mich.

Dear Uncle Ned:—As my father takes the M. B. F. and likes it splendid as a farm paper, and seeing so many letters to Uncle Ned from the girls and boys I decided to try and write. I am 10 years old, in the fifth grade and attend school every day. Our teacher's name is Miss Phoebe Epsey. I like her fine. I have two younger sisters and one little brother, a baby.—Leona Craven, Mesick, Mich., R. F. D. 2, Box 22.

Dear Uncle Ned:—My father takes the M. B. F. and said he surely will keep it up as long as he lives. I am a girl of 13 years now. We have 6 horses and one nice colt about six months old. Her name is Babe. We have six cows and about 75 chickens. I guess I will close with love to all. I hope to have some of



The Ice Carnival at Dooville

THE DOO DADS are having a high time at their ice carnival. With the booth arranged in which the bandmen stand to play and a refreshment stand at which hot drinks and food are served what more could be desired. Doc Sawbones is the director of ceremonies and it just arriving on the scene in the grandest manner he can think of and is supported by both a coachman and a footman. The Doo Dads have made themselves up to resemble the queer-

est kind of people and animals. Two of the Doo Dads made themselves up as a horse and one of them is having a drink at the refreshment counter. This makes the other Doo Dads who is acting as the hind legs of the horse angry, so he is giving a good hard kick. Percy Haw Haw the dude, is an aeroplane on skates and looks as

if aeroplaning on skates were real jolly sport. Roly is a balloon and doesn't even need skates to help him float along, but when that little Doo Dad who has been acting as Cupid lets fly his arrow, I am afraid Roly's balloon will go flat. Poly is a lamp-post and a good thin one he makes. Flannel Feet the Cop is in costume

as a knight, but his armour is so very stiff that he is having a terrible time of it trying to manage his skates. The clown who was outting up and not watching where he was going ran into the cop and down he went. It looked so funny to see the heavy knight on top of the clown that it even makes Old Man Grouch laugh—must be real funny mustn't it? The little fellow in front of the sailboat can't get out of the way and he is being carried right along the ice.

of the boys and girls write to me.—Emma Takala, Newberry, Mich., Box 23.

Dear Uncle Ned:—I am a girl 8 years old and in the third grade at school. My teacher's name is Mr. Hillsamer and I like him very much. I have two brothers and one sister and I live on a 40 acre farm. For pets we have 3 cats. We have two cows and 3 horses. My father takes the M. B. F. and likes it very much.—Thelma Wells, Copan, Mich.

Dear Uncle Ned:—I am a girl of 13 years of age. I saw a very nice letter in the M. B. F. The name of the boy was Everett Dunn. My New Year resolutions are: To be kind to dumb animals; be kind and true to my teacher; to help my mother with the work; and not be selfish with my friends or brothers. I like to look at the "Doo Dads." For pets I have seven rabbits, one cat and a dog named Sport. I have six brothers. Ora Rutter, Clare, Mich., R. F. D. 1.

Dear Uncle Ned:—I noticed in the M. B. F. that you offered a prize for the best New Year resolutions. Mine are: To obey God; mind my parents; study hard at school and obey my teacher; and be good to my pets. I live on a 120-acre farm, and have five brothers and no sisters. I wish I had though. My baby brother's name is Ernest, and he is five months old. I am a girl eleven years of age and have light hair, blue eyes and light complexion. My brother's names are George, Harry, Elmer, Lewis and Ernest. I will go to school every day and try to pass my grade.—Gladys Tripp, Shepherd, Mich., R. 3, Box 11.

AUTO GAME FOR STAMP

If you will read the advertisement on this page you will read in one part of it where they will give an auto game for a two cent stamp to any boy or girl, whose papas own tractors, trucks or autos, if the boys or girls will clip out the coupon at the lower right hand corner of the ad, have their papas carefully fill it out, put in an envelope enclosing two-cent stamp and mail to the address printed on the coupon. It is a great game and all kinds of fun. I have seen one of the games and I am sure you will all think the same as I if you get one.—UNCLE NED.

HENRY C. WALLACE NEW SECRETARY OF AGRICULTURE

(Continued from page 3)
with him and the paper was moved to Des Moines. The father was editor and the two sons undertook the business management. Then followed many hard, struggling years in which every energy of the Wallace family was taxed to the utmost to keep the paper alive and progressing. The kindly philosophy of the father, who was known around the world as Uncle Henry, gave the paper a standing and prestige that put and kept it in the very front rank of farm papers. Its influence and circulation gradually spread over the Middle West from Ohio to the Rockies, though in recent years the growth in strength and character of other farm papers has led to a policy of making *Wallaces' Farmer* primarily an Iowa paper.

Henry C. Wallace, in addition to being business manager of the Co., also devoted much of his time to the editorial side of the paper. As managing editor, he handled the bulk of the copy himself, for years answered all the livestock feeding and management questions, and personally attended to the make-up. In the late nineties he turned his attention to the railroad question, which was then one of the chief issues in Middle Western politics. His analysis of the railroad problem from the standpoint of Corn Belt farmers soon brought him recognition as one of the best authorities on railroads in the United States. In his paper and out, Mr. Wallace vigorously championed the rights of shippers, and this led to the organization of the Corn Belt Meat Producers' Association, which has done more in support of the farmers' cause in transportation matters than all other organizations combined. Mr. Wallace has been secretary of this organization since its beginning in 1902. He it was who "discovered" Clifford Thorne, and gave him his first slant on the farmers' side in the railroad question, and Thorne quickly developed into a national authority on transportation matters.

Mr. Wallace's extensive railroad studies were drawn upon freely by Senator Dilliver and Congressman Hepburn in preparing the Dilliver-Hepburn railroad rate regulation act in 1907. Mr. Wallace was one of the

chief witnesses before Congress in arguing this bill, and has since appeared many times as an expert before the Interstate Commerce Commission.

As his father advanced in age, Mr. Wallace gradually relieved him of most of the editorial responsibility for *Wallaces' Farmer*, and succeeded him as editor at his father's death in 1916. He and his brother John became sole owners at that time. Henry C. Wallace delved extensively into economic questions of agriculture, with the assistance of his son, Henry A. His writings have always been characterized by the "tune" that comes only through knowledge and deep conviction; his style is vigorous, and one has no difficulty in finding what side of the fence he is on. At the same time he has always been fair, and most of his opponents have recognized the fairness of his position.

Mr. Wallace held places on several advisory committees to government bodies during the war, though then as always he declined official position. It was in connection with the government guarantee on pork prices that he was brought into conflict of thought with Herbert C. Hoover, and his analysis of the U. S. Food Administration policy toward American agriculture is generally recognized as one of the best and most vigorous pieces of his work.

Mr. Wallace's activities in Des Moines outside of his own business, have centered largely in Y. M. C. A. and church work. He is a member of the International Committee, the great governing body of the Y. M. C. A., and was prominent in its war activities. He is a bank director and head of an electrotyping company, but all his other business interests are centered in *Wallaces' Farmer* and several farms which he owns.

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CO-OPERATIVE SELLING ASSOCIATIONS ALLEY WITH THE FARM BUREAU

(Continued from page 3)
organizations. It is advocated by both the College and the state farm bureau in new tones, according to the latter.

The farm bureau's reasons why it believes that commodity control will guarantee its future have been summarized as follows:

1.—It is already a big growing business.
2.—The commodity organizations will still continue to be regarded as departments of the centralized organization.
3.—Their services will be so correlated that a member of any one commodity co-operative association can get help from any of the departments.

4.—All specialized farmers and general farmers will still get the services of the general departments of traffic, seed, legislation, publicity, and the secretary's office.

5.—A large percentage of Michigan farmers are general farmers with interests in a number of commodities whose influence and the influence whose county agent will be toward a united service rather than a division.

6.—Michigan's commodity organization policy now provides for the admittance of the potato growers exchange and other such organizations which can come in without utterly losing their identity and whose admittance means an increased service and an increased satisfaction on the part of the farmers.

7.—The vote for president at the annual meeting Feb. 3-4, was 113 to 55 favoring James Nicol which was the test vote of the attitude of the membership toward commodity organization and would seem to indicate that two-thirds of the membership were already sold to the commodity idea.

8.—That one commodity organization being incorporated will not become responsible for the acts of another commodity organization.

9.—Ultimate representation of commodity organization on the executive committee of the state farm bureau will give the needed unity of action and mutual understanding.

Drain off the old oil from Your Motor—Refill with fresh



En-ar-co MOTOR OIL For Every Motor Use

Don't neglect to change the oil in your motor every so often; and "every so often" in an automobile means generally every 500 miles—never to exceed 1,000 miles. In a tractor, every third day at least.

This is the most important thing in the care of a motor. It's much less costly than repair bills and it's less annoying. When you drain off the old oil replace with kerosene and run your motor slowly for one minute, then drain and refill with En-ar-co Motor Oil. You'll find that your motor "feels" better and acts better—more "pep" and new life.

While it is true that the adding of new oil to the old from time to time, suffices to keep the motor running without a complete change of oil, it is not sufficient for proper lubrication. The old oil gradually grows thinner, carbon forms and accumulates, resulting in serious damages, and unexpected repair bills.

Oil—good oil—En-ar-co Motor Oil—is the smallest expense of any motor. This Scientifically Refined Oil in connection with White Rose Gasoline and En-ar-co Gear Compound will give you best results at the least expense.

Why En-ar-co Motor Oil is Better

All Motor Oils are made from crude petroleum—they all have the same starting point; but the difference comes in the stopping point.

The exacting care and scientific accuracy used in refining En-ar-co Motor Oil will not permit its "making" to stop until it has reached the very height of quality required of it. Possibly, for this reason, we do not get as much En-ar-co from a gallon of crude petroleum as we could, but you get a better oil. This is why En-ar-co will keep your motor remarkably free from carbon, engine trouble and repair costs.

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White Rose Gasoline

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Enclosed find 2-cent stamp to partially cover postage and packing. Send En-ar-co Auto Game free. I have never received an En-ar-co Game.

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.....gallons National Light Oil.

.....pounds Black Beauty Axle Grease.

.....pounds En-ar-co Gear Compound.

.....gallons En-ar-co Valve Oil.

Business Farmers' Exchange

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

FARMS & LANDS

FARM LANDS FOR SALE—CHOICE HEAVY Clay Loam Soil underlaid with limestone. In Michigan's wonderful Clover Seed Belt—Price \$10.00 to \$30.00 per acre on time—near Onaway, Presque Isle County. These are beech and maple lands from which the timber has been removed.

Let Clover and Alfalfa Seed Crops pay for your land—it is doing it for others here—why not for you? (Entire forty often paid for out of a single crop of seed—the product of one bushel of seed.)

A small cash payment exacted, (and if desired only the interest the first and second years. The amount of payments for the third year and thereafter—until land is paid for—is measured entirely by returns from seed yields harvested yearly at the rate of 5 acres for every forty purchased. Do you catch the point?

What you receive for your seed crops yearly—be it big or little—establishes the amount of your yearly obligation on interest and payment from third year on.

While building the farm home you are not confronted with a fixed yearly cash payment that, if not paid promptly, often endangers the loss of your property, and in many cases discourages would-be settlers.

Your responsibility is limited to seeding stipulated acreage yearly—harvesting and marketing the seed crop and applying proceeds upon payment of land yearly until land is paid for.

Paying for land in Clover Seed Belt where Seed Crops average \$100.00 per acre, entails no hardship for the dairyman or stockman—as the hay a dunchaff crops more than pay the expense leaving the seed crops as the mortgage lifter.

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STROUT'S SPRING CATALOG FARMS!

JUST OUT! More than 1,000,000 people will read this new 100-page illustrated catalog, packed with money-making farm bargains of 30 states. You'll want to read on page 15 details of 227 acres, 6-room house, barns with horse, 10 cows implements, crops, \$3,000, only \$1,000 down. See 80 acres page 73 house, barn, including horses, cows, pigs, chickens, tools, \$1,200 takes all, \$500 down. Details page 16, 400 acres 10-room house, good barn, silo, fruit, 1,000 cords pulp wood, 2,000 cords block wood, with 2 horses, 10 cows, 3 heifers, wagons, machinery, hay crops, etc., all only \$4,500, part cash. This book goes to every corner of America; write today for your free copy. STROUT AGENCY, 814 BE, Ford Bldg., Detroit, Mich.

LANDOLOGY SPECIAL NUMBER JUST OUT containing 1921 facts of clover land in Marinette County, Wisconsin. If for a home or as an investment you are thinking of buying good farm lands where farmers grow rich, send at once for this special number of Landology. It is free on request. Address SKIDMORE-RIEHLER LAND CO., 398 Skidmore-Riehle Bldg., Marinette, W.

FIRST CLASS FARM HOME, STATE REWARD road, 3-4 mile market, schools, churches. For particulars address owner, JOEL G. PALMER, Orleans, Mich.

FOR SALE—CHOICE HEAVY CLAY LOAM hardwood land, old cuttings, in live farm settlement near Millersburg and Onaway. Sweet clover seed crops pay for your land in this wonderful clover seed belt. It is doing it for others—why not for you? JOHN G. KRAUTH, Direct Dealer, Millersburg, Mich.

40 ACRE FARM FOR SALE—LOCATED IN Missaukee Co. Price \$1,500. For particulars address ALVIN ASPY, 401 King St., Saginaw, Mich.

FREE! DESCRIPTIVE LIST 100 FARMS IN "Thumb" District, the Garden of Michigan. REED REALTY CO., Carsonville, Mich.

FOR SALE—120 ACRES. NUMBER ONE best and best of buildings, fruit, timber. One mile to Dixie Highway, station, church and school. 30 miles from Detroit. R. W. ANDERSON, Clarkston, Mich.

FOR SALE—20 ACRES, BUILDINGS, MOST new. 1-2 mile from town; \$2,250. Ford or liberty bonds part. C. CUTLER, Benzonia, R1, Mich.

MUST SELL BEFORE APRIL, 40 OR 80 acres good level land, building worth the price. Close to market, gravel roads. W. CLEMENTS, Six Lakes, Mich.

138 1-2 ACRES GOOD LOAM SOIL, GOOD buildings, 20 acres timber, three miles from town, good beet ground, \$14,000. 1-3 cash, balance 5 per cent. J. W. PRATT, Byron, Mich.

FOR SALE—122 ACRES HIGHLY IMPROV- ed. Good buildings, 40 rods to school, 3 miles from Lansing. \$152 per acre if sold soon. S. W. HEMPHY, R 7, Lansing, Mich.

FARM BARGAIN—120 ACRE FARM SANDY loam, clay bottom, good soil to raise any kind of crops. Large house with basement; good well; large barn, metal lined granary; silo. Will sell with or without stock and machinery. \$85 per acre. Requires down payment of three thousand dollars. EDWARD HESSE, 1996 Gratiot Ave., Detroit, Mich.

FOR SALE—290 ACRES, FOUR MILES from Petoskey; good buildings, twenty acres apple orchard; running water at barn. \$30.00 per acre if sold soon easy terms. FRANK GRULER, Petoskey, Michigan.

100-ACRE FARM FOR SALE OR EXCHANGE for smaller farm. Would take city property as part payment. Good buildings, large orchard. 7 1-2 miles from Kalamazoo. H. A. BENJAMIN, Rose City, Michigan.

FOR RENT—MY FARM OF 60 ACRES; everything furnished, team, tools, seed and cows. ALBERT PARKS, Sidney, Michigan.

FOR SALE—80 ACRES OF OUT-OF- land, 10 acres cleared, in Clare county, near Marion. Sandy loam, clay subsoil. Price, \$20 per acre. B. J. STONEBROOK, Sumner, Mich.

FOR SALE—160-ACRE FARM WITH 40 acres wheat and 20 acres fall plowed, balance sod. Three miles from town. 1-2 mile from school, on state road. Price \$10,000. For particulars write, REUBEN KLAUS, Brown City, Michigan, R. F. D.

160 ACRES OGEMAW CO. FARM. BEST soil. 55 a. cleared; good buildings; water, roads, school and mail route. \$35 per acre. For terms write GUY C. WHITESIDE, Lupton, Michigan.

FOR SALE—80-ACRE FARM, LOCATED IN Acme township, Grand Traverse county. 50 acres plow land, rest pasture. Water by creek. Good buildings; good well water; small orchard. Good fences. One mile from state reward road; 2 1-2 miles from Acme; 9 1-2 miles from Traverse City. For further particulars write to THOMAS J. WARD, Williamsburg, Michigan, R. F. D. No. 2, Box 141.

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CERTIFIED STRAWBERRY PLANTS, SEN. Dunlap and Warfield. \$4.00 Oper 1,000; \$2.00 per 500; \$1.00 per 250. HAMPTON & SON, Bangor, Mich.

SENATOR DUNLAP AT \$3.50 PER 1,000. \$2.00 for 500; \$1.00 per 250. Guaranteed first-class plants or money refunded. C. H. STANLEY Flower View Farm, Paw Paw, Mich. R. R. No. 2.

FRANCIS' STRAWBERRY PLANTS, \$2.00 per 100, \$15 per 1,000, postpaid. TINDALL, the Ever-bearing Strawberry Man, Boyne City, Mich.

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CERTIFIED PETOSKEY GOLDEN RUSSET Seed Potatoes. Nine years; hill selected for type and yield. \$6 per 150 pound sack. E. D. POST, Twin Boy Farm, Alba, Michigan.

I HAVE RECLEANED WHITE BLOSSOM Sweet Clover Seed at \$7.50 per bu., bags included. Send for samples. ARTHUR CHURCH, Bad Axe, Mich.

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SEED CORN—EXTRA EARLY GOLDEN Dent. Large yielder, \$3.00 Bushel. Express or freight. Package 10 cents. GEO. L. PRAY, Elsie, Michigan, R. 3.

WHITE SCOTTISH CHIEF OATS, ALSO Waverline Oats and Timothy Seed, Silver King Barley. FRANK BARTLETT, Dryden, Michigan.

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SIXTEENTH PLACE TO FOURTH IN TWENTY-ONE YEARS

(Continued from page 4)

capital and population, and which are now entirely within the Detroit city limits. For the past 10 years they are as follows: 1909, 103,379; 1910, 116,981; 1911, 135,244; 1912, 157,759; 1913, 175,429; 1914, 162,919; 1915, 209,388; 1916, 250,000; 1917, 268,080; 1918, 287,703; 1919, 307,513.

The Workers Classified

The labor commissioner's classification of employees for 1919 was as follows:

Factories and workshops inspected	3,373
Male superintendents	3,716
Foremen	10,965
Traveling salesman	2,678
Boys, 14-16	329
Boys, 16-18	2,536
Men over 18 in office work ..	12,852
Men on skilled labor	107,686
Men on unskilled labor	119,995
Women superintendents ...	230
Foreladies	556
Girls, 14-16	176
Women over 16 in offices ..	11,668
Women over 16 in factories	30,753

Whole number employed ..307,513

There are some rather peculiar conditions disclosed by the detailed statement of the classification. As illustrating the extent to which it is the machine and not the man that does the work in these days, in the Highland Park factories there are more than two unskilled laborers to one that is skilled, and in Hamtramck the proportion was two and one-half to one. In Detroit proper the skilled men outnumber the unskilled, there being 88,788 of the former and 78,849 of the latter.

In Highland Park there is one foreman to every 10 workmen; in Detroit one to 32, and in Hamtramck one to 5. The Ford company evidently does not keep many men on the road, for the total number of traveling salesmen in Highland Park is seven; in Detroit it is 2,597 and in Hamtramck, 74.

There has been a marked diminution of late years in the number of minors employed in Detroit factories. As long ago as 1912, with a total salaried official and wage-earner list of 149,000 there were 1,472 boys and 1,154 girls under 16. In 1919, with a total of employees nearly twice as large, the number of boys under 16 was only 303 and of girls 176. In 1918 the number of women employed in factories was 30,443 and in 1919 it was 28,730. In the former year there were 9,500 adult women employed in the offices connected with manufacturing plants and in the latter year nearly 11,000.

In 1914 there were 24 separate manufacturing concerns in the city that employed over 1,000 men each. In 1919 there were 50 with over 1,000 each, and of these 12 had over 5,000.

The Range of Wages

The average wages for all classes of work for the past seven years were reported as follows

1913....\$2.60	1917....\$3.59
1914....2.67	1918....4.72
1915....2.74	1919....5.30
1916....2.99	

In the latter year the averages for certain classes were as follows: Superintendents, \$10.38; foremen, \$7.40 traveling salesman, \$8.21; skilled workmen, \$6.36; unskilled workmen, \$4.89; men employed in offices, \$5.81; foreladies, \$4.38; women superintendents, \$4.59; women in offices, \$3.21; women over 16 in factories, \$3.05.

The number of companies incorporated for manufacturing purposes in 1920 was much above the average, but there was no single concern of great magnitude. The increases made by old companies to capital stock amounting to over \$70,000,000 in all were much greater than usual.

Detroit reached its maximum of employment and production about the middle of 1920. It suffered with the rest of the country in the marked depression that commenced in November and culminated about the end of the year, when a large proportion of the factories were either

shut down or working on short time. With the first week in January there were signs of improving, but how soon complete recovery may be expected is impossible to say.

A NEWSY LETTER FROM A FARM WOMAN

(Continued from page 13)

and have even taken out and put the battery back in our machine.

The other day I went to town. I did not want to stop in the Main street because I hadn't yet put the new tag on, but I chocked the car off and when I tried to start it the starter wouldn't work. I have never tried to crank a car before, but I simply got out, turned the crank a few times and away it went.

For all of my outside work I never neglect my church work or the Ladies Aid. I am a class leader for our organist and teach a class of children in the Sunday school and like it very much. The M. E. church is my home church.

I surely love farming and a farmer's life. I feel you can do so many little things if you only want to. Christmas we furnished a dinner for a family who had no father and this morning I dressed a five pound chicken and sent it along with a can of fruit and some fresh eggs to a sick lady in town.—Mrs. P. H. A. HULMAN, Michigan.

That's the spirit, Mrs. A. Work is no drudgery if you love it. Life is dull and tiresome only to those who have no work to do. I hope you may never lose your love for the farm or your willingness to help wherever help is needed. Write to us again.—Editor.

ADMIRE SAND OF GRATIOT COUNTY SUPERVISORS

I SAW IN the last issue of M. B. F. the Gratiot County board of Supervisors had turned down the big budget for the maintenance of the Agricultural College and the U. of M.

I admire the board for the stand they have taken. As I am a taxpayer in Gratiot County I would like to know if they are the only board in the state, that have sand enough to stand up for the taxpayers. I should like to hear from some of the other counties and see if they have the sand as our county has. We read the M. B. F. every week with much interest.—J. R., Gratiot County.

This united protest against high taxes comes just two years too late. The 1919 legislature was a spendthrift. It threw away the taxpayers' money, and the taxpayer never squealed. The present governor and legislature are economically-minded and need no urging from the people to cut appropriations to the bone. The Governor has engaged Prof. David Friday of the U. of M. to make a study of the 1921 budget and suggest a scientific remedy for reducing it to reasonable limits.—Editor.

AN EASY WAY TO FIGURE THE COST OF PAINTING

Many a farmer is thinking about painting this spring, and is wondering if he can figure out just how much paint he needs. Any farmer can figure the answer out for himself. Start with the fact that in repainting the average outside paint will cover 4400 sq. ft. of surface with two coats of paint. Just figure the sq. ft. of surface which your barn or other structure has, and then divide this by 400 to find out the number of gallons of paint which you need. A barn 30 feet long, 16 feet wide, 16 feet high on the sides will have a sq. ft. area of approximately 1500. This will take less than 4 gallons of paint, say at \$4.00 a gallon, or \$16 to protect a good sized barn for four years, or \$4.00 a year.

Any bank will lend from 10 to 30 per cent more on a painted barn or other structure than on one that needs paint. This is why farmers are painting as they never have before.

Circumstantial Evidence

Mother—I wish you wouldn't stand on the steps so long with that young man when he brings you home.

She—Why, I only stood there for a second last night.

Mother—Is that all? I really thought I heard a third and a fourth.

Please send me your paper as I cannot get along without it. I get more real news out of it than papers I pay \$5 for.—S. P. H., Colon, Michigan.

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MAILING DEPARTMENT

The Michigan Business Farmer, Mt. Clemens, Mich.

HOW TO MAKE CREAM CHEESE ON THE FARM

(Continued from page 7)

of butterfat. Milk for Neufchatel is warmed to 80 degrees F., and one-half pint of starter is added and thoroughly stirred in with a long-handled spoon or milk agitator. Then 8 or 10 drops of commercial liquid rennet, diluted in half a cupful of cold water, is added to the mixture, thoroughly stirred, and the can of milk set away to coagulate at 80 degrees F. Powdered pepsin, which is cheaper than rennet, may be used instead, in which case a quantity equal to one-half of a medium-sized pea, dissolved in a cupful of cold water, is used. Fresh junket tablets also may be substituted for rennet. One tablet is dissolved in 10 tablespoons of cold water and 3 tablespoons of the solution used. For cream cheese a slightly larger quantity of the curdling agent is desirable.

For cream cheese the milk is warmed to 83 degrees F., the process being the same in other respects. When starter is not used in making either kind of cheese, the process is unchanged except that after thoroughly stirring the milk it is set away, at a temperature described, for several hours before the rennet or other curdling agent is added.

After the milk has been set away to coagulate it should be kept as nearly as possible at the same temperature. Under normal conditions, after about 15 or 18 hours, about one-half inch of whey collects upon the surface of the curd or coagulum; on the top of the whey a scum of fine white curd particles sometimes collects. This formation of whey indicates a normal fermentation. When the fermentation is abnormal, the coagulum is more or less convex, puffed, or inflated, and there is little, if any, whey on the surface.

A gassy fermentation of the curd does not necessarily render a cheese unfit for consumption; but for best results, both as to flavor and economy in handling (that condition should be prevented. Under ideal conditions the milk usually begins to coagulate in the course of a few hours, but is allowed to stand undisturbed for from 15 to 18 hours. It is advisable to set it so that the curdling occurs during the night, and if the cans are not provided with covers they should be covered with a close-meshed cheesecloth in order to exclude dirt.

Draining.—After the setting period, when whey has collected upon the surface of the coagulum, or when the milk is firmly clabbered, the contents of the can or pail are poured upon a strong drain cloth. The can may be shaken slightly before pouring, in order to loosen any curd which has a tendency to adhere to the sides or bottom. Unbleached cotton sheeting, which can be obtained in yard widths, has proved to be the most satisfactory material for drain cloths. For a small-scale operation the cloth may be thrown over a pail, can, or wash boiler and the ends tied securely about the draining receptacle. The curd or coagulum should remain undisturbed in the cloth for 3 or 4 hours, after which it should be worked toward the center of the cloth in order to hasten the draining and get it in better condition for handling. Drainage is allowed to continue until most of the visible whey has escaped and the curd appears rather dry as compared with its former mushy condition. Then the four corners of the cloth should be drawn diagonally across and tied. For home consumption and especially when it is not cooled, the curd should be allowed to drain for a longer time before pressing.

Cooling the curd.—While the cooling of the curd is very desirable, it is not absolutely necessary. The object of cooling is to facilitate the more rapid expulsion of whey during pressing. Cooling also seems to harden the curd so that it does not pass so readily into the meshes of the drain cloth and thereby interfere with and retard the expulsion of the whey. The bags of curd are placed on ice, or cracked ice is placed about them and left for a few hours.

Pressing.—After cooling, several bags of the curd are piled together between two boards and a weight of 50 pounds placed on top. Frequent rearrangement of the bags will hasten the process. After this weight has been left on the cheese overnight the curd should be in flat cakes. For Neufchatel it is preferable to press the curd from 30 pounds of milk until the pressed curd weighs 4 1-2 pounds, while for cream cheese it should weigh about 5 1-2 pounds. Special care should be taken in determining the yield of cheese in order to obtain a uniform quality from day to day, which can be done by weighing the curd. The manner and length of time of pressing determines, in a large measure, the texture of the cheese.

Working and salting.—After having been properly pressed the cakes of curd are salted and worked with a potato masher or butterworker, or run through a food chopper to produce a smooth, buttery consistency.

Fine, dry salt is sprinkled over the curd at the rate of about 2 1-2 ounces to 10 pounds of curd, or about two level tablespoonfuls to the curd from 30 pounds of milk. The quantity of salt may be varied to suit the individual taste; the quantities recommended, however, usually give the best satisfaction. If the curd is worked with a potato masher the addition of salt aids in obtaining the proper smoothness of the cheese.

When cheese is made for home consumption it may be placed in a glazed crock or porcelain dish immediately after salting and held at a temperature as near 50 degrees F. as possible until consumed. Under favorable conditions it will keep in good condition for from 6 to 12 days. When cheese is kept a few days at a temperature of 60 degrees to 70 degrees F., it will become disagreeably sour. It is most palatable immediately after it is made, for then it is fresh, soft, and sweet. When very cold, or after having been kept for some time, it does not have so fine a flavor.

THE FEDERAL STOCK FOOD COMPANY AGAIN

(Continued from page 10)

I would be mailed feeding directions and copy of "indemnity bond" which they issued.

I received some applications for indemnity bonds to be filled out by purchasers of salt, but have not received anything else.

I enclose one of their blanks. You see by this that they limit paying of losses to "contagious diseases" only, with no indemnity for losses from hog cholera at all, and feeding directions to be issued from home office after Stock Salt has been sold. This is an entirely different deal than Mr. Coyle sold me. I paid the first two notes of \$40.00 and \$100.00 and wrote them that I would not accept Salt or attempt to sell same only on terms under which I ordered it. They have never answered my letter. I let the third note for \$100.00 go to protest and will do the same with the last note of \$200.00.

There was no one present but Mr. Coyle and myself while we were talking, and if it comes into court it is his word against mine and the Company holding the notes.

Mr. Coyle certainly would never have received the notes or order for Stock Salt had he told me that they paid for losses from contagious diseases only. But he gave me every reason to believe that it was for every loss except accidental death or lightning. I am simply holding out for the same deal I bought. The Stock Salt still lies in the depot. I will never attempt to sell or feed same myself unless I receive the same terms as Mr. Coyle sold me the goods on. If I am forced to pay these notes will charge the amount to experience and let the R. R. Company sell the Salt for freight and storage charges.—H. L. O., Wotverine, Michigan.

One of our subscribers complained to us last October about this same agent and company. That time it was only a small matter of \$3, which they finally paid. Who will be the next victim of this slick agent?—Associate Editor.

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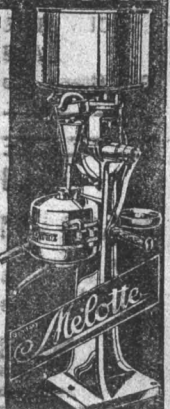
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BULL CALF BORN MARCH 27, 1920, VERY nice, straight and well grown, weighed 320 lbs. Feb. 1st. This gilt weighed 320 lbs. Feb. 1st. If not perfectly satisfactory on arrival ship her back at my expense. Price \$125 delivered.
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Registered Holstein-Friesian, sired by \$9.27 lb. bull and from heavy producing young cows. These calves are very nice and will be priced cheap if sold soon.
HARRY T. TURBS, Elwell, Mich.

FOR SALE

Tea good Pure Bred . . .

HOLSTEIN COWS

All good breeding and good Straight Individuals

DATE HOLSTEIN FARMS

Grant E. Volland Mgr.
Baroda, Berrien County, Michigan

Yearling Bull For Sale

Bull born Sept. 28, 1919, evenly marked and a fine individual. Sired by my 30 lb. bull and from a 20 lb. daughter of Johan Heng. Lad, full sister to a 32 lb. cow. Dam will start on yearly test Nov. 15.

ROY F. FICKIES
Chesaning, Mich.

WANTED—HOLSTEIN SIRE AROUND 10 months or younger, with 35 lb. (or better) sire and 30 lb. (or better) dam. Also 30 lb. (or better) cow, bred to 35 lb. (or better) sire. We must buy at farmer's prices.
BACON BROS., Pittsford, Michigan

SOLD AGAIN

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

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

HOWBERT HERD

WHERE TYPE, CONSTITUTION AND PRODUCTIVE ABILITY IS ASSURED.

TWO grandsons of King of the Pontiacs from A. R. O. Dams of excellent breeding.

H. T. EVANS
Eau Claire, Mich.

YOUR CHOICE OF THREE REAL SIRE

1 born Dec. 20th, 1920, nicely marked and from a 25 lb. 3 year old dam sired by a 25 lb. grandson of the \$50,000 bull for \$100.00. No. 2 born Dec. 4th, 1920. Nearly white and from a 15 lb. 3 year old dam. Sired by a 38 lb. bull. Dam a grand daughter of King Segis Pontiac. Only \$75. No. 3 born Feb. 2nd, from a nearly 20 lb. dam and sired by a 25 lb. 3 year old grandson of King Segis Pontiac Alcatraz. Nicely marked and yours for \$70.00. All papers free.

JOHN BAZLEY

319 Atkinson Ave.

DETROIT

MICH.

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

BULL READY FOR SERVICE, 16 MONTHS old. His two grand dams averaging 30 and 31 lbs. butter and his dam 24 lbs. butter and 519 lbs. milk in 7 days.
WILLIAM SCHWEITZER, R. 3, Bay City, Mich.
Bell Phone 6125-F-14

TO SETTLE AN ESTATE

7 registered Holstein cows, 5 yet to freshen, bred to a 30 lb. bull. \$1,200 takes them.
BERT SLOOM, Byron, Mich.

AM OFFERING

a high class bred gilt. Bred to a champion sow of Seisora. Bred to farrow April 1st. This gilt weighed 320 lbs. Feb. 1st. If not perfectly satisfactory on arrival ship her back at my expense. Price \$125 delivered.

H. E. BROWN
Breedsville, Mich.
Breeder of Durocs only

FOR SALE LARGE REGISTERED HOLSTEIN cow, five years old, well marked and a good milker. Also her bull calf born Oct. 27; sired by a son of Johan Hengerveld Lad, and a 22 lb. two year old dam. Price \$250 for the pair.
R. H. BARNHART, R. 1, St. Charles, Mich.

BRANDONHILL FARM

Ortonville, Michigan
We have cut our price one-half:
Bull calf, 85 lb. sire, 30 lb. dam, . . . \$100
Bull calf, 41 lb. sire, 30 lb. dam, . . . 200
Bull ready for service . . . 350
Bull, 41 lb. sire, 31 lb. dam . . . 500
All good individuals from herd having passed Third Clean Federal Test.
JOHN P. HEHL
1205 Griswold Street, Detroit, Michigan

FOR SALE—2 REG. HOLSTEIN BULLS ready for service from 19 1-2 and 24 1-2 lb. dams. Price \$100 and \$125. Herd on accredited list.
Wm. GRIFFIN, Howell, Mich.

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

FOR SALE—REGISTERED HOLSTEIN COW. Three heifer calves. 1 bull calf.
R. J. SANFIELD, Wixom, Mich.

BULL CALF FOR SALE

His six nearest dams average 29.7 lbs. Sire 42.26 lbs. Dam 21.39 lbs. at three years. Terms if you want them. Voepel Farm, Sebawaing, Mich.

FOR SALE

At Fairchild Farms, where good ones are being developed.
Bull calves out of Pallidier Pontiac Dora De Kol and good producing dams.
Some with high records.
JOHN SCHLAFF
277 Tillman Avenue
Detroit, Mich.

FOR SALE—FOUR PURE BRED HOLSTEIN yearling sires. Full set of papers given with each animal.
GEO. W. PUFFER, So. Boardman, Mich.

BULL BORN JAN. 2nd, BEAUTIFULLY marked, more white than black, straight and fine individual. Sire: A son of Sir Veeman Hengerveld—The great century sire with 125 A. R. O. daughters, 17 above 30 lbs. Dam: A 21.83 lb. butter in 7 days with 538 lbs. milk from a grandson of King Segis. Send for pedigree if interested—priced for immediate shipment \$75.00.
FRED M. BOYD, Waldron, Mich.

SHORTHORN

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

IF YOU WANT TO BUY OR SELL I MAY have just what you want. I handle from one animal up to the largest consignment sale in the country.
O. A. Rosmussen Sale Co., Greenville, Mich.

SCOTCH SHORTHORNS 5 GOOD BULLS 12 to 15 mos. old
Priced right, also my herd bull.
THEODORE NICKLAS, Metamora, Mich.

Have You a Mortgage on Your Farm?

If so buy Shorthorns at the Feb. 25th sale at M. A. C. held at 1 P. M. We are listing four females and two show bulls that will lift your mortgage if they are cared for.

RICHARD FARMS
C. H. Prescott & Sons, Tawas City, Mich.

SHORTHORNS

5 bulls, 4 to 8 mos. old, all roans, well fed. Dams good milkers, the farmers' kind, at farmers' prices.
F. M. PIGGOTT & SON, Fowler, Mich.

MILKING SHORTHORNS, BULLS FROM COWS making records. Priced reasonable.
O. M. YORK, Millington, Mich.

BUY SHORTHORNS FROM AN ACCRED- ited herd, that are right, at readjustment prices.
JOHN SCHMIDT & SON, Reed City, Mich.

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

SHORTHORN BULL CALVES FOR SALE. Milking and Scotch Top, \$100 and up.
W. S. HUBER, Gladwin, Mich.

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

SHORTHORNS COWS, HEIFERS, BULLS offered at attractive prices before January 1st. Will trade for good land.
Wm. J. BELL, Rose City, Mich.

FOR SALE—REG. SHORTHORN BULL CALV- es ready for service. Also Oxford Down Ewes.
JOE MURRAY & SON, Brown City, Mich.

Maple Ridge Herd of Bates Shorthorns Or- fers for sale a roan bull calf 9 mos. old. Also 2 younger ones. J. E. TANSWELL, Mason, Mich.

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

MACK'S NOTES

A bill is before the Indiana legislature which provides that the stock yards at Indianapolis shall be placed under the supervision of the Indiana Public Service Commission. The president of the stock yards company and of the Indianapolis Live Stock Exchange are opposed to the passage of the bill and are using their combined influence to defeat its passage.

J. Ralph Pickell, editor of *Rosenbaum Review* is advising farmers to buy feeding hogs and feeding cattle, urging as a reason, the certainty that prices will soon advance, sharply, for the finished product in both of these departments. The scarcity of shoats, the country over and the fact that thousands of cattle feeders are going out of the business, is assigned as the lifting power which will cause the advance in selling prices.

Veal calf prices are lower all around the market circle and the prospect is that they will go much lower before the peak of the spring calf crop is past.

There is good reason to believe that the live stock list with the single exception of veal calves has touched bottom for this year and a gradual hardening of values may be looked for during the next 60 days.

Everything goes to show that the big packers expected to clean up a big bunch of money out of the frozen mutton deal; they evidently reasoned that they could undersell the domestic product with the frozen stuff and incidentally take the joy out of the sheep-raiser's existence. The sequel shows that they got the sheep men alright but were swamped in the same landslide themselves.

Prof. Davenport of the University of Illinois, scored a base hit the other day when he was conducting an inspection committee from the Illinois legislature around the college plant. He stated that if the emergency appropriation that had been asked for by the college was not granted by the legislature he should recommend the dispersal of the college flocks and herds and a reorganization of the agricultural department on a basis of what it was 10 years ago.

Reports from the college horse market show an active demand for all grades except the narrow-waisted trotting-bred kind which are not wanted. Up to the middle of the current month heavy horses have been slow sale but the sign has changed and the demand for drafters exceeds the supply. Teams, weighing 3,000 to \$3,300 pounds sell readily for \$425 to \$455. Farm demand absorbs fully 90 per cent of the offerings. Chunky wagon horses, weighing from 1,250 to 1,400 pounds bring from \$180 to \$200 each.

There is good reason to believe that the low point in prices for stockers and feeders was uncovered early in the present month, prices having already advanced above the recent low, more than one dollar per cwt. The fact that the rise of grass in the southwestern district is not far away is causing the rank and file of the cattle-feeding contingent to nibble at the feeder market. Eastern demand for feeding cattle is hampered by high freight rates.

Continued heavy wool buying on American account in Australia and South America and at Liverpool sales is about the only feature of the recent wool trade. Foreign buying is in anticipation of tariff enactment and has stimulated Australian trade, while the domestic market languishes. Purchasers of foreign wools are confronted with possibility of not getting cargo space to land their property at Boston before a tariff becomes effective.

Veterinary Dep't

Dr. W. Austin Ewalt, editor

HENS SUFFER FROM PARALYSIS OF NERVES

I have some chickens (Barred Rocks) which lose the use of their legs suddenly. They look healthy in every way and have been laying. I feed equal parts of corn, oats or wheat, and a moist mash at noon. If you know the cause or remedy would you please let me know?—D. C., Cadillac, Michigan.

This is paralysis of the nerves supplying the extensor muscles of the legs, first manifested by a high step, and a tendency to bring the foot down with a flop. In many cases, the first symptom noticed, the fowls will teeter slightly forward as if trying to balance on their toes and walking becomes very uncertain, so to speak. As the disease progresses, walking becomes more and more difficult, until the birds only squat on the ground, and this condition is soon followed by complete paralysis. A complete change of food will eliminate your trouble.

SWELLING BETWEEN FRONT LEGS

I have a sick cow. I would like to know what is the matter with her? She stopped eating and then got some swelling between her front legs and her brisket and under her jaw. Her bowels were in good order and her kidneys also. She was five years old and in good shape when taken sick. I feed ensilage, corn stalks and hay. Would it be safe to put another cow in her stall?—H. T. H., Central Lake, Michigan.

This is a disease that is becoming quite common in this country and is very unsatisfactory to treat; in fact they usually die. Give the following: Powdered Digitalis, two ounces; Powdered Gentian, four ounces. Mix and divide into sixteen powders, giving one powder dissolved in a little lukewarm water, every four hours.

HORSE WEAK IN LEGS

I have an eight-year-old mare and cannot make out what ails her. She is in good or fair shape; has good appetite, and no work since fall. She seems to be weak in her hind quarters and stumbles in front as much as behind and sways from one side to the other when standing for a little while. Also seems to have no life in her. I am feeding her hay, corn stalks, ground oats and corn. The other horse gets fed the same. He is doing fine. Can you give me a remedy for same?—F. E. S., Rhodes, Mich.

I would recommend giving your horse the following prescription: Fluid extract nux vomica, two ounces, potassium iodid, two ounces, add sufficient water to make one pint and give one tablespoonful with a syringe three times a day, discontinue feeding corn stalks and add a little bran to the grain. Have salt before her at all times, and water before feeding.

NORTHERN MICHIGAN MEETINGS

Four more meetings of Hostein breeders in line with the accredited herd campaign started last December are scheduled for the early part of March in northern counties, as follows: Tuesday, March 8th, at Fremont; Wednesday, March 9th, at Scottville; Thursday, March 10th, at Cadillac; Friday, March 11th, at Petoskey.

These meetings are being arranged for by the county agricultural agents, who are taking a very lively interest in the campaign which the state association is putting on to stimulate interest in accredited herd work. In this section of the state there are only a few herds of Holsteins, but interest is developing rapidly. A portion of the program each day will be devoted to Holstein matters and the balance to a discussion of the accredited herd plan of eradicating tuberculosis. Six counties in Michigan have already appropriated funds for employing veterinarians to devote their time to testing cattle for tuberculosis, and this plan is meeting with favor on all sides and no doubt will be put into effect in many other counties during the year.

Like the paper and don't want to be without it. There are so many useful hints that one cannot tell which part is best. But think the talk on cooperation of the farmer should be first, last and all the time.—Mrs. J. R., Muskegon, Michigan.



BREEDERS DIRECTORY



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

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

Auction Shorthorn Durham Cattle

(Dual purpose beef and butter bred.)

MARCH 18, at 1 o'clock p. m., 1921, at the Frank I. Stephens Farm, 4 miles north, 1 mile west of Berlin, or 3 miles south, 1 mile east Conklin

27 Head

REGISTERED—12 HEAD—
5 Cows, 4 Heifers, 3 Bulls

UNREGISTERED BUT HIGHLY BRED GRADES—15 HEAD—
4 Cows, 3 Heifers, 3 Bull Calves, 5 Fat Steers.

HERD TUBERCULIN TESTED

Also a few fullblooded Big Type Poland China Glits, out of Hazel No. 631334, an exceptionally fine specimen of the breed.

FRANK STEPHENS, Prop.,

R. 2, Conklin, Michigan

CHESTNUT RIDGE STOCK FARM

offers eight Scotch Topped Shorthorn Heifers from seven to twenty-two months old and one roan bull nine months old. Also two younger bulls.

RALPH STIMSON, Oxford, Mich.

KENT COUNTY SHORTHORN BREEDERS' ASS'n are offering bulls and heifers for sale, all ages. Sell the scrub and buy a purebred.

A. E. RAAB, Sec'y, Caledonia, Mich.

MAPLEHURST FARM

Newton Loyalist 2nd in service, short horn bulls for sale.

G. H. PARKHURST, R 2, Armada, Mich.

MILKING SHORTHORNS I AM OFFERING for sale at present four bulls, two yearlings and two younger, also a few females. Prices reasonable.

ROY S. FINCH, Fife Lake, Mich.

REGISTERED RED POLLED CATTLE OF both sex for sale, at farmers prices. Write for descriptions to

WALTER LUCKHARDT, R 3, Manchester, Mich.

HEREFORDS

TWO HEREFORD BULLS, 11 MO. OLD, FOR SALE—
Sired by Keapon. Good ones.

JOSEPH FELDPAUSCH, Fowler, Michigan

HEREFORD CATTLE AND HAMPSHIRE HOGS.

We can furnish registered bulls from 12 months and older, best of breeding and at a very low price, have also some extra good Herd headers. We have also a large line of registered Hampshire Hogs, Glits, Sows and Boars.

Write us, tell us what you want and get our prices.

La FAYETTE STOCK FARM, La Fayette, Ind.

J. Crouch & Son, Prop.

REGISTERED HEREFORD CATTLE—KING REPEATERS 713941, and Beau Perfection 327899 head our herd. Bulls are sold; have some very fine heifers for sale, bred or opened, bred to our herd bulls. Come and see them; they will please you.

Tony B. Fox, Prop., Henry Gehrholtz, Herdsman, MARION STOCK FARM, Marion, Michigan

HEREFORDS FOR SALE

Fairfax and Disturber blood, 150 Reg. head in herd. \$35.00 reduction on all sires. Choice females for sale. Write me your needs.

EARL C. MCCARTY, Bad Axe, Mich.

150 HEREFORD HEIFERS. ALSO KNOW of 10 or 15 loads fancy quality Shorthorns and Angus steers 5 to 1,000 lbs. Owners anxious to sell. Will help buy 50c commission.

C. F. BALL, Fairfield, Iowa

LAKESIDE HEREFORDS GOOD TYPE, strong boned

young bulls, 12 months old for sale. Also high class females any age. Inspection invited.

E. J. TAYLOR, Fremont, Mich.

JERSEYS

Brighter Times Ahead!

Yes, these are dull times, but every period of depression in business has been followed by a period of prosperity. The present will be no exception. NOW is the time for the dairyman to improve the producing quality of his herd and get in better shape for the prosperous times to come. Take advantage of the slump in the prices of pure bred stock and get a pure bred bull to grade up the herd with. Which breed? The JERSEY, of course. Why? Because the JERSEY is the most economical producer of dairy products. JERSEY products sell for the highest market price.

JERSEYS are persistent producers. JERSEYS mature young—will commence milking at two years of age, oftentimes younger. JERSEYS work until twelve to fifteen years of age, frequently even longer. JERSEYS are beautiful, quiet, docile, pleasant to handle; a pleasure to own them. Write

Sec'y Hendrickson, Shelby, Mich.

For Free Literature.

MEADOWVIEW JERSEY FARM, REG. JERSEY cattle for sale.

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

Get Your Start in

Registered Jerseys for \$500

5 heifers from 5 mos. to 1 yr. will be sold at this price if taken at once. Write for breeding and description to

FRED HAYWARD, Scotts, Mich.

HIGHLAND FARM JERSEYS FEDERAL ACCREDITED herd. High production, splendid type and breeding. Write us your wants.

Samuel Odell, Owner. Adolph Heeg, Mgr. Shelby, Michigan

YEARLING BULL

Sired by Majesty's Oxford Shyllock. Nothing better

FRANK P. NORMINGTON, Ionia, Michigan

GUERNSEYS

REGISTERED GUERNSEYS

A bull calf, nearly ready for light service—he is a dandy—we have a price that will sell him.

J. M. WILLIAMS

North Adams, Mich.

GUERNSEY BULLS

One four-year-old bull, best breeding, splendid individual. His dam produced 8969.6 pounds milk and 423.45 pounds fat at 2 years old. Also some young bulls 9 to 12 months old; best of breeding.

SPRING DELL FARMS, LaPorte, Ind.

White Bros. & Sons R2, Box 20

Guernsey Bull for Sale

of serviceable age. From A. R. dam. Herd under state and federal supervision. Also Duroc bred sow (registered). Write for particulars to

C. A. HENNESEY, Watervliet, Michigan.

FOR SALE

PURE BRED GUERNSEY BULL

SHADDOCK'S CASTERLIUS 46484

Born May 8th, 1917. Color, light fawn Three cows on his sire's side have official records averaging 574 pounds fat.

HARRY HUNTER, Bancroft, Mich.

GUERNSEY BULL CALVES—TWO NICE 5 months old bull calves for sale. Cheap. Write for prices.

H. F. NELSON, R 1, McBrides, Mich.

GUERNSEY BULL CALVES

From tested and untested dams. Satisfaction guaranteed.

Write for prices and breeding to MORGAN BROS., Allegan, Mich., R1

ANGUS

The Home of Imp. Edgar of Dalmeny

Probably

The Worlds' Greatest BREEDING BULL

Blue Bell, Supreme Champion at the Smithfield Show, 1919, and the Birmingham Show, 1920, is a daughter of Edgar of Dalmeny.

The Junior Champion Bull, Junior Champion Female, Champion Calf Herd and First Prize Junior Heifer Calf, Michigan State Fair, 1920, were also the get of Edgar of Dalmeny.

A very choice lot of young bulls—sired by Edgar of Dalmeny are, at this time, offered for sale.

Send for Illustrated Catalogue.

WILDWOOD FARMS

Orion, Mich.

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

The Most Profitable Kind

of farming, a car load of grade dairy heifers from LENAWEE COUNTY'S heaviest milk producers to include a pure bred ANGUS bull of the most extreme beef type for combination beef and dairy farming.

Car lot shipments assembled at GLENWOOD FARM for prompt shipment. Methods explained in SMITH'S PROFITABLE STOCK FEEDING, 400 pages illustrated.

GEO. B. SMITH, Addison, Mich.

BARTLETTS' PURE BRED ABERDEEN-ANGUS CATTLE AND O.I.C. Swine are right and are priced right. Correspondence solicited and inspection invited. CARL BARTLETT, Lawton, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.

FINDLAY BROS., R 5, Vassar, Mich.

SWINE

POLAND CHINA

BIG BOB MASTODON

Sire was champion of the world. His dam's sire was grand champion at Iowa State Fair. 8 choice spring glits bred that are pictures, sired by him. Also some sows bred to him for March and April. Priced low and guaranteed in every way. Get my prices.

C. E. GARNANT, Eaton Rapids, Mich.

HERE'S SOMETHING GOOD

THE LARGEST BIG TYPE P. C. IN MICH. Get a bigger and better bred boar pig from my herd, at a reasonable price. Come and see them. Expenses paid if not as represented. These boars in service: L's Big Orange, Lord Clansman, Orange Prince and L's Long Prospect.

W. E. LIVINGSTON, Parma, Mich.

BIG TYPE POLAND CHINAS

A few choice spring boars and glits sired by "Half Ton Lad," a good son of "Smooth Half Ton" Champion of Michigan in 1918. Glits will be bred to Jumbo's Mastodon 2nd, son of Big Bob Mastodon for March and April farrow.

HOWLEY BROS., Merrill, Mich.

FARWELL LAKE FARM

L. T. P. C. boars all sold. A few spring boars and some glits left. Will sell with breeding privilege. Boars in service: Clansman's Image 2nd, W. B.'s Outpost and Smooth Wonder. Visitors welcome.

W. B. RAMSDALL

Hanover, Mich.

THE BEST BRED POLAND CHINA PIGS Sired by Big Bob Mastodon at the lowest price.

DeWITT C. PIER, Evart, Mich.

LSPC—4 BOARS BY CLANSMAN'S IMAGE and Big Defender, that are extra good a few glits left bred for April farrow, at Farmers' Prices.

H. O. SWARTZ, Schoolcraft, Michigan.

BIG TYPE POLANDS. AM OFFERING TWO good growthy fall glits, from best sow in our herd.

W. CALDWELL & SON, Springport, Mich.

BIG TYPE P. C. BRED SOWS ALL SOLD. Closing out a few choice boars at a bargain also some extra good fall pigs, either sex. From growthy stock.

L. W. BARNES & SON, Byron, Mich.

BIG TYPE POLAND CHINAS WITH QUALITY Nine fall glits out of litters of eleven and thirteen, for sale.

J. E. MYGRANTS, St. Johns, Mich.

BIG TYPE POLAND CHINAS

Three August boars for sale. Good backs and good heavy bone. Write for prices.

HIMM BROS., Chesaning, Mich.

B.T. P. C. A FEW TOP GLITS BRED TO Highland Giant, the \$500 boar. Others bred to Wiley's Perfection. Weight, 700 at 18 months.

JOHN D. WILEY, Schoolcraft, Mich.

L. T. P. C.

I have a fine lot of spring pigs sired by Hart's Black Price, a good son of Black Price, grand champion of the world in 1918. Also have a litter of 7 pigs, 5 sows and 2 boars, sired by Prospect Yank, a son of the \$40,000 Yankee, that are sure Humdingers.

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

LEONARD'S BIG TYPE P. C. SPRING boars, bred sows and the best litter of fall pigs in the state. Come and see or write

E. R. LEONARD, R 3, St. Louis, Mich.

I am offering Large Type Poland China Sows, bred to F's Orange at reasonable prices. Also fall pigs. Write or call.

CLYDE FISHER, R 3, St. Louis, Mich.

BIG TYPE POLAND CHINAS, 2 SPRING glits, one open and one bred, also fall pigs of both sex. These are good ones and priced to sell. Write for breeding and price.

MOSE BROS., St. Charles, Mich.

CLOSING OUT SALE

of Big Type Poland China hogs, which represents the work of 25 years of constructive breeding. Everything goes including our three great herd boars, Mich. Buster by Grant Buster, A. Grant, Butler's Big Bob. Two of the best yearling prospects in Mich. Modern type, high arched backs, great length, big bone. Come and pick up what you want. Our prices are right.

JNO. C. BUTLER, Portland, Mich.

WALNUT ALLEY BIG TYPE P. C. 3 fall sow pigs grand daughters of the Senior Grand Champion sow of Detroit, 1920, \$12.50 each. Also bred glits priced right.

A. D. GREGORY, Ionia, Mich.

BREEDERS DIRECTORY

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

AUCTION SALE

MARCH 11, 1921

Having rented my farm will sell at public auction, in Elmwood township, (Section 30), 1 mile east of Colling, Tuscola county, the following:

HORSES

Pair well-matched Clyde mares, rising 6 and 7 years old, weight, 2900 lbs. Seven young Belgian draft horses from 3 to 8 years old.

REGISTERED HOLSTEINS

- 8 Registered Holstein Cows; freshen soon.
- 1 Registered Holstein Bull, Pearl Sarcastic Butter Boy, 1 year old.

GRADE HOLSTEINS

- 2 Cows, calves by side.
- 4 Cows, freshen soon.
- 7 Heifers with calf.

O. I. C. HOGS

- 1 Registered Sow, 2 years old, due March 13.
- 1 Sow, 2 years old, due April 27.
- 7 Young Sows, due May and June.
- 1 Registered Boar, 9 months old.
- 1 Boar, 6 months old.

SHEEP

- 1 Registered Shropshire Ram.
- 3 Registered Shropshire Ewes with lamb.
- 2 Registered Leicester Ewes with lamb.
- All kinds of farm implements, hay and grain.
- One to 10 months' time on good bankable notes.

T. S. McELDOWNEY, Auctioneer.

Gravel roads from Gagetown, Caro and Unionville.

Lunch at noon.

Urvan Cross, Prop.

R-1

Colling, Mich.

PUBLIC SALE MARCH 16

16 Head of Dairy Cattle

One bull calf 11 months old, grandson of Don Diavola, out of high test cow. One bull 5 months old, same sire, high test dam. One bull calf 3 weeks old, sire, King B. of Bon-Ayer. Dam is a 50-lb. cow. One cow, Marie's Dairy Maid of Fairview 43958, 50-lb. cow. One cow, Marie's Beauty of Tavern Dairy 2nd 92625, 30-lb. cow at 3 years old. One yearling heifer 11544 dam of 50-lb. cow. One cow Juliet of Greenville 55108, 6 yrs. old. Rest are high grades, all sold on 60-day retest for T. B. One United Milker. One grand pacing mare, 3 heavy Percherons. One Reg. Boar Pig, also Reg. Hampshire Sheep.

5 miles northeast of Eaton Rapids, 14 miles southwest of Lansing, 9 miles west of Mason.

Hot lunch at noon.

JAS. A. LEWIS,

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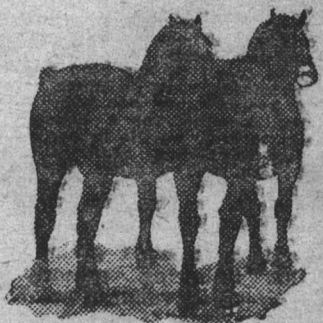
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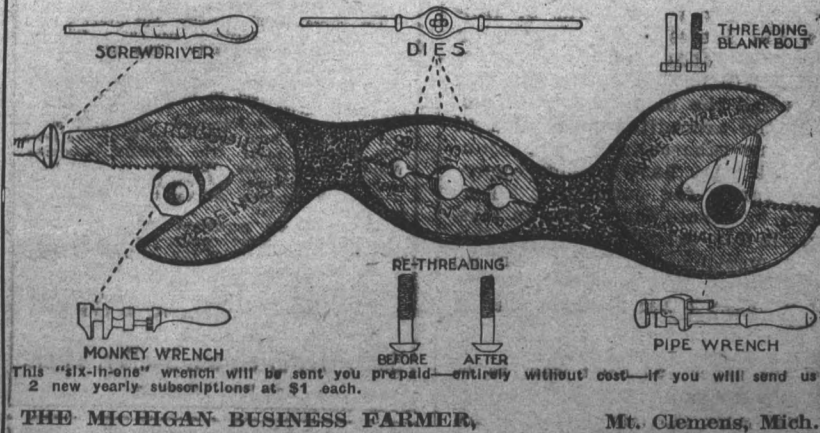
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