

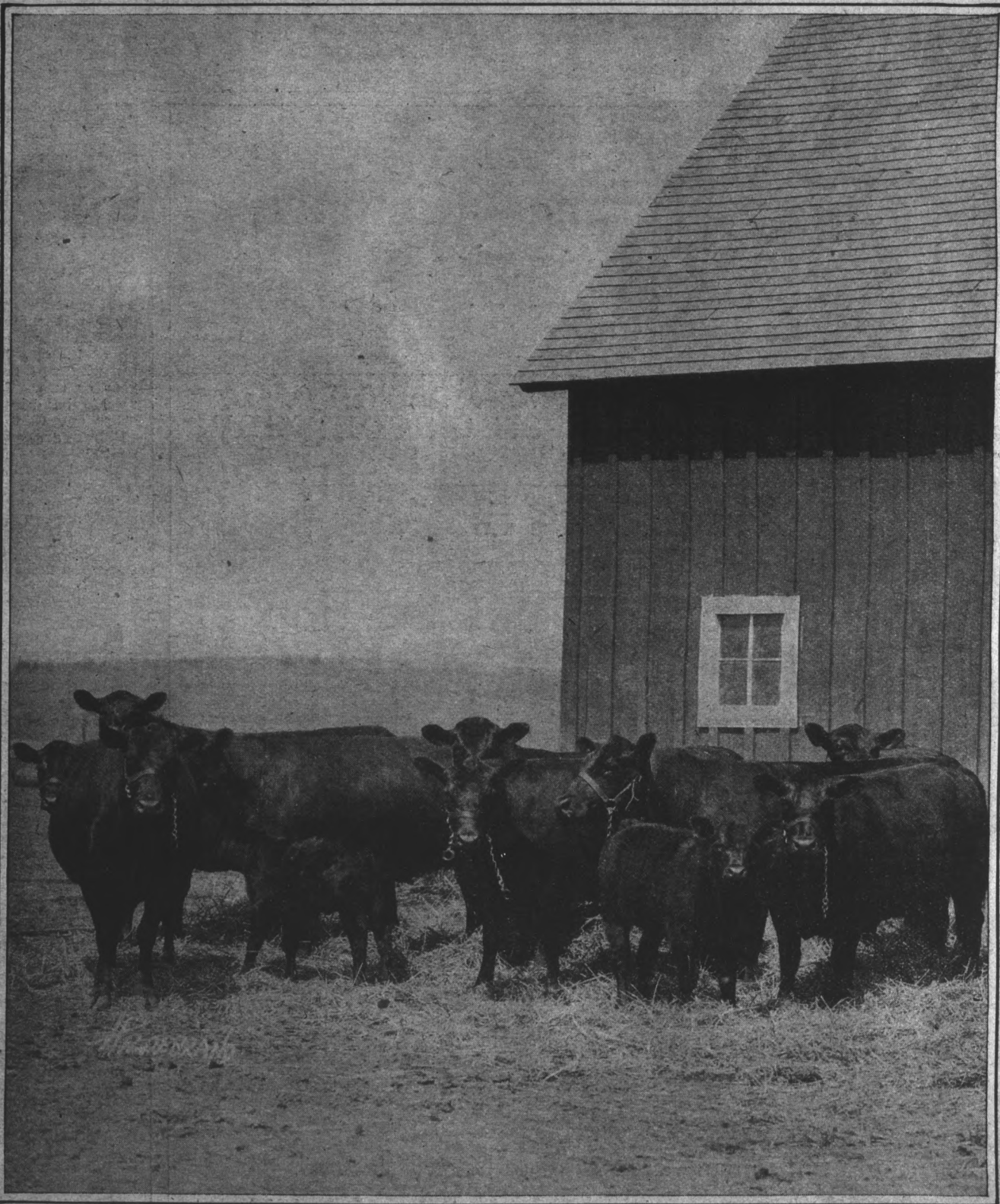
MICHIGAN BUSINESS FARMING

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"Doddies." Get your choice at the Aberdeen-Angus sale, Saginaw, March 26th.

In This Issue: Michigan Milk Prices Reported Below Average.—How Can We Keep the Boys and Girls on the Farm?—American Farm Bureau Federation Becomes Permanent Organization.—Soil Composition as Bearing on Productivity.

'How Can We Keep the Boys and Girls on the Farm?' Asks Fred Cressey

Mecosta County Farmer, After 27 Years Experience, Working for Himself and

the "other fellow" will Stick to the Farm.

AS I SETTLE myself back on the davenport this Sunday morning to read the M. B. F., I see the headlines in big letters, "The Farmer and His Hired Man." After reading this page and also the editor's earnest appeal for help to solve this problem I thought that perhaps after 27 years' experience working for myself and the other fellow, (the other fellow mostly) that perhaps my experiences might help a little.

In the first place I am going to tell you the answer to the problem as I see it, and then I am going to try to prove it. It isn't the hired man problem that is staring us farmers in the face any more than it is the question of keeping our boys and girls at home. I claim that it is practically all the same question. Mrs. Stockman has answered the question very good so far as this one man is concerned; her figures are all very true and should have a great bearing on a married man with four or six children, but how about the single man with no responsibility, no one to support but himself? How about your boy and my boy, your girl and my girl? That is the question that has gotten a lot of us up a tree.

The Farm or City?

FRED CRESSEY has had enough of the city's grind. He has been through the "mill" and was considerably worse off when he got through than when he started. He has found that the average city job does not pay, that high wages and easy hours are a snare and delusion. He writes his experiences here in response to the complaints of farmers and hired men who are tired of the hard work and small income on the farm and are planning to go to the city. Read his story. You'll agree that he ought to know what he is talking about, and perhaps it may change your viewpoint toward the city. Let us hear from others who have found from actual experience or that of a neighbor that "the old farm isn't such a bad place after all."—Editor.

Today, our boys and girls are leaving us and going to the city, with a few exceptions of course. The hired man is dissatisfied. Some have gone and others are thinking about going. Can we blame them? No! Why? Because we do not; we can not, offer the wages and the pleasures and the opportunities that they get in the cities. There you have the whole thing in a nut shell. Now in order to keep them on the farm, we have got to offer them something near what they get in the city. The city has the

street cars, the Y. M. C. A., the moving pictures, and among other attractions is the excitement of mingling with the crowd, the whirls of the street and the shop.

There is something about it that I am unable to explain but nevertheless it is a fact that when the boy or girl comes home for a vacation they are glad to see you and all that. You drive to town, meet them at the train, take them home, fill them up with fried chicken and the best of good things to eat, then you start talking

about the farm, things that are near as to your heart; they give you a blank stare. When you have run down and sit back to give them a chance to say something, they commence to talk shop, base ball, basket ball, what they have learned to do in the shop and the wages they are making. You wake up to the fact that they are not interested at home; things are altogether too slow and in a few days they are ready to go back. Someone is going to jump up and say "Keep them at home. Don't let them get a taste of that city life." I would like to see you do it.

I have a neighbor with five children. His oldest girl finished her 10th grade when she was 16 years old. She wanted to take up commercial book-keeping. The father was not able to send her to college but he made her this proposition. He gave her \$75 to take a six-weeks' course. In that time she would find out what it was going to cost; how long it would take; in short how much she would have to have to put her where she wanted to be. She took the six-weeks' course and came home all "lit up." Then she was going to work and earn the money with her father's help and she would go back to school. She started in picking beans in the elevator at home. When that shut down she got on the train and went to Flint to look for work. She got it and after six months came home to rest. Her father commenced to talk about how much money she had saved and when she was going back to school shook her head and with a shrug said, "There is nothing stirring. Why, father, I am making as much money now as I will after I have gone to school. I am making more than your local teachers are making," and no argument that that father could put up would change her mind. That isn't all of it. She has a brother and sister who will be through school in a year or two. The father has thrown up his hands. He told me just the other day that as soon as the other children are out of school they will go to town. She came home loaded with poison and they have swallowed it.

Now you can figure your head off but here is the situation. The automobile manufacturers want the help. They have got millions of dollars invested and they are making from 25 to 60 per cent on their investment. They know that all they have to do is to dangle good wages, good times, plenty of excitement before the eyes of the young people and they are going to get them. The managers and heads of the manufacturing companies are sitting in cool offices with their feet under a mahogany table smoking 25-cent cigars, figuring these things out, and what are you and I doing? We are plodding around the field, following a plough or drag under a hot sun, the perspiration streaming down our backs, figuring. Figuring what? Figuring how in the name of the good Lord we are going to pay our taxes and 7 per cent interest on the mortgage along with other expenses too numerous to mention.

Now about the farmer that pays his help \$500 bonus each year. How many men does this farmer keep and how much of a farm does he work? It is a pretty safe bet to say that he is a big farmer; that he has other interests outside of the farm, and that he does not depend on the farm for his bread and butter; also that he had his tools and machinery before these high prices came into effect. Another thing, he has the money to take advantage of every opportunity that comes his way. Now we may say, for example: I hire one man while the big farmer hires five or six men and possibly more. He makes a specialty of one or more articles. He can advertise or handle in large quantities thereby making a bigger profit on any one man than I can on my one man. Again, if he has an article to sell and the market does not suit him he can hold it until such times as he sees fit to sell it. Can we little fellows do that? No. When the interest on taxes come due we have got to sell.

Now I want to say this to my hired man friend, with a family of six on his hands, as I have already stated, I

(Continued on page 9)



Peninsular Fire Insurance Company of America

Grand Rapids, - - - Michigan
CAPITAL, \$1,000,000.00

A BIG, new, red-blooded stock company, with ample capital, that will insure farm property on the same basis that city property is insured--rated according to fire preventive construction and location of buildings.

It is the opinion of conservative business men that most farm property is not adequately protected against fire. Much farm property does not carry fifty per cent. of its present value.

If the farmer's buildings should be destroyed now, it would be a catastrophe for him---meaning years of saving and scrimping to replace them.

Very few farmers have increased their insurance since the World War, (city property owners have) yet it would cost one-half to two-thirds more now to replace their buildings.

No farmer--no business man--can afford to be underinsured.

Why not increase your present insurance by placing an additional policy with the Peninsular Fire Insurance Company of America?

Ask our agents or write us for our rate schedule on farm property. You will be surprised at our low rate for three and five year term policies.

J. FLOYD IRISH,
Sec'y and Managing Underwriter.

COLON C. LILLIE,
President.

Michigan Milk Prices Reported Below Average

On a Par With Eastern Prices, Less Than Southern, but Higher Than Western

FARMERS of Michigan who sell their milk to a distributing company are receiving less than many farmers in the eastern and southern states but slightly more than the farmers of the central and western states. These are facts gleaned from a recent report of the U. S. Bureau of Markets, covering nearly every state and important city in the United States.

It is generally supposed that the farmers in the Detroit area are receiving an exceptionally high price for their milk as compared with prices elsewhere. But this is not true. The Detroit price for February was \$4.05; the average of the principal markets for the entire country was \$4.36. This figure is a little misleading, however, as it covers the southern states where there is little dairying, and where, in some instances the price of milk at this time of the year goes as high as \$6 per cwt. But let's compare the Detroit price with that of other industrial cities located in or near dairying sections.

The following cities have a higher wholesale milk price than Detroit: Hartford, \$4.14; Sioux City, Iowa, \$4.10; Kansas City, \$4.03; Boston, \$4.05; Newark, N. J., \$4.12; New York, \$4.12 (8 per cent milk); Cincinnati, \$4.25; Columbus, \$4.20 (4 per cent milk); Pittsburgh, \$4.21; Providence, R. I., \$4.65.

Cities which have a lower wholesale price than Detroit: Milwaukee, \$3.85; Seattle, \$3.52; Grand Rapids, \$3.48; Cleveland, \$3.95; Toledo, \$3.85; Philadelphia, \$3.94; Buffalo, \$3.78; Los Angeles, \$3.76; Chicago, \$3.78.

February Cost and Selling Prices of "Standard Grade Milk"

The following table presents the prevailing prices of "standard grade milk" in various markets of the United States. The term "standard grade milk" is used to refer to that grade of milk which is most generally sold within the particular city for which prices are quoted. This grade of milk may be either raw or pasteurized but in case of most of the larger cities it is pasteurized. The "dealer's spread" or the difference between cost and selling prices for both wholesale and retail transactions, can be ascertained if the butter fat test of milk as delivered to different classes of trade is known. To reduce prices per hundred weight to either a gallon or a quart basis divide by 11.68 or 46.53 respectively.

Markets	Price to Farmer	Price to Consumer
San Francisco, Cal.	\$4.04	\$6.16
Denver, Col.	3.15	13
Hartford, Conn.	4.14	17
Washington, D. C.	4.15	17
Atlanta, Ga.	3.91	22
Fort Wayne, Ind.	3.90	15
Des Moines, Ia.	3.75	15
Topeka, Kans.	3.75	15
Portland, Me.	3.72	15
Baltimore, Md.	3.80	16
Boston, Mass.	4.05	17
Springfield, Mass.	4.05	17
Kalamazoo, Mich.	4.00	16
St. Louis, Mo.	4.07	16
Lincoln, Neb.	3.76	15
New York, N. Y.	4.12	16-17
Albany, N. Y.	4.04	16
Cleveland, O.	3.94	16
Columbus, O.	4.20	16
Harrisburg, Pa.	4.45	18

Milk Prices for February

Table A presents a comparison of the prices offered to producers by milk dealers, or concerns whose chief

Has Co-Operative Milk Distributing Arrived?

THERE ARE a score or more Producers' Co-operative Milk distributing companies in the United States. Some of them are very successful. Others are yet in the experimental stage, and one or two have decided that they can more cheaply market their product through independent concerns. Grand Rapids has tried the co-operative plan, and the farmers are now ready to sell out. Berrien county farmers have tried it and are satisfied. In succeeding issues we will tell the experiences of farmers who have tried the co-operative plan.—Editor.

business is the market distribution of fluid milk. These prices are to be paid producers who make deliveries in their own cans either at local plants or at country shipping stations.

The states making up the several geographic divisions are as follows: New England: Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut; Middle Atlantic: New York, New Jersey and Pennsylvania; East North Central: Ohio, Indiana, Illinois, Michigan and Wisconsin; West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas; South Atlantic: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia and Florida; East South Central: Kentucky, Tennessee, Alabama and Mississippi; West South Central: Arkansas, Louisiana, Oklahoma and Texas; Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah and Nevada and Pacific: Washington, Oregon and California.

In most of the important milk consuming centers of the United States the prices of natural milk, bought and sold for direct consumption, are determined in advance of delivery. Price changes do not generally occur oftener than once a month. Usually the leading city milk dealers send notices to their patrons several days in advance of a change from the schedule of prices then in effect. The particular schedule of prices in effect during any month of the year is usually the result of an agreement reached between representatives of producers and the leading city distribution concerns. In some of the larger markets, dealers negotiate with representatives of producers' marketing companies which have the exclusive agency for the sale of a large percentage of the producers supplying those markets.

The prices agreed upon are usually based upon estimates of producers' production costs, modified by the dealers' contentions with regard to the operating costs and the probable demands for fluid milk estimated on the basis of the proposed schedule of prices. If dealers agree to handle the entire production of all of their regular patrons, and if a surplus production seems probable, then the basis of the dealers' buying prices is complicated by considerations regarding the probable value of the surplus.

Unless otherwise qualified the prices given in the first column in the above table show the cost of milk delivered to dealers at either city railroad terminals or at the dealers' distributing plant where deliveries are made direct by producers. When the price paid by dealers to producers applies to deliveries at country receiving stations and does not include payment for transportation to the city, the average transportation cost of some dealers has been added to the country station price in order that the cost to the dealer (not including country station expenses) may be shown.

Evansville Indiana System of Determining Milk Prices

TABLE "A"						
Sections	Standard or Grade "B" Milk (8.5 per cent butterfat)	Comparing January and February Prices for the same Markets				
	Range of Prices per cwt.	Average price	Number of Markets	Average Jan. price	Average Feb. Price	Increase or Decrease
United States ...	\$2.55-6.16	\$3.76	551	\$3.83	\$3.74	-7c
New England ...	3.50-4.65	4.15	95	4.23	4.15	-8c
Middle Atlantic ...	3.19-4.18	3.63	109	3.78	3.63	-15c
E. North Central ...	2.90-4.31	3.67	189	3.71	3.67	-4c
W. North Central ...	2.55-4.08	3.41	81	3.60	3.42	-18c
South Atlantic ...	3.30-6.16	4.38	55	4.22	4.38	16c
E. South Central ...	2.80-4.35	3.59	9	3.89	3.59	-30c
W. South Central ...	3.34-5.99	4.62	26	4.45	4.65	20c
Mountain ...	2.78-3.58	2.94	19	3.11	2.94	-17c
Pacific ...	2.67-4.20	3.62	29	3.63	3.65	2c

Evansville Indiana System of Determining Milk Prices

In this market dealers pay producers twice monthly. The semi-monthly changes in prices are dependent upon the prevailing prices paid for butterfat in that territory during the current month, the changing market prices of shorts, and an agreed upon schedule of allowances for seasonal changes in market supply and costs of production. The following formula is used for determining the prices to apply to milk delivered in any half monthly period.

The average of butterfat prices paid by creameries for the preceding 15 days multiplied by the average butterfat test of milk, plus the price of 30 pounds short (on a ten basis) to cover value of skim milk for feeding purposes, plus premium of 40 cents per cwt. of whole milk for extra costs of producing good quality of

market milk, plus or minus the seasonal allowances to encourage more uniform production. The seasonal additions or subtractions are as follows:

January, add 15 cts. per cwt.; February, add 15 cts. per cwt.; March, add 15 cts. per cwt.; April, subtract 20 cts. per cwt.; May, subtract 20 cts. per cwt.; June, subtract 30 cts. per cwt.; July, subtract 20 cts. per cwt.; August, add 10 cts. per cwt.; September, subtract 10 cts. per cwt.; October, subtract 15 cts. per cwt.; November, subtract 15 cts. per cwt.; December, subtract 15 cts. per cwt.

Applying the figures as they were for the first fifteen days in December, we have: 4 lbs. butterfat at \$.745 is \$2.986; (For the first 10 days the price paid for fat in cream was 76 cents a pound. For the next five days the price was 72 cents per pound, making an average price of \$.745 per pound). Skim milk in 100 lbs. milk (30 pounds shorts at \$.265 per cwt.), \$.795; premium for production of clean market milk, \$.400; addition for December, \$.150. Total, \$4.330.

If any producer delivers milk in quantities 20 per cent in excess of the amount called for by his contract, no allowances are made for the value of skim milk or for extra production costs but such surplus is paid for by the dealer on a straight butterfat basis. If a producer falls more than 20 per cent short of the amount called for by his contract with dealer, he is paid on the same basis that applies to the normal supply but a reduction of 5 cents per lb. of butterfat is made in such a case.

Boston Price Agreement

Dealers in the Boston market agree to pay the price given in the first column of Table III for 3.5 per cent milk delivered in Boston with a flat deduction of 3.72 cents per cwt., for can service and graduated deduction for dealers' station expenses, freight and war tax on freight ranging from 22.9 cents to 64.6 cents per cwt. for the nearest and farthest zones respectively.

For January the dealers agreed to pay the above price for 18 per cent of their sales of whole milk. Where milk is bought by weight and test the dealer will pay 4c for each \$1 of 1 per cent above 3.5 per cent and deduct 4c per cwt. for each \$1 of 1 per cent below 3.5 per cent butterfat contents. Where farmers furnish cans between the farms and R. R. or milk station a premium of 2.3c per cwt. shall be paid.

For balance of milk purchased, the dealers will pay the average Chamber of Commerce price for creamery extra butter for the month of February 1920 for the butterfat in each cwt. of such milk plus 32.1-2c for each cwt. of such milk. This price applies to such milk delivered at the railroad station, milk station or usual point of delivery in the country.

The dealers shall report to the New England Milk Producers' Association or to some person acceptable to it, under oath, the amount of milk purchased and the test thereof and the amount of milk sold as fluid milk. Such report to be subject to verification by the association.

The March 20th Issue of Michigan Business Farming Will Contain—

1. Learning how to Boss the Farmer's New Hired Man,—the Tractor,—at the M. A. C.
2. Uncle Jasper's Pump—A Case of Mistaken Economy.
3. Is there Need for the Michigan Potato Growers' Association?
4. Construction of a Practical Sheep Barn for Central Michigan.
5. How Gov. Lowden reduced the Illinois Tax rate. This is the plan which Milo Campbell will carry out in Michigan if elected.
6. Corn Production in Michigan.
7. The Problem of the Country Church—by Mrs. George E. Innis, a farmer's wife.
8. The Milk Surplus Problem.

Soil Composition as Bearing on Productivity

What Science Has Done to Determine Causes of Soil Depletion and Restore Essential Plant-Food

By M. M. McCool

Professor of Soils, Michigan Agricultural College

IT IS AGREED that the composition of soil and its bearing on soil productivity and its exhaustion is of vital importance to this and other nations, whose welfare depends largely upon agriculture. Soil depletion is a subject that has been much discussed and studied, and although opinions may differ, an abundance of experimental evidence tends to show that the maintenance of soil fertility is in the main based upon mathematical principles; that is to say, if the composition of a soil is known, and also the rate at which the essential elements are added to and removed, the length of time required to deplete the soil of its fertility, can be approximated. It is impossible to do more inasmuch as it is not known just what constitutes the lower limits to which plants may remove the mineral plant food constituents from soils.

The composition of soils is determined by means of chemical analyses. The methods in use are very refined and only an expert analyst can obtain reliable results and to make a complete analysis of a sample of soil requires many hours of rather exacting work. This means, of course, that this is a matter that must be considered more from the point of view of kinds of soil on large areas than from that of the individual field or farm. The results of chemical analyses are criticized by some on the ground that they have certain shortcomings and are, therefore, of little value. I am led to conclude, as a result of discussions by others and from an abundance of experimental data and correlations, that I have been able to make between the results of laboratory and field investigations, that the chemical studies of soils are of great value and have thrown much light upon the problems pertaining to soil productivity. Unquestionably, our present knowledge of soils and soil fertility would be much less comprehensive if chemical studies had never been resorted to.

The question at once arises wherein lies the value of soil analyses. In order to answer this question we must first see what an analysis shows. The reaction of the soil is determined, that is, whether or not it requires lime; the humus or vegetable matter content, as well as the total nitrogen, and amounts of the essential mineral elements as well as others are determined. A knowledge of these amounts, to be sure, is important information which aids greatly in planning permanent systems of soil management. We are safe in saying that at present we have no laboratory method by means of which the immediate fertilizer needs of the soil can be determined, but that the chief value of the analyses, lies in the fact that they afford a foundation upon which to base rational system of soil management. It is true that a knowledge of the amounts of the readily soluble matter in a soil may, and has, thrown some light upon the soil problems, but inasmuch as there are a number of factors that influence the available plant food in soils, this method is somewhat limited in its usefulness.

The chemical composition of soils varies markedly. Such factors as the method of formation, the nature of the material from which derived, and also its age or stage of decomposition, or disintegration, as well as the climatic condition, profoundly influence the composition of soils. The results of studies of various investigators show in an uncontrovertible manner that residuary soils formed in humid regions, as a general rule, contain less soluble plant food than those formed in arid regions. A summary table of the average results of analyses of over 500 samples of soil from arid regions and about 700 from humid regions throws much light upon this subject.

Oxides of	Arid Soils	Humid Soils
Silicon	75.87	88.21
Aluminum	7.21	3.66
Iron	5.48	3.88
Phosphorus	.16	.12
Calcium	1.43	.13

Magnesium	1.27	.29
Sodium	.35	.14
Potassium	.67	.21

The seven essential elements of crops removed from the soil are widely but not uniformly distributed. Indeed, if they were, the much discussed and studied soil fertility problems would be of less importance.

The separates, that is, sand, silt, and clay, vary in composition. These were isolated from several soils and analyzed. The results show that the

000 lbs. to about 1,200 lbs. An examination of census reports and interviews with numerous farmers reveal that this can be attributed to a comparatively low acreage of clover especially during the last quarter of a century, as well as to losses by leaching from manure before it is applied to the soil. One tenth of one per cent or 2,000 lbs. of this element is considered to be a fair supply for light soils and for the heavier ones about fifteen hundredths of one per cent or 3,000 lbs. Michigan's



Industry, commerce and education rely upon agriculture for their support. Improvement of agriculture is the basis of all general prosperity. The fertility of the soil is the greatest of the natural resources and is the supporter of all agriculture. Better seed, disease control and tillage, although essential cannot materially increase the productivity of depleted soils. Fertility may increase it several hundred per cent.

coarser particles contain more silica and less of the important minerals, and also less of the essential elements, especially is this true of residuary soils in humid regions. There are, however, less differences in this respect between the separates of soils formed in arid regions and those deposited by glaciers, inasmuch as less leaching has taken place because of less rainfall under the former and the younger deposits of the latter.

I shall now discuss the amounts of certain of the elements of plant-food that soils carry. The composition of soils may be expressed on the percentage basis and as the number of pounds per acre. In making the latter calculation the percentage is multiplied by 2,000,000 or the weight of the surface layer of soil over one acre to a depth of seven inches. Nitrogen is derived from organic matter that has accumulated in the soil since its formation. Moreover, when the organic matter goes out of a soil so does the nitrogen. Since this is true this important element varies tremendously with soil texture or kind of soil drainage conditions and the management of the land. It may be increased somewhat by certain methods which are to be discussed in more detail subsequently, but since the vegetable matter decays constantly during the warmer portions of the year provision must be made to constantly renew it in the soil. Chemical analyses of a large number of samples of soils taken from the older farms in Cass county show that in many instances the amount in the surface seven inches of soil has decreased from about 4,-

soils vary tremendously in their nitrogen content. We have found many light soils that contain less than 1,000 lbs. per acre, other sands much more while the fine textured soils range from about 1,200 lbs. to more than 4,000 lbs. per acre.

There is a shortage of phosphorus in the soils of the world and many soils in the humid areas respond to its application. With the exception of sulphur, soils in general are more deficient in this element of plant food than all others. One tenth of one per cent or 2,000 lbs. per acre is considered to be a desirable amount.

The phosphorus content of representative soils from several counties is given in special bulletin No. 284. This may be obtained by writing to Dean, R. S. Shaw at East Lansing. In general we have found that our prairie soils are highest in this element, some carrying more than 1,800 lbs. per acre, the pine and scrub oak lands lowest or about 750 lbs. while other timbered lands usually lie between.

Soils must release large amounts of potassium to crops. It is usually present in soils in rather large amounts and is needed in smaller amounts than phosphorus, yet there is a wide range in the quantities that they carry. Some peat and muck soils contain less than five thousand pounds per acre and it is generally understood that sandy lands contain much less than do the fine textured ones. A soil that has about 3,000 lbs. or more is well supplied with it, however, some heavy soils possess more than 100,000 lbs. per acre.

We have made fewer potassium

determinations than nitrogen or phosphorus on Michigan soils yet the indications are that the sandy loams, loams and clay loams contains as much or more than the above standard. In addition we have not found that Michigan sandy soils are not strikingly low in this substance, in fact very few samples have shown less than 20,000 lbs. per acre and many of them carry almost as much as the heavy soils. This work is being pursued in our laboratories and at a later date the results of our investigations will be ready for distribution.

The sulphur content of soils in general does not run as high as phosphorus. It is carried in both the vegetable matter and mineral portion of the soil mass. Recent investigations in some regions show that the application of materials that contain this element results in greatly increased yields of several crops. However, I shall discuss this matter in detail in another article.

Lime or calcium may exist in the soil in several forms but as a rule the most of it is united with the silicates as calcium silicate. About seven hundred samples of soils taken in the humid region averaged 13 per cent. It is desirable to have sufficient lime in the soil as the carbonate to give a clear cut test for it. Our studies of the southern half of Michigan reveal that aside from the old Maumee lake bed the areas that contain sufficient lime are small indeed. We are provided with less definite information of the soils of the northern counties, especially with the light phases of hardwood lands. The pine lands that we have been able to test are deficient in it.

In the next article I shall discuss available plant food in soils.

PREPARING FOR ALFALFA

I would like some information about alfalfa and how to start it. I have some high sand ground, not the poorest in Michigan, but I have tried clover of every kind except sweet clover. It will do well until the hot dry mid-summer, then kill out. Now I hope to place alfalfa on this ground and wish to know if it is necessary to inoculate with clover first, if so, will sweet clover act the same as another?—F. N. Coleman.

Alfalfa is a very exacting crop. It requires an abundance of lime in the soil and all the available mineral elements, especially phosphorus and potash. In addition it makes its best growth where the soil contains and appreciable quantity of active vegetative matter. Unless one has a soil that is in a pretty good state of fertility or is able to purchase lime and apply an abundance of plant-food it certainly is not advisable for him to attempt to grow this crop.

If you will send us a sample of soil we shall examine it for lime content and advise you relative to its use. As a general rule, however, it is essential that not less than two tons of pulverized limestone or about four or six cubic yards of marl should be applied to soils that are to be seeded to alfalfa. In addition not less than six loads of stable manure which will furnish some nitrogen to the start of the crop and especially some potash, and also at least 300 pounds of 16 per cent acid phosphate per acre.

Sweet clover and alfalfa may be inoculated with the same organisms. If one is to prepare the land for alfalfa by growing the sweet clover previous to this it is essential that the sweet clover be inoculated before it is planted. If the owner of the land does not wish to precede the alfalfa by the sweet clover it is advisable that a few pounds of this clover be sown with it inasmuch as its presence will increase the yields of the first appreciably.

It should be borne in mind that sweet clover is about as exacting with respect to lime as the alfalfa. We have found that phosphates pay when used on soils that are to grow this clover. Last year the only seeding that remained on our experimental plots was the sweet clover where lime was used; where lime was absent it failed and June clover perished on both limed and unlimed sandy land.—M. M. McCool.

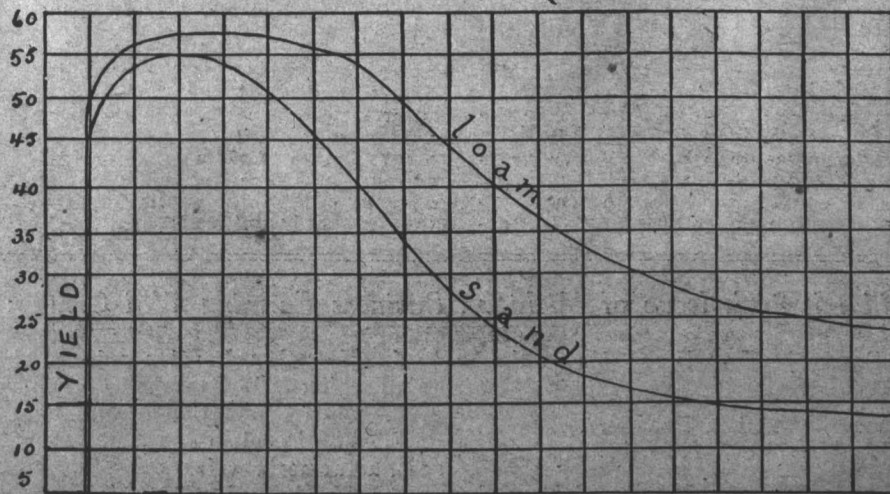


Chart showing the decline in yield of crops on fine and coarse textured soils when improperly handled.

Speculators Are Blamed for High Land Values

U. S. Dep't of Agriculture Defends Farmers Against Charge of Profiteering From High Land Values

A METROPOLITAN newspaper recently printed on its front page an article by one of its staff correspondents, devoted to what purports to be an exposure of profiteering by farmers in Iowa. The article is full of inaccurate statements and misinterpretations of facts say farm management specialists of the United States Department of Agriculture. These inaccurate statements and misinterpretations are not peculiar to the particular newspaper in question. They have been made or insinuated by a considerable number of newspapers and other publications. But the staff of this particular newspaper very accommodatingly chose, as the scene of his story, the one place in the United States where his statements could be most definitely disproved by the Department of Agriculture. The division of Land Economics, Office of Farm Management, has just completed a study of the recent increase in land values in Iowa and is in position to indicate the conditions that actually exist in that state.

Here is a typical paragraph from the newspaper article:

"Land values all over this agricultural region have been inflated to a preposterous extent. The big boom started in Iowa last summer and has been booming ever since. Last year there was an unprecedented turn over in Iowa farm lands and values were artificially increased by speculators to such an extent that land formerly selling at \$30 an acre found willing purchasers at \$400, \$500, up to \$800 an acre."

"Formerly" was 30 Years Ago

The most interesting and apparently the most agile word in that paragraph is "formerly." Land was "formerly" selling at \$30 an acre in Iowa. But "formerly" was 30 years ago. Not since about 1890 have farm land values in the state ranged anywhere around that figure. And these lands are not now selling "at \$400, \$500 and up to \$800 an acre," as the correspondent says. The average selling price of Iowa farm land is not higher than \$250 to \$275 an acre. Out of 1,500 instances of actual sales on which the Department of Agriculture gathered information, less than a dozen represent prices of \$500 and less than 5

THOSE WHO profess to believe that all the farmers are getting rich at the expense of their fellow men, point to increasing land values as an evidence that farming pays big dividends. Now what is the truth about the present values of farm lands? Have they advanced in proportion to the value of other commodities. Do the present productive capacity and rent value of Michigan farm lands warrant the assertion that these lands are worth twice as much as they were ten years ago. Is it not a fact that the land speculator, playing upon the credulity of the city folk, have placed a value on farm lands which is all out of proportion to their productive worth? And isn't it a fact that assessing officials use this speculative value as a real basis upon which to figure their assessment? It would be fine if every farmer could sell his farm at this speculative value. But we know what would happen after a few thousand of them had passed into the hands of the city gullibles. They would be thrown back onto the market and the bottom would go out with a thud. Tell us, Mr. Farmer, what you think of the matter.—Editor.

per cent represent as much as \$400 an acre.

The impression is created all the way through the article that the high prices of food are caused by the high price of land. The fact is, however, that the prices of foods rose and the rise in land values followed. The further fact is that if the government were to take from the Iowa farmers by taxation nearly all of the net earnings of farm lands, as single taxers advocate, prices of farm products would still be as high as they are now, unless lowered by some other cause. Prices of food products have moved up in approximately the same proportion as general prices in response to the same world-wide causes—war scarcities and currency inflation. If prices of farm products were to any degree lower than they are, they would be entirely out of line with the prices of other products.

How Land Values are Based

Every economist knows that farm land values are based on the earning power of land as manifested, largely by its rent and that the earning power and rent are the result of prices of products in relation to the expense of production. During the war prices of food products rose rapidly, and expenses of production, for a time, did not rise with the same rapidity. The result was that farmers made somewhat larger net earnings than formerly and, consequently, found it possible to pay more for land than before.

Here are other statements from the article:

"The farmers in this region are richer today than they have ever been in their lives, and this means that nowhere on earth before has the man who tills the soil profited as these folk are profiting.

"Today it is the east which is paying tribute to the money barons of the western farms.

"Moreover, unless the east keeps on being held up by the prairie speculators who have driven the cost of farm lands up to these absurd figures, and continues to pay interest on the watered stock or fictitious values now represented in these farms, in the form of abnormal and outrageous prices for wheat and corn and meat, the western bubble will break.

"So long as the consumers stand for being robbed, existing values can be maintained. When the consumers revolt and refuse to pay, the bubble will be pricked, and when the explosion comes, great will be the casualty list among those arrogant agricultural gentlemen who now levy tribute upon the whole world. High prices of land must be maintained or else the bubble of fictitious values will burst."

"Riches," "tribute," "robbery," and like words are short enough to serve and ugly enough for anything, but they have the disadvantage of being rather too indefinite. Fortunately the facts are available. One of the studies made by the Department of Agriculture included a group of 324 farms in the richest portions of Iowa. The average net income of these farms in 1918, with no allowance whatever for interest on the investment in land and equipment, was \$3,480. If 5 per cent be allowed for interest on the investment at the value of the land before the recent "boom," there is left on the average, only \$1,124 to pay for the labor of the farmer and for the risk to the business. On the basis of average values of land in August, 1919, there would be left an average of only \$151 to pay the interest on the value of the land and equipment—the interest, as the correspondent says, "on the watered stock or fictitious values now represented in these farms in the form of abnormal and outrageous prices for wheat and corn and meat." After all, \$151 does not seem rather "abnormal and outrageous."

City People Get 2-3 of Increase

"Wildcat speculators," these Iowa farmers are called. But the facts show that nearly one-half of the people engaged in buying and selling farm lands in Iowa during the recent "boom" were city people, and this one-half who lived in the cities got about two-thirds of the money represented by the increase of sale value in farm lands during 1919.

In the light of these facts and of the almost universal prevalence of what might be called profiteering, the Department of Agriculture thinks it is unfortunate to single out as a profiteer the farmer—the man who sells his goods in an open market characterized by intense competition and free, so far as the farmer himself is concerned, from any element of monopoly or price control.

There can be no question, the department believes that the recent increase in the price of Iowa farm lands is unfortunate, even in relation to farm earnings, under the favorable conditions of production and prices in 1918, and that it is doubly unfortunate if the world faces the period predicted by many economics prophets. The land economics specialists of the department say, however, that the increase was an inevitable result of the present industrial system and that the farmers were no more to blame for it than any other class of people.

What Organization Has Accomplished for the Beet Farmers of the West

THE CORRESPONDENCE printed below shows how the sugar trust sought to cover up its actual profits, and what methods it followed to spread propaganda in its interest. Nor have these tactics been entirely abandoned by the sugar men. Numerous articles have recently appeared in Michigan papers giving the difference that the beet growers are getting exceptionally good returns, and these articles all bear the earmark of having been written or inspired by the manufacturers. The letters and the concluding information showing what organization has accomplished for the western beet growers are submitted and vouched for by Mr. Albert Dakan, of Longmont, Colo.

"W. B. Thomas, President American Sugar Refining Company, 117 Wall St., New York.

"My Dear Mr. Thomas: Enclosed herewith I hand you a copy of our financial Exhibit and Income Statement. This is the form in which we expect to publish these statements.

"You will notice that this year, in addition to the regular 2 1/2% depreciation which we have been deducting for the past three years, we have set up \$1,000,000 in Depreciation Reserve. I did not want this year's earnings to appear as large as they would if we had not made this entry.

"You will note that our total surplus is shown by these statements as a little over \$5,000,000. This does not include any surplus from the Billings company; The Great Western Ry. Co. and other corporations which really add nearly \$2,000,000. Our sugar is invoiced at 4c and judging from the present market indications, there is at least \$1,000,000 profit that will show up next year's business. The value of our real estate and railroad over and above the amount at which they are carried is at least \$500,000, so that our actual surplus is nearer \$9,000,000 than \$5,000,000.—C. S. MOREY, Gen. Manager.

"The above letter was written, it should be noticed, at the end of the 1909-10 campaign. So the Great Western had been organized five years and in those five years had piled up a surplus of \$9,000,000, besides besides paying regular dividends and high salaries; had done that with sugar selling at an average of \$4.57 per 100, over that period and beets at \$5.00 per ton.

"At the end of the 1918-19 campaign the company's surplus is estimated at approximately \$50,000,000.

"That the farmers have the true basic facts on the cost of producing beet sugar will be admitted by any interested party upon reading the following:

(New York, June 6, 1909.

"Mr. Robert Oxnard, 32 Nassau Street, N. Y.

"Dear Sir: Agreeable to your request I herewith tabulate the cost of produc-

ing 100 lbs. of granulated sugar by the American Beet Sugar Company and that of a typical plant.

	Am. Typical	Plant
Cost of Beets.....	\$2.170	\$2.045
Operating Expenses.....	.952	.810
Maintenance.....	.603	.810
Interest.....	.072	.038
Sugar in Process.....	.097	.000
General Expenses.....	.091	.043

Total.....\$3.985 \$3.211

Invite your attention to the difference and hope that during your administration the cost of producing 100 lbs. granulated will not exceed 3 1/4 cents a pound.—H. O. HAVEMEYER.

"New York, Sept. 20, 1909.

"Mr. C. S. Morey, Denver, Colo.
"My Dear Mr. Morey: I enclose a clipping from a Boston paper in reference to the report made by the stockholders' committee of the American Sugar Refining Company, which may be of interest to you.

"Without having it appear that its publication is inspired by us or our friends, if it could be published in some of your Denver papers I think it might be advisable.



Delegates to the National Board of Farm Organizations, a convention of which were in session in Washington last week. Lower row, L. to R.: Clifford Pinchot, Director N. B. F. O., C. S. Barrett, President National Farmers Union, J. H. Kimble, Sec'y Farmers National Congress, E. P. Cahill, Md. Agri. Ass'n, C. O. Drayton, Pres. Farmers Equity Union. Back Row: L. to R.: J. W. Batcheller, Pres. So. Dakota Farmers Union, Leroy Melton, Sec'y Farmers Equity Union, Dr. T. B. Symons, Md. State Agri. College, Chas. A. Lyman, Sec'y, N. B. F. O.—Copyright Keystone View Company.

The interesting features are—that the investments are considered conservatively valued; that the plants are placed at a conservative figure; that there is keen competition in the sugar business; that the Affairs of the company are more open, and that the company is not owned by a few rich people.—W. B. THOMAS, (p. 1982, Vol. 4.)

Enormous Benefits Result From Beet Growers Organization

"Slowly, slowly, the beet growers of Northern Colorado, Nebraska, Wyoming and Montana have builded their organization. In 1909 beets were \$5 per ton. Now, for the crop of 1918, the farmers have through their organization secured \$10 per ton. Many of the factory towns of Northern Colorado have experienced a change of heart and have appointed a business man to go with the farmers' committee before the sugar officials and fight for a fair price. The farmers appreciate this and advise efforts to secure the moral support of all the towns for what is fair to the growers.

"Counted in dollars the gain to the growers through organization is very much beyond what any one on the outside realizes. For several years past the Great Western Sugar Co. has been securing annually two million tons of beets. In February, 1917, the company had put out its contracts for that year. The growers were not satisfied, held mass meetings, sent a big committee to Denver and secured not only a flat raise of 50 cents per ton but a written agreement from Mr. Morey to that effect and also an agreement for a conference before the 1918 contract was put out. That 50 cent

(Continued on page 17)

American Farm Bureau Federation Becomes Permanent Organization

Tariff, Strikes, Reciprocity, Freight Rates, Credits and Foreign Exchange Receive Scrutiny of Farmer Delegates

BEFORE an enthusiastic assemblage of 300 representative farmers of 28 leading states at the La Salle hotel March 3rd, the American Farm Bureau Federation was swept into a permanent organization.

In the election which followed, J. R. Howard, of Clemons, Iowa, who has served as temporary president since the last November convention, was elected president for the coming year by an unanimous vote. No other nomination was made. S. L. Strivings of Castle, N. Y., who has served as vice president, was continued by a full vote of the delegates. Each responded amid wild applause with a brief talk acknowledging their appreciation of the honor and responsibilities of their positions.

Howard Promises All Sections Cooperation

In a brief speech accepting his office, Howard said he wouldn't promise not to make mistakes, but he would try not to make the same one twice. He promised full cooperation to all sections and in all problems. Calling attention to the fact that there was no more rich farm regions to develop he declared that agriculture was entering a new period where greater stability of farming as a business was demanded and must be fostered.

When Strivings was nominated vice president, a dozen states seconded it. Mr. Strivings said the problems of farmers demanded the best thought of every one. He admonished patience among the states and said there must be built out of the federation a fabric as solid as oak.

He declared the big task ahead is to make the country see that farming is made reasonably prosperous without selfish purposes. Bartering away the farm products to the rest of the world to give a market for our manufactured products must not be allowed to be carried on as in the past.

Touches on Tariff

Indirectly the speaker touched on tariff problems by saying that we must be very careful in opening wide the portals of this country to foreign grown foods. The federation, he declared, must stand for a square deal to all citizens of the nation, however, as well as to farming.

With typical farm enterprise the assembly plunged into the business at hand and reconvened after supper worked late into the night. It is the talk among all that the federation is to be a business organization and not educational in its activities. It shall devote itself to develop the business and economic side of farming. It will not dabble in politics.

Six women delegates were present, Mrs. M. E. Judd, of Dalton, Ga., president of the Whitefield county fair of her state, is one. The other five were Mrs. L. E. McClung, Rupert, W. Va.; Mrs. C. H. Savage, Storrs, Conn.; Miss Gertrude M. White, Andover, Conn.; Mrs. John C. Ketcham, Hastings, Mich., and Mrs. Charles Chutler, Farmington, Mo.

Following the naming of a resolution committee resolutions were recommended for the protection of farm products from foreign competition, milk and potatoes being cited, also on the farm income tax, wood pooling, collective bargaining and an international conference on production.

Dept. of Agriculture Official Speaks

Dr. A. C. True, director of the states relations service of the United States department of agriculture, was called on for a talk, in which he said that it was vital not only to agriculture that it be prosperous, but to the entire nation. A new condition which farmers must consider and profit by was the grouping of workers and industries for efficiency.

He traced the growth of agricultural education the latest development being the extension service provided for under the Smith-Lever act. Education must be thought of hence-

forth as relating to all features of farm life, with especial emphasis on the economic aspects.

The American Farm Bureau Federation had the promise of a wonderful and useful career, he declared. Under wise and intelligent leadership and the backing of American farmers there was every reason to believe the organization would flourish and do a great constructive work.

Budget of \$200,000 for Year

An extended discussion in the afternoon of the lines along which the federation should carry out its work brought up the resources available.

Acting Secretary, John W. Coverdale, of Ames, Iowa, stated that \$200,000 was in sight for 1920.

The president's salary came up for discussion first and vice president Strivings stated the executive committee after considering the loss which any man qualified for the job would have to suffer in leaving his farm decided on \$15,000 a year. The president is elected annually. Traveling expenses were estimated at \$3,000. It was the general opinion that the president should be "the man" in the federation and the management of the general office placed in the hands of a competent executive. The expenses of the office, salary of secretary and clerks was estimated at \$10,000 to \$14,000 depending on where the office was located.

Members of Executive Body

The temporary executive committee was elected, viz:

Northeastern region—B. B. Cornwall, Middlebury, Vt.; E. F. Richardson, Mills, Mass.; H. E. Taylor, Freehold, N. J.

Middle states—O. E. Bradfute, Xenia, Ohio; Howard Leonard, Eureka, Ill.; C. H. Gray, Nevada, Mo.

Southern region—Gray Silver, Martinsburg, W. Va.; J. W. Morton, Athens, Ga.; George Bishop, Cordell, Okla.

Far west region—W. H. Walker, Willows, Cal.; W. J. Jamieson, La

Veta, Colo.; J. F. Burton, Garland, Utah.

An amendment to the constitution offered by Prof. Crenshaw of Kentucky and supported by O. E. Bradfute of Ohio, E. H. Cunningham, of Iowa and others was passed after much discussion pro and con. The amendment reads, viz:

"Effective Jan. 1, 1921, the annual dues of each member state in the American Farm Bureau Federation shall be 50 cents per capita of the individual county farm bureau memberships affiliating with the state organization, providing that in states not having a membership the executive committee of the American Farm Bureau Federation fix a reasonable sum for same.

The present membership of the federation is 485,000 farmers and the per capita fee averages 40 cents.

Some of the features of the program which is now under consideration for the coming year are:

National legislation that will prevent strikes and unnecessary suffering.

Investigation of the tariff in relation to farm products.

Kill the clause offering reciprocity with Canada.

Investigation of marketing, live stock prices and foreign competition. Lower freight rates.

Investigation of foreign trade relations.

Investigation of credits and foreign exchange.

Establishment of a Washington office, with experts to watch and report on legislation.

Those who attended from Michigan were: C. A. Bingham, A. J. Rogers, A. E. Illenden, Mrs. J. O. Ketcham, R. Blemhuber, R. Montleth, M. M. Holbrook, O. D. Hagerman, Dr. Eben Mumford, A. M. Berridge, Roland Morrill, R. G. Potts, James Nicol, the last named being voting delegates.

—By L. E. Troeger, in *Chicago Live Stock Drivers' Journal*.

Upper Peninsula Farmers Protest Against Attacks on Farm Loan System

EDITOR MICHIGAN BUSINESS FARMING: An article in the Feb. 26th issue of your magazine has aroused considerable concern not only to myself but to a number of farmers in this locality, and it is gratifying to feel at liberty to advise you regarding the same, and to ask a favor of you in the way of granting space in the columns of your magazine for the publication of a resolution by our farm loan association, which is herewith enclosed and is self explanatory.

The article above referred to is the article by W. G. McAdoo and the editor's note of warning accompanying same. Will say at this time that the members of our association wish to extend to M. B. F. their appreciation and thanks for that note of warning, and beg to ask one more small favor, as we are not in possession of the correct address, and ask that you forward same to proper address of the following named officials at Washington; namely, Rep. Scott, Senator Townsend, J. W. Fordney and the Secretary of Agriculture. Trusting you may see fit to grant these favors we are sincerely yours for better conditions.—Thompson-Inwood National Farm Loan Association by Dell Smith, Mgr. of Board.

Resolution of Protest

By Thompson-Inwood National Farm Loan Association of Manistique.

"Whereas, it has come to the observation of this association that attacks have and are being made on the Federal Farm Loan System, and whereas an appeal was taken to the Supreme Court of the U. S. to overrule the decision of Judge Van Valkenberg in favor of the constitutionality of the Federal Farm Loan Act. And whereas, speeches are reported to have been made by the Hon. J. W. Fordney, chairman of the Ways and Means committee of the house of representatives and by Rep. McFad-

Bankers' Ass'n Approves Loans on Warehouse Wool

AT THE RECENT meeting of the Agricultural Committee of the Michigan State Bankers' Association, we are advised by Comfort A. Tyler, they unanimously endorsed the pure fabric law, also endorsed the proposition to finance pure-bred lamb clubs in the state of Michigan, also approved of assisting the new Wool Growers' Association of this state by advancing individual farmers 75 per cent of the estimated value of the wool on the association warehouse receipts.

den, a member of the Banking and Currency Committee of the House, in opposition to the tax exemption clause in the act, which speeches are said to be given a wide circulation by the mortgage brokers of America, and whereas bills has been introduced in both the Senate and House to force liquidation of the Joint Stock Land Banks, and whereas it is reported that threats that the tax exemption on farm mortgages and land bank bonds would be knocked out by the present congress have been made by the mortgage brokers of America. All of which go to indicate that the force of the efforts to cripple the farm loan system is not yet spent, and whereas the federal farm loan act was devised and enacted for the express purpose of supplying a generally recognized and long felt need in the agricultural program of the nation, namely, the creating of a system of farm credit that would enable the farmers of the nation to borrow money on farm land security on long time loans at a low rate of interest to aid them in carrying out their part of the great agricultural program of the nation, namely, providing food and clothing for the people of a nation, and, whereas, the commercial end of this great enterprise was already taken care of by a system of commercial credit as represented by the Federal

Reserve Banks, the stocks of which is owned by the National Banks of the U. S. and are exempt from all federal, state and local taxation, as is also all state, county and municipal bonds in the hands of wealthy people and whereas, under the present workings of the farm loan system, borrowers are required to pay the taxes on the mortgaged properties, the removal of the tax exemption clause from the act would leave the borrower subject to double or even triple tax on the value represented in the mortgage executed against it. First, by direct tax on the property; second, by a tax on the mortgage, held by the land bank, and third, by a tax on the bond issued against the mortgage, and yet further without the tax exemption clause it would be impossible to dispose of the bonds of the land banks at the low rate of interest at which they are now sold, and borrowers would be compelled to pay, in addition to taxes on his acknowledgment of indebtedness (for what is a mortgage but an evidence of indebtedness) an increased rate of interest on that debt.

"Now, therefore be it resolved, that the tax exemption clause in the federal farm loan act is nothing more than right and just, in the light of the foregoing facts, and was so

conceded but three years ago by the congress of the U. S.

"Be it further resolved, that the removal of that clause or the passing of any bills now pending or hereafter introduced in congress that might cripple or injure the present workings of the farm loan system could only be looked upon as a wilful discrimination against the agricultural interests of the U. S. and a disposition on the part of congress to yield to the pressure and influence of farm mortgage brokers and money lenders who seek to destroy the farm credit system and again place the farmers of the nation in a position where they can again dictate rates of interest and terms on which farmers may borrow money, and to cast on him an unequal portion of taxation.

"Be it further resolved that any act as above mentioned by the congress of the U. S. should and would be met by disapproval, resentment and protestations, not by this association alone, but by the thousands of farmers throughout the U. S. who are finding refuge in this great system from the Shylocks of old who seem to be again in evidence in such force as to again demand that pound of flesh, the taking of which they must know would necessarily mean the spilling of the blood of this great credit system.

"Be it further resolved that a copy of this resolution be sent to our representative in congress with our request that he use his efforts and influence to defeat any and all measures tending to injure the farm loan system, and also a copy to the Secretary of Agriculture with a like request, also that a copy be sent for publication to MICHIGAN BUSINESS FARMING, a farm magazine published at Mt. Clemens and having a wide circulation. Submitted and adopted this 24th day of February, 1920, by the Thompson-Inwood National Farm Loan Association of Manistique, Mich.—By Board of Directors, Alfred Huber, Albert Hubscher, Angus McEachern, Dell Smith.

CURRENT AGRICULTURAL NEWS OF THE WORLD

THE LIVE STOCK AND MEAT SITUATION

The Institute of American Meat Packers has issued the following statement:

Absence of foreign demand for American pork continued throughout February to be a vital influence upon the market. Export business continued virtually at a standstill. This situation was summarized in a special bulletin issued February 17.

Heavy shipments of pork last fall have apparently put a stop to any further demand from Europe for some time to come. In many continental ports there are consignments of American pork which are not being sold on account of the depreciated value of foreign exchange.

There seems to be some prospect of British buying in limited quantities for the March period through their appointed agency in New York.

At home there was a good volume of pork trade throughout the month, but consumers seemed to want the choice and higher-priced cuts. High wages in the south have led to the purchase of choicer cuts of pork than in former years, and the result is a lack of sale for the heavier cuts of salt pork.

These heavy meats are being made in good quantity, and greater consumptive demand will necessarily have to be developed.

Hog prices were higher the last of January and the first of February than at any time during the winter's packing. With a strong demand for light hogs, the spread between prime light and prime heavy hogs widened until the difference amounted to about one cent a pound.

A significant factor is that hog receipts from the first of January until the present time have been from 15 to 20 per cent lighter than last year. There is some difference of opinion among those in close touch with the situation as to what this means.

One view is that farmers have been slow to market their hogs, probably because of price conditions, because they wished to carry on further feeding, or because of difficulty in obtaining cars for shipments. Taken in conjunction with the Government report of January 1 which showed only about two per cent fewer hogs in the country than one year ago, this would suggest that there is a large surplus on the farms. Consequently, receipts from now until summer may be as heavy or heavier in numbers and also in weight than they were in the corresponding period of 1919.

Another view is that the lighter receipts so far this year indicate actual decrease of hogs upon farms.

In the beef markets the supply of dressed beef is considerably in excess of that available for home consumption one year ago. The Government, in 1919, was still buying beef in rather large quantities. Absence of any such demand this year leaves a great deal more beef to be absorbed by consumers.

With demand no more than fair, a further depressing factor continues in the Government's disposal of considerable so-called Army beef.

Another factor which has had great influence upon the beef trade has been the relatively strong demand for hind quarter beef and the poor demand for forequarter beef. A more even demand would be an economic gain to the consumer and to the meat industry.

Receipts of sheep and lamb have been less than those one year ago. A smaller number of stock is on feed, a situation brought about largely because Colorado producers stayed out and did not buy for feeding purposes at prevailing prices. Iowa, Illinois and other central states bought freely of lambs, but these animals have for the most part been marketed.

Practically the entire supply from now until the first of June must come from the Scott's Bluff territory in Nebraska and Colorado.

A larger demand from the housewife for cuts from the shoulder and stew meat would help in equalizing

the prices of all cuts. It would lower the cost of more fashionable cuts and would lead to a better consumptive demand for the carcass.

Previous to the war, the United States was not an exporter of beef, and the situation can probably adjust itself to a basis of domestic consumption on a line of prices which we hope will be equitable both to producer and consumer.

The pork situation, we believe, is quite dependent on the foreign demand. The situation is, of course, complicated by foreign exchange.

Lapeer Farmers Endorse Bureau

The following resolution was submitted and unanimously adopted at the Burnside Township Farm Bureau

meeting, Burnside, Feb. 20, 1920:

Whereas, we, the farmers of Burnside township, knowing the conditions that have existed so long, have organized the Farm Bureau for the betterment of the same. Therefore be it

Resolved, that we demand a reasonable margin of profit over and above the cost of production of our products.

Be it further resolved, that this organization declares it to be its earnest desire and purpose to co-operate with other state federations of farm bureaus and other agricultural organizations in efforts for improvement of agricultural conditions not only this state, but other states of our nation. Signed—Anthony Esper, D. McNary, W. B. Wilson, Committee on Resolutions.

Will Detroit Develop as Live Stock Market?

SOUTH MICHIGAN growers of high grade beef, in the years in which they assiduously have been building up their herds in numbers and quality, have seen the city of Detroit grow from a population center numbering a few hundreds of thousands to more than a million. Meantime firstclass Michigan grown beef has been going to the Chicago market, and still goes—away from this population center of a million, just as it always has done. And to the Chicago market go Detroit wholesale dealers through their agents, there to buy Michigan grown beef and bring it back to Detroit for sale to retailers and their customers in this city.

Why this diversion to a far market of a food product from Detroit's gateway? and what justifies such a transaction involving two long hauls, first of the live stock to the Chicago yards, then of the dressed beef back to the market so near its origination? Who pays the shot?

George B. Smith, of Addison, Lenawee county, probably knows as much about conditions and their causes as any man in Michigan. He is secretary of the Tri-State Beef Growers' Association, composed of owners of high grade herds in this state, Indiana and Ohio. He is an Angus breeder and grower.

"The reason," said Mr. Smith, incidental to a recital of a plan to correct conditions, "the good beef goes to Chicago is the lack of a competitive market in Detroit and the fact that top prices invariably run from four to five cents a pound under the Chicago price for the very same animals. The one fact is the cause of the other, no doubt."

"In the first place," said Mr. Smith, "get the fact that more than 75 per cent of all the meat consumed in Detroit is beef. I have been told by

same time that the Detroit packers pay 20 cents a pound for Angus beef in Chicago the best they will pay for the same cattle in Detroit is about 16 cents a pound, and this in spite of the fact that the haul to Chicago and the haul back to Detroit would be a saving, deducting only the cost of the haul from the farm in Michigan to the yards in Detroit. The low price for poor beef, ruling the Detroit market rules price for high grade cattle—and there you are."

Mr. Smith acknowledged that it didn't sound logical, but it was the fact. And as practical business men the members of Tri-State Association of Angus growers have tackled the situation. This is their plan, now in course of operation:

They have procured from Detroit packers, all the important ones, a concession of Chicago prices. They are to ship their stock to Detroit and get for it the top price which the local packers are accustomed to pay in the distant market. Arrangements are being made to distribute this high grade beef, after "manufacture" by the packers, to a selected list of retailers. This list will be advertised. Housewives in Detroit, according to the plan, will be enabled to ask for and get Michigan grown, first class beef, from these advertised dealers.

The saving is not planned to be in the form of a reduction in price paid to the grower, in the reduction of price paid to the packer by the retailer, or in margin of profit made by the retailer. In none of these, but in a saving of transportation charges, handling and shrinkage incidental to long hauls and delayed slaughter.

Mr. Smith and other members of the Ass'n are at work on sales plan. Meantime, first shipments of high grade Michigan beef cattle is being

made from Manchester by L. Whitney Watkins, from his herd of Angus cattle. This is a shipment which under the old arrangement would have gone to Chicago, and part of it, no doubt have been brought ultimately to Detroit, at much unnecessary added expense, for sale to distributing patrons of Detroit meat markets.—Fred Janette, in the Detroit News.

BIG RESULTS FROM

N. E. MICHIGAN LANDS

Northeastern Michigan scored heavily at the Shorthorn Congress Show and Sale, held at Chicago in February when 10 head of shorthorns from the Prescott ranch sold for an average of \$1,477.50 each, a figure considerably above the average of all sales at the congress. Three of these Prescott hifers sold for \$3,300, \$3,050 and \$2,250 respectively. The figures show not only what sort of cattle Northeastern Michigan can produce but they also show that it pays to raise thoroughbred stock.

From Comins, Mich., located in the center of the Northeastern Michigan district, little known to the outside world because it is not reached by a railroad, but containing thousands of acres of fine farm lands, comes a letter from Meno Steiner in which he says that from 19 acres of alsike clover he received \$2,236.89 for seed and chaff last year and that in 1918, from nine acres of this same piece, he received \$676.12 for the clover seed and chaff. He says: "We bought this land 15 years ago at \$8 per acre and the more it is cultivated the better it gets."

A 21-acre tract of reclaimed muck land near Pinconning, which was planted to sugar beets last year brought the owner \$3,722, which paid the \$2,800 which the owner paid for his farm and the remainder went into a house on the property.

The booklet on "Ranching in Northeastern Michigan," which the Development Bureau published a few weeks ago, is attracting wide attention among stockmen. Prescott & Son distributed a number of them at the Shorthorn Congress last month, many of them going to stock breeders from Dakota, and the result has been that they are receiving requests for many more copies from neighbors of these people.

Back From Europe; Talks Prosperity

Trade with Europe will soon assume many pre-war characteristics, with the added feature of being many times more brisk, in the opinion of A. C. Frank, export manager of the Firestone Tire & Rubber Co. Frank recently return to New York City after a trip of three months in England and continental Europe.

"Although they are still suffering from the industrial difficulties which were the inevitable inevitable result of the war, the European nations will soon regain their old-time commercial aggressiveness, I believe," Frank said. "The resourcefulness they showed in the war will reassert itself in peace and they will again demonstrate their stamina by reclaiming a share of world's trade."

"The industrial activity of Belgium is particularly noteworthy. This plucky country, undaunted by its tremendous hardships, is now rapidly placing its factories on a quantity production basis, and is doing much toward the rehabilitation of the devastated districts."

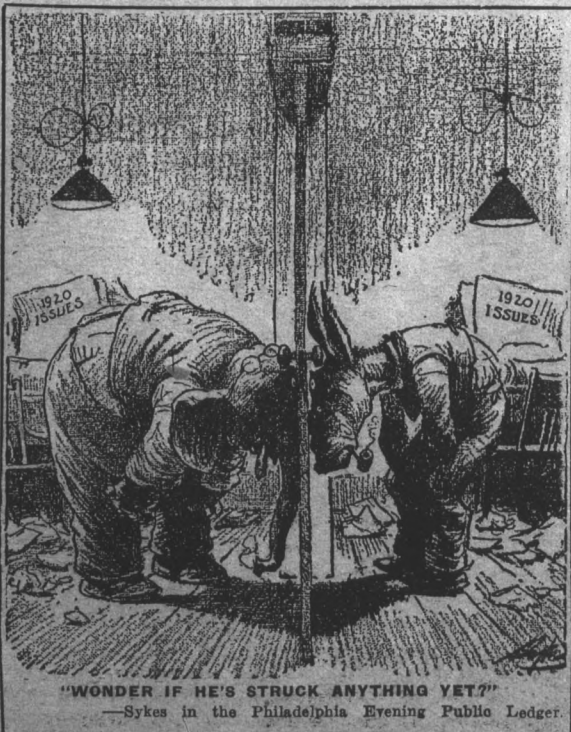
"International trade, after the resumption of European industries, should develop, I believe, to a degree heretofore considered impossible. I look for an unparalleled era of trade among all nations."

\$1,300 Worth of Potatoes From \$400 Worth of Land

A year ago Wellington Rouse, of Greenbush, bought the old Burton place, paying \$400 for it. This property is located in the sand west of the village and had been in disuse for many years. Last week Mr. Rouse sold \$1,200 worth of potatoes raised on this cheap land and has \$100 worth of spuds left, besides the crop from five acres of millet.

Let's see now—\$400 from \$1,200 leaves \$800 in cash to pay for seed and labor and the land. He has the extra potatoes and millet for good measure—all in one season.

Looks like a pretty good profit and furnishes an object lesson for boosters for the light lands that are to be found in some sections of Northeastern Michigan.—Alcona County Review



"WONDER IF HE'S STRUCK ANYTHING YET?"
—Sykes in the Philadelphia Evening Public Ledger.

MARKET FLASHES

WEEKLY TRADE AND MARKET REVIEW

A slight improvement in the money exchange, a report that England would shortly begin to export gold to this country to take care of purchases and stabilize her credit, increased building activity, increased demand for steel, stiffening of grain prices—these were the features of the past week's trade and market situation. The money shortage is acute in some sections and industrial corporations are selling liberty bonds to secure money to carry on their operations. To all appearances those who need money and have ample credit are experiencing no difficulty in securing loans. This is taken as indication of soundness and the general feeling throughout the country the past week has been one of greater confidence that has prevailed for some time.

Grains were generally firm throughout the week. Cattle were in poor demand the first of the week but picked up some as the week advanced. Hogs were steady for the most part, though there was little improvement in the demand. Beans were firm and potatoes advanced. Butter and eggs were on the decline. Taken as a whole the conditions were fairly satisfactory and gives us reason to believe that most of the farm products have reached their low level.

LAST MINUTE WIRE

DETROIT—Corn and oats are firm despite bearish reports of supplies. Hay in better supply but good demand. Cloverseed 25c higher.

CHICAGO—Exception of wheat grains in fair demand, supplies short and markets firm. Predictions freely made higher prices despite light foreign demand. Hogs strong and higher; cattle firm; mutton firmed up after week of declines.

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

WHEAT CONTINUES IN POOR DEMAND

Grade	Detroit	Chicago	N. Y.
No. 2 Red	2.42	2.40	2.60
No. 2 White	2.40	2.40	2.60
No. 2 Mixed	2.40	2.40	2.60

Grade	Detroit	Chicago	N. Y.
No. 2 Red	2.30	2.30 1/2	2.30
No. 2 White	2.28	2.28	2.34 1/2
No. 2 Mixed	2.26	2.27	2.33

Not even the announcement that England was in the market for a large quantity of flour checked the slump in wheat and the week opens with a decidedly weak condition in that market. A good many terminal markets are over-supplied, mills

are making flour for the government and are not for the time being interested in purchases of wheat for independent trade. J. Ralph Pickell, publisher of the Rosenbaum Review, opines that wheat will go to \$3.50 before the government's guaranty is removed, June 1st, but the market will have to get a hump on itself to make J. Ralph's prediction come true.

CORN GOES UP

Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	1.62	1.61	1.78 1/2
No. 3 Yellow	1.62	1.59	1.76 1/2
No. 4 Yellow	1.58	1.56	1.74

Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	1.44	1.43	1.62
No. 3 Yellow	1.41	1.40	1.60
No. 4 Yellow	1.41	1.40	1.57

Not even a government report which showed a higher supply of corn in farmers' hands than generally supposed had any effect upon the strength of the corn market at the opening of the week. Supplies on both the Chicago and Detroit markets were considerably short of demands, and as a result the price advanced. The spring break-up of the country roads is expected to still further decrease supplies for the next three or four weeks and a firm market is expected to rule.

OATS FIRM

Grade	Detroit	Chicago	N. Y.
No. 2 White	.97	.92 1/2	1.02 1/2
No. 3 White	.96	.91	1.01
No. 4 White	.95	.89	1.00

Grade	Detroit	Chicago	N. Y.
Standard	.85	.83	.73
No. 3 White	.84 1/2	.82	.72
No. 4 White	.83 1/2	.80	.71

Oats were firm on the Detroit and Chicago markets with no changes in price. Export buying which had been rather active the past week was slower and the government's report of oats remaining in farmers' hands was higher than the bulls had reckoned with. Nevertheless, there were no bearish tendencies to the market, and it is confidently expected that the oat market will continue on its upward trend.

RYE AND BARLEY

Rye has recovered its firmness and is quoted at \$1.73 on the Detroit market. Barley has advanced 25 cents per cwt., and is jobbing at \$3 @ 3.25 per cwt.

BEANS STILL LOW

Grade	Detroit	Chicago	N. Y.
O. H. P.	6.75	7.25	8.00
Red Kidneys	14.25	14.00	14.75

Grade	Detroit	Chicago	N. Y.
O. H. P.	7.25	6.75	7.75
Prime	6.75	6.00	7.25
Red Kidneys	10.25	11.50	11.50

There is nothing new to report on the bean market. The market is easy at \$6.75 @ 6.90, and there is talk of still lower prices. We are informed that there will be some real news to announce on this market within another week or two.

POTATOES HIGHER

Potatoes reached their highest level of the season last Saturday on the Detroit market when a few cars of

	Sacked	Bulk
Detroit	5.35	5.30
Chicago	5.25	5.10
Pittsburg	5.15	5.10
New York	6.00	5.90

Detroit	1.70	1.70
Chicago	1.75	1.70
Pittsburg	2.00	2.00
New York	2.08	2.00

choice stock sold for \$8 per 150-lb. bag. This is 5 and one-third cents per pound or \$3.20 per bushel. No other markets were quite so strong, although nearly all reported higher prices. Unquestionably the reason for these abnormal prices was the continuance of the severe weather. The principal barometer of this market the next sixty days will be the weather. If cold weather continues throughout March, and according to the weather prophets it will, prices will be sustained, but a couple weeks of warmer weather would certainly mean lower prices. The same farmer who bet us a year ago that potatoes would go to \$2 per bushel takes issue with our views on this year's potato markets and holds that many farmers might have lost money had they followed the advice given in our December 27th issue. If our readers will refer to all the issues for that month they will note that we predicted higher prices, and when prices reached their highest level the last of December we advised our readers to begin marketing their spuds. The price at that time was good. The average farmer could have made money, and we still claim that the farmer who sold one-fourth of his holdings during the month of January as we suggested was acting the part of a good business man. The time to market potatoes is when the price is going up. Those who wait for the top-notch price seldom get it, for they fail to recognize the top-notch price until after the crest has passed and the market recedes. Then, as in thousands of instances in the past, they sell on a declining market and lose money. If I had a thousand bushels of potatoes today I would sell at least one-half of them and if the price went up another dollar a bushel in the next month I would have no regrets. For my common sense would tell me that in nine years out of ten when prices are abnormally high the market would go the other way. We want our readers to have the highest possible prices for their products, but in the average years these are best secured by a gradual marketing of their crops during the period when demand is strong and prices pay a profit.

HAY IN BETTER SUPPLY

	No. 1 Tim.	Stan. Tim.	No. 2 Tim.
Detroit	\$3.50 @ 34	\$2.50 @ 33	\$1.50 @ 32
Chicago	\$3.00 @ 34	\$1.00 @ 32	\$2.00 @ 30
New York	\$4.00 @ 55		\$1.00 @ 54
Pittsburg	\$7.50 @ 37	\$6.50 @ 36	\$4.00 @ 35

	No. 1	No. 1	No. 1
	Light Mix.	Clover Mix.	Clover
Detroit	\$2.50 @ 34	\$1.50 @ 32	\$1.50 @ 32
Chicago	\$1.00 @ 32	\$2.00 @ 30	\$2.00 @ 32
New York	\$5.00 @ 52		\$4.50 @ 51
Pittsburg	\$6.50 @ 37	\$3.50 @ 35	\$3.50 @ 35

	No. 1 Tim.	Stan. Tim.	No. 2 Tim.
Detroit	\$2.50 @ 28	\$2.50 @ 27	\$2.50 @ 26
Chicago	\$2.00 @ 31	\$2.00 @ 29	\$2.00 @ 28
New York	\$3.00 @ 33	\$3.00 @ 31	\$3.00 @ 32
Pittsburg	\$3.00 @ 30	\$2.00 @ 30	\$2.00 @ 28

	No. 1	No. 1	No. 1
	Light Mix.	Clover Mix.	Clover
Detroit	\$2.50 @ 27	\$2.50 @ 26	\$2.50 @ 26
Chicago	\$2.00 @ 31	\$2.00 @ 29	\$2.00 @ 28
New York	\$3.00 @ 33	\$3.00 @ 31	\$3.00 @ 32
Pittsburg	\$3.00 @ 29	\$2.00 @ 29	\$2.00 @ 28

Receipts of hay are on the increase in nearly all markets and there is a slightly easier tone as a consequence. Demand however, continues good and no materially price changes are anticipated during the next thirty days.

LIVESTOCK MARKETS

DETROIT.—Cattle: receipts, 722; canners steady; all others strong, to 50c higher; best heavy steers, \$11.50 @ 12; best handy weight butcher steers, \$10 @ 11; mixed steers and heifers, \$9.25 @ 9.75; handy light butchers, \$8.50 @ 9; light butchers, \$7 @ 8; best cows, \$8.50 @ 9; butcher cows, \$6.50 @ 8; cutters, \$5.50 @ 6; canners, \$4 @ 5; best heavy bulls, \$3 28.50; bologna bulls, \$7.50 @ 8;

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stock bulls, \$6.50@7; feeders, \$8.50@9.50; stockers, \$7@8; milkers and springers \$65@115. Veal calves, receipts, \$15; market slow, best, \$20@21; others, \$8@15. Sheep and lambs: receipts, 967; market steady; best lambs, \$19@19.50; fair lambs \$18@18.50; fair to common lambs, \$15@16; yearlings, \$16@17; fair to good sheep, \$12@13.50; culls and common, \$6@8.50. Hogs: receipts, 2,042; market strong; pigs, \$15@15.25; mixed hogs, 16.65.

Chicago—Receipts 39,000; steady to 10c higher; closed weak; bulk, \$14.65@15.50; top, \$15.65; heavy, \$14.25@15.15; medium, \$14.90@15.60; light, \$15.10@15.65; medium, \$14.90@15.60; light, \$15.10@15.65; light light, \$14.50@15.40; heavy packing sows, smooth, \$13.25@13.75; do rough, \$12.50@13; pigs, \$13.50@14.75. Cattle: receipts 14,000; strong; beef steers, medium and heavy; choice and prime, \$14.50@16; medium and good, \$11.85@14.50; common, \$9.75@11.85; light, good and choice, \$12.75@15.40; common and medium, \$9.50@12.75; butcher cattle, heifers, \$7.35@13.75; cows, \$7.10@12.75; canners and cutters, \$4.90@7; veal calves, \$15.25@16.75; feeder steers, \$8.75@12; stocker steers, \$7.25@10.75. Sheep: receipts, 17,000; strong; lambs, 84 lbs. down, \$17.25@20; culls and common, \$14@17; ewes, medium, good and choice, \$11@14.25; culls and common, \$6@10.75.

LIGHT BEEF TONNAGE

AIDS CATTLE VALUES

An advance of about \$1 per cwt. in live stock cattle values since the recent period of demoralization is attributed to various causes, but that beef consumption has expanded is not admitted in packing circles. Chicago has received only about 150,000 cattle during the past three weeks and at other markets supply has been light. Cattle are going to market deficient not only in weight, but beef yields, few dressing over 55 per cent. At a conservative estimate beef tonnage is 20 per cent less than a year ago, when every market in the country was full of mature steers finished in anticipation of a broad post-war European demand that never materialized. This winter feeders made few heavy cattle, a fact on which they are now congratulating themselves, as demand centers on cheap light grades.

Market opinion differs as to what is likely to happen during the next 30 days. The probability is that a further advance of \$1 per cwt. would dislodge many cattle now munching corn as the feed bill is prohibitive of profit.

Two sources of cattle supply promise seasonal volume for the next ninety days. One is south Texas, which has approximately 300,000 fat grassers ready to go to the shambles, and the Lancaster section of Pennsylvania credited with 150,000 winter-fed bullocks. Iowa has liquidated, other sections of the corn belt report a substantial deficiency compared with a year ago and there will be no distillery-fed cattle this year, prohibition having killed that industry. If beef consumption, repressed artificially during the war, revives, this crop can be readily absorbed, but the beef market is an invalid concern. Adverse factors to an active, if not higher, cattle market are a crash in hides, grease and other by-products.

Hog Values Recuperate

Hog values have recuperated materially since the bear drive late in February, when average cost at Chicago was depressed to \$14.06. Last week late it reached \$15.04, or practically \$1 per cwt higher. This is a meritorious performance in view of prostration of export trade, owing to an adverse rate of foreign exchange, and has strengthened the growers' position. Packers still profess doubt as to the deficiency in the winter crop that has been apparent for two months, but buy hogs freely on every break. Nobody at the stockyards is bullish on anything but an impression is gaining ground that pending the June break present prices will be maintained.

Announcement that the British government will dump 300,000 frozen New Zealand lamb carcasses into the North American market to be followed by another consignment if

this gets a good reception broke the dressed lamb market \$6 per cwt. and the live market 75c last week. Frozen stuff will probably not sell freely through regular channels, but can be used advantageously by hotels and restaurants and the innovation means competition for the domestic producer. Lambs have declined about \$2 per cwt. since the recent high spot, and if Colorado crowds the residue of its winter crop into the market hopper further depreciation is probable.

DETROIT PRODUCE MARKET

Firmness in the leading lines of farm stuff and in many cases higher prices are quoted owing to activity in buying and a small movement of produce to market. Scarcity felt in potatoes and the market made a large advance without attracting an increase of shipments. The country is taking little interest in the market at the present level of prices and demand is increasing. It is about the same with poultry, although the market has not shown much advance. Receipts are small and consumers are taking everything promptly. Hogs are scarce and calves easy. Receipts of butter are not sufficient for the wants of the market and an advance is quoted. Consumers have been active buyers all week. Eggs are in good supply and consumers take everything. There is no chance for an increase in stocks with the present conditions. Fruits show no activity. Prices are considered very high and consumers are practicing economy.

Apples—Western, boxes, \$3@4; Spy, \$3.25@3.50; Baldwin, \$3@3.25; Greening, \$3.25@3.50; Steel red, \$3.50@4 per bu.

Popcorn—Shelled, 10c per lb.

Honey—White comb, 32@35c per lb.

Cabbage—Home grown, \$5@6 cwt.

Cauliflower—\$2.75@3 per case.

Potatoes—\$8 per 150-lb. sack.

Onions—Indiana, \$3.50@5.75 an 100-lb. sack.

Calves, (dressed)—Fancy, 26@27c a lb.

New potatoes—Bermudas, \$15@16 per bbl.

Dressed Hogs—Best, 19@20c; heavy 17@18c lb.

Live Poultry—Spring chickens large 36@38r; Leghorns, 35@36c; hens, 33@40r; small hens, 36@37c; roosters, 23@24c; geese, 30@35c; ducks, 40@45c; turkeys, 44@45s per lb.

1,500 BEET GROWERS SWEAR LOYALTY

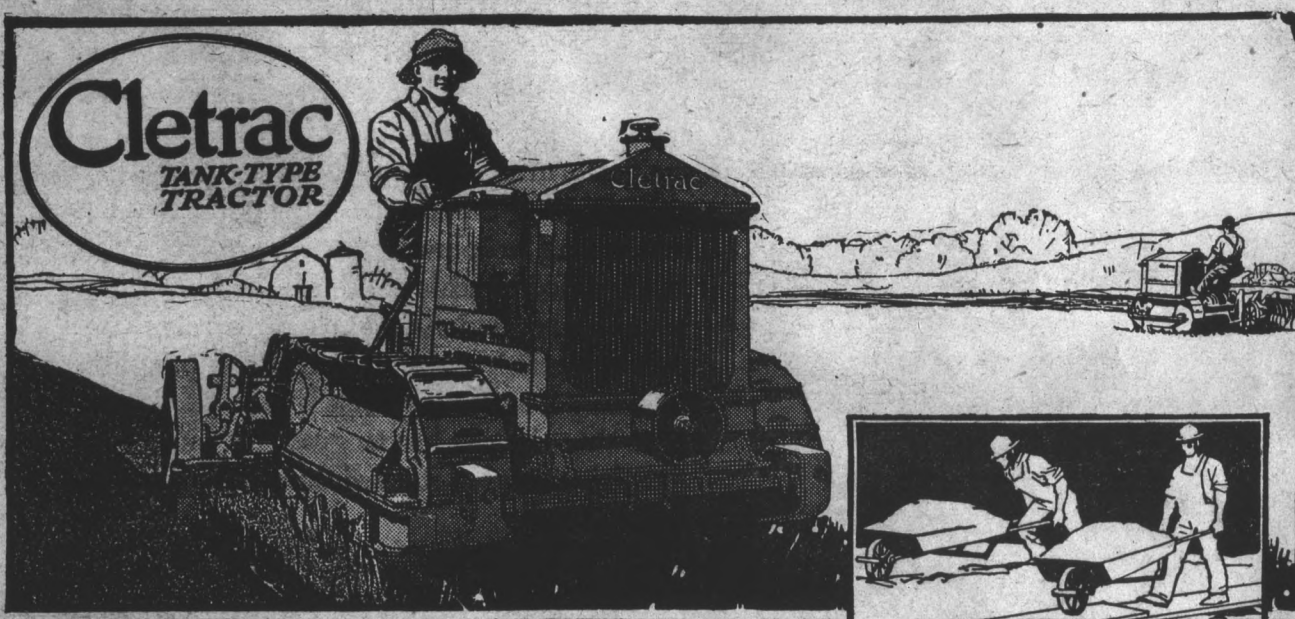
Fifteen hundred beet growers—one out of every seven beet growers in Michigan—thronged the big auditorium at Saginaw Monday and in an enthusiastic demonstration, stated their determination to stand loyally by the position taken by the executives of the Michigan Sugar Beet Growers' Ass'n, and grow no beets this year unless the sugar manufacturers granted their representatives a conference. Speakers included Mr. Thos. Price, president of the Saginaw Beet Growers' Ass'n; G. E. Ackerman, manager of the Michigan Sugar Beet Growers' Ass'n; John O. Ketcham, president of the State Association; C. G. Patterson, acting secretary of the United States Beet Growers' Ass'n; Forrest Lord, editor M. B. F., Dr. W. W. Diehl, agricultural field worker of the Methodist church in Michigan, and Ashley M. Berridge, member executive committee Michigan State Farm Bureau. There was no mistaking the sentiment of the farmers present, and it is fair to say that they represented 90 per cent of the beet growers. It was the largest single meeting of real farmers that has been held in Michigan in recent years, a fact which sugar company representatives who sat quietly throughout the meeting, and were apparently very much impressed with, later commented upon. Full details of this important meeting will be presented in our March 20th issue.

HOW CAN WE KEEP THE BOYS AND GIRLS ON THE FARM?

(Continued from page 2)

have had 27 years' experience working out most of the time. I was working for the C. H. Sheep Construction Co., of Kansas City, Mo., craning a steam shovel in New Mexico on the A. T. & S. F. R. R., getting \$100 a month and that was good money in 1906 and 1907. I was trying to pay for a home here in Michigan. I had a family of five; had to buy everything of course. One morning in November, 1907 we woke up and were out of a job. Any one can remember those times when the banks were all closed. I had \$450 in checks on the Bank of Commerce of Kansas City under my belt, and the government examiners closed the doors. By a little streak of good luck I got my money and came home. For 16 months money would not buy a job. You can guess where my savings went. Again, during the winters of 1917 and 1918 I was working for the Mason Motor Co. at Flint, Mich., making from \$5 to \$6 per day and I had a family of seven by this time, and just when I commenced to think we were going to get through the winter in good shape, what happened?—everything shut down—no coal. There were hundreds of men in that shop, many of them making \$8 to \$10 per day and when they could not get thru the gates that morning they were down and out. Why? Well, there are a dozen reasons why, but that is another chapter.

I want to tell my friend, that if he is making anything like a good living with that family on a farm by all means stay there. You cannot save a penny in the city and you are not sure of a living. You might say that others live there. No, sometimes they live, and the rest of the time they just stay. I know what I am talking about. I have been there. I may say in conclusion that the city is no place in which to raise a family of children.—Fred Cressey, Mecosta County.



Don't Wait for the Spring Rush— Get Your Cletrac Now

SPRING'S almost here! A few weeks more and you'll be faced with loads of work, limited time, unsettled weather—with help scarce and costly.

Put a Cletrac on the job! It replaces six or eight horses, works longer hours and more days, saves time and cuts costs.

It speeds up plowing—and fast plowing now means less work later, because it pulverizes the soil and cuts down work of preparing the seed bed. Travels easily over soft and sticky ground, turns short, gets the corners and swings back to the furrow quickly. Puts more acres under cultivation and helps produce bigger crops.

And the Cletrac not only plows—it prepares the seed bed, harvests, hauls. In winter when the horses are laid up, eating expensive feed and

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The quick popularity of the Cletrac has led to a bigger output, with lower manufacturing costs. That's why we can offer you an *improved* Cletrac—and at the same time lower the price from \$1585 to \$1395, f.o.b. Cleveland.

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"Hearts of Three"

By JACK LONDON

Author of the "Valley of the Moon," and other stories.

Synopsis of Preceding Chapters

FRANCIS MORGAN, son of a New York millionaire, who has just died, becomes bored with society and decides to take an extensive fishing trip. Regan, Francis' broker and a former colleague of young Morgan's father, plans to ruin Francis through his Wall Street holdings. Regan pays Torres, a dark-skinned visitor from the Caribbean islands who knows of a treasure buried by a pirate ancestor of Francis, to lure young Francis away. The lure works and Francis starts out alone. He lands on an island whither he has been beckoned by a girl on the shore. The girl mistakes Francis for a lover with whom she has quarreled. He is chased from the island by her father and brothers. Francis explores another island where a young man threatens his life and then saves it from savages who attack young Morgan. Francis and the young man discover they are related. The young man, whose name is Henry Morgan, is also hunting for the treasure. They form a partnership. Francis discovers that Henry is the lover of the girl on the island and that her name is Leoncia Solano. Francis returns to the first island to ask Leoncia to forgive Henry which she does. He is captured by Torres and the Jefe Político of San Antonio who proclaim him to be Henry, whom they wish to hang for a murder he did not commit. They are about to hang Francis when Henry appears and is thrown into prison. Leoncia finds she loves both men. The Solanos and Francis plan to release Henry.

"THAT'S what I am arriving at. You, Senor Solano have plenty of saddle horses? Good. And you, Alessandro, does it chance you could procure me a couple of stick of dynamite from around the plantation? Good, and better than good. And you, Leoncia, as the lady of the hacienda, should you know whether you have in your store room a plentiful supply of that three-star rye whiskey?"

"Ah, the plot thickens," he laughed, on receiving her assurance. "We

have all the properties for a Rider Haggard or Rex Beach adventure tale. Now listen. But wait. I want to talk to you, Leoncia, about private theatricals. . . ."

CHAPTER V.

IT WAS in the mid-afternoon, and Henry, at his barred cell-window stared out into the street and wondered if any sort of breeze would ever begin to blow off Chiriqui Lagoon and cool the stagnant air. The street was dusty and filthy

because the only scavengers it had ever had known since the town was founded centuries before were the carrion dogs and obsence buzzards even then prowling and hopping about in the debris. Low, white-washed buildings of stone and adobe made the street a furnace.

The white of it all, and the dust, was almost achingly intolerable to the eyes, and Henry would have withdrawn his gaze, had not the several ragged mosos, dozing in a doorway opposite, suddenly aroused and looked interestedly up the street. Henry could not see, but he could hear the rattling spokes of some vehicle coming at speed. Next, it surged into view, a rattle-trap light wagon drawn by a runaway horse. In the seat a gray-headed, gray-bearded ancient strove vainly to check the animal.

Henry smiled and marveled that the rickety wagon could hold together, so prodigious were the bumps imparted to it by the deep ruts. Every wheel, half-dished and threatening to dish, wobbled and revolved out of line with every other wheel. And if the wagon held intact, Henry judged, it was a miracle that the crazy harness did not fly to pieces. When directly opposite the window, the old man made a last effort, half standing up from his seat as he pulled on the reins. One was rotten and broke. As the driver fell backward into the seat, his weight on the remaining rein caused the horse to swerve sharply to the right. What happened then—whether a wheel dished, or whether a wheel had come off first and dished afterward—Henry could

not determine. The one incontestable thing was that the wagon was a wreck. The old man, dragging in the dust and stubbornly hanging on to the remaining rein, swung the horse in a circle until it stopped, facing him and snorting at him.

By the time he gained his feet a crowd of mosos was forming about him. These were roughly shouldered right and left by the gendarmes who erupted from the jail. Henry remained at the window and, for a man with but a few hours to live, was an amused spectator and listener to what followed.

Giving his horse to a gendarme to hold, not stopping to brush the filth from his person, the old man limped hurriedly to the wagon and began an examination of the several packing cases, large and small, which composed its load. Of one case he was especially solicitous, even trying to lift it and seeming to listen as he lifted.

He straightened up, on being addressed by one of the gendarmes, and made voluble reply.

"Me? Alas senors, I am an old man, and far from home. I am Leopoldo Narvaez. It is true, my mother was German, may the Saints preserve her rest; but my father was Baltazar de Jesus y Cervillos e Narvaez, son of General Narvaez of martial memory, who fought under the great Bolivar himself. And now I am half ruined and far from home."

"Prompted by other questions, interlarded with the courteous expressions of sympathy with which even the humblest moso is overgenerously supplied, he managed to be politely grateful and to run on with his tale."

"I have driven from Bocas del Toro. It has taken me five days, and business has been poor. My home is in Colon, and I wish I were safely there. But even a noble Narvaez may be a peddler, and even a peddler must live, eh, senors, is it not so? But tell me, is there a Tomas Romero who dwells in this pleasant city of San Antonio?"

"There are any God's number of Tomas Romeros who dwell everywhere in Panama," laughed Pedro Zurita, the assistant jailer. "One would need a fuller description."

"He is the cousin of my second wife," the ancient answered hopefully, and seemed bewildered by the roar of laughter from the crowd.

"And a dozen Tomas Romeros live in and about San Antonio," the assistant jailer went on, "any one of which may be your second wife's cousin, Senor. There is Tomas Romero, the drunkard. There is Tomas Romero, the thief. There is Tomas Romero—but no, he was hanged a month back for murder and robbery. There is the rich Tomas Romero who own many cattle on the hills. There is . . ."

To each suggested one, Leopoldo Narvaez had shaken his head dolefully, until the cattle-owner was mentioned. At this he had become hopeful and broken in:

"Pardon me, senor, it must be he, or some such a one as he. I shall find him. If my precious stock-in-trade can be safely stored, I shall seek him now. It is well my misfortune came upon me where it did. I shall be able to trust it with you, who are, one can see with half an eye, an honest and an honorable man." As he talked, he fumbled forth from his pocket two silver pesos and handed them to the jailer. "There, I wish you and your men to have some pleasure of assisting me."

Henry grinned to himself as he noted the access of interest in the old man and of consideration for him, on the part of Pedro Zurita, and the gendarmes, caused by the present of the coins. They shoved the more curious of the crowd roughly back from the wrecked wagon and began to carry the boxes into the jail.

"Careful, senors, careful," the old one pleaded, greatly anxious as they took hold of the big box. Handle it gently. It is of value and it is fragile, most fragile."

While the contents of the wagon were being carried into the jail, the old man removed and deposited in the wagon all harness from the horse save the bridle.

Pedro Zurita ordered the harness taken in as well, explaining, with a glare at the miserable crowd: "Not a strap or buckle would remain the (Continued on page 15)

TEXACO MOTOR OIL

REEL off the miles on the way to town along the white-ribbon road, secure in your knowledge that all's well with your car. For TEXACO Motor Oil will keep the car performing without let-up or miss. It is a fine, lasting oil that completely retains its lubricating properties despite engine heat. It so perfectly seals the clearance between piston and cylinder, that no gasoline can leak into the crank case. Thus full compression is secured, and every last ounce of power used that the gas has to give. Be certain to get the can with the red Star and green T.

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Only Cure for High Cost Epidemic

"A BACK TO the farm" movement is the only sure cure for the "high costs" epidemic that is disturbing the whole country and unless it begins soon on an extensive scale foodstuffs are apt to qualify as a luxury, Roland Morrill of Benton Harbor, president of the Michigan State Farm Bureau, says. Mr. Morrill has been gathering statistics on the shortage of labor in the rural districts of the country and his summary is startling. Too many farmers are being drawn from the country by big industries for the nation's good, he points out.

Mr. Morrill says, "The problem of a daily supply of good food is important to the successful operation of any or all industry. The country cannot get by quite so easily as suggested by a worthy Detroit lady who in a recent ladies' club meeting called to kill 'high cost' eggs and butter remarked that she saw no reason to waste time discussing the farmer as all present bought their butter and eggs of the grocer."

"But attention must be focused on the farmer. A careful canvass of Iowa shows a shortage of farm hands for this spring of more than 50,000 men which means that Iowa must drop not less than 500,000 people off her feeding list. It appears that the 10 principal middle western states will show a shortage this spring of half a million farm hands; and that the country-wide shortage will be between 1,000,000 and 1,500,000 which means the cutting off of supplies for between 15,000,000 and 20,000,000 consumers. Of course these figures are approximate. A good season will not produce such drastic conditions. On the other hand, adverse weather conditions will make the situation more alarming."

"And this shortage will not be faced first by the farmer, who by the rules of the life game must provide for the sustenance of his own family before providing for others. Statistics show that the average farmer can market only 35 per cent of his products after feeding his own

family, but that he can market about 90 per cent of products produced by his employees. In other words, if there are 20,000,000 farm owners in the country who support at home 55,000,000 people, they can do so without employees and can supply about 20,000,000 others or possibly 75,000,000 in all with food and clothing materials. Food and clothing supplies and materials for the other inhabitants of this country must be produced by hired labor on the farm."

"Just at present there is a lot of fool propaganda going the rounds about farmers going on strike. That word 'strike' is as obnoxious to the average farmer as a rattlesnake and the idea is pure bunk. The farmer knows his place and will fill it as a good citizen, but his power to save the nation from hunger and worse is limited to the industrial support of those who must depend on him for their existence, a matter which in the present crazy industrial rush is being overlooked."

"There must be a readjustment of labor. Ten years ago the automobile, the phonograph, the player piano and the movies would have been classed as luxuries; now they are called essentials. In manufacture, sale and maintenance these industries now employ one third of the labor of the country. This labor is of the highest class drawn from other industries who in turn replenished their forces from the farms. The farmers have no reserves to fall back on. The war has virtually stopped immigration."

"The situation is just this—a 'back to the farm' move must start quickly or thousands of people in this country are going to go hungry. And this move must be started in the cities. The remedy for the conditions we are facing today lies in the hands of big industries, and also their employees. The demand for men from the country must cease and the continuing strikes for higher wages and shorter hours must stop. Otherwise the cost of living will be a game with the sky as the limit."

Dr. Seulke, Cornell, to Aberdeen-Angus Field



DR. K. J. Seulke, professor of the Animal Industry at Cornell University, N. Y., took up his new duties as Eastern fieldman for the American Aberdeen-Angus Breeders' Association, Feb. 15. Dr. Seulke's field extends from the Ill.-Ind. boundary east to the At-

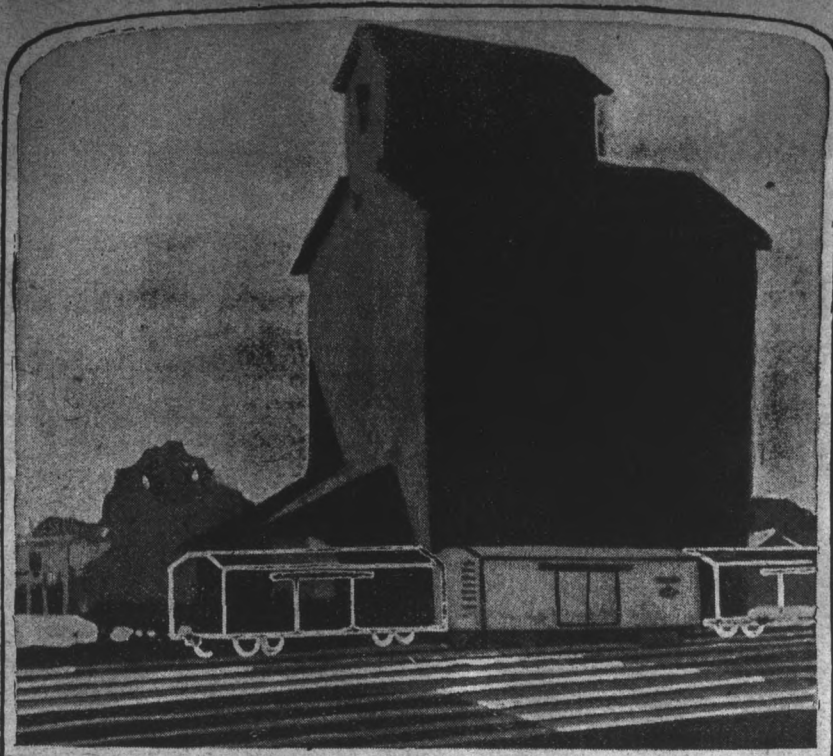
lantic north of the Ohio river and West Virginia.

Dr. Seulke was chosen as the best man for the new field and comes strongly recommended by breeders, college and experiment station people and business men. He was raised on an Indiana live stock farm; is a graduate of Purdue University, from whence came two Aberdeen-Angus grand champion steers at the International Exposition, and he has degrees from both Pennsylvania State College of Agriculture and Cornell. He conducted a live stock survey of Indiana a few years back, and his work at Cornell is almost wholly re-

sponsible for a beef herd at that institution. His beef bulletins from Cornell Station are standard for that territory.

The addition of Dr. Seulke to the Aberdeen-Angus corps, gives this breed one of the strongest field forces carried by any pure-bred live stock association. Dr. C. D. Lowe, Knoxville, Tenn., has charge of the south, and E. T. Davis, veteran breeder, showman and importer, the middle west. An additional man will be appointed for the territory west of the Rocky Mountains soon. Some hundred and twenty-five public sales of Aberdeen-Angus pure-breds will be held by breeders under the management of these men the coming season. Dr. Seulke already having arranged to give New York its first sale, at Albany, April 1, while Michigan's first sale will be held at Saginaw, March 25. Ohio will also have a spring sale, as will district associations in Indiana, at Miami, Kentland and Logansport, in March and April.

Some \$2,500 in prize money will be offered for shows in connection with these sales of state and district associations, the American Aberdeen-Angus Breeders' Association contributing sums of \$50 to \$100, depending on the number to be sold.



There is one freight car today
where three are needed

How the Railroad Situation Affects Your Farm

Every Spring brings an enormous demand for Solvay Products. Thousands of farmers call for Solvay Pulverized Limestone, Arcadian Sulphate of Ammonia and "U-S" Potash during the months of March, April and May. Naturally, they want immediate deliveries. While in the past, the railroads have handled their burden of the season's excess shipments more or less adequately, conditions this year are entirely different.

Railroad Congestion This Spring Will Be Serious

Few new box cars or locomotives have been supplied to the railroads for over two years. At the same time, depreciation of rolling stock has been enormous, and the percentage relegated to the scrap heap abnormally large because there has been no replacement to offset this increased depreciation. There are fewer operatives, fewer box cars, fewer locomotives. Yet, in the face of these conditions the country's industries are planning to do more shipping in 1920 than ever before.

This situation will have a serious effect on your plans, if you fail to provide against delayed shipments.

Ordering in Advance is Absolutely Essential

This year, as in the past, we are making effort to deliver our enormous amount of spring shipments into the consumer's hands as promptly as possible. But it will be absolutely impossible to satisfy all our customers on deliveries unless we can obtain their cooperation.

You may be one who will not be satisfied if you neglect this warning. We want you to appreciate the seriousness of the situation—to visualize the effect of delayed shipments upon your crops—so that you will not delay a moment your orders for Solvay Pulverized Limestone, Arcadian Sulphate of Ammonia and "U. S." Potash.

The Solvay Process Company
2097 Jefferson Ave. Detroit, Michigan



Arnold F. Knoop, of Monee, Ill., with his tractor, the mechanical construction and operation of which he learned at the Michigan State Auto School.

—for all the farmers of Michigan

MICHIGAN BUSINESS FARMING

An Independent Farm Weekly Owned and Edited in Michigan

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Paying the County Agent

COMMENTING upon the successful efforts of an Indiana congressman to prevent a cut in the appropriation for the county agents from \$1,500,000 to \$1,000,000, the Price Current Grain Reporter says:

"County agents now receive pay from the federal and state governments and from the county funds, but the county agents, or many of them, do not seem to realize that there is any impropriety whatever in accepting money from county funds and then making it a large part of their business to as far as possible destroy or interfere with the business of the merchants and others in the towns who are compelled to pay taxes for their support. Rep. Purnell says the country needs more county agents and not fewer, which is probably true, if they are of the right sort and tend strictly to their business of farm advisers and do not act as commercial agents to disrupt the mutual relations of farmers and traders in villages. In this respect a great many county agents are getting to be a public nuisance, not because their activities are improper if paid for by the farmer himself but are if paid for by the people of the towns."

The complaint is justified. We are acquainted with a hardware merchant who spent weeks of valuable time drumming up sentiment among the citizens of his town for a county agent. The board of supervisors made the appropriation and the county agent was hired. He was a hustler from the word go, and in less than six months' time the co-operative associations which he had formed were selling lime, fertilizer, fencing and other farm supplies in direct competition with the merchant who was instrumental in getting the county agent and with all the hardware merchants who helped to pay his salary. The merchant looked upon this as a case of rank ingratitude. Can you blame him?

On the other hand, the county agent was but doing his duty to the farmers. He was hired to work for them, and anything that would advance their interests was a part of his job. No rules were laid down for him to work by; no stipulations were made as to what he should and should not do. He was but one figure in a great system, the methods of financing which and the work of which has become established and approved by the country at large. True, there have been and still are some county agents who try to walk the chalk line and please everybody who through taxes contribute a part of their salary. As a result they please nobody, not even themselves.

The trouble is that the method of financing the county agent system is all wrong. Who wants a hired man, anyway, who gets part of his wages from a third party, and doesn't dare to milk the cow, for instance, unless the party approves. Which is the wiser thing to do—let the cow go dry, discharge the hired man, or remove him from obligations to the other party? If the county agent has proven his worth, and we doubt if any farmer longer questions that, the farmer ought not to expect that he shall be paid from the public funds, even though a large part of them are contributed by agricultural interests. The county agent cannot be entirely free and independent to study

and improve the conditions of agriculture, if he is in anyway tied up to commercial interests. The same applies to farm organizations who receive financial support from others than farmers. The sooner all such bonds of financial obligations are severed the better it will be for the farmer, his organization and his county agent.

Reaction

IT WAS Hiram Johnson who said, "What I fear is not revolution, but reaction." Revolution in the United States is remote, improbable, if not impossible, but reaction is upon the nation. In our struggle to recover our balance from too much leaning to radicalism we stand in danger of falling the other way.

During the war we frowned upon free speech if it was against the war. That was entirely proper, as much of the freedom of speech at that time was designed to give aid and comfort to the enemy. But now that the war is over and there is no enemy to aid, those who stand in fear of honest criticism would muzzle the country with an anti-free speech law. That is reaction.

From the day when our forefathers conceived this nation, we have prided ourselves upon being a peaceful, unwarlike people, holding institutions of militarism in distrust and dislike. Wars have forced us to raise volunteer armies and conscript those who would not volunteer. In every conflict we have been successful. We are at peace with the world and have no immediate need for a large standing army and strong naval force. Nevertheless our Congress is being importuned to create a large standing army and fasten a military system

LINCOLN ON LABOR

THE PRUDENT, penniless beginner in the world labors for wages awhile, saves a surplus with which to buy tools or land for himself, then labors on his own account another while, and at length hires another new beginner to help him. This is the just and generous and prosperous system which opens the way to all, gives hope to all, and consequent energy and progress and improvement of condition to all.—Abraham Lincoln.

upon the country, that is a counterpart of the system which brought ruin to Germany and damnation to the rest of the world. That, also is reaction.

In times past labor has not had a square deal. The war created a shortage of men and an abnormal demand for the things which are made by men. Necessity forced employers who could not be moved in any other way to pay higher wages and improve labor conditions. Just as employers have taken advantage of labor when there were two men for every job, labor is now trying to take advantage of the employer when there are two jobs for every man. The public resents the attitude of labor and would crush the organizations which labor has built up to protect their interests. The attempt to embody in the railroad bill a provision which would deprive labor of its weapon of protection was another example of the reaction of the times.

Most lamentable of all is the fact that a large body of people have caught this contagion of reaction and do not recognize its manifestations when they appear. Some simple people would believe that the anti-sedition bills before Congress are aimed only at the anarchists and the communists. A careful reading of the bills will soon convince them that no matter at whom the bills are aimed they are full of buckshot which will hit the honest critic as well as the preacher of violence. As for military training, the good people are asked to believe that its prime object is to make us a nation of healthful, red-blooded citizens. And labor, we are told, is flirting with the reds and must be rendered powerless. We are asked to deprive labor of its right to organize, its right to set a price on its commodity, and its right if need be to strike.

We have scant sympathy for the professional agitator or propagandist whether he represents labor, manufacturing, commerce or agriculture. But we deplore the tendency to judge

all the great bodies of people wrapped up in those enterprises by the acts of a few. For that reason we question the wisdom and justice of the resolutions adopted by the American Farm Bureau Federation against the right of labor to strike. Resolutions aimed against the right of capital to withdraw its money from enterprise, or the right of farmers to decrease the acreage of certain crops or to collectively bargain would be equally as indefensible. Of what value is organization to labor if labor cannot set a price on its commodity and enforce that price when necessary by striking? Of what value is organization to farmers if it will not permit them to bargain collectively and refuse to sell their crops or grow more if they cannot get a fair price for them? The cases are identical. What is sauce for one is sauce for another.

We cannot take from labor or any other class of people the right to bargain collectively, fix prices based on value, and to withdraw their commodities from the channels of trade if they so desire. Providing, however, that in the exercise of such right no effort is made to coerce others to take similar action. Labor's only weapon of protection is the strike. There is a better way to settle industrial disputes, but until the employer or the government provides the better way, we must be content with the poorer way. The same truth applies to disputes of every name and nature which involve the industry and the agriculture of the country.

Standards for Farm Products

IF "HONESTY is the best policy" why would it not be well to apply it to all transactions? The government and the consumer insist that the farmer be honest. So they have established certain standards by what he is getting, is it not also in the same ard for grains; if a certain percentage of low grade is found in grain of otherwise high quality, the whole is graded low. There is a standard for wool; a standard for potatoes; a standard for beans. Now if it is in the interest of the public welfare to standardize farm products and tag them so the purchaser may know what he is getting, is it not also in the same interest to standardize and tag manufactured articles so that the farmer may know what he is getting? Take clothing, for example. The man who buys a suit of clothes nowadays takes as much chance as the fellow who gets a wife through a matrimonial bureau. Both may look good but what about the wearing qualities? That is what counts. The suit of clothes may be all shoddy and in six weeks' time be all shabby, and the wife may prove a lemon and in less than six weeks' time sour her husband. But at the present time there is absolutely no way in which to distinguish between looks and quality. Clothing ought to be standardized, marked and sold according to the amount of virgin wool they contain. And matrimonial bureau wives ought to be classified, and advertised according to looks, health and temper. Otherwise there is fraud and deception.

The same is true of seeds, feeds, gasoline, underwear, paints, and a score of other articles which the farmer buys. He has no way of knowing whether he gets his money's worth or not until after he tries them, and then it's too late. Who can in justice say, that the things the farmer buys should not be as scrupulously sold on their merits, as the things he produces?

The State Constabulary seems to have put their foot in it, in a raid on the homes of three brothers in Iron City; after the state courts said there was no violation of the prohibition laws. The raid was undoubtedly intended for an argument for the retention of the useless organization which has been saddled on the state.—Hastings Journal-Herald.

"It's no time for new ideas," says Leonard Wood. Mebbe this explains why some of our presidential aspirants haven't any.

Take up the slogan, "The Campbells are coming."

OPPOSED TO GOV'T CONTROL

In answer to your request as to my opinion whether or not the government should have control of the railroads two more years, my answer is "No." We have had hell enough the last two years and don't want any more such "d—" foolishness when people are suffering for the want of all the necessities of life. Even if we have the money to buy coal we can't get it for no other reason than the miserable way of all business being under government control. Take for instance sugar. They say the government set the price, and still the price is going higher every day. It's nothing but graft and our measly government officials uphold it. Now, I am a farmer producing grains of all kinds and also milk and I saw in the last issue of M. B. F. you ask for all farmers' opinions as to whether or not we want the governor to appoint a three-man committee to fix the price of milk. I should say "not." We don't want to support three more political suckers, as that is all it would be. Talk about the Reds that we hear so much about. My opinion is that if we could send 99 per cent of our government officials to Russia we could then expect to set up a government for the people and by the people which it should be. I think this will give you my opinion of government control of everything that the farmer raises.—F. Market, Macomb County, Mich.

We "get" you. But consider. What would have happened had the government not taken control of the railroads at the beginning of the war, and run them at public expense since then? Speaking before the United States Senate last December, Senator LaFollette said: "The truth is that the railroad system of this country had broken down prior to the war and if there had been no war the roads would have been infinitely worse off than they are today unless the government had taken them over to operate them or had financed them. The point I am making at this time is that the railroads of the country were wrecked, not by government operation during the war but private operation prior to the war." These assertions are frankly substantiated by railway executives themselves. You have cited sugar prices. In the face of the greatest shortage of sugar of the last half century, have you thought what prices might have been had not the government taken control? There are instances, it seems, when circumstances make government control necessary and wise. There are other instances when it is indefensible. Apparently no rule can be established that will always apply. The government which you criticize is your government, and the officials who direct its affairs are your officials. If you do not like them, you have the power, with the aid of other farmers, to change them in any way you see fit. Why not exercise that right?—Editor.

AS A CITY CONSUMER SEES IT

I am enclosing subscription price of your farm paper, and in my judgment if more city people would invest a few nickels in taking and reading a reliable agricultural paper, they could judge more intelligently the situations between the grower and consumer, and who is at fault for conditions as they now exist. I believe it is very unwise for farmers to leave their farms for city life, and will regret it after seeing the white lights for a short time as conditions will change in a few years and the farmer has his good living first hand, and the crumbs go to the city. So, farmers, stick to your farms and live a life worth living. I am not financially interested in farming, but interest myself in things necessary.—G. E. Waterman, Washtenaw Co.

Yes, unquestionably it would do the farmer's cause much good if some of the leading agricultural papers could be placed in the hands of city dwellers. The present attitude of the consumer toward the farmer is largely the result of misunderstanding.—Editor.

APPROVES BEET GROWERS' STAND

I have been very much interested in the stand taken by you in behalf of the farmers not only of Michigan but the whole country, and am pleased to see that we have one editor that has got some lime in his spine, and not a rubber tube.

I was one of the members of the executive committee of the state grange that started the fight three years ago for a raise in the price of sugar beets. While I don't grow beets I am glad to see the good work go on.

I am also glad to see the farmers get together to make the effort to elect not only a governor but they should go right down the line, and

elect the legislature. While Milo Campbell was not my choice for governor I am going to support him to the best of my ability.

I am sending in a vote for McAdoo as my first choice for president. I believe that his record in financing the railroads shows him to be a big man, eminently qualified to handle the affairs of the nation. Wm. J. Bryan would be my second choice, and Herbert Hoover third. I think it would be a good idea to have each give first, second and third choice. I will now close with the best wishes for your paper.—W. H. Welsh, Manager Farm Sales Dept., Ohio and Commercial Ass'n, Sault Ste. Marie, Mich.

Your attitude toward the farmer's interest and their candidate for governor is most commendable, and shows that you are indeed a true friend of agriculture.—Editor.

WILL NOT STAND BY OLD PARTIES

If you will allow me a little space in your paper I would like to pass my opinion with regards to a farmer's view on the political issue in Michigan. I would not support any candidate for office that does not come out independently from the two old parties. Milo Campbell may be a good man, but he says that he is running on a Republican ticket and if elected will stand by that party's principles. I think we have had too much of one party now in Michigan. You need never expect very much good from any party where the people will continue to roll up a hundred thousand majority. We have got to keep elections more even. I believe in an independent farmer's state and congressional ticket in Michigan this fall. Yours for success.—John S. Beng.

I am very sorry to see you take this stand. What have the principles of either of the great national parties got to do with out local and state issues?—Editor.

COLLEGE QUESTIONS VALUE OF LUPINE AND SERRADELLA

As one of Michigan's most widely read farm papers, the MICHIGAN BUSINESS FARMING exerts a powerful influence on Michigan agriculture. This influence is reflected just now by the numerous inquiries coming into this office on the use of lupine and serradella from the reading of a very interesting article in one of your recent issues on the use of these crops by Mr. Carl Schmidt of Serradella Farm, Oscoda County.

The Week's Editorial

PITY THE POOR BEAR

The bear in corn this season has had a hard pull and a disastrous one financially. Ever since the crop was harvested he has been predicting a decline and working hard to bring it about, only to see the market recover after every attack and emerge stronger than ever. In past seasons the farmer has played into the hands of the bear by selling liberally on a declining market. It was one of the truisms of the trade that the farmer would hold his grain until the price began to break and then rush to sell, but he appears to have gained wisdom and now shuts off the supply the moment the price declines to a certain level. This has been the undoing of the bear. Relying on the grower to supply the goods he has several times sold freely at declining prices, but the farmer has not come to his assistance by loading the market with grain and the result has always been a prompt recovery and the bear scrambling to get in out of the wet.

In other years the discomfiture of the bear has always been a delight to the average citizen and especially to the farmers whose goods were depressed, but this year finds the bear in great favor owing to the general desire of the public to see lower prices. The fact that he is popular, however, is not helping much. The bear loses at every turn and the farmer keeps his head and holds back the

I have not personally visited this farm but have received a full report from Mr. J. W. Nicolson of this department in regard to Mr. Schmidt's operations. I understand that considerable success has been met with in improving the quality of very light land through the use of lupine and serradella by Mr. Schmidt. However, in the estimation of Mr. Nicolson, and others who have visited this farm, there is no indication that this use has been practical nor did I note in the article of the MICHIGAN BUSINESS FARMING any cost accounts or estimates.

I believe it would be of great interest to all those who read the article, describing Mr. Schmidt's farming methods, to see a second article written by a competent investigator from your staff, who will make a careful study of Mr. Schmidt's methods from a practical standpoint as well as the standpoint of general interest.—J. F. Cox, Professor of Farm Crops, M. A. C.

Michigan Business Farming was possibly in error in publishing the results obtained by Mr. Carl Schmidt with lupine and serradella before consulting competent advice upon the matter. Acting upon Prof. Cox's suggestion, we are seeking to establish the practicability of these legumes or determine under what conditions, if any, they may be used profitably as soil builders. Until this investigation is completed, it might be well for our readers to proceed slowly in seeding these crops. We feel that the opinion of the farm crop leads of the M. A. C., should be the determining factor.—Editor.

THE RAILROADS

I read in the paper some time ago that the heads of the Farm Bureaus, Gleaners and Grangers sent a petition to government to hold the control of the railroads for two more years. I have talked with a good many farmers and failed to find one in favor of it. I have 2,500 bushels of beans and am interested in your articles in your paper on beans. I think your paper a very good farm paper.—E. C. Walker, Supt. Bliss Farm, Swan Creek, Mich.

The Farm Bureau did not join in the straw vote we are conducting upon the subject, the majority of farmers seem to favor government control. But there's no use arguing the point any further as the roads went back to the private owners March 1st. Under the guaranteed dividend clause in the railroad law, the roads will have to have higher rates which you and every farmer in the United States will help to pay, and which, it has been estimated, will add \$4,000,000,000 annually to the already high cost of living.—Editor.

THE FARMER AND THE FOOD SUPPLY

The practical question arises as to the food supply in the near future. The soil, being its source, the necessity for its thorough and complete cultivation is imperatively demanded.

But this cannot be accomplished without adequate labor of man and this is difficult, if not absolutely impossible to obtain because of so large a portion of our population being gathered into city homes, until house-room is difficult to obtain, while, yet in the rural districts, many houses are left uninhabited, it being estimated that in one state, 24,000 houses are standing empty. Will the pendulum of migration swing back to the rural districts? One of two conditions is sure to result in the near future, more help must be provided for tilling the soil, or more people will be obliged to restrict their appetites to a limited supply of food. The farmer and his family will not be of the latter class, for it is their privilege to satisfy their own needs first. "Back to the Farm," must be the slogan if adequate supply of food products is provided. American farmers are now producing but a portion of what they can be made to produce, if cultivated as the soil is cultivated in the thickly settled portions of Europe.

The discussion of this question in MICHIGAN BUSINESS FARMING of Feb. 21st, is interesting reading and Mrs. Dora Stockman has shown very clearly the situation which the hired man will be obliged to meet, who leaves the farm and moves to the city. The writer has a neighbor who keeps two hired men, paying \$65 per month for the entire year, furnishing house-rent, fruit, ground for a garden and one man has remained with my neighbor for several years.

As a nation we have become extravagant in our demands; only the best will satisfy us and a return to the less expensive ways of former years is the remedy needed. But this can hardly be expected in this age of automobiles, telephone, phonograph, flying machines wireless telegraph and prospective communication with the moon.

An earnest and courteous discussion of this question can but be helpful, provided we are broad enough in our views to look broadly at both sides of the question.—J. T. Daniells, Shiawassee County.

True as gospel! If the farmer has made both ends meet or laid something aside for a rainy day, it is because he has practiced thrift. When the people of the cities have acquired this simple habit, they will cease their wailing about the H. C. of L.—Editor.

WOULD PATTERN AFTER NON-PARTISAN LEAGUE

I am an interested reader of your paper and on most, or many subjects can endorse your opinions, but will say I cannot endorse your opinions on political action. If I get your correct ideas they are in opposition to the farmers and labor uniting in an organization outside the two old parties.

You advocate co-operation in buying and selling of products and condemn profiteering. You condemn the Newberry method of buying office in state and national legislatures. You condemn the yearly increase of taxation but we seem to come to the parting of our ways at about this point.

You think to elect a farmer governor is the main thing and to accomplish that, that his name should be placed on the Republican ticket. Now as I see it, when we vote that ticket we are, indirectly, endorsing the Newberry iniquity, also endorsing the high cost of living and profiteering, and thus lend our influence against co-operation and endorse indirectly the merchants' and manufacturers' organizations and, as is clear to everyone, that organization is fighting the co-operative system to the death.

A large proportion of the voters of Michigan are studying carefully the accomplishments of the North Dakota Non-Partisan League, which is really doing something for the people. In six years they have taken peaceful possession of both legislative assemblies through the ballot, inaugurated a state banking system, state-owned elevator; provided for furnishing flour, feed, etc.; passed state insurance laws and many other relief measures for the whole people and all without profit, or raising of taxes. No other state has equaled, or, at least

(Continued on page 17)



The Farm Home

A Department for the Women



HEALTH AND WEALTH

THE WOMAN in town who plays tennis or the man who follows a golf ball around miles of ground is simply seeking health by exercising in the open, and this may be necessary and very wise for townspeople, but for the women of the farm, there is more profit to be gotten from her out-of-door exercise, if she will spend it in her garden—whether that garden be a vegetable or flower garden. Recently we took up the subject of popcorn raising for profit, and now in this issue we shall consider the possibility of the flower garden.

Every woman loves flowers, but some haven't the so-called "knack" of making them grow. All this "knack" really is, is a knowledge of the needs of the flowers as to soil, time of planting, amount of moisture required, the right kind of fertilizer, etc., and any woman who sets about her task with a determination to make of it a paying proposition instead of just a haphazard posy bed, will find that there is much to learn, and that the study and work are both absorbingly interesting.

There has been a shortage of flowers, and this shortage promises to continue. First it came about by the government requisitioning all coal not needed for absolute necessities, and so a lot of greenhouses were closed, and many of these will never be opened again. And of course they were depended upon for flowers for decorations for summer as well as winter.

If you decide upon this as an investment proposition it is well to take only a limited number of varieties of plants at first and make a success of their culture before attempting a large number.

And if you desire the flowers to bloom early, which means that you can command the best price, then you should plant the seeds in the house, so that about Decoration Day your plants will be large and sturdy enough for transplanting. In planting in boxes, be sure that your boxes are provided with proper drainage, so that the soil will not sour.

Asters are perhaps one of the hardiest plants; have a profuse bloom and are very easy to cultivate. Because of their long stems and beautiful foliage, they are much sought after as a decoration in the late summer.

Sweet peas and roses are lovely for the June weddings, graduations, etc., and although they require a little more care, will pay one for the time spent. In order to have roses productive, they must be well mulched in the winter and the stalks tied with straw to quite a height. Sweet peas do not require very rich soil, a clay sub-soil with a sandy top is best. They are planted in a trench about six inches deep. They must be planted where they will not get too much sun

Sunrise in Wintertime

By C. Shirley Dillenback.

Ho! Come with me to the sleeping farm—
Far from the city's man-made charm,
Would you see a picture the eye to please
Just gaze while the hoar-frost is on the trees.
The scraggly poplar has changed somehow,
Gone are its imperfections now
As it stands like a princess with arms outstretched,
Showing intricate patterns so finely etched.
With the wintry sky like an azure sheen
Filling the vacancies in between.
See the ermine drifts piled row on row—
Where the gentian and golden-rod used to grow.
Light up and glisten with rainbow tints
As the winter's sun, like an errant prince,
Laughs at you o'er the snow clad hills
Have you ever experienced such splendid thrills,
In princely hall with music's chime
As you do at sunrise in wintertime?

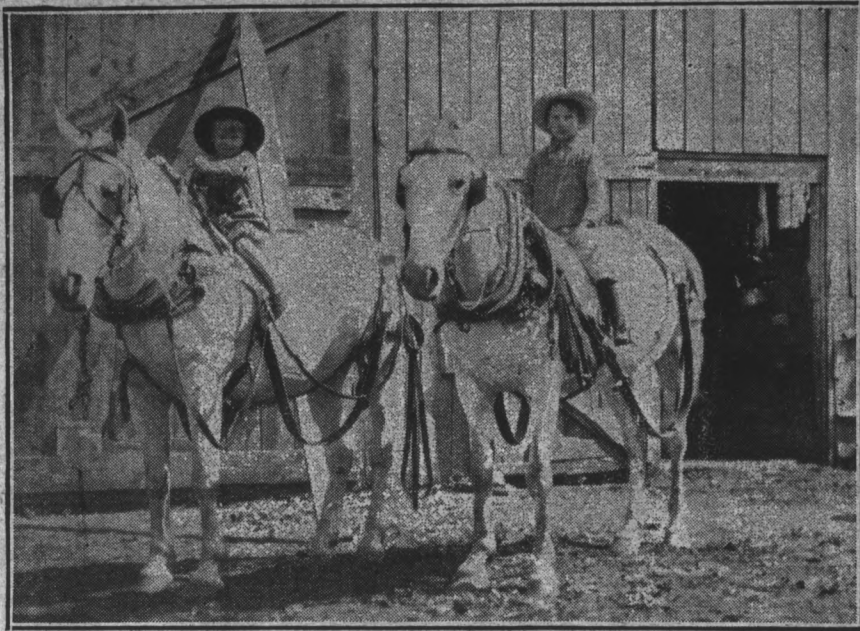
Edited by MABEL CLARE LADD

and they require a great deal of moisture. The trench in which they are planted is only lightly covered with earth until the plants are about three inches high, when the ground is filled in around them.

As to marketing your product. A line in your county paper stating what

of mankind, it will be such a power as the world has never known."

And right now, women in Michigan are coming together armed with the most powerful weapon in a democracy—the vote. And in order to intelligently use that weapon we must study the questions presented and the quali-



FUTURE FARMERS

The craze for motors is ever increasing, but when the snow, sand or mud are deep, faithful horses supply the dependable motive power. J. L. and Ivan are the children of Anna and John L. Stark, and reside at Fountain, Mich.

kind of flowers you have, and that you are prepared to fill orders for all occasions will undoubtedly bring you all the orders you can care for the first year. Another scheme if you have more than your townspeople will buy is for you to secure the names of the florists in your nearby city. Write them a letter, telling them that you have, say for instance, asters which will be ready for market, beginning such a date, and that from that date on you will be able to furnish them with three dozen per day during the season, or as many as you can be sure that you can send. Advise them as to the colors you have, and also tell them how long the stems are. This all has a bearing on the price they will pay. In shipping it will be necessary for you to sort them as to length of stems.

The florist will undoubtedly be willing to supply you with the knock-down paper boxes, marked "flowers" in which to send them to him.

The most important step at this stage of the game is to prepare them for shipment in such a way that they will reach the florist fresh. In order to do this, you should pick your flowers with shears, after sun-down the night before making shipment. Cut the stems a little on the slant. Place the flowers in a deep crock or other receptacle so that they will be in water up to their heads, and set these crocks right on the cool cellar floor and let them remain there until morning. Then take your boxes in which you are to ship them into the basement. Have plenty of oiled paper. Tie your flowers in bunches of a dozen; wrap them in the oiled paper, so that a little air as possible will reach them and also line the box with the paper. Then so plan it that the boxes will reach the express or postoffice just in time to catch the train so that they will go through as quickly as possible.

The woman who spends her spare moments in the house crocheting or embroidering, may complain that "She could just fly she is so nervous" but did you ever hear such a statement from the woman who spends all her spare time in the open air?

WOMEN IN POLITICS

MATTHEW ARNOLD said: "If ever the world sees a time when women shall come together purely and simply for the benefit

of the men who ask for our vote. Then, once having elected a man we should stand by him. He may make mistakes—but who doesn't—and it's a sure thing that he will make more mistakes if he is not given a substantial backing than he will if you give him your confidence.

There is only one kind of criticism that is helpful and that is constructive criticism. When you say a man is wrong and yet suggest no remedy; when you knock behind his back and do not face him squarely with your complaints, it is indeed striking from the back. Petitions signed by a sufficient number of voters cannot help but have a bearing on the question at issue, but just neighborhood talk against a measure will hurt the administration without doing a particle of good.

Bainbridge Colby, the new secretary of state, has defined loyalty to America as "loyalty to her chosen servants" and I believe our readers will be interested in the following excerpts from an address given by that new official recently at a "loyalty week" meeting held in New York:

"We must stifle the voice of hatred and faction," added Mr. Colby. "We must realize that there is not a man in America who does not hold office as a result of the free choice of our citizens. It is a high patriotic duty that we should support and sustain the men who have been placed in positions of difficulty, burden, responsibility and even danger, as the result of our suffrage.

"An intelligent and conscientious opposition is a part of loyalty to country, but we must not, if we are loyal, seek to disperse our energies in a partisan warfare that is waged without regard to its consequence to the well being, security or honor of the country."

The speaker referred to General Pershing as the "true American" who is "a lesson in loyalty to country, which makes all spoken words seem weak and futile."

Declaring that the "social and industrial structure" of America is founded on "enlightened citizenship," Mr. Colby asserted he "was deeply concerned with the diminution of the teaching strength of the country as a result of the disproportionately low

salaries being paid to teachers throughout the country.

"We must look to this right promptly," he added. "It is a condition that must not be suffered to continue."

SLEEVELESS SWEATERS

IN REPLENISHING the wearing apparel the sleeveless sweater is found to be indispensable for the coming spring and summer seasons.

Back—Cast on 81 stitches with No. 6 needles and knit 12 ribs plain; knit one, purl one, for 44 rows or 22 ribs being careful to begin and end each row with knit one. With No. 3 needles knit 12 ribs plain. With No. 6 needles knit one and purl one, 20 rows or 10 ribs. Knit first and last 12 stitches plain of every row and knit one and purl one in the central stitches for three ribs. Bind off six stitches at each end for armhole. Knit the first and last six stitches plain and knit one and purl one on the central stitches six ribs. Knit all stitches plain, 30 ribs. Place first 23 stitches on to a stitch holder; bind off 23 stitches; start front on last 23 stitches. Knit plain one side, 30 ribs and place on stitch holder. Knit second side 30 ribs plain. Knit across one front, cast on 27 stitches. Knit across the second front, knit six ribs plain. Knit the first and last six stitches plain and knit one and purl one on central stitches, six ribs. Cast on six stitches at each end of row. Knit the first and last 12 stitches and knit one and purl one on the central stitches for three ribs. Knit one and purl one, 10 ribs. With No. 3 needles knit plain 29 stitches; knit one and purl one, 27 stitches; knit plain 29 stitches, and re-



peat from*, 12 ribs; knit one, purl one on all stitches, 22 ribs. Knit plain 12 ribs and bind off. Sew underarm seam. Finish with crocheted buttons.

HE'LL GET IT ANYWAY

The wealthy old lady was very ill and sent for her lawyer to make her will. "I wish to explain to you," she said weakly, "about disposing of my property."

The lawyer was sympathetic. "There, there, don't worry about it," he said, soothingly; "just leave it to me."

"Oh, well," said the old lady, resignedly, "I suppose I might as well. You'll get it anyway."



Winds and Rains; Aches and Pains

EXPOSURE to bad weather means rheumatic twinges and other handicapping after-effects. We can't be too careful in relieving pains and aches, stiff joints, sore muscles, lumbago, sciatica.

"We keep a large bottle of Sloan's Liniment in the house all the time to use when an attack comes on. You know Sloan's is one of the old timers. Doctor Earl S. Sloan put it on sale 38 years ago.

"We get the biggest bottle because it's more economical. A little applied to the spot penetrates without rubbing and promptly eases up the pain and ache."

Sloan's
Liniment
Keep it handy



5 GREAT NOVELTIES 20 cts.

The glorious flower recently introduced by us has succeeded everywhere and proved to be the most showy garden annual. Nothing can surpass the mass of bloom which it shows all Summer and Fall.

We now have three new colors—pink, yellow and scarlet, as well as crimson. All these colors mixed. 20 cts. per pkt.

With each order we send 1 trial pkt. each of Giant Kochia, most decorative foliage annual.

Salvia Hybrids, white, pink, striped, scarlet, plumed, etc., mixed.

Japan Iris, new hybrids, all colors. Magnificent.

Giant Centaurea, superb for garden or vases.

And our Big Catalog, all for 20 cts.

Big Catalog, free. All flower and vegetable seeds, bulbs, plants and new berries. We grow the finest Gladioli, Dahlias, Cannas, Irises, Peonies, Perennials, Shrubs, Vines, Ferns, Pears, Apples, etc. All special prize strains, and many sterling novelties.

JOHN LEWIS CHILDS, Inc. Floral Park, N.Y.

19⁹⁵ ON TRIAL Upward American FULLY GUARANTEED CREAM SEPARATOR

A SOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for \$19.95. 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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Now a sanitary marvel, easily cleaned. Whether dairy in large or small, write for free catalog and monthly payment plan.

Western orders filled from Western points.

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60 BEST PAYING VARIETIES
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STRAWBERRIES

AND SMALL FRUITS
Quality plants that satisfy.

Send for catalog.

GEO. H. SCHENCK
Elsie, Mich.

DO YOU WANT TO SELL YOUR FARM THIS SPRING?

Try a Classified Ad in M. B. F. Business Farm-ers' Exchange.

Dye Old, Faded Dress Material

"Diamond Dyes" Make Shabby Apparel
Stylish and New—So Easy Too.

Don't worry about perfect results. Use "Diamond Dyes," guaranteed to give a new, rich, fadeless color to any fabric, whether wool, silk, linen, cotton or mixed goods—dresses, blouses, stockings, skirts, children's coats, draperies, everything!

A Direction Book is in package.
To match any material, have dealer show you "Diamond Dye" Color Card.

"HEARTS OF THREE"

(Continued from page 10)

second after our backs were turned." Using what was left of the wagon for a stepping block, and ably assisted by the jailer and his crew, the peddler managed to get astride his animal.

"It is well," he said, and added gratefully: "A thousand thanks, seniors. It has been my good fortune to meet with honest men with whom my goods will be safe—only poor goods, peddler's goods, you understand; but to me, everything, my way upon the road. The pleasure has been mine to meet you. To-morrow I shall return with my kinsman, whom I certainly shall find and relieve from you the burden of safeguarding my inconsiderable property." He doffed his hat. "Adios, seniors, adios!"

He rode away at a careful walk, timid of the animal he bestrode which had caused his catastrophe. He halted and turned his head at a call from Pedro Zurita.

"Search the graveyard, Senor Narvaez," the jailer advised. "Full a hundred Tomas Romeros lie there."

"And be vigilant, I beg of you, senior, of the heavy box," the peddler called back.

Henry watched the street grow deserted as the gendarmes and the populace fled from the scorch of the sun. Small wonder, he thought to himself, that the old peddler's voice had sounded strangely familiar. It had not been because he had possessed only half a Spanish tongue to twist around the language—the other half being the German tongue of the mother. Even so, he talked like a native, and he would be robbed like a native if there was anything of value in the heavy box deposited with the jailers, Henry concluded, ere dismissing the incident from his mind.

In the guardroom, a scant fifty feet away from Henry's cell, Leopoldo Narvaez was being robbed. It had begun by Pedro Zurita making a profound and wistful survey of the large box. He lifted one end of it to sample its weight, and sniffed like a hound at the crack as if his nose might give him some message of its contents.

"Leave it alone, Pedro," one of the gendarmes laughed at him. "You have been paid two pesos to be honest."

The assistant jailer sighed, walked away and sat down, looked back at the box, and sighed again. Conversation languished. Continually the eyes of the men roved to the box. A greasy pack of cards could not divert them. The game languished. The gendarme who had twitted Pedro himself went to the box and sniffed.

"I smell nothing," he announced. "Absolutely in the box there is nothing to smell. Now what can it be? The caballero said that it was of value!"

"Caballero!" sniffed another of the gendarmes. "The old man's father was more like to have been peddler of rotten fish on the streets of Colon and his father before him. Every lying beggar claims descent from the conquistadores."

"And why not, Rafael?" Pedro Zurita retorted. "Are we not all so descended?"

"Without doubt," Rafael readily agreed. "The conquistadores slew many—"

"And were the ancestors of those that survived," Pedro completed for him and aroused a general laugh. "Just the same, almost would I give one of these pesos to know what is in that box."

"There is Ignacio," Rafael greeted the entrance of a turnkey whose heavy eyes tokened he was just out of his siesta. "He was not paid to be honest. Come, Ignacio relieve our curiosity by letting us know what is in the box."

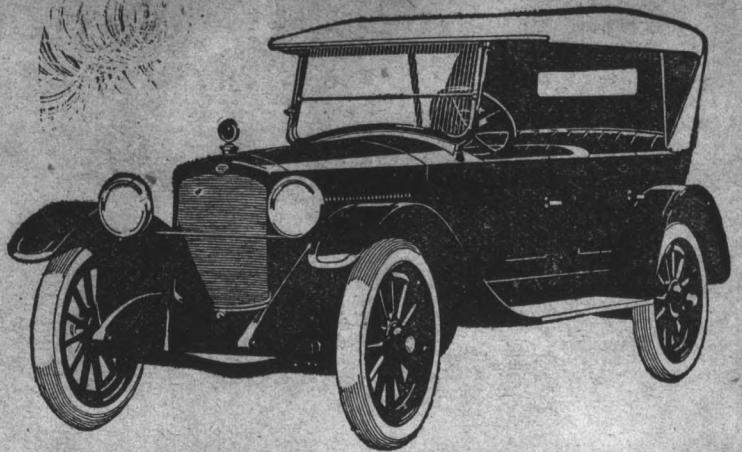
"How should I know?" Ignacio demanded, blinking at the object of interest. "Only now have I awakened"

"You have not been paid to be honest, then?" Rafael asked.

"Merciful Mother of God, who is the man who would pay me to be honest?" the turnkey demanded.

"Then take the hatchet there and open the box," Rafael drove his point home. "We may not, for as surely as Pedro is to share the two pesos

(Continued on page 19)



GRANT SIX

FOR a number of years the Grant Six has been one of the most popular cars selling to farmers, because it has always been remarkably good value at a reasonable price.

This year's car is by all odds the finest Grant Six that has ever been built. The high radiator and hood with aluminum molding give a new touch of distinction and with the long, low body lines, make a decidedly handsome and stylish car.

The famous Grant Six overhead valve engine has been steadily refined and improved until it is one of the most flexible and responsive motors ever put into a car. It has power and speed beyond what most men will dare to use.

The Grant Six is an ideal car for farm use because of its remarkable spring suspension. The rear springs

are underslung and 56 1/2 inches long—the longest springs ever used in a car of 116 inch wheel base. When the rear seat is filled the springs are flat so that the full spring action is obtained and the car travels over rough, bumpy roads with utmost comfort.

This model exceeds in wheel base and in size any former Grant Six.

In buying the Grant Six you get a car you can be proud of, a car that will satisfy you completely—a powerful, roomy, speedy, comfortable car of unusually fine appearance.

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CLEVELAND, OHIO

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SCHOOL OF AUTO-TRACTOR-AVIATION
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Our book, "Care of Baby Chicks" (free) and a package of Germozone is the best chick insurance. **WITH BABY CHICKS YOU MUST PREVENT SICKNESS—NOT ATTEMPT TO CURE.** "I never had a sick chick all last season"—C. O. Petrain, Moline, Ill. "Not a case of white diarrhea in three years"—Ralph Wurst, Erie, Pa. "Have 800 chicks now 5 weeks old and not a single case of bowel trouble"—Mrs. Wm. Christiana, Olive Ridge, New York. "Two weeks after we started last spring we were a mighty discouraged pair. Every day from three to six chicks dead. A neighbor put us next to Germozone and we are now sure if we had had it at the start we would not have lost a single chick"—Wm. E. Shepherd, Scranton, Pa.

GERMOZONE is a wonder worker for chicks, chickens, pigeons, cats, dogs, rabbits or other pet or domestic stock. It is preventive as well as curative, which is ten times better. It is used most extensively for roup, bowel trouble, snuffles, gleet, canker, swelled head, sore head, sores, wounds, loss of fur or feathers.

Sec. 750. \$1.50 pkgs. at dealers or postpaid GEO. H. LEE CO., Dept. F-38, Omaha, Neb.

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44 STYLES, colors, and sizes to choose from in our famous **RANGER** line. Send for big, beautiful catalog.

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YOU SHOULD KNOW HOW TO VOTE INTELLIGENTLY

on great political issues. Send 25c for "What Michigan Women Should Know About Voting," by Judson Grenell, to Waterford Publishing Company, 308 Thompson, St., Ann Arbor, Mich.

SEED CORN

Have you any to sell?

A little ad in M. B. F.'s Classified Business Farmers' Exchange will do the trick!

YELLOW GLOBE DANVER ONION

and DANISH BALL-HEAD CABBAGE SEED. Special surplus offer for first quality seed. Send this adv. in to us. Ask for 1920 catalogue.

Ebeling's Seed Store,
Estab. 53 Years Syracuse, N. Y.

The Children's Hour

DEAR CHILDREN:—I know that a whole lot of you little folks who have submitted original drawings have been anxiously awaiting to see them in the papers and to receive your prizes, and I am very glad to be able to print the drawings this week and award the prizes.

The four drawings published this week were awarded the prize of a "Trip Around the World" in postal cards, but greater than the actual value of the prize you receive is the fact that your drawing was good enough to be reproduced in the paper. I am sure that you will be glad to cut them out and preserve them and that you will be encouraged to try harder than ever and that others will also try for the prizes and to have their pictures given honorable mention in our paper.

The names and addresses of the four who drew the pictures on this page are, Leona Cole, of Webberville, Mich.; Walter Williams, of Seneca, Mich.; Marion Beeman, of Empire, and Thelma Middaugh, of Nessen City, Michigan, and there is an additional one which will be published next week and the winner announced.

And I am still getting inquiries relative to prizes for securing subscriptions to M. B. F. One little girl asks how many subscribers it will take to secure a wrist watch and also how many to secure a camera. It will require ten new subscriptions at \$1 each to secure either of these prizes. Both prizes are well worth working for. The boys have been very successful in earning Boy Scout Knives which are awarded for only one new subscriber and also flash lights which take only two subscribers.

One of our little girls sent me a picture of the home which she drew, and while it is very good, our artist tells me that it is out of "perspective," and therefore we cannot publish it. I wish that Beulah would take another subject and submit another drawing as she has talent and with something not so difficult as a house, it might not be difficult for her to win a prize. Remember these prizes for original drawings will be awarded just as fast as we receive enough drawings to warrant it and every time there are four prize drawings they will be published. Affectionately yours,—Laddie.

The Adventure of Practice

MARY LOUISE had such a big family it was a wonder she could keep track of them all. There was the French doll, Suzanne, that brother Tom brought home from France; and the Scotch doll that Aunt Margaret had sent over from the old country when Mary Louise was three years old; and the rag doll Mary Jane that the family suspected Mary Louise loved the most of all. Those three had been the favorites for many a day. But when Christmas came the family was increased by four more and then the nursery was full to overflowing.

One morning, not very long after Christmas, the house was so cold that Mary Louise's mother said everybody should bring their work or their play and sit in the living room where a big, cheerful log fire made things warm and comfortable. Mary Louise was willing enough for she loved to play in front of the fire, but moving as you know, is hard work. Especially when one has such a big family.

Mary Louise took one trip for the old dolls, Suzanne, Peggy (the Scotch lassie) and Mary Jane; then

she went again for their chairs and extra clothes. The third trip was for the four new dolls, Elizabeth, Georgia, Bessie and Practice. Practice had that queer name, by the way, because he was given Mary Louise by her mother to keep her company while she did her practicing every day. Mary Louise liked the idea of

family to bed. Practice wasn't there! "Have you seen Practice?" Mary Louise asked her mother.

"No, I haven't, dear," replied Mrs. Brown, "didn't you bring him down with the rest of the family?"

"I did," said Mary Louise, "but he's gone."

"Have you seen Practice?" she asked her brother Ned. But he had not seen the doll either, so Mary Louise had to go to bed with one of her family missing and every mother knows that's a very painful feeling.

But it wasn't painful for Practice. He was having the time of his young life. He had slipped out from Mary Louise's arms right by the window box in the big upstairs hall. And there he lay, in the shadow, till night time.

When the house was dark as midnight, he heard a little wee, wee sound, close by and a tiny little voice whispered, "Please may I take a bit of your soft warm jacket? I need some yarn to line my nest. My babies like soft warm things."

Practice, much interested, replied, "Help yourself! My little mother likes to knit and I know she'll make me a new one! But tell me all about your family."

While the stranger nibbled at the dark blue jacket he told Practice about his family up in the attic and about the cousins in the basement and Practice was so interested he almost wished the night would never end.

In the morning, Mary Louise spied Practice and she's wondering to this day how in the world he got that awful hole in the back of his brand new jacket. But, of course, she made him a new one. Such a pretty one that it seems a shame Practice can't tell her all about his adventure, and what happened to the jacket with the hole.

OUR BOYS AND GIRLS

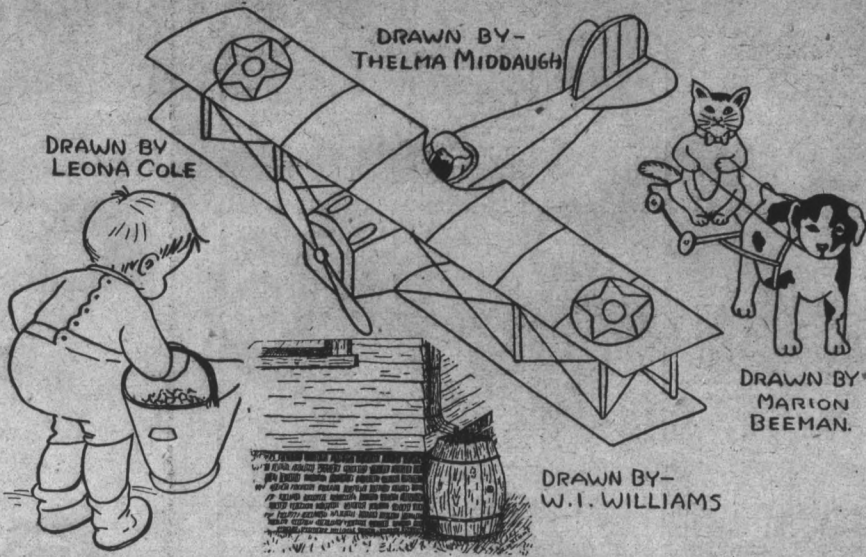
Dear Laddie:—This is the second time I have written to you. I am a girl 8 years old and in the 5th grade. I have been looking for the Doo-Dads. My little brother, Clayton, cried because they were not in. I have four sisters and two brothers. Their names are Louisa, Luella, Naomi, Helen, Clayton and Freddie. I am going to get some chickens and the money I get is mine. I am writing a verse.—Herlandra Ewald, Elkton, Mich.

A Mouse

A little mouse sat down to spin. Puss came by and she peeped in. What do you make my good little man? Making a coat as fast as I can. Shall I come in and wax your thread? No thanks, Mrs. Puss, you'll bite off my head.

Dear Laddie:—This is the second time I have written to you but I did not see my first letter in print. We live on an 80-acre farm. We intend to have 10 acres of beets this year. We have four horses, Jess, Charley, Maud and Tobias. We have six cows, Flora, Bell, Rose, Bess, Aggie and Margaret. I am a girl 11 years old in the 5th grade. My teacher is Miss Alice Russell. For pets we have three cats. Mother said that was the last incubator full of eggs we could have; our incubator holds 110 eggs. I have two brothers and five sisters. What is the matter with the Doo-Dads that they are not in the paper? Perhaps they are having a war with the Brownies or other small people. I will close, hoping to see my letter in print. I wish some of the girls of the M. B. F. would write to me.—Naomi Ewald, Elkton, Mich.

Dear Laddie:—This is the first time I have written to you. We take the M. B. F. and like it very well. I like to read the stories and letters very well. I am 10 years old and in the 4th grade. I have one sister, Amber, and three brothers, Tracie, Russell and Chester. My teacher is Miss Cowin. I like her very well. I used to live on a 40-acre farm but last fall we rented our land and moved to town. I don't like the city at all. I want to go the farm again. My father is the Rawleigh man. I like to see chickens, and I like to take care of them; they are so pretty. I hope to see my letter in print. As my letter is getting long, I will close.—Reva M. Loomis, Cadillac.



having him sit on the piano in front of her while she practiced scales and finger exercises. She didn't get lonesome and yet he didn't bother by talking as a person might.

Now just how or why it happened Mary Louise didn't know. Probably because she had taken two trips upstairs before she was getting a little tired. Or maybe it was because she had such a big family; maybe folks with big families don't count their children till bed time. But however it happened, Practice got lost. When Mary Louise loaded up her arms to go down stairs he was tucked tight under her elbow just as cozily as could be. And when, that night, after the house was again nice and warm, Mary Louise went to put her



THE SLEEPYTOWN EXPRESS

Just beyond the rainbow's end a river ripples down
Beneath a bridge, around a bend and flows through Sleepytown—
Through Sleepytown, where goblins toil to fashion wondrous toys
And make up fascinating games for little girls and boys.
And automobiles, just the size for little hands to drive
Await to whirl you all about as soon as you arrive.
But no one ever is allowed in Sleepytown unless
He goes to bed in time to take the Sleepytown Express!

I know a foolish little boy who always starts to whine
When he is asked to trot upstairs before it's half-past nine.
And often he will stamp his feet and shake his tousled head.
And make a racket, even then, when he is sent to bed.
Of course, when he has said his prayers it always is too late
To catch the Sleepytown Express—it starts at half-past eight.
And so, in all his long, long life—he's five years old this fall—
That little boy has never been to Sleepytown at all.

But other wiser little boys, and little girls as well,
As soon as 8 o'clock has struck rush right upstairs, pell-mell,
Get off their clothes and say their prayers, just of their own accord,
And, when the train comes rolling in, they're there to climb aboard.
Then, through a long, delightful night they wander up and down,
And have a most exciting time in queer old Sleepytown;
And not for cake or anything that children could possess
Would any of them ever miss the Sleepytown Express.

—JAMES MONTAGUE.

County Crop Reports

GRAND TRAVERSE—We are having fine weather at present. Farmers are hauling in corn and getting wood. Still lots of sickness. Auction sales will begin soon.—C. L. B. The following prices were paid at Williamsburg:—Wheat, \$2.25; corn, \$1.40; oats, \$1; rye, \$1.50; hay, \$36; potatoes, \$3.50; cabbage, 12; butter, 45; butterfat, 70; eggs, 50.

ALLEGAN—Farmers are busy doing chores and attending sales, of which there are a plenty. Good grade cows at sales are selling for \$100 and up. Corn, oats and hay also are in great demand, judging by the prices paid. We have had very mild, pleasant weather the last few days, and a few days more will put an end to our sleighing. Very few potatoes have been sold in this section during the past two months.—W. F.

MONROE (West)—We are having some warmer weather at present. The snow and ice are almost gone from the fields. The wheat looks bad, but a good warm rain would make it look better. Some farmers have been drawing manure forenoon while the ground is frozen. The roads are getting bad and most of the farmers who had to move took advantage of the good roads while they were frozen. A lot of farms are changing hands.—W. H. L., Dundee.

MONTCALM—Farmers are hauling produce when the weather permits. The weather is very unsettled; rain turns to snow and freezes. The soil is frozen to a depth of about four feet. Farmers are selling potatoes mostly.—G. B. W. The following prices were paid at Lakeview:—Wheat, \$2.10 bu; corn, 55; oats, 70; rye, \$1.50; hay, No. 1 timothy, \$20 No. 1 light mixed, \$35; straw-rye, \$12; wheat-oat, \$14; beans, \$6.75; red kidney, \$12; potatoes, \$4; hens, 27; springers, 25; ducks, 22; geese, 25; turkeys, 35; butter, 60; butterfat, 65; eggs, 45; apples, \$2.

JACKSON (South)—Weather cold and windy. The long-looked-for rain made the roads almost impassable in places where the snow was deep, and then freezing again made travel difficult. Farmers busy getting up wood and marketing their grain before the rain. Hay brings \$36 per ton at the barn. Help very scarce and the farmers with few exceptions are arranging their work and planning to put in no more crops than they can take care of alone. Month hands, when they can be secured, are demanding \$50 to \$70 a month, including board and washing.—G. S. The following prices were paid at Hanover:—Hay, \$36; hens, 30; butterfat, 70; eggs, 55.

INGHAM—The first rain for three months came yesterday; it rained all day and took the snow except drifts; turned cold at night and is frozen solid again. Farmers looking over tools, harnesses, etc., making repairs where needed, but cannot accomplish much yet. A little stock, some scattering bunches of hogs were sold this week. Auction sales are still numerous. Farmers say not many acres of beans this year and it looks like few acres of everything with the help so scarce.—C. I. H. The following prices were paid at Mason:—Wheat, \$2.20@2.25; corn, \$1.40; oats, 80; rye, \$1.40; hay, No. 1 timothy, \$25; No. 1 light mixed, \$25; barley, \$2.50; beans, \$6; potatoes, \$2.25; butter, 50@55; butterfat, 65; eggs, 45; lambs, 18; hogs, 14; beef steers, 10@11; veal calves, 19.

SHIAWASSEE (East)—The cold winter and heavy snow storms have put all farm work at almost a standstill. The roads are almost continually blocked by snow and snowplows are being used constantly on all the main roads, but without much success, as the high winds cause the snow to drift and make the tracks worse than before. There are many changes in real estate owing to the high prices paid for farm lands paid by parties coming in from other states, a good many from Illinois.—D. H. M. The following prices were paid at Corunna:—Wheat, \$2.25; corn, \$1.45; oats, 85; rye, \$1.50; hay, No. 1 timothy, baled, \$25; No. 1 light mixed, baled, \$22; straw-rye, \$10; wheat-oat, \$8; potatoes, \$1.75@2; onions, 90 lb.; cabbage, 8; hens, 25; springers, 23; butter, 50; butterfat, 65; eggs, 48; sheep, \$12@14; hogs, \$15; beef steers, 75; beef cows, \$25; veal calves, \$1@12; apples, \$2.50.

JACKSON (N. E.)—The past week brought us good weather until Thursday when it rained all day and turned colder, making the roads almost impassable except for sharp-shod horses. The fields are bare and the fall grains are exposed for thawing and freezing. No damage can as yet be noticed. Some beans moving at \$5.75 per hundred and many report it to be the last ever drawn. What difference does it make what is sold, grain, produce or live stock price considered either high or low to the farmer, if the profiteers and speculators have a chance at the commodity? The farmer will get the small end of it on the wind-up. I believe that a complete "farmers slate" in local, state and national elections will do more to right matters in time, and particularly, if voted regardless of present political parties. Auctions are the order of the day; prices fair except grains. Corn in the ear at \$1; oats, \$1; hay and roughage being at about fair market price.—A. F. W.

GENESEE—Farmers are working up wood and attending auction sales, besides doing their regular chores. Some teaming was done during the first part of the week, but none is being done now on account of the poor roads. We had warmer weather with rain this week which has left most of the fields bare and the roads in bad shape with neither sleighing nor good wheeling. Last night and today it was much colder and

everything is covered with ice. Unless we get snow to cover the crops again they will surely be injured considerably by this kind of weather. Farmers are selling some hay, potatoes, wood and live stock and are buying coal, feeds, flour and clover seed. Some beans are in the farmers' hands and are being held for higher prices. Potatoes are about all sold. Indications point to a considerable decrease in the acreage of all crops this year. Most farmers are planning on working what they can do themselves, and letting the rest go.—C. W. S. The following prices were paid at Flint:—Wheat, \$2.35; corn, \$1.50; oats, 95; rye, \$1.55 buckwheat, \$3 cwt.; beans, C. H. P., \$6; red kidney, \$11; hay, \$25@30; rye, wheat and oat-straw, \$10@15; potatoes, \$2.50@2.65; onions, \$4.50; cabbage, \$8 bbl.; cucumbers, \$2.50 doz.; hens, 32; springers, 32; ducks, 32; geese, 32; turkeys, 40; butter, dairy, 55; creamery, 60@62; eggs, 50@52; apples, \$2.50@3; beef steers, \$16.50@11.50; beef cows, \$7.50@8.50; veal calves, 19@20; sheep, \$12@13; lambs, \$18.50@19.50; hogs, \$12.50@14.50.

WOULD PATTERN AFTER NON-PARTISAN LEAGUE
(Continued from page 12)
surpassed them in improvement of their school system, justice to returned soldiers, peacefully settling the coal trouble and in every way illustrating true democracy. Now why should not the people of this state be able to elect men to our highest offices who will go and do likewise?—P. P. Miner, Saginaw County, Mich.

The Non-Partisan League is not a political party, in the strict sense of the term. It endorses and elects candidates on both the Republican and Democratic tickets. Moreover, it is not in sympathy with the third party movement, preferring to support men for office who will purge and perfect the existing parties. The attitude of the League on this subject will be explained in a later issue.—Editor.

WHAT ORGANIZATION HAS ACCOMPLISHED

(Continued from page 5)
raise meant a million dollars gained by organized efforts from the company, on the 1917 crop, and Morey admitted the raise to be the result of a conference in the following letter: (Letter to J. A. Hicks—3-7-13.)

"Then in September, 1917, the farmers' organization sent another large delegation to Denver for a conference with the company. The farmers asked \$10 for 1918 beets. The company after several weeks of study concluded it would be very patriotic to give an average of \$9 and covered acres of newspaper space telling of its patriotic action. The farmers' organization again got into action, raised about \$2,000 and sent a committee to Washington to lay the matter before Mr. Hoover. The committee performed its duty to such good purpose that Mr. Hoover was convinced that the company should pay still more for its beets. He appointed a commission to get sworn testimony at factory towns on the cost of beet raising. That commission made its investigation, reported back to Mr. Hoover, recommending an alternative price of \$10 flat per ton, or \$9 minimum with 64 cents advance for each 1 per cent increase of sugar content above 14 per cent, and many other vitally important improvements in the treatment of the growers by the sugar company, as the report will convince any man. Ten dollars was accepted by the company.

"The average price of beets in 1917, was \$7.50, the farmers by means of their organization got a raise of \$2.50 per ton for 1918. On the basis of a two million ton crop then, the Great Western Sugar Company will pay \$5,000,000 to its growers as a result of their organized effort for the 1918 crop.

Enclosed find check for \$3 for my renewal and two of my neighbors. We like M. B. F. and think you are working for the farmers' interest, first, last and all the time.—E. V. S., Kent County.

Plant Clover Right
Do not plant clover unless you plant it right.
Lime, good seed, and a good seed bed make the difference between a stand and failure.
Plant with a drill if you have one; if not, cover the seed with a harrow.

SEE that beautiful field of tasseled corn?
Hear the cool rustle and swish of the blade-like leaves and the sturdy stalks as the breeze roves through the even-standing forest of green and gold?

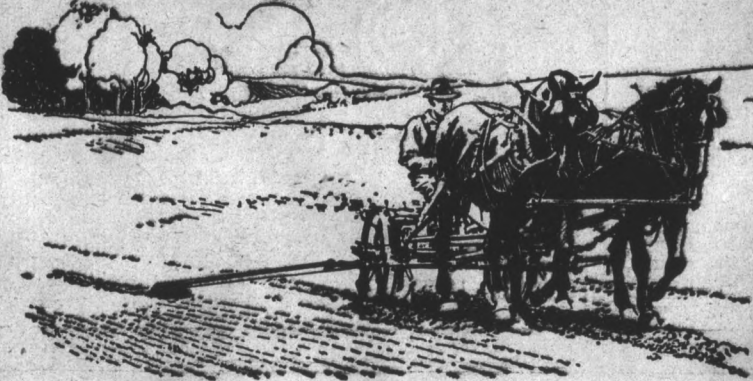
Bright prospects for some one! That field of corn may belong to you. If the stand is regular and heavy it is just the kind that grows where an International Corn Planter has been at work earlier in the season. Bright crop prospects go hand in hand with these planters because—

The variable drop clutch will deposit 2, 3, or 4 kernels to the hill, as desired, and it works with a high degree of accuracy. Correct planting is an essential to good crops.

The tongue is adjustable to height of team and, together with the quick action check spring, results in an evenly checked field that can be cross cultivated without digging up any of the hills. Insures healthy, even stand of corn.

A foot drop lever is provided for planting head rows or dropping hills without wire. Makes a nicely completed, full field when used the first way and enables you to make use of every foot of ground in "patchy" fields.

If you are interested in bright crop prospects it will pay you to scribble your name and address along the margin of this advertisement and mail to us so that we can send you an illustrated pamphlet telling all about International Corn Planters. Later—see the International dealer.



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CHICAGO OF AMERICA INC. U.S.A.

Canada Field Peas
Be sure to plant this great forage crop this year. Order select seed from us now—the kind you can depend on for big yields. Wonderful values in Clover, \$3.98. Mixed Alsike & Timothy, Millet, Rape, etc. Catalog free. Write, PER BUSHEL, THE ADAMS SEED CO., Box 16, DECATUR, IA.

Strawberry Raspberry, grape, currant, blackberry plants, trees and flowers. Everything to plant. Will pay you to answer this little ad. Value for FREE. Write THE ALLEGAN NURSERY, Box 80 Allegan, Michigan.

One Man Saws 25 Cords a Day
The Ottawa Log Saw does the work of ten men. Makes wood sawing easy and profitable. When not sawing works for pumping, feed grinding, etc. Simple to use, durable. Thousands in use. Fully guaranteed. 54 day trial. Cash or Easy Payments. Write for Low Price, OTTAWA MFG. CO., 1401 Wood St., Ottawa, Ont.

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Concrete improvements have saved money for so many farmers that their Sheldon Farm Concrete Mixer has become as important a piece of farm equipment as their corn sheller or cultivator. Do away with the old-fashioned, expensive, back-breaking, unsatisfactory hand and shovel method. Mix your concrete the Sheldon way and get a uniform mix every time; save labor, save time and save the cost of the Sheldon on the first job.

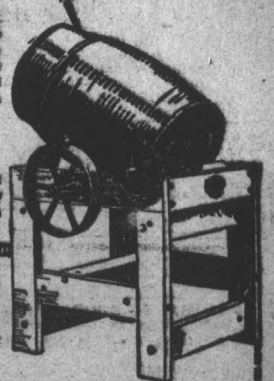
SHELDON CONCRETE MIXER
does the same high grade work as a \$500 mixer, yet costs only a fraction as much. Solidly built to stand strain and vibration for years. Easy to operate—easy to move—mixes two wheelbarrowful at a batch—a 1 1/2 H. P. engine will run it.

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and get our 1920 Book on Concrete. It will tell you how you can save money on your concrete work. Shows all types of Sheldon Mixers and gives our direct-to-you low prices. It's FREE. Get your copy today.

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4

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Were you to spend a lifetime designing and building a silo we believe that your silo would be very much like one of these 4 Saginaws.

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Because of our knowledge of silo conditions, our resources and manufacturing facilities we are able to build these 4 different types and you are assured of the best silo service in any one of these 4 Saginaw silos.

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BUSINESS FARMERS' EXCHANGE

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FARMS & LANDS

\$2,000 DOWN SECURES 300 ACRES WITH pair horses, 2 mules, 12 cows, 10 heifers, bull, 5 steers, all high grade Holstein, hogs, poultry, hay, fodder, carriages, wagons, harness, implements included; \$4,300 gets everything, easy terms, biggest bargain ever offered in this rich dairy and farming section, by owner whose oil interests in the South require quick removal. Near main line depot and market city. Dark loam soil cuts 3 tons hay the acre. 75-cow pasture, wood, timber, large orchards; vast quantity berries for high prices at local stores. New 12-room house, 2 immense basement barns, also, corn storage barn, granary, running water house and barns. Details page 7 Strout's Spring Catalog—Bargains 83 states; copy free. **STROUT FARM AGENCY, 814 B E, Ford Bldg., Detroit.**

FOR SALE—MICHIGAN CLOVER SEED BELT LANDS. Old grass covered, cut over clay soils, from heavy, light to medium. Easily cleared. Where clover seed reproduces thirty to fifty fold. Settlers (English speaking) are rapidly becoming prosperous growing clover seed, beef, mutton and marketing dairy products. **NO BETTER RECOMMENDATION.** 10,000 acres in any size tracts from 80 acres up, \$10 to \$15 an acre. 10 per cent down, interest 6 per cent. Settler has option to meet a small stipulated yearly cash payment, or merely apply the product of one peck of clover seed yearly for every forty purchased—**UNTIL THE LAND IS PAID FOR.** Entire forty or eighty often paid for out of the product of one bushel of clover seed. Will advance to settlers for 5 years, interest 6 per cent on live stock, the first payment made upon land purchased. Will show land after April 1st.—**JOHN G. KRAUTH, Millersburg, Presque Isle County, Michigan.**

FARMS FOR SALE—GOT A LARGE LIST of farms for sale, hay and grain, corn potatoes, stock and poultry farms, and some of the best fruit farms in West Michigan. Good market for your farm produce and stock. You do not have to pay an agent's fee of any kind. Just pay the farmer his price if you buy. Write me what kind of farm you want and terms. Address **GEO. J. ROSPLOCK, Farm Agent, 204 Third St., Ludington, Michigan.**

80 ACRES, 80 CLEARED, FREE OF stumps, 20 timber. Soil, clay loam, in fruit belt. Spring creek, barn 40 x 50, small house. One mile woven wire fence, cedar posts, 20 acres rye, 5 acres fall plowed, if sold within 30 days, \$3,000 takes it, \$1,200 down. **MILFORD PRESTON, Hersey, Mich.**

FOR SALE—FARM 122 ACRES, 3 MILES from Lansing, on good road. All improved. Good buildings. Best of soil. S. W. HEMPHY, R7, Lansing, Mich.

FOR SALE—GOOD FARM, 120 ACRES good buildings, except house, small orchard, maple grove, good fences, clay loam soil, good drainage, 90 acres cultivated, 30 woods and pasture, 50 acres meadow, 8 acres wheat, 11 acres pastured. Price \$5,000. Terms. **GEORGE JOHNSTON, R3, Port Hope, Mich.**

FOR SALE—FARM OF 84 ACRES, 3 MILES east of Hopkins. Well improved. Price right. A bargain. Write **GEO. A. TUTTLE, Hopkins, Mich.**

LANDOLOGY—A MAGAZINE GIVING THE facts in regards to the land situation. Three months' subscription FREE. If for a home or as an investment you are thinking of buying good farm lands, simply write me a letter and say, "Mail me LANDOLOGY and all particulars FREE." Address Editor, Landology, Skidmore Land Co., 398 Skidmore Bldg., Marinette, Wis.

MISCELLANEOUS

REGISTERED FARM SEEDS Michigan's highest yielding varieties. Michigan 2-row Barley, Reg. No. 9F1 at \$2.35 per bu., and Wisconsin Pedigree at \$2. Sacks extra. **W. I. BANDEEN, Mt. Pleasant, Mich.**

TOBACCO—"OLD HOMESPUN" CHEWING or smoking. Grown and sold by Kentucky Farmers. Not doped, just plain OLD NATURAL LEAF. Trial offer, 2 lbs. postpaid \$1.00. **KENTUCKY TOBACCO ASS'N., Dept. 5, Hawesville, Ky.**

FOR SALE—CANADIAN FIELD PEAS ready to sow, \$6 cwt., bags included, with 150 pounds or more. **WALTER BROWN, Shepherd, Mich.**

CUMBERLAND RASPBERRY PLANTS FOR sale. Plants by the twenty-five, fifty, hundred and thousand. The most extensively grown of any blackcap. Send for price list. **ELMER H. NEVINS, Nurseryman, Ovid, Mich.**

BUILDERS' PRODUCTS CO., 14 PASADENA Ave., Detroit. Wholesale to consumers—Paints, Varnish, Spraying Materials, Sprayers. Manual mailed free. **M. B. TEEPLE, Mgr.**

SENATOR DUNLOP STRAWBERRY PLANTS—Money makers. 1919 demand exceeded supply. Prospect same this season. Order early. \$5.00 per 1,000; \$2.50 per 500. Per 100, 75 cents. **J. E. HAMPTON & SON, Bangor, Mich.**

BUY FENCE POSTS DIRECT FROM FOR-est. All kinds. Delivered prices. Address "M. M." care Michigan Business Farming, Mt. Clemens, Mich.

WE PAY \$200 MONTHLY SALARY AND furnish rig and expenses to introduce guaranteed poultry and stock powders. Bigler Company, 6822 Springfield, Illinois.

WRITE THE CLARE JEWELRY CO. FOR bargain sheet of watches and silverware. We do watch repairing. Lock Box 535, Clare, Mich.

MICHIGAN CHOICE WHITE CLOVER HONEY in 5 lb. pails, 12 pails to case or 34 pails in barrel. **ARCHIE BREAKEY, Grindstone City, Mich., R. 1.**

SENATOR DUNLOP AND STEVENS' LATE champion \$5.00 per 1,000; \$2.50 per 500; \$1 per 100 delivered. **C. H. STANLEY, Paw Paw, Mich., R. R. No. 2.**

FOR SALE—84 ACRES IN IONIA CO., NEAR Grand Ledge and Mulliken. Good buildings. **C. V. BALDWIN, Grand Ledge, Mich.**

FOR SALE—FORDSON TRACTOR AND TWO bottom fourteen inch Oliver plow in first class condition. Address **E. P. KINNEY, East Lansing.**

FOR SALE—100 TONS OF LOOSE MIXED hay. **CHESTER WELCH, Elwell, Mich.**

WANTED—BOY 16 TO 18 YRS. WITH some experience, to work on farm. Write **ERNST A. DEAN, South Lyon, Mich.**

Uncle Rube Spinach Says:

WOMEN AN' CLOTHES

WHEN I HEARIN' a good deal these days 'bout the immodesty of women—in their ways of dressin' I mean—that they are exposin' 'most altogether too much of what should or't to be hid an' a lot of things like that. Preachers are wallin' from the pulpits—the older preachers ya understand—the younger an' more up-to-date ones ain't sayin' much about it yet their eyesight bein' clearer an' mebbe better, but the ol' fellers! Gosh! They jest about go into tantrums about it. "Why it's absolutely indecent," says one; "it's ree-diculous an' outrageous," sez another, an' they keep howlin' about it til I git to thinkin' mebbe they been lookin' closer'n a mere man, 'specially a preacher, ort to look.

Jest this mornin' I've been readin' an article by Rev. Lucien Johnston, taken from the *Baltimore Catholic Review*, an' what he sez is a plenty, believe me. Why Lucien sez; I will not quote his exact words, they're too durm high falutin' for me, but here's the substance of it: "If women leave certain parts of their bodies undraped, (meanin' undressed) because they think they have beautiful forms, then men should wear no clothes at all, for men have much more beautiful forms than women," and that neither man nor woman has as beautiful an' symmetrical forms as almost any other member of the animal world, even the caterpillar an' some species of beetles, has got us beat a-thousand ways when it comes right down to hard tacks. An' accordin' to the Rev. Lucien, 'bout the only thing the human family can claim superiority over is the hog an' an' the parrot. Gereusalem crickets! Would not that git ya? Why Lucien claims that men realize this fact and cover their bodies with suitable clothes to beautify 'em, but women have not reached that high standard of mentality an' like the ostrich, consider themselves safe if their heads are covered an' they have a string of beads around their necks. Now as I said before, these ain't exactly his words but it's 'bout what he means an' so much for that.

Well, now comes one from Elinor Glynn—you all know Elinor, she's quite a success as a writer—well, she ort not to be quite so plain spoken about her own sex seems to me, but listen to her now: "A friend insisted on my going to a ball last week, and after my quiet months at Versailles I was startled at the nakedness of evreyone. What is causing this almost universal desire to expose the person to view? The standard of decency in such matters has always been only geographical, but in all countries where the later christianity held sway morality had caused a set of instincts which experienced horror at any undue exposure of any part of the body but the face, neck and hands. The re-

sult of this was that a woman's figure was a thing of mystery and fascination because it was hidden and imagination had to be called in to picture it. Now hardly anything is left to the imagination; almost everything can be stared at boldly, and the eye forced to realize that five women out of ten are ugly, misshapen creatures, often with coarse skins. Have you ever remarked how much finer and whiter men's skins are than women's, as a rule?"

Now I've given Elinor's exact words an' I'll admit she's handin' it to women purty darn strong but she's capable of doin' things like that so you can blame her an' not me for what she sez. I know an' you know that hundreds of women appear on the streets of every city in the land every day in the week in dresses that make them look perfectly silly—some of 'em so tight the wearer can hardly walk in 'em, others so short, top an' bottom, they's nothin' much but a girdle—ev'ry manner an' kind of dress; seems as if the more exposure the better the wearer wuz suited—an' so with all'ta bein' said an' printed I've jest been doin' a little thinkin' of my own an' I come to the conclusion that women an' young girls don't go an' tog up in them sort o' duds to please themselves, nor to please old preachers nor reformers of any kind b'gosh! It is ev'ry woman's desire to be attractive; she lives for that, an' dresses for it. She thinks because a lot of addeipated, cigarette weakened, bow-legged young molly coddles stand around on the street corners and gaze at 'em in awe-struck wonderment they are showing admiration for them, poor silly little girls! If they could only hear the remarks that were being made by these same non-essentials, by gosh! they'd go home an' yank off such ridiculous gowns, put on some sensible clothes, wash the paint an' powder off'n their faces, wash the back of their necks an' behind their ears an' then an' there resolve to be what the Creator intended them to be, good, true, natural, lovable women, women who were created to be mothers, in due time, not painted dolls nor subjects for morbid and half-baked 'sight' seers on the city streets.

Preachers may preach; reformers may rave until the world ends, but women will not change their mode of dress as long as they think they are in style and the style is attractive. The question of morality never enters into the question of dress, not with women it doesn't and the only thing that will change her views in regard to the way she dresses is for the one an' only young man to tell her she doesn't look good in that costume. It will never be worn again, take it from me!

Well, this a longer letter than I intended to write, but like all great writers, the things I know least of I write most about. Cordially yours—*Uncle Rube.*

Sense and Nonsense

Proved It Five Times

Mrs. Jones read from her evening paper that John Smith died Saturday.

"But he died Friday," interposed her husband.

"He died Saturday," interposed his wife; it says so here. I thought it was Friday myself, but I went out and bought five copies of the paper to be sure, and it was the same in all of them, and they wouldn't make the same mistake six times."



PINE SPORT

Little Bug—My what a fine hoop this makes.

MacHennery came out into the kitchen one Sunday night to find his hired man lighting the lantern.

"Where are you going," he asked.

"Goin' out to see my girl," answered the hired man.

"Heck!" snorted MacHennery. "When I done my courtin' I never carried a lantern. I went in the dark."

"Yeah," retorted the hired man, as he took up the lantern and started for the door. "Yeah, and look what you got!"



A POPULAR SHOW

Mr. Judy—Do you know my dear that this show of ours has had the longest run in the dramatic art.

"HEARTS OF THREE"

(Continued from page 15)

with us, that surely have we been paid to be honest. Open the box, Ignacio, or we shall perish of our curiosity."

"We will look, we will only look," Pedro muttered nervously, as the turnkey pried off a board with the blade of the hatchet. "Then we will close the box again and—Put your hand in, Ignacio. What is it you find? . . . eh? what does it feel like? Ah!"

After pulling and tugging, Ignacio's hand had reappeared, clutching a cardboard carton.

"Remove it carefully, for it must be replaced," the jailer cautioned.

And when the wrappings of paper and tissue paper were removed, all eyes focused on a quart bottle of rye whiskey.

"How excellently it is composed," Pedro murmured in tones of awe. "It must be very good that such care be taken of it."

"It is Americano whiskey," sighed a gendarme. "Once, only, have I drunk Americano whiskey. It was wonderful. Such was the courage of it, that I leaped into the bull ring at Santos and faced a wild bull with my hands. It is true, the bull rolled me, but did I not leap into the ring?"

Pedro took the bottle and prepared to knock its neck off.

"Hold!" cried Rafael. "You were paid to be honest."

"By a man who was not himself honest," came the retort. "The stuff is contraband. It has never paid duty. The old man was in possession of smuggled goods. Let us now gratefully and with clear conscience invest ourselves in its possession. We will confiscate it. We will destroy it."

Not waiting for the bottle to pass, Ignacio and Rafael unwrapped fresh ones and broke off the necks.

"Three stars—most excellent," Pedro Zurita orated in a pause, pointing to the trade mark. "You see, all Gringo whiskey is good. One star shows that it is very good; two stars that it is excellent; three stars that it is superb, the best, and better than beyond that. Ah, I know. The Gringos are strong on strong drink. No pulque for them."

"And four stars?" queried Ignacio, his voice husky from the liquor, the moisture glistening in his eyes.

"Four stars? Friend Ignacio, four stars would be either sudden death or translation into paradise."

In not many minutes, Rafael, his arm around another gendarme, was calling his brother and proclaiming that it took little to make men happy here below.

"The old man was a fool, three times a fool, and thrice that," volunteered Augustino, a sullen-faced gendarme, who for the first time gave tongue to speech.

"Viva Augustino!" cheered Rafael. "The three stars have worked a miracle. Behold! Have they not unlocked Augustino's mouth?"

"And thrice times thrice again was the old man a fool!" Augustino bellowed fiercely. "The very drink of the gods was his, all his, and he has been five days alone with it on the road from Bocas del Toro, and never taken one little sip. Such fools as he should be stretched out naked on an ant heap, say I."

"The old man was a rogue," quoth Pedro. "And when he comes back tomorrow for his three stars I shall arrest him for a smuggler. It will be a feather in all our caps."

"If we destroy the evidence—thus?" queried Augustino, knocking off another neck.

"We will save the evidence—thus" Pedro replied, smashing an empty bottle on the stone flags. "Listen, comrades. The box was very heavy—we are all agreed. It fell. The bottles broke. The liquor ran out, and so were we made aware of the contraband. The box and the broken bottles will be evidence sufficient."

The uproar grew as the liquor diminished. One gendarme quarreled with Ignacio over a forgotten debt of ten centavos. Two others sat upon the floor, arms around each other's necks, and wept over the miseries of their married lot. Augustino, like a very spendthrift of speech, explained his philosophy that silence was golden. And Pedro Zu-

rita became sentimental on brotherhood.

"Even my prisoners," he maundered. "I love them as brothers. Life is sad." A gush of tears in his eyes made his desist while he took another drink. "My prisoners are my very children. My hearts bleeds for them. Behold! I weep. Let us share with them. Let them have a moment's happiness." Ignacio, dearest brother of my heart. Do me a favor. See, I weep on your hand. Carry a bottle of this elixir to the Gringo Morgan. Tell him my sorrow that he must hang tomorrow. Give him my love and bid him drink and be happy today."

And as Ignacio passed out on the errand, the gendarme who had leapt into the bull ring at Santos, began roaring:

"I want a bull! I want a bull!"

"He wants it, dear soul, that he may put his arms around it and love it," Pedro Zurita explained, with a fresh access of weeping. "I, too, love bulls. I love all things. I love even mosquitoes. All the world is love. That is the secret of the world. I should like to have a lion to play with . . ."

The unmistakable air of "Back to Back Against the Mainmast" being whistled openly in the street, caught Henry's attention, and he was crossing his big cell to the window when the grating of a key on the door made him lie down quickly on the floor and feign sleep. Ignacio staggered drunkenly in, bottle in hand, which he gravely presented to Henry.

"With the high compliments of our good jailer, Pedro Zurita," he mumbled. "He says to drink and forget that he must stretch your neck tomorrow."

"My high compliments to Senor Pedro Zurita, and tell him from me to go to hell along with his whiskey," Henry replied.

The turnkey straightened up and ceased swaying, as if suddenly become sober.

"Very well, senor," he said, then passed out and locked the door.

In a rush Henry was at the window just in time to encounter Francis face to face and thrusting a revolver to him through the bars.

"Greetings, camarada," Francis said. "We'll have you out of here in a jiffy." He held up two sticks of dynamite, with fuse and caps complete. "I have brought this pretty crowbar to pry you out. Stand well back in your cell, because real pronto there's going to be a hole in this wall that we could sail the Angelique through. And the Angelique is right off the beach waiting for you—Now, stand back. I'm going to touch her off. It's a short fuse."

Hardly had Henry backed into a rear corner of his cell, when the door was clumsily unlocked and opened to a babel of cries and imprecations, chiefest among which he could hear the ancient and invariable war cry of Latin-America, "Kill the Gringo!"

Also, he could hear Rafael and Pedro as they entered, babbling, the one: "He is the enemy of brotherly love;" and the other, "He said I was to go to hell—is not that what he said, Ignacio?"

In their hands they carried rifles, and behind them surged the drunken rabble, variously armed, from cutlasses and horse pistols to hatchets and bottles. At sight of Henry's revolver, they halted, and Pedro, fingering his rifle unsteadily, maundered solemnly:

"Senor Morgan, you are about to take up your rightful abode in hell."

But Ignacio did not wait. He fired wildly and widely from his hip, missing Henry by half the width of the cell and going down the next moment under the impact of Henry's bullet. The rest retreated precipitately into the jail corridor, where, themselves unseen, they began discharging their weapons into the room.

Thanking his fortunate stars for the thickness of the walls, and hoping no ricochet would get him, Henry sheltered in a protecting angle waited for the explosion.

(Continued next week)

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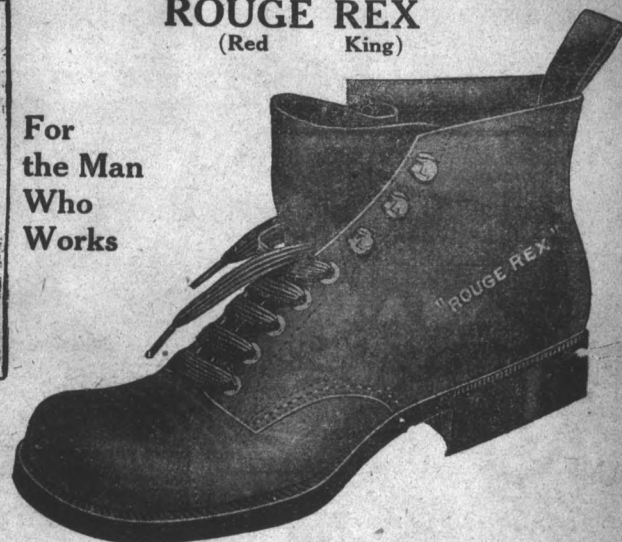


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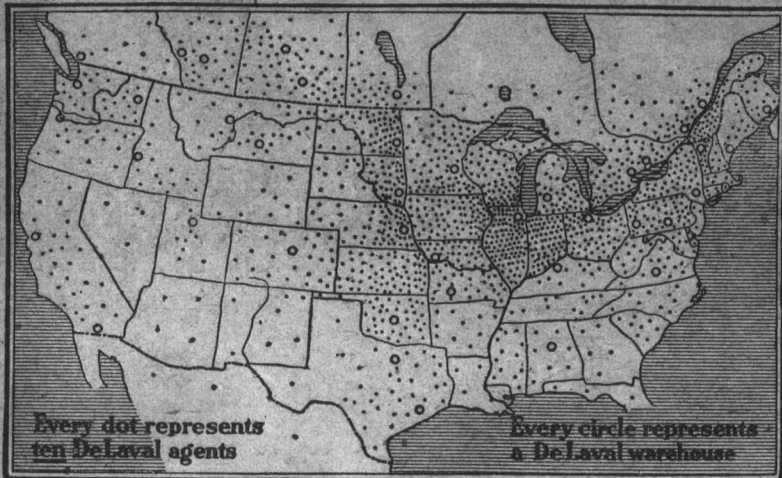
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MUCK LAND FOR ONIONS

I have five acres of low muck land to put in crop this spring. I am planning on putting in eight pounds onion seed. Would it pay to put in carrots or beets to ship for stock? This land is well drained. Three acres have not been cropped; been plowed three times; been too wet. I ditched it last fall and plowed it. Potatoes do well on it; had 1-2 acre last year and got \$2 a bushel.—C. E. S. Glennie, Mich.

If you are planning to grow onions 8 pounds on five acres are hardly sufficient. You should plant at least three pounds to the acre. The soil should be thoroughly prepared, rolled and fertilized. I don't believe that onions are a profitable crop considering an average number of years, unless you have arrangements for storage. There is always a time in the year in most seasons when the onions can be sold at a profit but in years of over production the fellow who is not in shape to store his onions is caught. It is true that carrots and beets are valuable when you are feeding on your own farm but the lack of demand and the cost of the handling makes it a doubtful proposition as to raising stock carrots or beets to sell. In general, I would say that if this is connected with the high land farm with stock to feed, it might be well to try carrots and mangels. Oats and peas, are a practically sure crop on muck, where hay is needed and labor is short. In Osceola county last year in a muck demonstration, Canada field peas were green, alive and growing long after the frost had killed everything else. The hardness of the Canada field peas and the fact that it is a legume makes it a very valuable feeding crop to grow on muck.

If you will write me as to what kind of farming you practice, I will be able to advise you more fully. The complications of labor shortage and the type of farm management practiced would have considerable bearing on the crops to plant.—Ezra Levin, muck land specialist, M. A. C.

BARBED WIRE LAWFUL FENCE

Can the owner of a farm compel owner of adjoining farm to build line fence that will stop sheep? Is barbed wire a lawful fence if either party objects? How early in the spring can I compel a family to move from my house if there has been no agreement as to when they should vacate?—B. W., Fremont, Mich.

The owner of a farm can be compelled to build only a "lawful" fence such has been several times described in these columns. He is not bound to build such a fence as will turn any animal but must build of the kind and dimensions designated in the law. If he builds such a fence the owner of an animal whatever it is, is responsible for its breaking through a fence and for all the damage it commits. I believe that properly built barbed wire fence is lawful fence regardless of objections by adjoining owner. A person may be removed from a house as soon as his time of occupancy expires whatever time of year it happens to be. If no time was specified for the occupancy you would have to give notice required by law.—W. E. Brown, legal editor.

RETAIL SUGAR PRICES

We have to pay 17 cents a pound for sugar. Is this right?—Subscriber

You are lucky. In some towns in Michigan sugar is as high as 19 and 20 cents. Your letter was referred to the Department of Justice and the following reply has been received: Permit me to assure you that the Department of Justice is deeply concerned in this matter. Extensive investigations of refiners, wholesalers and retailers have been conducted to apprehend profiteers, and action is being taken in cases where the facts warrant prosecution. Generally speaking (the high prices have been found to be attributed to the increased prices paid to planters or to the dealers in Cuba, who are not amenable to the law. Where you have reason to believe that a merchant is profiteering, the matter should be promptly reported to the fair price committee, or, if no committee is functioning in the particular locality, the facts should be presented to the district U. S. Attorney, who should be furnished with a memorandum of sale, if possible, and such other data or information as is available.—Howard Figg, Special Assistant to Attorney General.

COLLECTING NOTE ON TRANSFERRED PROPERTY

A is owing B a note which is due next month. A being old and disabled signs over his property both real and personal to C, a neighbor, for his care the remainder of his life, with the understanding that C shall pay all debts accumulated before and after the transaction. Now C refuses to pay B's note. Is it collectible? Also how can it be collected?—Mr. F. M. Merrill, Mich.

If "A" transferred his property to "C" for the consideration stated, which is a lawful consideration, "C" can be compelled to pay the note, if "A" will not. I think the usual practice would be for "B" to take judgment against "A" and afterwards take a judgment creditor's proceedings to reach the property transferred to "C."—W. E. Brown, legal editor.

THE POISON IN AMERICA'S CUP

Will you please advise me where I can procure Philip Frances book, "The Poison in America's Cup?"—D. E. C., Fremont, Mich.

This book is published by the Little Books Library, 61 Washington Square, New York City. Price 25 cents postpaid.—

THE RENTER'S RIGHTS

What is the law in regards to a renter holding a meadow? The renter rents from year to year and has seeded a meadow to clover and timothy. The following spring a new renter finds that the seeding has failed to catch, and wishes to plow the ground for corn. The old renter says the ground belongs to him just the same as if his seeding has caught, and intends to crop the field himself. What is right and what redress can be had?—W. B., Hartford, Mich.

The renter's time usually expires at the end of the year and he has no right to hold longer unless specially provided in the lease. The new renter would have the right to plow the field for corn.—W. E. Brown, legal editor.

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2 Registered Holstein Cows

both 4 years old. One due to freshen March 5th, the other one is milking, bred in December to 33 lb. bull. Federal tested for tuberculosis. Price \$600.
Also registered Holstein bull 1 yr. old, light color, price \$100. 3 heifer calves \$100 each.
Wm. C. SCHOOF, R. 2, Washington, Mich.
Phone 41-F-13, Washington Exchange

TWO GREAT BRED BULLS

One a fine, beautifully marked son of KING PONTIAC HENGERSVELD PAYNE the hundred thousand dollar son of KING OF THE PONTIACS from a 23 lb. Jr. 3 year old daughter of a near 32 lb. Jr. 4 year old cow, whose sire was from a 30.59 lb. cow and this heifer is just one of the choicest heifers of the breed. Good for 80 lbs. at next freshening. If interested write for extended pedigree and price. Guaranteed right. The other a son of the above sire out of a 20 lb. Jr. 2 year old granddaughter of KING KORNDYKE SADIE VALE. Where can you get better breeding?
JAMES B. GARGETT, Elm. Hall, Mich.

For Sale, 30lb Bull Born Jan., 1918

We have bred all our heifers with him as we are using a 38-lb. son of Rag Apple Korndyke on the cows. We are offering him for \$600 and guarantee him right in every way or your money refunded. Send for pedigree.
BAZLEY STOCK FARM, YPSILANTI, MICH.
Address all correspondence to
JOHN BAZLEY
319 Atkinson Ave., Detroit, Mich.

HOLSTEINS

FOR SALE

Nine head of cows and heifers, high producers and registered.
For particulars address
CLARK HILL and EARL THORNE
Clio, Mich.

SHORTHORN

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.

SHORTHORNS AND POLAND CHINAS FOR sale. Registered cows, heifers, bull calves, bred sows and fall pigs, either sex. The farmers' kind at farmers' prices.
F. M. PIGGOTT & SON
Union Phone Fowler, Mich.

3 SHORTHORN BULLS, 11 MONTHS TO 2 yrs. 50 Young Tom Turkeys 20 lbs. up, out of Antrim's King a 45 lb. Tom, at \$10 each.
JAY W. THUMM, Elmira, Mich.

THE VAN BUREN CO. Shorthorn Breeders' Association have young stock for sale, mostly Clay breeding. Write your wants to the secretary, Frank Bailey, Hartford, Mich.

THE BARRY COUNTY SHORTHORN BREEDERS Association announce their fall catalog ready for distribution. Scotch, Scotch Top and Milking Shorthorns listed. Address
W. L. Thorpe, Sec., Milo, Mich.

SPECIAL OFFER SHORTHORNS— Cows, \$250.00 to \$300.00. Bulls, \$200.00 to \$250.00. Wm. J. Bell, Rose City, Mich.

HURONA STOCK FARM

Over fifty head of Scotch and Scotch Topped Shorthorns. Am offering several good bulls, cows and heifers, Roans, Reds and Whites. Write or see them.
S. H. PANGBORN, Bad Axe, Mich.

FOR SALE—SHORTHORN BULL CALVES ready for service. Also young Oxford Down Ewes. Prices to sell.
JOE MURRAY & SON, R2, Brown City, Mich.

SHORTHORNS FOR SALE AT REASONABLE prices. The prize-winning Scotch Bull Master Model 576147 in many states at head of herd of 50 good type Shorthorns.
E. M. PARKHURST, Reed City, Michigan.

FOR SALE Clay Bred Shorthorn bull calf from a heavy producing dam.
W. S. HUBER, Gladwin, Mich.

Milking Shorthorns. Registered females \$200 and up. Bull calves at \$100. Cows all hand milked.
ROY S. FINCH, Fife Lake, Mich.

HEREFORDS

MEADOW BROOK HEREFORDS

Having used Bob Fairfax 494027 (son of Richard Fairfax) for 3 years, I now offer him for sale. Also stock of either sex, any age. Come and look them over.
Earl C. McCarty, Bad Axe, Huron Co., Mich.

120 HEREFORD STEERS, ALSO know of 10 or 15 loads fancy quality Shorthorn and Angus steers 5 to 1000 lbs. Owners anxious to sell. Will help buy 50c commission. C. F. Ball, Fairfield, Iowa.

LAKEWOOD HEREFORDS

E. J. TAYLOR, Owner
Fremont, Mich.
Individually good and breeding unsurpassed. No females for sale at present, but am offering two exceptionally good bull calves by COLLEGE BEAU 42153, only son of that grand old matron "DELILA" illustrated in January 24th issue of "Business Farming" and founder of M. A. C. Hereford herd.
Come and see them.

REGISTERED HEREFORD CATTLE

KING REPEATER HEADS OUR HERD We still have eight good bulls and some heifers for sale.
Come and see them.
STONY CREEK STOCK FARM
Pewamo, Mich.

ANGUS

LONGEVITY OF ABERDEEN-ANGUS

Old Granny lived to be 36 years old and produced 25 calves. There are many cows "old enough to vote" that are producing Aberdeen-Angus calves today. A 14-year-old registered Aberdeen-Angus cow recently sold for \$4,000 with calf at side. Aberdeen-Angus excel at longevity and ability to reproduce many times. Write for "History of Aberdeen-Angus."

AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION

817 M. B. Exchange Ave., Chicago

LOOK FOR OUR LARGE AD IN NEXT WEEKS M B F

announcing the

1ST. ANNUAL SHOW AND SALE

of the

MICHIGAN ABERDEEN-ANGUS BREEDERS ASSOCIATION

at Saginaw, March 26, 1920

Write for catalog to

WARD HATHAWAY, Sec'y
Ovid, Mich.

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.

BARTLETT'S 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.

GUERNSEYS

GUERNSEYS WE ARE OFFERING FOR sale some splendid bull calves out of A. R. dams with records up to 500 lbs. fat. Our herd sire, a grandson of Dolly Dimple May King of Langwater, and whose dam has an A. R. record of 548 lbs. fat at 2 1-2 years is also for sale or exchange. Write for particulars and prices to
MORGAN BROS., R No 1, Allegan, Mich.

THREE BULL CALVES

Registered Guernseys, sired by PENCODY PATRIOT whose 3 nearest dams average 678 lbs. fat. Bred to improve your herd, and offered reasonable. Guaranteed free from disease.
P. S. MYERS & SON, Grand Blanc, Mich.

Registered Guernseys For Sale

1 bull calf, born Nov. 6, 1919.
1 bull, 17 months old.
1 cow, born Jan. 11, 1918.
1 7-8 grade cow, 4 yrs. old Apr., due Apr. 22.
HERBERT L. BUSSELL, Owosso, Mich., R2

FOR SALE: GUERNSEY BULL, GRANDSON of Gov. of the Cheese from A. R. O. dam, 19 mos. old. Also other bulls from 2 to 7 mos. old. Write for particulars.
C. A. HENNESEY, Watervliet, Mich.

JERSEYS

For Sale—Jersey bull calves. Oxford and—W. J. L. CARTER, R4, Lake Odessa, Mich.

BROWN SWISS

VAL VERDE FARM BROWN SWISS
Registered calves for sale—both sex.
EDWIN GRISWOLD, R1, Bellaire, Mich.

FOR SALE

PURE BRED BROWN SWISS BULL
Calved April 28th, 1919. His dam, Gertrude No. 6191, her sire, King Edgar No. 2219. His dam College Bravura 2nd. World's Champion Brown Swiss Cow. Will give purchaser registration and transfer.
FRANK POET, Clare, Mich., R 6
Breeder of Brown Swiss Cattle

AYRSHIRES

AN OVERLOOKED OPPORTUNITY

is offered right here for some Michigan Ayrshire breeder to get his offering before 70,000 Michigan business farmers.

Some one is going to grab this opportunity and send along a little ad that will pay him handsomely.

ARE YOU THE ONE?

SWINE

POLAND CHINA

(his name) **Big Bob Mastodon**

MR P C BREEDER IF YOU WANT TO GET a Gilt bred to **BIG BOB MASTODON**. He has more Grand Champion Blood in his veins than any other boar in Michigan. I have 15 choice Gilts bred to him for March and April farrow. Fall pigs of either sex.
O. E. GARNANT, Eaton Rapids, Mich.

BIG TYPE POLAND CHINA GILTS. Sired by **BIG BONE 4th**. Bred to **BIG LONG BOB** for May farrow.
MOSE BROS., St. Charles, Mich.

BIG TYPE P. O.—CLOSING OUT OUR boars at a bargain. Choice sows for March and April farrow.
L. W. BARNES & SON, Byron, Mich.

6TH ANNUAL P. C. BRED SOW SALE, March 13, 1920. For particulars write **W. J. HAGELSHAW**, Augusta, Mich.

WALNUT ALLEY BIG TYPE boars all sold. Have a few good gilts that I will sell open or bred to one of the best boars in Michigan. Write for prices.
A. D. GREGORY, Ionia, Mich.

Must Sell L. T. P. C. Gilts, bred for Mar. and Apr. farrow. Bargain if taken at once.
H. M. JEFFRIES, St. Louis, Mich.

LTPC NOV. PIGS AT A BARGAIN PRICE. Come and see or write
ELDRID A. OLARK, R 2, St. Louis, Mich.

BIG TYPE P. O. BRED GILTS AND FALL yearlings including prize winners. Out of 1,100 lb. sire and mammoth sows from Iowa's greatest herds.
E. J. MATHEWSON, Burr Oak, Mich.

BIG TYPE POLAND CHINAS WITH QUALITY BRED SOWS FOR SALE. BOARS ALL GONE.
J. E. MYGRANTS, St. Johns, Mich.

I am offering Large Type Poland China Sows, bred to Big Orange at reasonable prices. Also fall pigs. Write or call.
CLYDE FISHER, R3, St. Louis, Mich.

LTPC AM OFFERING SPRING boars, summer and fall pigs.
F. T. HART, St. Louis, Mich.

B. T. P. C. BRED GILTS Sired BY MOW'S Big Jones 3rd, out of Grand Daughters of Dishier's Giant and bred to Wiley's King Bob, a good son of Harrison's Big Bob \$10,100 boar. Gilts priced reasonable.
JOHN D. WILEY, Schoolcraft, Mich.

BOARS ALSO SOWS AND PIGS. ANYTHING you want. Poland Chinas of the biggest type. We have bred them big for more than 25 years; over 100 head on hand. Also registered Percherons, Holsteins, and Oxford. Everything sold at a reasonable price, and a square deal.
JOHN C. BUTLER, Portland, Mich.

BIG TYPE POLAND CHINA tried sows and gilts bred to MICHIGAN BUSTER BIG DesMOINES 5TH, BOB-O-LINK or WONDER BUSTER. Fall pigs.
O. L. WRIGHT, Jonesville, Mich.

THE OLD FASHION SPOTTED POLAND CHINA HOGS CHOICE GILTS—BRED March, April—\$50 to \$100
J. M. WILLIAMS, No. Adams, Mich.

O. I. C. SOWS FOR SALE

ONE OF THE BEST HERDS IN MICHIGAN
Spring gilts and fall yearlings bred for March, April and May litters. I ship C. O. D., pay express and register in buyer's name. If you want a **BIG TYPE** sow, guaranteed right in every way, write me.

J. CARL JEWETT,

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.

WONDERLAND HERD

LARGE TYPE P. C. A few choice bred gilts for sale. Also fall gilts and boars, some very good prospects of excellent breeding. Gilts bred to ORPHAN'S SUPERIOR he by BIG ORPHAN'S EQUAL by BIG BONE ORPHAN by the BIG ORPHAN. Dam, BEAUTY'S CHOICE by ORANGE BUD, by BIG ORANGE A.
Free livery to visitors.
Wm. J. CLARKE, Eaton Rapids, Mich.

LARGE TYPE POLAND CHINA HOGS. BOAR pigs spring farrow. Single Comb Rhode Island Red Cockerels. Write for pedigrees and prices. Inspection invited.
FRED C. VOSS, Avoca, Mich.

LTPC A FEW SPRING BOARS LEFT AT FARMERS' PRICES.
H. O. SWARTZ, Schoolcraft, Mich.

BIG TYPE P. C. SOWS FOR MARCH AND April Thirty farrow. Fall pigs, none better, call or write.
E. R. LEONARD, St. Louis, Mich.

FOR SALE

Large Type P. C. Hogs

Have a few spring boars and spring gilts, also yearling sows. Bred to such boars as Clansman's Image 2nd, King's Giant, and Smooth Wonder. They are three real boars. Free livery to visitors.
W. B. RAMSDALL, Hanover, Mich.

DUROC

PEACH HILL FARM Duroc sows and gilts sired by Fred Principal, Romeo Cherry King Brookwater Gold Stamp 7th and Rajah out of dams by Limited Rajah and the Principal IV. Bred to Peach Hill Orion King and Rajah Cherry Col.
INWOOD BROS., Romeo, Mich.

EBERSOLES BIG TYPE DUROCS yearling, spring and fall boars and gilts for sale. Are booking orders for spring pigs. We solicit inspection.
ALBERT EBERSOLE, R3, Plymouth, Mich.

DUROC JERSEY

BRED SOWS SERVICE BOARS

Booking orders for weanling spring pigs
\$25 EITHER SEX
We deliver the hogs before you pay
INA BLANK, Potterville, Mich.

DUROCS OF BREEDING SIZE AND QUALITY.
O. L. POWER, Jerome, Mich.

DUROC BOARS OF SIZE, QUALITY and breeding, including several State Fair winners. Newton Barnhart, St. Johns, Mich.

DUROCS BRED GILTS FOR APRIL FAR- row, sired by Liberty Defender. Dams Col. breeding, good quality, weighing 225 lbs. not fat, price \$65, while they last, bred to Orion boar.
H. G. KEESLER, Cassopolis, Mich., R 5

DUROC JERSEY GRANDSONS OF BROOK- water Cherry King or Panama Special. \$20 at weaning.
E. E. CALKINS, Ann Arbor

DUROC BOARS FROM PRIZE WINNING STOCK ready for service. Geo. B. Smith, Addison, Mich.

DUROC BOARS, GILTS AND BROOD SOWS of all ages. Sows bred or open. Newton & Blank, Hill Crest Farms, Perrinton, Mich. Farm 4 miles straight south of Middleton.

MEADOWVIEW FARM. REG. DUROC JERSEY hogs. Fall pigs for sale.
J. E. MORRIS, Farmington, Mich.

FOR SALE—REGISTERED DUROC JERSEY swine. Both sex. All ages. Rhode Island Red Barred Rock and White Leghorn cockerels. 40 a. and 80 acre farms. Easy terms.
W. U. BARNES, Wheeler, Mich.

DUROC BRED GILTS Choice breeding, splendid individuals. Bred for April farrow. Would like to have you see them.
CHERRY LAWN FARM, Shepherd, Mich.

DUROC JERSEY BRED SOWS AND GILTS April and May farrow. Sired or bred to my 1,000 lb. herd boar.
JOS. SCHUELLER, Weldman, Mich.

DUROC BRED SOWS AND GILTS Sired BY Orion Cherry King Col. 2nd, first aged boar at Detroit in 1919, and bred to All Col. of Sango-mo. He is an intensely Col. bred boar and the Col's were never more popular than now. Priced from \$65 to \$100 each.
W. C. TAYLOR, Milan, Mich.

\$12.50 FOR A DUROC SPRING PIG, 6 weeks old either sex, M. A. C. Brookwater breeding. Reg. papers free. Express charges paid. Booking orders now.
D. W. SUTHERLAND, Grand Ledge, Mich.

MAPLE LAWN FARM REG. DUROC JERSEY swine. Order your spring pigs now. Pairs and trios not akin.
VERN N. TOWNS, R6, Eaton Rapids, Mich.

FOR SALE BRED SOWS. DUE TO FAR- row in March and April. Bred to MASTERPIECE'S ORION KING.
O. E. DAVIS & SON, Ashley, Mich.

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

FOR SALE REGISTERED DUROC JERSEYS of quality. Three good boars, farrowed in Mar and April, 1919, weighing 300 to 350 lbs. each. Modern type with big bone. Write for pedigrees and prices. Satisfaction guaranteed.
F. HEIMS & SON, Davison, Mich.

PHILLIP'S PRIZE WINNING DUROCS FOR sale—A few good boars of breeding age, also a few good gilts, prices right, let me convince you.
Henry D. Phillips, Milan, Mich.

BERKSHIRES

REGISTERED BERKSHIRES FOR SALE, AUG. 10 pigs for \$40 a piece, while they last. Satisfaction guaranteed. Taking orders for spring pigs.
JOHN YOUNG, Breckenridge, Mich.

Registered Berkshires

Place orders for bred gilts for June farrow. Also boars and spring pigs. 1 2-year old sow due to farrow Apr 20th.
RUSSELL BROS., F S, Merrill, Mich.

GREGORY FARM BERKSHIRES FOR profit. Choice stock for sale. Write your wants. W. S. Corsa, White Hall, Ill.

CHESTER WHITES

CHESTER WHITES—A FEW MAY BOARS. Fall pigs in pairs or trios from most prominent bloodlines at reasonable prices. Registered free.
F. W. Alexander, Vassar, Mich.

REGISTERED CHESTER WHITE PIG FOR sale at prices that will interest you. Either sex. Write today.
RALPH COSENS, Levering, Mich.

YORKSHIRE

3 BRED YORKSHIRE GILTS, DUE APR. 1. From M. A. C. bred stock. \$50 each.
A. R. BLACK & SON, R7, Lansing, Mich.

HAMPSHIRE

HAMPSHIRE

This add will save you from \$10 to \$20 on the purchase price of every bred sow or gilt of the most prominent blood line, bred to good boars for Mar. and Apr. litters. A few fall pigs left of either sex. These are all good and well grown. Call or write.
GUS THOMAS, New Lothrop, Mich.

BRED GILTS ALL SOLD ONE SPRING BOAR LEFT FALL PIGS FOR SALE
W. A. EASTWOOD, Chesaning, Mich.

HAMPSHIRE BRED SOWS AND BOARS for sale, also fall pigs of both sex. Best of breeding. Call or write
RAYMOND SKINNER & SON, Henderson, Mich.

HAMPSHIRE BRED GILTS NOW READY TO SHIP. FALL PIGS from new blood lines.
JOHN W. SNYDER, St. Johns, Mich R4

O. I. C.

O. I. C.'s Choice Bred Gilts, 2 extra fine Service boars. Choice Sept. pigs, either sex or pairs.
CLOVERLEAF FARM R1, Monroe, Mich.

SAGINAW VALLEY HERD OF O. I. C. in breeding flesh bred for March, April and May farrow. Guaranteed safe in dam. I will replace any proving otherwise to your satisfaction or refund purchase price in full. Have a few October boar pigs ready for spring service that are right priced to sell. Herd cholera immunized by double treatment. E. C. Burgess R3, Mason, Mich.

O. I. C. GILTS WEIGHING 200 TO 275 LBS. in breeding flesh bred for March, April and May farrow. Guaranteed safe in dam. I will replace any proving otherwise to your satisfaction or refund purchase price in full. Have a few October boar pigs ready for spring service that are right priced to sell. Herd cholera immunized by double treatment. E. C. Burgess R3, Mason, Mich.

A few boars of serviceable age. Now booking orders for spring pigs to be shipped at weaning time. Write your wants to
CLARE V. DORMAN, Snover, Mich.

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

FOR SALE O. I. C. BRED GILTS FOR APRIL farrow, \$50. Bred to Bartlett's Choice No. 35649. Will register in buyers name.
WILL IHRISINSKE, Imlay City, Mich.



Mud-way-aush-ka farm

offers O. I. C. bred gilts and two serviceable boar pigs. Also bred to lay Barred Rock hens and pullets, Embden Geese and White Runner Ducks.
DIKE C. MILLER, Dryden, Mich.

O. I. C.'s Choice bred gilts for spring farrow, good fall boars. Am booking orders for spring pigs. Can furnish pairs and trios not akin.
A. J. BARKER & SON, Belmont, Mich., R1

SHEEP

IT PAYS TO BUY PURE BRED SHEEP OF PARSONS' The Sheepshead of the East. I sell and ship everywhere and pay express charges. Write for club offer and price list. Oxford, Shropshire and Felled-Delaine.
PARSONS, Grand Ledge, Mich. R-9

WANT A SHEEP? Let American Hampshire Sheep Association send you a dandy booklet with list of breeders. Write **COMFORT A. TYLER**, Sec'y. 10 Woodland Ave., Detroit, Mich.

REG. SHROPSHIRE BRED EWES 1 TO 3 years old, large, healthy, well fleeced. Representatives of this flock gave satisfaction in 15 states last season. Rams all sold. C. Lemen, Dexter, Mich.

KIDS I CANNOT SELL YOU ANY MORE ewes until next fall. To some grown up, I can offer 10 very good young Shropshire ewes that will lamb in April for \$400. Their lambs contracted to me should net more than purchase price next fall. Also 10 mighty nice ewe lambs for \$350. Come and see them.
KOPE-KON FARMS, Coldwater, Mich.

HAMPSHIRE SHEEP

Everything sold out, both ewes and rams. I am breeding 50 ewes to "Stroman 209" an excellent big boned type ram lamb that weighed 176 lbs. October 1. Booking orders for 1920 rams.
CLARK U. HAIRE, West Branch, Mich.

PET STOCK

FOR SALE Shetland Pony, born May 25, 1919. Also bred mare, 2 years old.
MARK B. CURDY, R 6, Howell, Mich.

BELGIAN HARES, CHOICE STOCK, 3 AND 6 months old, also S. C. Ancona Cockerels. Write for prices, Sheridan Rabbitry, R 5, Sheridan, Mich.

FOR SALE Flemish Giant Rabbits that are giants, old and young, in blacks, steel grays and natural grays. Quality guaranteed.
E. E. HIMEBAUGH, Coldwater, Mich.

YOUNG FOX HOUNDS. WALKER STRAIN. Every one registered and guaranteed.
E. W. GILL, Clarion, Mich.

M. H. BIRD, BREEDER OF HIGH CLASS Pedigreed Flemish Giant Rabbits. Black, steel gray and natural gray. Write for what you want. Prices reasonable.
M. H. BIRD, R 6, Lansing, Mich.

HORSES

FOR SALE ONE IRON GRAY 5 YEAR OLD Percheron stallion, Prince No. 148423. Sired by Brilliant IV No. 47581, a black horse and sold once for \$3,000. The dam of Prince a large gray mare No. 148423. Price \$300.
D. E. DEAN, Milford, Mich.

Percherons for Sale—21 Head

Sevier 130757 at head of herd. A horse carrying the blood of Imposant, his sire and Hartley's Samson, two 2,400 lb. horses. He is 42 months old, weighs 2,150 lbs. carries 14 inch bone (six weeks).
CHAS. OSGOOD & SONS, Mendon, Mich.

BELGIANS

We are forced to sell our entire herd within thirty days. 8 imported mares, 5 young mares and 2 young stallions 3 and 4 years old. This is an extra good lot and must be sold regardless of price.
L. H. LEONARD, Caledonia, Mich.

FOR SALE OR TRADE

TWO IMPORTED STALLIONS a Percheron and a Belgian, both 8 years old. Reason for selling, colts in the way. For particulars address
W. J. MCCARTHY & SONS, Ada, Mich.

BELGIAN AND PERCHERON DRAFT STALLIONS With Size and Quality

MR. FARMER: Now is the time to raise draft horses. I put out stallions on a breeding plan. If your locality needs a good draft stallion, let me hear from you.

FRED G STEVENS
Breckenridge, Mich.

CLAIM YOUR SALE DATE!
If you are planning on a sale this spring, write us now and **CLAIM THE DATE!**
This service is free.
LET "BUSINESS FARMING" CLAIM YOUR DATE!

GREAT AUCTION SALE

of Registered Durham Cows, Heifers, Calves, Bulls.
Just east of Hadley Village, Friday, March 19th.

FRANK HARTWIG

Mail to Metamora, Mich.

It Pays Big

to advertise livestock or poultry in **M. B. F.'s** Breeders Directory.

Rations, by Dept. of Agriculture

CALVES to be finished on pasture may be handled in the same way as those to be fattened in the dry lot. The grain allowance may be smaller at first but after the calves are turned on pasture it should be increased as they become able to utilize greater quantities of concentrates.

Calves that are to be "fed out" as long yearlings or two-year olds or sold as stockers and feeders may be fed considerably more cheaply during the first winter. The winter ration may consist principally of silage and cheap roughages, but some concentrates should be used to keep the calves growing and in a thrifty condition. They should be run on pasture the following summer and sold in the fall as feeders or fattened out the following winter as long yearlings. If it is desired to keep them longer, the cattle may be "roughed" through a second winter and fattened the next year.

Feeding the Cattle Herd

When feeds are high in price the use of cheap rations is especially desirable for the maintenance of the breeding herd. Cows raised for the production of calves only can be fed very cheaply on silage and dry roughages combined with a small quantity of protein-rich concentrates. By the use of leguminous roughages the protein-rich concentrate may be omitted.

Dual-purpose cows kept for dairy products as well as calves should receive feeds nearly identical with those for dairy cows, for best results. Considerable quantities of concentrates must be used if the cows are to produce the maximum of dairy products. The cost of the feeds in the ration should be considered and home-grown feeds utilized whenever possible. Cows that are milked should receive 1 pound of concentrate for every 3 to 4 pounds of milk produced, depending upon the fat content of the milk. This is the customary grain allowance and is satisfactory.

The purchase of feeds is not to be discouraged but should be reduced to a minimum. A successful cattle raiser must grow the necessary roughages and not rely upon their purchase.

During the summer months the cow herd should be maintained largely on pasture. Should the pastures become very short a supplemental feed should be provided. This can best be supplied by silage if available; otherwise forage crops, or even hay, may take its place. In the fall the cows may be maintained on meadows and aftermath, and later in the fall on stalk fields in regions where a considerable part of the corn crop is not cut or used for silage.

For the reader's convenience in working out winter rations for breeding cows in various sections of the country the United States has been divided into several sections, viz., Far West or Coast, Western Range, Southwestern, the Corn Belt, East, and Southeast, and a few general rations prepared for each. These rations are only suggested and must be varied according to local conditions.

The rations suggested are per thousand pounds of live weight and are only for beef cows in calf. Cows that are producing milk should have considerably more concentrates for best results.

Ration 1.		Pounds.
Corn silage	-----	35
Corn stover	-----	10
Cottonseed meal or oil meal	-----	1
Ration 2.		Pounds.
Alfalfa or clover	-----	10
Corn stover or straw	-----	15
Ration 3.		Pounds.
Corn silage	-----	40
Straw	-----	5
Oil meal or gluten feed	-----	4
Ration 4.		Pounds.
Corn silage	-----	35
Clover hay	-----	10

Rations for Wintering Stockers

Ration 1.		Pounds.
Corn or sorghum silage	-----	15
Alfalfa, clover, soy bean or cow-pea hay	-----	4
Ration 2.		Pounds.
Corn or sorghum silage	-----	15
Oat, rye, or wheat straw	-----	8
Cottonseed meal or oil meal	-----	1

Ration 3.		Pounds.
Corn or sorghum silage	-----	10
Lespedeza hay	-----	3
Oat or wheat straw or stover	-----	3
Cottonseed meal, oil meal, or peanut meal	-----	1

Ration 4.		Pounds.
Corn or sorghum silage	-----	15
Lespedeza or pea-vine hay	-----	10
Velvet beans in pod	-----	4

Ration 5.		Pounds.
Corn or sorghum silage	-----	15

Michigan Jersey Makes a Fine Record

Majesty's Iris 265701, owned by Mr. Edwin S. George, of Pontiac, Mich., recently completed her year's authenticated test, as a seven year old, with 17,469.7 lbs. of milk, 955.87 lbs. of fat, equivalent to 1,171.6 lbs. of 85 per cent butter, to her credit. Her average fat per centage for the year was 5.47. She holds two previous records, one as a three year old of 589.2 lbs. of fat from 11,250.8 lbs. of milk and the other as a four year old of 673.97 lbs. fat from 12,905 lbs. of milk. Iris is the second highest Jersey ever tested in Michigan. She is the ninth highest fat producer and the tenth highest milk producer of the breed. She is a daughter of Royal Majesty, one of the many noted Jersey sires.

HOG SITUATION FOR 1920 LOOKS DISCOURAGING TO FARMER

Editor, M. B. F. In reply to Mr. G. I. Christie's statement regarding the hog situation and farm products for 1920, will say this: Just tell him that the farmers of Michigan have listened to that kind of hot air until they are getting about tired of it. There is not a man feeding hogs this winter that is going to any more than play even. I know of two men who went to Chicago last fall and bought a carload of cattle each. One of them has already shipped his and got returns and he lost just \$2,000. I was talking with the other man not long ago, and he told me that he was looking for his cattle to lose him about \$50 per head. Now just ask Mr. Christie if he can give any reason why these men lost so heavily. I will tell you my opinion as to why they lost.

Last fall they went over to Chicago, swallowed a lot of that hot air they have there; bought those cattle for 12 and 13 cents; shipped them about three or four hundred miles; put them in and fed them this \$60 to \$80 a ton grain and \$30 per ton hay; then had to ship them back and take almost the same money they paid for them last fall. Now here are two men I know of who were trying to help the nation out with its low production of food stuff, and what premium have they got for it? They got what Paddy shot at.

Now, with the farmer facing a situation of this kind, I think the farmers of Michigan would like to see Mr. Christie's figures showing them just where the great fortune in the 1920 hog crop is going to be. I will admit that hogs will be a good price along in June and July, but where will hogs be then, Mr. Christie? They will be just where they were the July after the armistice was signed, in the packers' hands. Then next September when the farmer gets ready to put the spring crop of hogs on the market, you have not told us what price to expect. I think if you were going to try to tell us, and tell us the truth, you would say, around 12 or 13 cents for you would not want to hurt our fellows telling us we should have 20 cents.—S. E. Welch, Melvin, Mich.

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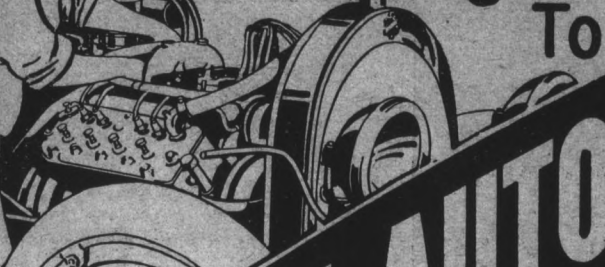
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Hoping this will find you all well, and thanking you again, I am,
Yours truly,
HERBERT FUHRWERK,
Harbor Beach, Mich.

I am making good (thanks to the "Old Reliable" M. S. A. S. faculty, par excellence), with every job that happens along, which is to say that I am kept more than busy, although I haven't opened a garage yet. I am out on the road nearly every day, starting autos and gas engines, locating electrical troubles, etc., etc. So you can see that I am busy.

I can truthfully say that I have never regretted one minute of the time that I spent in the M. S. A. S. and would advise anyone who wanted a thorough training in the Auto Industry by all means to go to the "Old Reliable" M. S. A. S. and there they will find just the place for them.

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