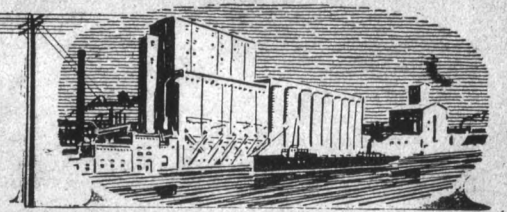


The Michigan BUSINESS FARMER



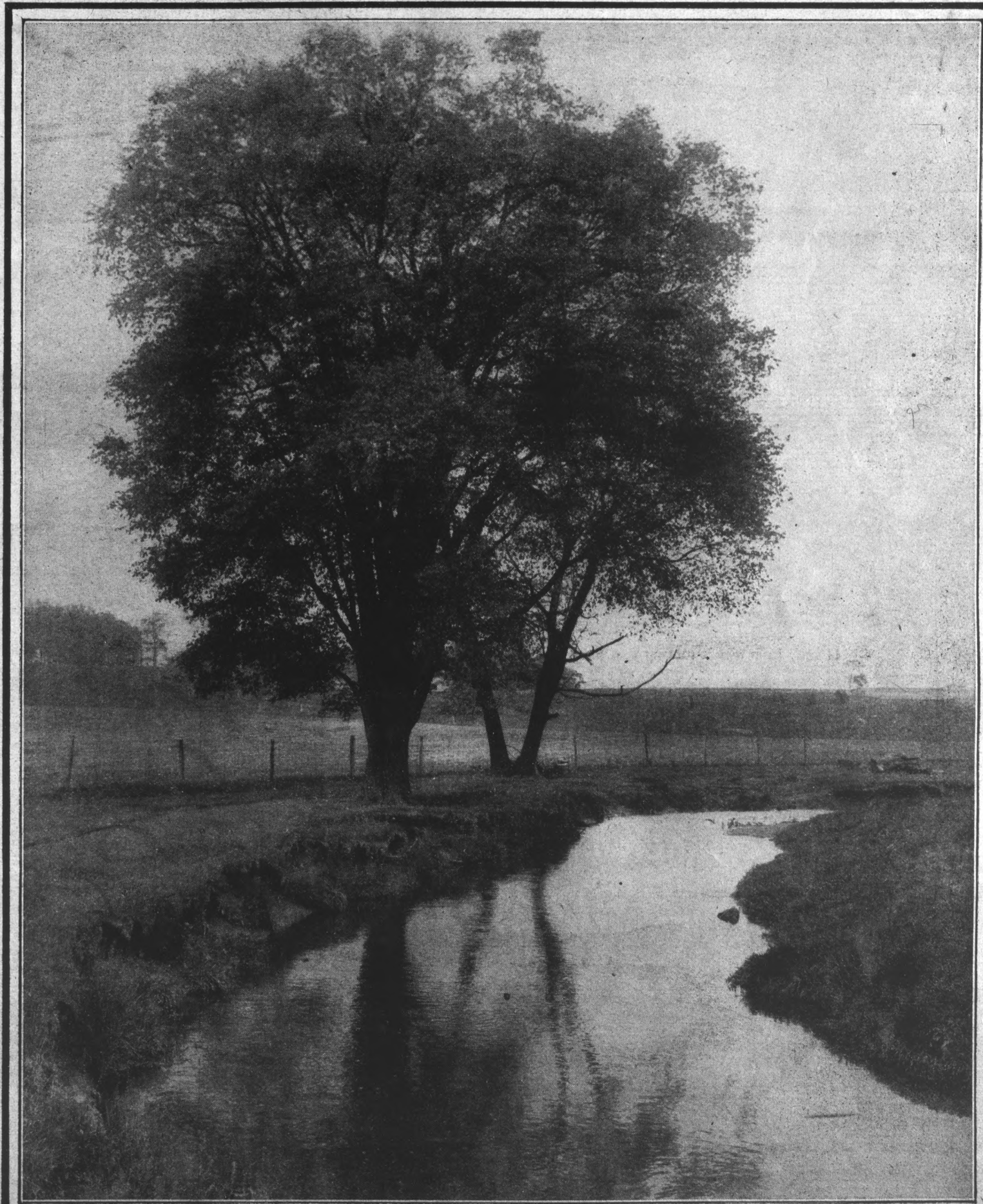
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"A rustle of corn leaves; a tinkle of bells on the hills; a twinkle of sheep in the lowlands; a bevy where the clover is heavy; a butterfly blundering by—And that is July!"—James Newton Matthews.

Current Agricultural News

WHAT HAS HAPPENED TO THE FOREIGN MILK MARKET?

IT is the opinion of a prominent French importer that the trade in condensed milk, which has been rapidly declining in the past year, will continue to fall off progressively and that in five years from now there will be no call whatever for American condensed milk in France. This conclusion is not borne out by investigation, however. Adverse influences are bearing heavily upon the entire business, but there is no reason why American trade in special brands can not be maintained and developed. The adverse factors referred to are of two classes. The first has to do with general considerations such as the unfavorable exchange and reduced buying power, all of which apply not only to France, but to other important consuming countries. A second class of trade difficulties is to be connected more particularly with France. This class includes (a) A low per capita consumption of milk, as the people are by habit wine drinkers and use little milk, even in their morning coffee; (b) a rapid restoration of live stock, with increasing supplies of fresh milk; (c) the market drag of surplus war

stocks, of which a considerable amount was thrown on the market in bad condition; and (d) the French discriminative tariff, which confers an initial advantage upon competitors against American producers in the canned-milk market.

Offsetting these adverse factors may be mentioned certain favorable factors, such as superior American manufacturing technique, with production costs that enable the producers to turn out better brands for the money. On the negative side is a growing recognition that the canned-milk business has been overdone in Europe. A reaction has already set in with marked curtailment, especially in Switzerland. Further, continental dairying tends to revert to normal conditions under which surplus milk is converted into butter and cheese. In brief, the continental dairy trade possesses a valuable good-will asset in the cheese business, whereas in the condensed-milk industry it has yet to acquire a position of primary. In Turkey, Greece, Austria, Germany and Poland the sale of condensed milk is a question of finance rather than actual demand. In the case of France the restoration of the dairying industry does not necessarily imply

that condensed milk will be supplanted by fresh milk. A broad demand may be built up and maintained in the case of certain brands. No matter how plentiful fresh milk may be, there are always some people who distrust its purity and are willing to accept condensed milk as a satisfactory substitute.

Before the war America exported very little canned milk to Europe, the belief being that this country could not produce as cheaply as the European countries. But when the war came on and Europe's dairy herds began to suffer depletion coincidental with the increased demand a very large market was created for American canned milk, with the result that in 1920 the exports of both sweetened and unsweetened milk to France alone was over 60,000,000 pounds. Partial recovery of the dairy herds and the increasing difficulty of financing foreign purchases have rapidly lessened European demands and the domestic industry which thrived and expanded under this demand in 1919 and 1920 has suffered seriously from the loss of this market.

Granted that France will never again be an important purchaser of American milk and products, there are other countries, it is pointed out by a commerce report, which do and will continue to need the products of the American cow. Austria and Germany could both use large quan-

titles of American condensed milk if they could only finance their purchasers. Even as it is considerable quantities are going to these countries. Greece is also mentioned as a potential customer, but in all cases, exchange is proving the stumbling block to trade. As these countries recover their economic balance it is believed that trade in American milk products will increase.

MICHIGAN ACTIVE IN T. B. ERADICATION

IN the past several years Michigan has advanced from one of the most backward to possibly the most forward state in the union in tuberculosis eradication work. The monthly summary issued by the Bureau of Animal Industry of this work shows a rapid increase in the number of accredited herds and an even more rapid increase in the number of cattle on the waiting list.

According to the May summary, 17,240 head of cattle were tested in this state in May. Of these, 487 head reacted and were killed. At the present time there are 364 accredited herds consisting of 7,334 cattle. There are 15,085 herds of 135,765 head under supervision, and 13,880 herds of 124,920 head on the waiting list. Michigan ranks fourth among all the states in the number of cattle under supervision and first of all states in the number of cattle on the waiting list.

MARINE CITY FARMERS CO-OPERATE

ONE of the new co-operative enterprises of St. Clair county is that of the Marine City Farmers' Co-operative Elevator Association. This association is composed of 143 farmers in the vicinity of Marine City and Algonac. They have purchased the Baldwin elevator property. In addition to the hay and grain trade, they expect to handle coal, feed and such other supplies as may be purchased in large quantities.

At their first annual meeting held in Marine City, Wednesday, June 28th, the following officers and directors were elected:

John Volker, Marine City, president; Robert Baker, Marine City, vice-president; H. A. Shaw, Algonac, secretary; Andrew Hahn, Marine City, director; Robert Folkerts, Algonac, director; Charles Reichle, Marine City, director; H. F. Labuhn, Fair Haven, director.

They have secured the services of Mr. L. Thomas as manager. Mr. Thomas, who is formerly of Grand Blanc, is considered one of the most successful co-operative elevator managers of Michigan.

This territory comprises one of the best farming sections in St. Clair county. With this as a foundation on which to build, the Marine City association bids fair to become one of the strongest co-operative marketing associations in this section of the state.

M. A. C. NAMES NEW "HORT" HEAD

IN the appointment of Prof. V. R. Gardener of the University of Missouri, as professor of horticulture at the M. A. C., the State Board of Agriculture has taken the first step to co-operate with Pres. David Friday in his determination to help put the fruit industry of the state on its feet.

Pres. Friday does not believe that the fruit industry is living up to anywhere near its possibilities, and he wants to develop the college agencies so that they can render the industry every possible assistance.

The new horticultural head graduated from M. A. C. in 1905, received the advanced degree of master of science in agriculture from Iowa State College in 1908, and went from there to Oregon Agricultural College where he was made professor of pomology in 1915.

In 1918, Prof. Gardener went to the University of Missouri as professor of horticulture and has made that department one of the strongest in the country, at the same time attaining a wide reputation as an author on horticultural subjects. Prof. Frederick Bradford, also of the University of Michigan, will take up the duties at the M. A. C., at the

(Continued on page 16)



The Path To Ease

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**The STANDARD
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American Corn Exports Double Last Year's

Greatest Amount of this Grain Exported from January to May this Year than in Entire History of Country

FROM time to time the Department of Commerce issues reports and statistics which continue to disprove the assertion of the grain gamblers that declining food prices are due to the falling off of exports. While it is true that Europe is not buying as much food from American farmers as she was during and shortly after the war, the difference in the aggregate number of pounds is not very large. The greatest loss has been in dairy products, but this has been nearly if not quite made up by larger purchases of other foods such as corn and sugar.

The export trade of the United States in foodstuffs for the month of May and for the first five months of 1922 is notable for the very large shipments of corn and sugar, according to a survey by the Foodstuffs Division of the Department of Commerce. Corn and wheat have practically changed positions as compared with the first five months of 1921, corn exports being double those of last year, whereas wheat exports are less than half of those for the January-May period of 1921.

Several factors have affected the trade in these two commodities. Declining stocks of wheat in this country have helped to sustain domestic prices. On the other hand, there has been an enormous surplus of corn at a relatively low price as compared with wheat, rice, barley and other competing cereals. In addition, corn has been used very largely in relief work, which has taken considerable quantities, and its use for this purpose has undoubtedly attracted the attention of Europeans to this cereal, which heretofore has not been very popular on the continent. Its low price has also caused it to be used more freely in Europe as food for live stock and in brewing and distilling.

Billion Pounds of Sugar Exported

Sugar exports for the first five months of 1922 exceed a billion pounds, as compared with about a quarter of this amount for the corresponding period of last year and an average of only 30,-

1922 EXPORTS
Exports of the principal foodstuffs, January-May, 1922, inclusive, compared with the average of the first five months of the years 1910-14 were as follows:

	Jan.-May, 1922	Jan.-May, 1910-14
Wheat	37,481,012	15,002,946
Wheat flour	6,083,128	4,113,946
Rye and rye flour	97,905,656	25,910,787
Barley & Barley flr.	8,447,636	473,872
Oats and oatmeal	8,981,790	2,360,287
Rice	203,964,803	9,936,518
Lard	313,919,618	232,024,299
Bacon	122,628,928	73,462,132
Hams & shoulders	118,556,128	70,056,404
Condensed milk	107,039,756	7,141,041
Butter	8,687,630	2,118,787
Cheese	2,536,962	2,731,851
Dried fruits	56,214,194	33,460,699
Sugar	1,124,543,860	29,894,303
Coffee, green	13,208,177	20,524,807
Coffee, roasted	509,709	604,348
Cottonseed oil	37,167,497	146,952,865

000,000 pounds for the pre-war period. This enormous demand for sugar confirms the statement made by the Department of Commerce in January that the world sugar stocks were low and the situation at that time justified the belief that not only the large surplus of old sugar then held in Cuba would be readily absorbed, but the new crop as well. Sugar production has been slower to recover in Europe than any of the other agricultural crops, owing partly to the large amount of labor involved in the production and also to the lack of fertilizer during the war.

As an animal fat there is practically nothing to compete successfully with American hog lard. It is expected that large exports of this product will continue, as there is no other region that can produce an animal fat at so low a cost.

On the other hand, the large exports of cottonseed oil, which were well developed in the pre-war period and continued up to last year, have

shown a remarkable decline. This is in part due to the very short crop of cotton seed last year and also to the fact that Europe is now taking increased quantities of low-priced oriental oils.

DANISH FARMERS GET 50% BEET SUGAR PROFITS

DANISH sugar beet growers and beet sugar factories are operating under contracts whereby the growers receive fifty per cent of the net profits of the factories and of all other earnings over five per cent paid as dividends to factory shareholders. Simultaneous with general agricultural and industrial development, the cultivators, with that genius for co-operation which characterizes the Danish farmer, joined in co-operative societies whose officers closed contracts with the factories and whose experts devoted themselves to crop improvement. Vice Consul E. Gjessing, Copenhagen, states in a report to the Department of Commerce.

When the first sugar factory was built in 1907, it was planned to produce sugar for export only but the domestic absorbed its total output, and due to the continually increasing per capita consumption of sugar Denmark will not be able to export raw sugar to any appreciable extent. During the European War Denmark was one of the few countries where sugar was relatively abundant and cheap.

Sugar beets are grown principally on the islands of Fyn, Lolland, and Falster and these sections during late years have been able to hold their own population due to the increase of the industry and the intensiveness of crop attention, while other agricultural sections have sent their increasing surplus population to the cities and towns.

The efforts of the co-operative societies' experts have been successful in increasing the percentage of sugar in beets from 6.65 in 1873 to seventeen per cent in 1921.

Shall Farmers Hold their Crops in the Fall or Sell Them?

Could you give me any information to be used for a Grange discussion on the question: "Is it best to sell the crops when harvested, or hold them for higher prices?" J. C. S., Charlotte, Mich.

THIS is an old, old question. There is only one answer to it: If every farmer took his crops to market as soon as harvested there wouldn't be any market. It is only because farmers and middlemen are willing to hold crops and speculate upon their future prices that we have such a thing as a market.

What is a market, anyway? Webster says it's an "opportunity for buying and selling commodities." When more goods are offered for sale than there are buyers to take them we have a dull market and prices go down. When the demand is for more goods than can be supplied we have an active market and prices go up. The more goods that are offered for sale during a given period in excess of what the market can absorb, the duller the market and the lower the prices will become.

It is therefore, evident that should all the farmers of the United States attempt to harvest all their crops within one month or two months or even six months after they are harvested their market would be absolutely destroyed.

This is plain common sense and an economic truth, but many people fail or refuse to believe it. Persons who think their own selfish interests would be advanced by everybody selling their crops in the fall can produce the most convincing statistics that farmers lose more money than they make by holding their crops. On the other hand, fully as convincing statistics can be produced to prove the contrary.

Neither the transportation facilities, the storage facilities nor the investment facilities of the United States are great enough to absorb all the crops of the country in less than a six months period after harvest. Imagine what would hap-

pen if the farmers attempted to sell or to even offer for sale every bushel of their 1922 wheat crop as soon as it was threshed. In the first

FARMERS GETTING READY FOR THEIR COUNTY PICNICS

THE farmers' picnic is an annual event in most counties of Michigan, and there is probably no event of the year more greatly enjoyed. This year's picnics will be further enlivened by the horseshoe pitching contests which have been scheduled by the county agents and the several farm organizations.

Most of the farm bureau picnics will be held the middle of August and we are glad to present below the dates and salient facts on those of which we have been advised.

Howard Scheduled at Branch County

The Branch County Grange, Gleaner and Farm Bureau picnic is scheduled for August 17th, when Pres. Howard of the A. F. B. F., has been invited to speak. Chas. M. Gardner of the National Grange has also been scheduled and the Gleaners invited to send a speaker. The horseshoe pitching tournament will be put on at this time.

Muskegon county also holds its farmers' picnic on August 17th and County Agent Long says he is making every preparation for a successful horseshoe pitching tournament at the same time.

Ottawa county picnic will be held at Boynton's Grove, 10 miles southwest of Grand Rapids, at Jenison, on Wednesday, Aug. 9th.

Jersey Club Gets Busy

Ray Baker, president of the Hillsdale County Jersey Club, tells us that his club will hold a picnic August 9th at the farm of J. J. Walsh & Son, and at that time the best horseshoe twirler among the Jersey men will (Continued on page 16)

place the elevators have not the capacity to receive this wheat. It would have to be held in storage on the farm. In the second place the information spread through the world's wheat marts that the farmers of the United States stood ready to sell their wheat from the machine would cause a veritable panic and prices would sink to nothing.

It is mighty fortunate for the farming industry that some farmers are willing to hold their crops and market them gradually throughout the year. No greater calamity could happen to the country than for them to depart from this wise practice. The trivial losses which farmers may be occasionally subjected to as a result of this practice would be a mere drop in the ocean to the losses they would suffer if they all sold in the fall.

Both extremes of marketing are to be avoided. It is not good business for a farmer to sell all his crops in the fall if he can conveniently hold them, nor to hold them all until spring if there is any fall and winter market for them.

One of the greatest objectives and probably what will be the greatest achievement of the co-operative movement is the educational campaign it has given rise to, to induce farmers to market their crops in an orderly fashion.

It would be to the best interest of all concerned if farmers everywhere would divide their marketing into two or more periods. Let part of the cereal crops be marketed as soon as ready; another portion a couple months later; still another portion a few months later, and the balance within thirty or sixty days of the new crop. Thus, the agencies required in the marketing and financing of the crop will not be over-taxed, the market will be stabilized, and higher profits will be returned to the farmers. There is still much to learn about the production of crops, but in their intelligent marketing we are still in the cradle stage.

Story of N. Y. Dairymen's Famous Pooling Plan

How Every Member of Dairymen's League Co-Operative Association Shares Equally with Every Other Member



A corner of the accounting department at the Utica office of the Dairymen's League Co-operative Ass'n, Inc., where several million dollars' worth of business is recorded each month.

A CO-OPERATIVE selling organization naturally wants to find a market for the entire output of its members, and to the best advantage. But although the old Dairymen's League was able to dispose of practically all the milk of its members, the best rate it could obtain for this milk was a price based on the returns from milk converted into dairy products such as butter and cheese, even though a good part of the milk supplied the dealers was actually sold by them in its fluid form, at a higher price.

The new Dairymen's League Co-operative Association, Inc., being stronger and better organized, was able to make a better contract with the dealers. This contract divides the milk into four classes, the highest price being paid for Class 1. The classification remains practically unchanged from month to month, except for minor changes, and the seasonal variations in price. In brief, the contract for June, 1922, covers the following:

Class 1. Milk sold in fluid form; or made into cream and the skim milk sold in fluid form; or milk used in other ways not specified in the contract. The price for the month was fixed at \$1.75 per 100 pounds.

Class 2. Milk made into cheese of the soft cheese type, such as Neufchatel, Pimento, Cream, Olive, Camembert, De Brie, etc., or into cheeses other than those specified in classes 2, 3 and 4; milk made into cream and the skim milk used for making milk powder, plain condensed milk, or other products; milk made into plain condensed milk; or used for the manufacture of

By GILBERT I. STODOLA

(The second of a series of articles written by Mr. Stodola exclusively for the Business Farmer describing the wonderful work of the organized dairy farmers of New York.)

homogenized mixtures of milk products with the addition of sugar, flavors, etc. Also milk used for making ice cream. Milk in this class was scheduled to bring \$1.50 per 100 pounds during the month.

Class 3. Milk used in the manufacture of whole milk powder; milk turned into Swiss, Limberger, Muenster, Edam, Hard Italian and similar cheeses; milk used in making sterilized evaporated whole milk or sweetened whole condensed milk from which the cream has been removed and turned into butter.

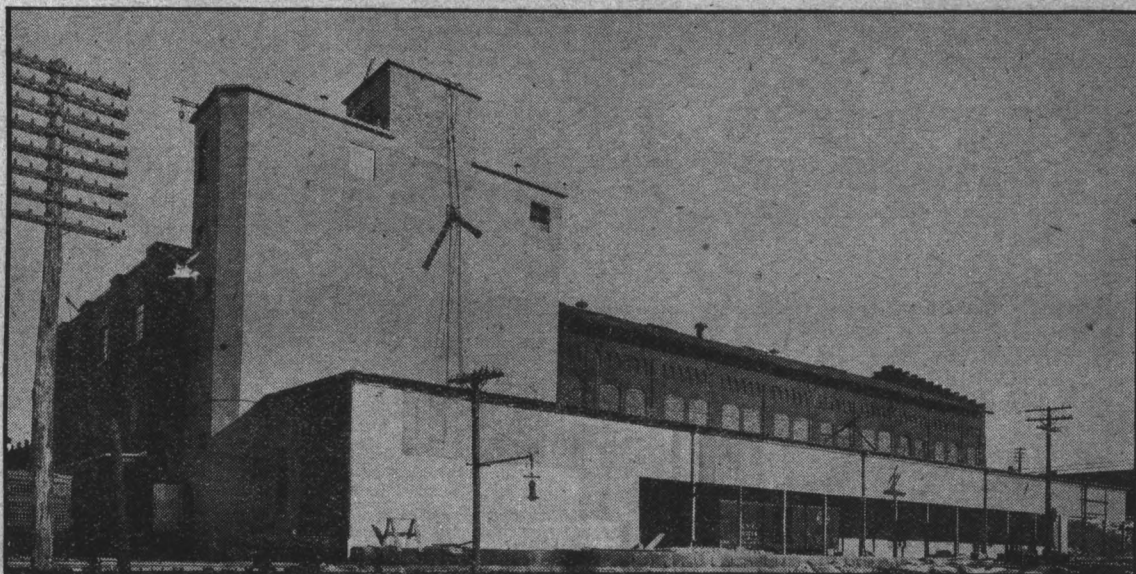
Class 4A. Milk made into butter. The yield is figured at 4.176 per 100 pounds, for 3.6 milk, five cents per pound being allowed for making. If the skim milk is turned into casein or pot cheese, five cents per 100 is added to the price.

and an additional ten cents where the whey is converted into milk sugar. Or if skim milk powder is made, fifteen cents per 100 pounds is added to the price.

The methods of determining prices in classes 3 and 4A are given in considerable detail. In a general way they are arrived at by averaging official New York City quotations for butter of 90, 91 and 92 score and up.

Class 4B. Milk made into American cheese. The yield is computed at 9.68 pounds per 100 for 3.6 milk and the allowance for making is four cents a pound. Ten cents per 100 pounds is added to the price if the whey is converted into milk sugar. The price is determined by taking for the month the average official New York City for New York State average run colored and uncolored flats.

Unless otherwise stated, the prices are based on Grade B milk testing 3 per cent butterfat, with an additional 4c per 100 pounds for each 1-10 of 1 per cent of butterfat over the 3 per cent test. For Grade A milk an increase of from 15c to 25c per 100 pounds is granted, depending upon the bacterial count. (Continued on page 21)



Elevator and warehouse at Buffalo, New York, where feeds and grains are handled. This is one of scores of buildings owned by the Dairymen's League Co-operative Ass'n, Inc., for transaction of its huge business.

Bean Acreage Indicates Total 1922 Crop of 12,000,000 Bushels

ACCORDING to the most reliable reports obtainable, the acreage planted to beans this year in the six states of New York, Michigan, California, Colorado, New Mexico and Arizona, is 1,074,000 acres, indicating a crop of 12,485,000 bushels. In 1921 the total U. S. crop was 3,902,00 bushels.

A number of causes are responsible for the increased acreage. When the large crops of 1913 and 1919, added to the imports, broke the bean market and resulted in a period of unprofitable prices thousands of old-time bean growers quit the game and went to raising the more profitable sugar beets and cereals. The small crop of 1920 and the smaller crop of 1921 soon cleaned up the surplus stocks. The market found its feet and the high prices prevailing the last four months again caught the attention of the farmer. As the price of beans went up, the price of sugar and of sugar beets went down, so this year in Michigan we have a larger acreage of beans and a smaller acreage of sugar beets. Simultaneous with this readjustment the bean jobbers who saw their business going glimmering last year, conducted an effective educational campaign which no doubt has had an influence on the acreage.

The all-important question is, of course, what effect the larger acreage and probably the larger production will have upon next fall's and winter's market. The following bulletin recently issued by Secretary Drees of the Michigan Bean Jobbers Ass'n, discusses this subject as well as general bean statistics:

"The 1921 bean crop and carry over from previous years will be marketed so closely by September 15, and stocks in all hands will be so light that it seems an opportune time to present the following statistics covering the

past five years—and also an estimate on the 1922 crop.

PRODUCTION IN SIX STATES

	(In thousands of bushels)				
	1917	1918	1919	1920	1921
New York	1,875	1,660	667	756	1,072
Michigan	3,294	4,887	4,847	3,718	2,972
California	8,091	8,584	6,561	3,400	3,618
Colorado	1,950	1,638	429	416	342
New Mexico	633	564	862	855	830
Arizona	152	64	87	44	68
	16,045	17,397	12,953	9,189	8,902
Imports	*	4,209	4,972	2,094	274
Total		21,606	17,925	11,283	9,176
Exports	*	2,398	3,795	1,764	1,409
Balance in the U. S.		19,207	14,130	9,518	7,766

*Government reports imports and exports for 1917 include peas. Average consumption in the United States for the past four years, 12,630,772 bushels.

Bean Production in 1922

"Estimates given by Secretaries of State Ass'n and private parties gives the acreage in the six states as per list below and we have applied the government figures on production per acre on the 1921 crop. The result is as follows:

	Acre	Bu. per Acre	Bushels
New York	84,000	16.	1,344,000
Michigan	450,000	11.3	5,085,000
California	310,000	13.3	4,123,000
Colorado	100,000	9.	900,000
New Mexico	120,000	7.9	948,000
Arizona	10,000	8.5	85,000
Total	1,074,000		12,485,000

"If estimated acreage which is 303,000 in excess of that in 1921, is fairly accurate the 1922 production will not exceed the average consumption of the past four years even if imports equal these in 1921—and none of the 1922 crop is exported.

"The figures would lead us to believe that there is no good reason why the 1922 crop should not be marketed at prices which would yield a fair return to the growers, the elevator, the jobber and distributors, if sound business principles are used and the price is not so high as to cause large imports from foreign countries.

"During the past four years the market has been handicapped by the carry over of old crop beans and this has probably tended to restrict consumption, owing to poor cooking quality of old stock.

"We shall not have this condition to face in the coming year. The national advertising campaigns conducted by several of the leading canners has undoubtedly contributed largely to bringing back normal consumption of beans."



Inaugurating M. A. C.'s new president, David Friday. In the center group, bottom row: Pres. Friday and Hon. Jason Woodman, senior member Board of Agriculture; Second row: President Dwight B. Waldo, Western Normal and Pres. J. W. Manek, Hillsdale; Third row: Regent J. E. Beal of U. of M., and Rev. E. W. Bishop of Lansing; Fourth row: Mrs. Dora Stockman and Clark Brody, Board of Agriculture; Fifth row: Dean F. S. Kedzie, Dean R. S. Shaw and Secy. Halladay (behind Brody) of M. A. C. In the center of the trio to the right we note the smiling countenance of our old friend, A. B. Cook, master State Grange.

PICTURES FROM FAR AND NEAR



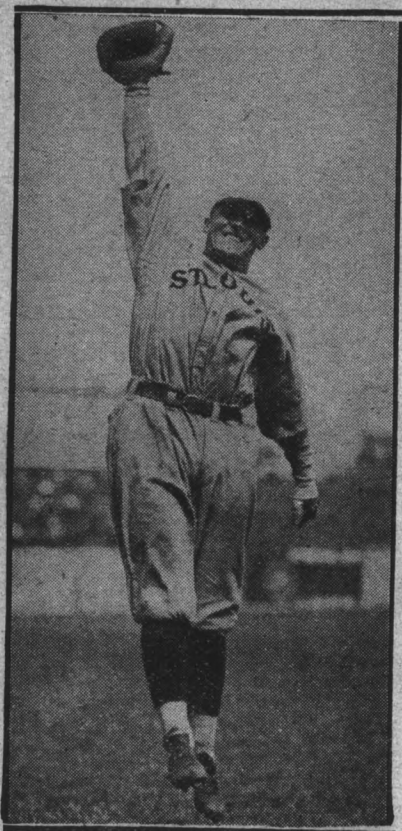
"Distantly related." There are five generations between Grandpa Kipp of Deer Valley, Cal., and Baby Kenneth Kipp. The young hopeful is the youngest in a family of 78, all descended from the elder Kipp.



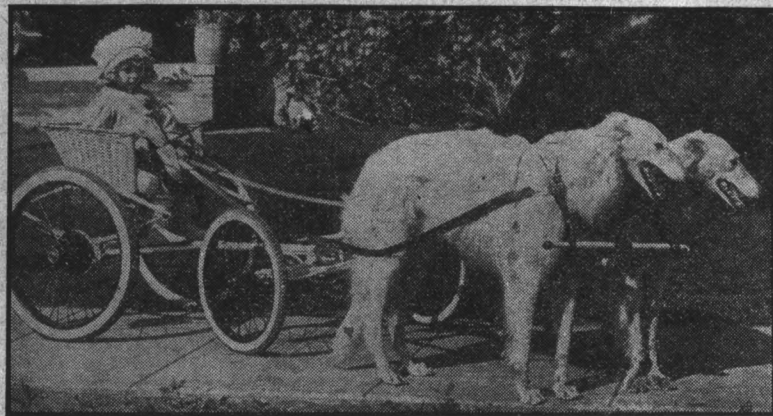
The swan dive. A swan dive is naturally graceful but when performed by such a bathing beauty as Viola Hartman of Los Angeles, it approaches the perfection of grace and beauty. This young lady recently captured first prize in all-around championships in her native city.



Some stepper! Pillory wins \$50,000 stakes at Belmont Park, N. Y. Michigan State Fair will have running races this year instead of harness events. The stakes won't be so high but the stepping will.



Greatest of 'em all. George Sisler, first sacker of the St. Louis Browns, considered by baseball experts as the greatest player in the game today. He leads the American League in batting percentage, greatest number of hits, stolen bases and run-making and is a better hitter than Ruth altho he does not make as many home runs.



Baby Betsy Ann Hisle, who like all national beauties, hails from Hollywood, comes in "under the wire" with her wolfhound team, at the annual baby show held at Venice, Cal. The dogs were loaned for the occasion by W. W. Harkins, of Culver City.



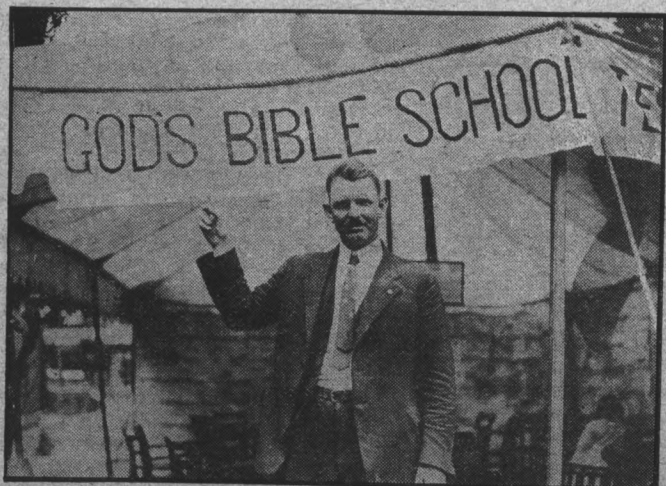
Isn't she pretty? Her name is Clara Beresback, now appearing in Ziegfeld Follies new 1922 spectacle glorifying the American girl.



Who are the twelve superwomen in the U. S.? They must be women who have made their own way without the aid of father or mother. Geraldine Farrar, the grand opera singer, has been nominated for one of the places.



"Tramp, tramp, tramp, the boys are marching." Men of Co. K, 11th Infantry of the 28th Pennsylvania Division, march again at Valley Forge as did Washington's Continental Army. They are wearing the tattered uniforms of the Revolutionary War heroes while many of them are barefoot. One of the early Colonial flags was carried aloft.



From farming to preaching. Alvin York, war's greatest hero, was offered fabulous sums to appear in the movies but he rejected them all to carry the word of God to his mountain neighbors in Tennessee. "Service above self" is York's motto. The feats of valor performed by York during the war are almost unbelievable and constitute one of the most inspiring pages in the recent war's history. The mortgage on his Tennessee farm was recently paid by popular subscription. York is shown here delivering a sermon at a Bible School meeting at Cincinnati, Ohio.



Eleven-year-old Rosie Reeve of Chicago, "read-in' up" for her entrance in the law course this fall at Columbia University. The prodigy "skipped" most of the grammar school grades.



"Winchester," replica of the horse ridden by Gen. Phil. Sheridan, ready for his last journey, from Governor's Island, N. Y. to the Smithsonian Institute at Washington. Commander Isador Isaacs, Dept. Commander of the G. A. R., is holding the horse's head while other old vets look on with vivid recollections of other days.



Farmers Service Bureau



TAX EXEMPTION

"Will you please tell me if I have any right to ask the board of the township of Metz for tax exemption for five years, 1913 to 1917? In May, 1913 I bought 40 acres of cut-over land. I have built a house and barn on it and have cleared up about 4 acres every year and have lived on it all ways. I have asked the supervisor of the township for tax exemption but he told me that he did not know anything about it. Will you please write me personally if I have any right to ask for a tax exemption for first five years, so they would give me a credit for my money that I have paid? I like this paper and could not be without it.—M.B., Metz, Mich.

The statute, Section 4192 and 4193 of the Compiled Laws of 1915, provides that any cut-over or wild lands, as defined therein, which shall be actually purchased by any person for the purpose of making a home, shall be exempt from the payment of all taxes for the period of five years thereafter, provided, however, that the purchaser thereof actually resides on and improves at least two acres thereof each and every year of the said five years in a manner to subject the same to cultivation, and further specifically provides that the exemption provided for therein shall not extend to more than eighty acres purchased by any one person.

Section 4193 provides that any person claiming exemption under said act shall make application to the supervisor for exemption at the time assessment of the township is made and the supervisor shall enter the person's name upon the assessment roll and the description of the land, the same as though taxes were to be spread upon the land, and refer the application to the board of review of the township, who shall, if the conditions entitling exemption have been complied with, order that the following be written after the description:

"Exempt under the cut-over and wild land act, first year."

It further provides that each subsequent year thereafter if the conditions have been complied with during said five year period, the same course shall be followed with respect to said land.

This statute, nor any other statute to which my attention has been called, does not specifically provide a method whereby the owner of such cut-over land may be reimbursed the tax paid thereon without application first having been made for exemption, as provided by statute and in ignorance of his right to said exemption.—A. B. Dougherty, Deputy Attorney General.

ADDRESS OF KHAYM

I would like to know if you could give me the address of Khaym, the mind reader. This man follows the theaters.—Mrs. B. C., Williamston, Mich.

A letter addressed to this gentleman, in care of the Billboard, Cincinnati, Ohio, will undoubtedly reach him. His full name is Bob Khaym.—Editor.

REMOVING TREES FROM HIGHWAY

In grading the road in front of my farm the commissioner ordered the removal of several trees which did not have to be removed at all. Trees in front of other farms were untouched. I want to know what can be done in cases like this to prevent road constructors from destroying trees and discriminating between property owners.—Reader.

The contractor has no authority for removing any trees which may be in the way of road construction without first having given the property owner notice to remove such trees and if he fails to do so, then the contractor is authorized in removing the trees which are actually in the way of road construction. Neither a contractor nor a highway commissioner are authorized or justified in removing any trees along the highway that do not interfere with road construction, and the courts have held that a commissioner who removes trees which are not in the way of road construction are liable in damages therefore.

It would be advisable for you to take this matter up directly with

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

the Board of County Road Commissioners if the road under construction is under the jurisdiction of the Board of County Road Commissioners; if not, then with the district engineer who will give the matter prompt attention as it is the aim of this department and should be the aim of all officers having charge of road construction to save every tree within the limit of the highway which does not necessarily have to be removed for proper road construction.—State Highway Department.

HAVE YOU SEEN THEM?

Mr. Julius Steig of Twining, Mich., would like to receive information concerning the present whereabouts of Isabelle and Homer Bidwell. The girl is eighteen years old and the boy 15. They used to live in Kansas, first in Wichita and then in Severa.

MUST FENCE BE REMOVED?

I would like to know if the boss on a road job has the right to throw stumps and brush over my fence. The men on Trunk Line M-20 are throwing the trash on my land. I ask the boss not to do it and he said he had the right of 13 feet on the outside of the survey stakes to use for trash and if he wanted to he could make me move my fence over 13 feet. My fence is only barbed wire and some places they have piled stuff onto it until it is nearly down. Now please advise me if they have the right to do as they are doing and to make me move my fence.—J. F., Clare, Mich.

P. S.—This fence is my pasture fence and the only pasture I have as I only own 40 acres. The survey stakes are all on the road side of the fence.

A contractor has no authority to deposit rubbish or refuse matter upon the property of an abutting property owner. Neither has a con-

tractor a right to deposit rubbish along a road which he is improving without making a final disposition of it before the road will be accepted by the State Highway Department.

With reference to the removal of fence, without knowing more of the facts in connection with this matter it would be impossible to state specifically but it is the law that unless a fence had stood in the highway for a period of fifteen years or more preceeding the year 1907 then an abutting property owner would not have acquired any rights in the highway with his fence and he could be compelled to move it back so that the highway would be 66 feet in width, that is you could be compelled to remove your fence so that it would stand 33 feet from the center of the highway.—State Highway Department.

SCHOOL ELECTIONS AND ELECTORS

Sec. 1, Art. 3, of the constitution reads that at all elections in this state an elector must have a residence in the state of six months and 30 days in precinct to be qualified to vote at any election. Would this govern school elections?

Is Act No. 301 as amended in legislature of 1921 governing school elections in conflict with the above franchise clause? Sec. 17 of Act 301 uses repeatedly the term "citizen of the United States," instead of "elector of Michigan," in referring to qualified voters at school elections, and mentions property owners liable for school taxes in connection therewith. Please treat this question so as to make it clear to the tax-payer who may vote. Can a tax-payer vote at school election who is not a resident of the school district, though a citizen of the United States?—E. R., Port Hope, Mich.

Sec. 1, Art. 3, of the State Constitution does not govern school elections, as the law provides that school electors must be citizens of the United States, twenty-one years of age

and either the parent or legal guardian of children whose names appear upon the census list, or be a taxpayer in the district (the individual must be a taxpayer in order to be eligible to vote on questions involving the raising of money), and must have resided in the district for at least three months next preceeding the time at which the school election is held at which they desire to vote.

There is no conflict between the law governing general elections and the law governing school elections but three months' residence in the district would qualify the individual to vote at school elections even though he moved into the state from some other state; that is, so far as the residence qualification is concerned; whereas, for general elections six months would be required to gain residence upon moving into the state from some other state. In case the individual moves from one precinct to another voting precinct, twenty days is required in which to gain a residence for general elections and three months for school elections.—B. F. Ford, Assistant Superintendent Public Instruction.

WHO FURNISHES THE DRIVEWAY?

Montcalm county road commission is building a county road by my house, which is four miles east of Greenville, Mich., on what is known as the County House Road. The road being ditched on both sides cuts me off on 3 entries into my fields, that is, spoils my driveway into the fields adjoining the highway. Who has to build those private driveways, as the tile are at least 12 inches diameter? They tell me they will furnish one driveway in front of the house, other ones owners of land along the highway will have to furnish themselves. I do not want to make it harder for any one than I have to but I have to have those driveways.—K. R., Greenville.

It has usually been the custom for the board of county road commissioners or state highway department to furnish a driveway for every property owner but there is nothing in the law which provides for the construction of any driveway into a farm entrance, but this is usually done by the municipality constructing the highway but is not in any way mandatory. If the property owner wishes more than one driveway he is obliged to provide for them himself.

The highway law differs in this respect from the drain law in that when a drain is constructed along the limits of the highway the drain law provides that a bridge or approach shall be constructed to each farm entrance which shall be charged to the expense of the project, but thereafter maintained by the property owner, while the highway law does not provide for any approach being made for a farm entrance.—State Highway Department, Lansing.

COURT-MARTIAL MONEY

I was discharged from U. S. navy service Dec. 22, 1921. Have I a right to the court-martial money which was taken while in service? Was discharged with an ordinary discharge by request. Thanking you in advance.—L. D., Kalamazoo County.

You are advised that if a man in the Naval service is sentenced to lose pay and the same is remitted subject to the conditions specified in Article 1877, Navy Regulations, 1920, the entire amount will be refunded to him upon discharge from the service with an honorable discharge, or one-half the amount will be refunded to him if he receives an ordinary discharge.

Any person who was discharged from the Naval service and believes that he is entitled to pay checked as a result of sentence of court-martial should address a letter to the General Accounting Office, Navy Department Division, Winder Building, Washington, D. C., stating the facts in his case.—Judge Advocate General of the Navy.

HAY CROP ON MUCK

Have a two acre piece of muck that I would like to get seeded to some hay crop. The center is usually quite wet, altho tile drained. Freezes late in spring and early in fall, therefore potatoes and corn are uncertain crops. Had barley

The Collection Box

THE DISHONEST COMMISSION MERCHANT

THE worst offenders with whom the Collection Box has to deal are the commission firms. Most of the commission firms with whom we correspond in behalf of our readers are dishonest. They do not scruple to accept the farmers' produce and forget to pay him or to send him worthless checks and notes. About two-thirds of the claims we prosecute against such individuals are collected. In the rest of the cases we find too late that the rascals have quit the business and departed for parts unknown. In collecting amounts from these fellows we usually have the co-operation of the postoffice inspectors and the State Bureau of Foods and Standards who have the licensing of commission merchants. When threats avail nothing a visit from the postal inspector usually does the business.

At present we have a number of claims pending against the Consumers' and Producers' Company which started in Detroit in a big way nearly a year ago. The concern owns farms and plants at Cheboygan, Mich. It met with financial reverses and was unable to pay for all goods received from farmers. The concern is being refinanced and the claims will be paid in the near future. The firm seems to be doing business on the square but met with losses which it has taken them some time to absorb. The letters and the many personal visits which were made in connection with these particular claims required a great amount of time and patience which was freely rendered for the benefit of our subscribers.

Another firm with whom the Collection Box has had a good deal of trouble is the Naumann Commission Company. Mr. Naumann accepted a large amount of produce from farm-

ers, spent the proceeds and then sent notes to them in settlement. Before the notes became due Mr. Naumann quietly retired from the commission business, and refused payment on the notes when presented. The postoffice inspector is powerless to prosecute because intent to defraud must be shown and the giving of notes indicates an intent not to defraud. Shrewd old Jew, Mr. Naumann. But we'll get him yet.

Sam Silvermann, operating under the name of Wayne Commission Company, also forgot to pay the farmers when he sold their produce. He wound up in the Shiawassee circuit court where a kind judge put him on probation for a year providing he would liquidate his debts in the meantime. Sam is now pushing a fruit wagon in Detroit and a firm of attorneys are using their wits to keep his creditors off his back. Several times they have promised their client would pay up, but each time they have suffered a lapse of memory. Just now the State Bureau of Foods and Standards is trying to refresh it.

The commission business in this state should be thoroughly sterilized and fumigated. A state law requires that all commission merchants take out a license. This law has not been strictly enforced, but the new head of the State Bureau of Foods and Standards, Mr. W. P. Hartman, is putting a literal construction on the law and his department is going after the unlicensed merchants.

Under this law a commission merchant can quickly be put out of business for accepting produce and not paying for it, and the law also provides lethal punishment for such tactics. Farmers who are swindled by commission merchants should immediately place their case in the hands of the Collection Box where it will have prompt attention.

on it last year and sowed to timothy at same time, but the latter did not catch at all. Do not care much for timothy as it is usually rusty. What would you advise doing? Can alfalfa be grown on a tiled field, or will it have a tendency to fill up the tile with roots?—T. P. Metamora, Mich.

A mixture of from 4 to 6 pounds of timothy and 4 pounds of alsike clover seed per acre has been found to be one of the best when it is desired of securing hay on muck land. Red top has a wider range of adaptation than timothy and if cut early, makes a fair quality of hay. Timothy, however, is to be preferred if it can be grown.

Alfalfa may be grown quite successfully on tiled land. Running or standing water is very detrimental to alfalfa roots. There is not likely to be any danger of the tile becoming stopped up from the penetration of alfalfa roots.—C. R. Megee, Associate in Farm Crops, M. A. C.

CONTRACT TAX

Having read your article on the contract tax, there are two things that are not clear to me: First, when did this law go into effect, and second, would it affect a contract made prior to the law?—O. P. S., Rives Junction, Mich.

The law relative to the specific tax on land contracts and mortgages went into effect January 1st, 1912.

The law provides that every mortgage or contract upon which the specific tax is not paid shall be subject to the provisions of the general tax law; therefore every contract is subject to this law whether given before it went into effect or not. If the owner does not take advantage of the privilege of paying the specific tax, the unpaid balance on his contract is subject to the general tax law.—Board of State Tax Commissioners.

CLIMBING VINES

Is the Weigela vine a climbing vine? It has trumpet shaped flowers. Is the wisteria a climbing vine or just a shrub? Can I get the roots of a French Lilac? I would like to know the prices and where I may be able to obtain the above.—Mrs. F. B., Onaway, Mich.

The Weigela is not a vine but a flowering shrub growing to a height of about six to eight feet, producing trumpet shaped flowers about one inch long, usually colored pink but sometimes is white or dark red depending upon the particular variety grown.

Wisteria is a climbing vine that is a very desirable one for training about porches or arbors, producing large drooping bunches of flowers usually purple in color.

Most of the lilacs of the better varieties grown in this country were propagated abroad and hence are sometimes referred to as French lilacs. However, these plants are now propagated in this country, an embargo having been placed on the importation of this stock a few years ago to prevent the importation of troublesome insects and diseases. You may obtain the nicer varieties of lilacs from the Greening Nursery Co., Monroe, Mich., or from the Corvett Nursery of Birmingham, Mich.—C. P. Halligan, Professor of Horticulture, M. A. C.

DAMAGE FOR LOWERING LAKE

We have 120 acres. The three forties corner just about in the middle of a lake. There is a road laid out and built around this lake and in the spring and fall the water raises over the road. About five years ago the commissioner wanted to drain this lake by cutting a ditch across our field, a distance of about 30 rods. He said he would give me a job of cutting the ditch but I told him I did not want the lake drained as the land around it is quite sandy and I think the lake is quite a benefit to the land. Besides I wanted to make a private fish pond of it. Now this same man is one of our county road commissioner. He was here a few days ago and wanted to lower this lake, two feet. I told him that would be all right with us, if they would lower it by an underground drain. I consider it a damage to the land in either case to lower the lake or drain it. Can they go ahead and do this without paying a damage?—L. H. Gladwin, Mich.

The owner of the lake would have a right to refuse the Board of Road Commissioners authority to construct the drain. The road commissioners would then have to resort to an act provided by law which is to petition the county drain commissioner to construct a drain to benefit the highway. The county drain commissioner then proceeds with the construction of the drain the same as any other drain constructed by him which would give a right to

the subscriber to be heard as to the question of damages which he might sustain by the lowering of the lake, and he would thereby be provided a day in court for the purpose of presenting a claim of damages.—Harry H. Partlow, State Highway Department.

PLANTING ASPARAGUS BULBS

Will you please tell me how to plant asparagus bulbs? I put mine in shallow earth but since then some people told me I should have put them away deep in the earth. Please tell me the correct way.—Mrs. B. E., Newberry, Mich.

The proper way to plant asparagus is to place the plants deep enough in the soil so that the patch may be disked or cultivated during the season without doing any injury to the crowns. Usually we recommend that the young plants be set in the bottom of a trench 8 or 10 inches deep or at least deep enough so that the crown of the young plant will be at least 6 inches below the normal level of the soil. Not more than two or three inches of soil should be placed over the crowns at the time of planting, the trenches being filled in later by subsequent cultivation.

In case the soil is inclined to pack or become hard or if it has consid-

erable clay in its composition, it is sometimes advisable to trench the soil to a depth of eighteen inches to two feet and incorporate a liberal amount of well decomposed stable manure in the soil that is being put in the trench. With mellow sandy loam soils no trenching is necessary.—R. E. Loree, Department of Horticulture, M. A. C.

FOX FARMING PROFITABLE

I would like your advice on men traveling through the country trying to sell silver gray fox, claiming they are such a money making proposition. Why can't a farmer buy and breed them on his own farm if the government is backing these other fellows and trying to establish fox farms here and there through the country. Where can I get real honest-to-goodness information in regard to the breeding, feeding, handling, etc? Where can the thoroughbred silver gray fox be bought? How much do they ask for a pair and what is their pelt worth and is there a good sale for them?—Reader, Lakeview, Mich.

Farmers' Bulletin No. 795, issued by the U. S. Department of Agriculture fully describes the domesticated silver fox industry. The industry had its origin in Canada, but has spread into the United States, and there are now scores of successful fox farms in Michigan alone. The profits of the industry are large, pelts finding a ready market at from \$600

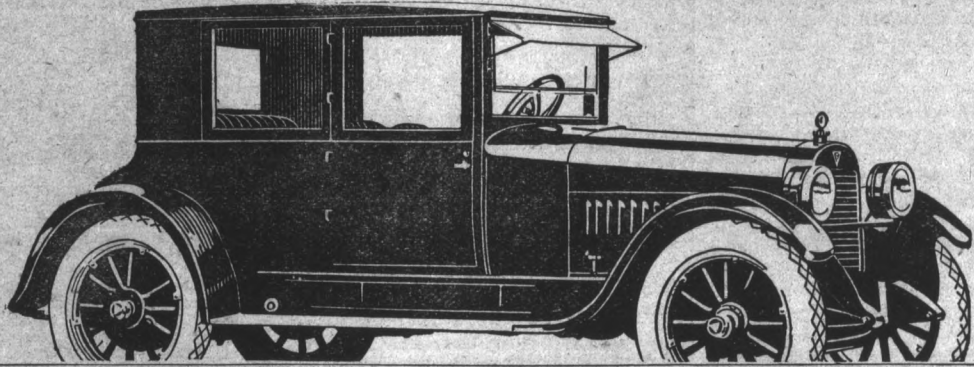
to \$1,000. Breeding foxes are in demand also, and most of the Michigan breeders contract the puppies for sale before the litter comes at \$1,500 to \$2,00 per pair. There is no reason why any farmer who can make the initial investment should not enter the business as a side line. You can secure fuller information and the names of reliable breeders by addressing the National Silver Fox Breeders' Ass'n at Muskegon, Mich. I am mailing you a copy of the government bulletin.—Editor.

PLANTING FISH

Where can I get fish to plant in a lake, and what kind would be best? It is a soft bottom lake. I would like black bass and pickerel.—J. H. Gladwin, Mich.

We would suggest large mouth black bass as suitable, and therefore enclose a blank on which formal application for a consignment may be made. We do not hatch nor propagate pickerel at the present time.

Kindly have your subscriber fill out and return the blank and we will endeavor to make him a shipment of large mouths during the current year, giving advance notice of the day and train on which the fish will be shipped.—Department of Conservation, A. T. Stewart, Supt. of Hatcheries, Lansing, Mich.



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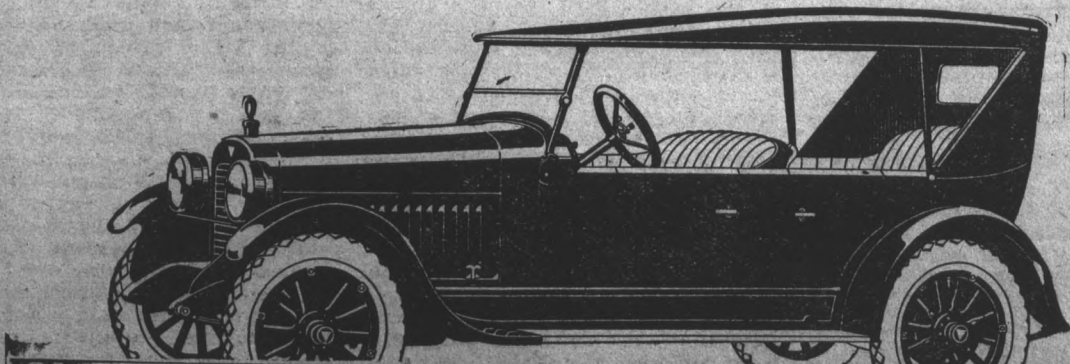
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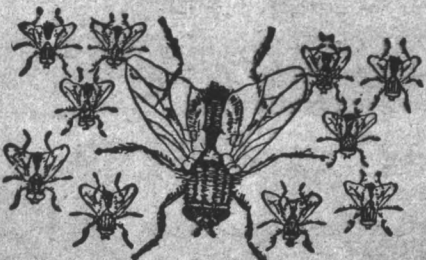
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This new discovery, which is called Alexander's Rid-O-Fly, is not a poison. Though it kills flies like magic, farm animals and human beings are not affected by it at all. In addition to killing these insects, Rid-O-Fly is a strong repellent. Flies will not come near stock or buildings where Rid-O-Fly has been used. Rid-O-Fly is particularly valuable for cows and horses, as it is known fact that flies do untold harm to these animals.

So confident is Dr. Alexander that his discovery will rid your house, barns and live stock of these pests that he offers to send a \$2.00 supply for only \$1.00 on the guarantee that if Rid-O-Fly does not solve your fly problems it will cost you nothing. Two big Kansas City banks guarantee the reliability of this offer.

SEND NO MONEY—just your name and address to the Alexander Laboratories, 1548 Gateway Station, Kansas City, Mo., and this introductory offer will be mailed at once.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. M. Hurst, who lives at 508 E. Olive St., B-363, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.



What the Neighbors Say



DIXIE LAND, DOWN AMONG THE OZARKS, IN THE WHITE RIVER VALLEY

THIS little story of the South, is written in the hopes of showing our Michigan people some of the conditions in Dixie Land, down the great Mississippi River in the flood water districts of Arkansas. Having crossed "The Father of Waters," entering Missouri at St. Louis, the writer found conditions to be very similar in Missouri to that of Michigan, it at least one respect, viz. It would not matter much whether one was kicked with a mule in Missouri or by a Ford in Michigan. The Mississippi with all of her tributaries was exceedingly high on the date of May first, she having just passed the danger period of high water mark, and statistics show that the water level at about this time is the highest known for a term of years.

Agriculture is the chief pursuit of the natives of Missouri and Arkansas, corn, hogs and cotton are the principal crops grown, that portion of Missouri being eastern and central part of which the writer was favored to see would strike a Michigan man as being a rich, level, loamy agricultural section with great future possibilities. Along the mouth of the Ohio and down the Mississippi, much damage has been done in the flood districts. All through this section corn planting was completed and the crop ruined. In most of sections the cotton crop was not yet planted. In some instances on the low lands the water raised so high as to flow into the second story windows of the buildings. Many millions of dollars of damage has been done in the lower Mississippi district through this high water period.

Arkansas, to the writer, has a wonderful future agricultural possibility and to the Northern traveler it has the appearance of a new undeveloped agricultural section; but the facts of the case are that many sections here have been settled years ago by rich southern cotton planters. If such a place is known to man it appeared to the writer from general conditions surrounding this section the homes of southern nobility, the tenant farmer and the Negro, that this could be termed the place of self contentment.

At Newport, in eastern Arkansas, in the White River Valley, at the foot of the Ozark Mountains is one of the most typical sections of Southern planters life. Here you find the busy business man, none too busy to devote an entire day to the benefit of the traveler, while the tenant leisurely leans idly on his hoe longing for someone to stop that he might discuss the future prospects of the unplanted crop, which may never develop, at the same time the dark and shady night Negro with gasping breath and dimmed vision is hoping that his boss may continue the conversation for all time that he may be relieved of any further effort on his part.

The land is owned in large tracts from one to eight thousand acres, or even more, by landlords who may live in St. Louis, Memphis, or New Orleans, and is tenanted out in small parcels to poor white trash on a share basis of the crop grown, usually, the landlord furnishing everything, grub staking the tenant out and receiving half to three-fourths of the cotton crop. The result is after the tenant works from three to eight years for the landlord he is farther in debt to him than when he began, the landlord then takes all he has, turns him loose to the commons, and grub stakes another tenant.

I believe the average Michigan person would look upon the cotton gin as a one-horse affair with a large hopper which the cotton would be thrown in, with a long sweep attached to the same with an old gray horse hitched to the sweep, and slowly circling round and round the hopper, ginning the cotton, but dear reader modern ginning machinery is

of a much different nature than this. For example, at Diaz, Arkansas, is located the largest gin of the south, and the Wilmans Merchantile Company planters, ginners and merchants own approximately 12,000 acres of land here, and have one of the largest plantations operated in Arkansas. The cost of this gin alone and its equipment exceeded \$55,000. The land value of this plantation will average about \$50 an acre, while the improved land is worth approximately \$100 an acre. They have 125 tenant farmers with hundreds of Negroes to work this plantation, the production of which is approximately 4,500 gin bales of cotton weighing 500 pounds per bale, and a cotton seed production of 45,000 pounds. The price per bale at the present time for the best long staple cotton is about \$100, however, the price went up on May 2nd, 71 points, or \$3.75 per bale, and it is predicted that on account of the great floods in the south cotton planting will be retarded to such a late date that a very poor staple will be grown this year, and it is expected that cotton prices will go amazingly high before the year is over. The seed value in its raw state before drying and milling is worth about \$30 per ton, and brings in a handsome profit to the ginning business.

Wonderful advancement in the perfection of homes and home conditions could be brought about by the state and government in this section, the conditions under which humanity lives, especially the poor white people, is appalling. The buildings they call houses are nothing but shacks, set upon posts from 4 to 6 foot high, that during the high water period the water might flow safely under them, and when the water subsides that the same place may be made beneficial as a sun shelter for the famous Arkansas Razor back hogs which are found in abundance in this section and are all that the name implies.

The people are of wonderfully kind disposition and very hospitable and it was the writer's good fortune to be entertained at Newport by the Newport Chamber of Commerce and given a sight seeing drive for many miles by some of Newport's leading business men. They have a great desire that people from the north would migrate to Arkansas and there establish their homes permanently under general northern conditions, thereby enlightening the southern planters as to the difference between sections of our great commonwealth.

In the writer's judgment many lives will be lost through the drinking of improper water, leaching in to their water cisterns from the overflowed lands. This water in many instances being polluted by dead animals and even in some instances by human beings. However, the conditions are now fast improving and in the ten day period which I was through this section the waters have subsided and in the higher sections a second planting of corn is resumed, and the planters are now preparing their cotton beds as rapidly as possible. It is well that the southern people are so easily satisfied and if they have plenty of corn bread, ham or bacon they care not for the morrow.—Chas. B. Scully, Almont, Mich.

We are grateful to Sen. Scully for this interesting account of his trip. It makes good reading, but it serves an even better purpose than that. The account of how the people live in those states, of their hardships and discouragements makes us all feel a little prouder of old Michigan and a little better satisfied with our lot.—Editor.

A "DIRGE" ON MODERN DRESS

THOUGH not a subscriber to the M. B. F. I sometimes have the opportunity of reading it, and the recent discussion in regard to modern fashions was very interesting to say the least.

I quite agree with those who think women and girls should not display their nudeness to the public. I am enclosing a song I have written which I wish might be printed in the

columns of the M. B. F.:

The Modern Maid
Tune—Tramp, Tramp
On a busy street I stood,
Thinking mother, dear, of you,
And the pretty, modest gowns that
you do wear,
And the shame it filled my heart
Spite of fashion's gay decree
As I viewed the modern maids so
nearly bare.

Chorus
Nip, Nip, Nip, the girls are passing,
In a never-ending throng
And they've shortened up their skirts
From the streets a foot and more
While on heels four inches high
They nip along.

O, their waists are decollete
And you'd call them "peek-a-boo"
While the short or gauzy sleeves are
but a name.
All their hose are very thin
With their legs a-showing through
And I wonder if their mothers are
to blame.
Cho—Nip, nip, nip.

O, the innocent grow bold
And their laugh is much too loud
As they wear the scanty gowns that
fit so well.
Then I register a prayer,
And I wish that they might know
Eve's emotions in the Garden when
she fell.

Nip, nip, nip, the girls come walking
In a gay and thoughtless throng
And each mother's daughter sure
From her skirts has cut some more
While on heels four inches high
She nips along.

—Mrs. B. R., Breckenridge, Mich.
Was there ever more fruitful theme than this, inspiring as it does song, sermon and prayer. For ages woman has been kept in the back-ground, an insignificant figure, but now she comes forth dressed in a garb which focuses all eyes upon her. Great questions of the day go neglected while we quarrel and baffle over the length of a woman's skirt. Verily, another mole-hole has become a mountain.—Editor.

PRODUCERS OR PROFITEERS?

A PUBLICATION of the United States Department of Agriculture says that "agriculture has passed completely beyond the low point of depression." On this statement, the Literary Digest comments: "This is very fine for the people who produce food. But how about the consumer?" The Literary Digest may be accepted as fairly reflecting the tone and substance of the press in general, but every farmer can see a number of fallacies in the Literary Digest's thinking. For prices of farm products to go up when farmers have been liquidated to the point of having nothing salable on hand is not "very fine for the people who produce food." If farmers got the increased prices, their dollar would still buy less than it used to buy, though it never bought enough. The farm prices of food-stuffs are so very far below what consumers pay that manifestly farm prices might be reasonably advanced and prices to consumers reasonably reduced at the same time. In the cost of a suit of clothes, wool at any reasonable price is a negligible item. The cost of the corn that goes into a package of corn flakes may be computed by any farmer. All over the world producers and consumers are compelled to seek less wasteful ways of meeting in their deals. America proves behind other nations in such attempts; the spread between producer and consumer is greater here than elsewhere. If farmers should come a little nearer to getting the cost of production for what they sell, their condition would not yet be "very fine." Reduction in wheat acreage, sugar beet acreage, sheep and other items while the population of the country increases indicates the approach of a time when we shall learn the desirability of having some farming done, whether we want to learn or not. Russia listens to farmers now better than it listened a year or two ago and is trying to get farming

started again. When the time comes for America to pay its tuition, Russia may help. Farmers are near enough to their problem to understand it, whatever papers may say.

Farmers are not so near to the problems of wage earners, and some papers try to line farmers up for low wages as the same papers try to line up wage earners for low prices to farmers. The Literary Digest alleges that the coal miners are responsible for "paralyzing business." The total labor cost of a ton of coal at the mines is under two dollars. Evidently the price of coal to the consumer might be decreased without cutting the wages of miners whose families enjoy about as many luxuries as farm families have. Coal miners are asking primarily that consumers be informed as to what becomes of the dollar they pay for coal. Nobody has succeeded yet in getting that information. Consumers have more interest in it than miners.

The same number of the Literary Digest asks whether "the promise of prosperity" is to be "dashed from our grasp by a railroad workers' strike." Farmers want cheaper coal and cheaper transportation, just as wage earners want cheaper food; but cheaper transportation may demonstrably be had without cutting wages. Inefficient and extravagant management offers possibilities for saving; profits on the seven billion dollars of water in railroad stock might be cut instead of wages; but such possibilities do not appeal to the men higher up. A bill was introduced in congress prohibiting salaries above \$15,000 to railroad officials; but the bill was not popular in Washington or with papers controlled by railroads.

Very commonly, railroad workers are sons of farmers. Many farm boys of today will be railroad workers soon. Wage-cutting will make the world worse for them just as surely as cutting the prices of farm products. Wage earners are the farmers' market today. If he can afford it, a coal miner or a brakeman eats as much as a mine owner or a railroad magnate. Demonstrably, good wages make a good market for wheat. Since there is no wall between farmers and wage earners, since men often pass from one occupation to another, the returns from farming tend to be equalized with wages. Many papers have urged wage earners to oppose farmers; workers' schools, labor papers and other agencies have educated wage earners to a policy of supporting farmers instead. When farmers are urged to stand with mine owners against miners or with railroad officials against railroad workers, selfishness and humanity suggest the same answer: It is the answer that wage earners now give when they are asked to oppose farmers.

Recent primaries prove what anybody can figure out. When wage earners and farmers stand together, they can win. The attempts to make them oppose each other are well financed; but Michigan farmers, like Iowa farmers, may do their own thinking and voting.—David Clay, Michigan.

In certain respects, as you have pointed out, the interests of farmers and laboring men are very closely allied. In other respects they are not. It is nothing new for groups or classes of people to act in political union when important issues are at stake. The election in Iowa showed that it was not necessary to unite farmers and laboring men into a separate party in order to elect their candidate. The situation was such that both classes felt their interests would be better served by the election of Col. Brookhart and consequently they worked in unconscious union to bring that about. We denounce the methods that are employed to create discord and suspicion between farmers and laboring men. While we do not believe that anything would be gained by the creation of a farmer-labor party or any other party founded on class consciousness, we do believe that there should be the most cordial relations between these two most important groups of people and that when it appears desirable they should act in political concord.—Editor.

LEGALIZED MURDER

Is it proper for men to say things that reflect on what God has done? "Who are we that we should reply against God? And yet that is what is being done by everyone that calls capital punishment 'legalized murder'."

When God organized his own chosen people into a nation and gave them civil as well as spiritual law

for their guidance He commanded that "who so sheddeth man's blood by man shall his blood be shed" and then made special rules for carrying out the death sentence.

Did you not know that God found fault with King Ahab for allowing Benhadad to live when he was Ahab's prisoner of war and that the prophet Samuel under similar circumstances hewed Agog in pieces with his own hand because of Agog's murders.

The prophet Elijah was sent by God to denounce the death sentence on King Ahab for the murder of Naboth and later God had the man made king who carried out that sentence on Ahab and his queen.

Who can forget the grandeur of God's answer by fire to the prayer of Elijah and that right after that Elijah ordered the execution of 850 false prophets and then with the hand of God on him Elijah ran before the chariot of Ahab and how God talked with Elijah on earth and finally took him to heaven in a chariot of fire.

How then is it possible to claim that God is against civil executions, when he showed such favor to one that had just been executing the civil death sentence on many men. When Christ came He did nothing to impart civil authority in any way. Instead He and some of His apostles recognized its force.

But Christ's mission was entirely spiritual. He came to organize a church that was to have no civil authority whatever and so be free to work under all governments.

That church could not decide even civil cases, much less have any jurisdiction in criminal cases. So that were our civil authorities to be restricted to Christ's directions to the Church we would have no civil processes whatever. Which might work well enough in a world full of saints. But it would be all wrong in a world of the other kind of people.

Paul wrote that the law was "for the punishment of evil doers" and how can punishment be just and not be according to the crime committed. What can be more just than God's penalties of an eye for an eye, a tooth for a tooth and a life for a life.

If we deny to the state the right ever to take human life how can we expect our officers to arrest and to imprison desperadoes? Even if the officers did capture them by surprise how long would it take for their friends to rescue all prisoners from unarmed guards.

Take the case of Harry Tracy. He was serving a prison sentence and his friends helped him and his brother-in-law escape provided with weapons and they left a trail of innocent blood from the prison to the ocean and back to the wheatfield where Harry was shot. Was that better than capital punishment? When God gave us the state and the church He gave to each a work of their own and the best means for each to do their work with and they no more ought to exchange means to work with than the stone mason and the carpenter ought to change tools.—Francis G. Smith, Isabella County, Mich.

Tracy's gang might have left a trail of blood, but they would have left a bigger one had the penalty of capture been death. Capital punishment does not deter or decrease crime. You will find as many arguments in the New Testament against capital punishment as you find in the old for it. Therefore, your arguments are without weight. After all is said the conscience of the individual and state should be the determining factors.—Editor.

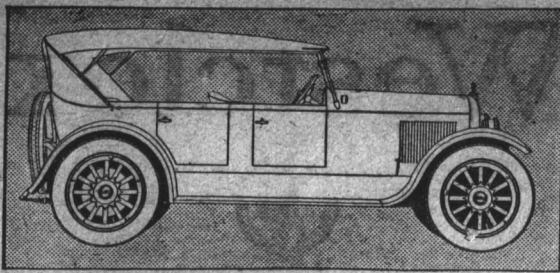
ODDS AND ENDS

Oranges are selling at two cents a dozen in Haiti. Grape fruits are ten cents a dozen, pineapples five cents each, bananas five for a cent, and limes one hundred for a dime.

No better illustration of the turning of the worm could be desired than the fact that Swiss people are now eating American cheese.

Argentine meats are selling readily in English markets. The increasing favor with which their products are being received is encouraging Argentine stock growers.

In some of the central European countries wheat is displacing radishes, onions and other garden crops in back yards and small tillable plots. The ancient Chinese method of cultivation—including planting in rows, cultivating, fertilizing and watering by hand—are being resorted to. These methods, of course, result in much higher yields than ordinary field methods.



Well-bred or well-built, quality always shows

If you were buying a horse or a steer or a breeding animal of any kind, conformation would count heavily in your estimate of his value.

Fine lines and proportions have the same meaning in a motor car. The knowledge and skill which created the powerful long-stroke Earl motor and the balanced Earl chassis, likewise provided the comfort and beauty of the Earl's high-grade bodies.

At \$1095, The Earl is the great motor-car value of the year. No other car of the same wheel base swings so near the road or hugs it so closely on sharp turns or at speed. The rigid 7-inch channel frame with five cross members, rugged Earl-forged axles, 56-inch rear springs, Earl-built steering gear, transmission and carburetor cannot be matched in quality and efficiency by any car in the Earl's price range.

On rough and broken roads, the Earl's performance and economy are unusual for a motor car of any size. In the sixth annual A. A. A. Economy Run from Los Angeles to Yosemite Valley—360 miles over heavy mountain roads—an Earl touring car averaged 30 miles per gallon of gasoline and won the highest ton-mileage rating in a field of sixteen big and little motor cars.

Write now for the illustrated Earl handbook and the name and location of your nearest Earl dealer. You can't afford to buy any car at any price until you have examined and driven the quality Earl.

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

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

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SPORT SHOES, \$1.45

Boys' sizes, small, 9 to big 6.
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Your head timekeeper

THE biggest business in the world—farming. Westclox as head timekeepers. On thousands of farms you'll find a Westclox alarm on the big job. Westclox have been appointed to the job because they've proved their ability to handle it the way you want it handled—faithfully and on time.

From America—the oldest of the family—right through the entire line, Westclox are made with the

ideal of bringing right to your home and pocket a real servant who will run and ring on time.

America running the house—Pocket Ben with you every working minute; they'll handle the schedule and do it right.

There are two easy identifying marks—the name Westclox on every dial, and the orange and buff six-sided tag. They are there for your benefit. Look for them.

WESTERN CLOCK CO., LA SALLE, ILLINOIS, U.S.A.
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Big Ben	Baby Ben	America	Sleep-Meter	Jack o' Lantern	Pocket Ben	Gle-Ben
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is designed and built to live up to its guarantee—the broadest and most positive guarantee given any ensilage cutter. There are thousands of satisfied owners.

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The farmer who finds and stops the leaks in his business is the one who makes a profit. This 60-page book is so conveniently arranged that a few entries a day will enable you to determine your exact financial standing. Write us giving the size of your silo and your dealer's name and address, and the book will be mailed promptly. It's worth a dollar to any farmer.

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The Genuine FAIRBANKS SCALE

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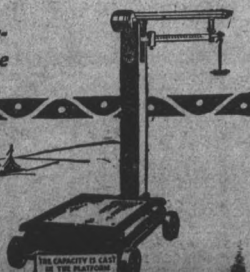
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GO to your dealer—see this wonderful scale value. This scale stays correct because its tool steel knife-edge bearing contact with tool steel plates. And it has an arrow-tip beam, wide wheels and a large platform.

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RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

VACUUM-TUBE DETECTOR

THE necessary parts for the construction of a vacuum tube detector and the approximate cost of the materials, is as follows:

1 Rheostat (6 or 10 ohm for front or back mounting) 75c to \$1; 1 vacuum tube socket, 65c to \$1.50; 1 grid condenser (.0005 m. f. capacity), 25c to 75c; 1 grid leak, 75c to \$1.00; 1 6-volt (or its equivalent) storage battery, \$10 to \$25; 1 22 1-2 volt "B" battery (black style), \$1 to \$2; 1 vacuum tube detector, \$5.50 to \$6.50; 1 bakelite or rubber panel, 6 in. by 10 in. 3-16 in. thick, \$1.50.

This panel is optional and for our description we will not need any panel.

After buying the above mentioned articles, you can proceed to mount them on a piece of board as a base. For those who prefer a more finished looking set, a panel can be used, but after reading this article you can mount your set in any box, nicely finished, with the panel in front and binding posts leading to your two sets of batteries and to your telephone receivers. Always remember in mounting that all wiring should be as short as possible, and connections of the best, otherwise the detector will be noisy.

Those of you who have a 32 volt home lighting outfit in your homes need not buy any battery, but may use 3 cells for your 6 volt "A" battery and the balance for your "B" battery.

Notice that the vacuum tube socket has your connections marked P, G, Fx, F-, this means that the wire that leads to your plate is connected to P, the wire to the "grid" is connected to "G", and the A battery (6 volt) is connected to Fx and F- which is the positive and negative connections for the filament in the tube.

Mount your tube socket, and rheostat and grid leak and condenser as close together on a board as possible leaving a little space to have room to make connections. Now connect them together and be sure you follow the diagram, remembering that X means positive and — means negative terminals of the batteries, and where a wire is shown crossing another wire it means connected to a wire is shown looped over another wire it means it passes over or under but is NOT CONNECTED and MUST NOT TOUCH.

When adjusting this detector always remember to start with the A battery turned off and turn it on gradually until the filament lights quite brightly. The filament burns out quite easily and then the bulb is useless, but if handled carefully a detector tube will last for about 1,000 hours of use, more or less.

As the filament is lit, listen carefully, and when you hear signals, turn it up and down till you get the clearest and loudest signals. When thru listening in turn off the A battery and so prolong the life of your

bulb and battery. When the A battery is off no B battery current can flow. Therefore, you do not need to turn off the B battery.

This detector takes the place of the crystal detector and is very much more sensitive to weak signals, and it should enable you to hear stations about 300 miles away especially at night and in the cool months of the year. Handle it carefully as you build it carefully, and it will more than be worth its cost to you.

The wooden base should be soaked in paraffine before using—a piece of hard rubber is better, such as is used in storage battery construction.

INSTALL SET IN GRANGE HALL

I am interested in the buying of two receiving sets—one for our local Grange hall in a room 24x40 ft. and the other in ordinary living rooms for personal (family) use. The first we hope to secure at once and attempt to pay for it by giving programs, for it will be one of the first installed locally.

Will you advise us as to the construction requirements of a set suitable for our locality? We do not care to do any building or assembling ourselves as none of us are well enough informed and we want it in use as soon as possible. Of course we want to hear Pittsburgh, Madison, Chicago, Lansing, Detroit, etc. For the hall, we want this loud enough for use as public entertainment of 50 to 75 people; for family use, at least as loud as a phonograph. In both cases we want a loud speaker—like your advice as to the best kind.

What kind of aerial would give best result for the set you recommend? Would vacuum tube detector and two-step amplification be sufficient for our needs? Also cost?

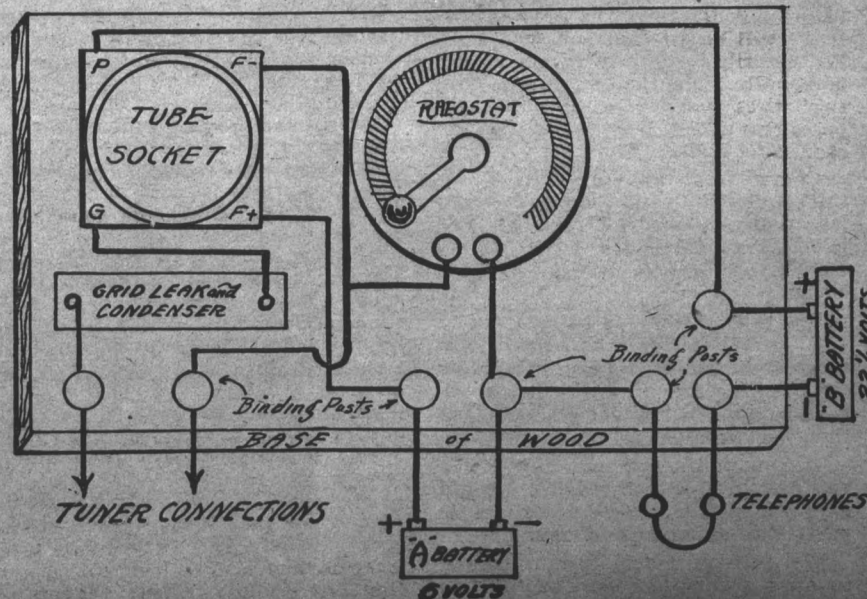
Do you think there may be such improvements by fall as to make it wise to wait until fall before buying. With present apparatus, would static interfere with summer programs seriously? We want what you consider a little better than ordinary in a set as far as results are concerned. It must be simple enough for ordinary folks to operate, however.

Also we shall be grateful for warning against the most common mistakes of amateurs. Will you advise reliable companies, also a good magazine?

I am reading your department in the M. B. F. and find it very helpful. However, there is such a variety of material in our magazines and new rumors all the time that I feel we need your advice as to a set for our particular use.—S. H. H., Lundington, Mich.

Your very interesting letter in regard to radio is one that will require a rather more elaborate reply than can really be given in a short article, but will try to give as much information as will enable you to buy safely. Your idea of buying a complete set is good, and you will be saved a lot of trouble in operating a home made set as the average home made set has so many poor connections in it that you never get the satisfaction that a good set will give you. However a home assembled set, if properly made will be very much cheaper, give you more real pleasure as you feel as if you had helped create something worth while as well as giving a good working knowledge of a receiving set.

First let me straighten you out as to what stations you will hear with any given set. Strange to say some days one hears better from the east than from the west. Other days it will be the opposite, and again it



might be from the north or south, and again some times when you can hear stations within 200 or 300 miles you will not hear farther ones or sometimes you can hear far stations a thousand miles away and miss the nearer ones that you have been listening too, however, you can with a loud speaker and amplifiers hear the near-by stations practically every night.

You will need a regenerative tuning set, a vacuum tube detector and at least a 2 step amplifier and for your hall you will need a Radio Magnavox loud speaker which will make it loud enough for your hall.

Costs, tuning set \$35 to \$50, detector \$15, with batteries \$40, 2-step amplifier from \$25 to \$30, Magnavox \$45 with battery \$60 to \$65—for your home an attachment that will enable you to use your victrola in connection with your telephone receivers will cost you \$3, each complete set costing you about \$100 without the loud speaker.

There are several standard makes, such as Clapp-Eastham, Adams-Morgan, Tuska, Amrad, Deforest, Westinghouse, Collins-Kennedy, Radio Corporation, each and all make good radio sets and you will have quite a choice of designs and prices; however, be very careful about buying any kind of set you are offered at a low price especially if not made by one of the older manufacturers. There is a lot of "junk" on the market today and many dealers do not care what they sell just so they get the money.

I do not believe that the improvements by fall will amount to anything, except the rare possibility of lower prices, yet the biggest demand is in the winter, hence lower prices are not very likely to come about for about a year if at all.

Sometimes static will interfere with summer receiving, but there are many days that static will never bother. Even in winter static bothers now and then. The real interference will come from some of the boats in Ludington harbor which cause quite a little interference if not far away. If the static is what makes you think of putting the purchase off till fall, I would suggest that you get your set now and learn how to operate it this summer and get your real pleasure this winter.

When you say that you want a set a little better than ordinary and simple so that anybody can operate it you will have to buy a Westinghouse set that has but one lever adjustment to make but at that it is not louder than a phonograph and will cost you \$350 without a storage battery which is extra. The ordinary good sets require careful tuning and a little practice to get the best results and if too many operate the set you will be finding that some one depended on some one else to turn off the battery and your bulbs may be burned out, your battery discharged and a lot of worry caused. A few of the very interested should learn how to operate the set and if they are not present the set should be under lock and key.

A single wire aerial 150 feet in length as described in previous M. B. F. will be all that you will need. We described a 2 wire aerial and personally I get better results with two wires but for all general purposes one wire is best and will be the easiest to install.

Common mistakes of amateurs is the purchasing of the cheapest articles of unreliable dealers; cheap articles are good sometimes, but on the whole the best is not always the cheapest.

The Radio News is a good magazine, as well as the others mentioned recently in the M. B. F. The Radio News is full of goods ads and is worth getting for that alone as one can then see what is on the market.

If you could tell me how much you wished to spend, possibly I could give you a little more advise as to particular apparatus to buy.

We will try before winter comes, to have a complete set such as you desire described in our paper for the

benefit of the different Granges, Lodges and clubs, etc., as we believe that the field for radio at present is in the group of people more than in the individual home.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

MY FARM REPAIR SHOP

On my farm I have a repair shop, 10x16 feet in size. It is equipped with a forge and anvil weighing 75 pounds, and with a large vise and carpenter bench and tools, a horizontal bench drill and two screw plates, one for small bolts and one for large ones. I also have equipment for shoeing horses so that I can set a shoe at any time. This shop has been on my farm for about ten years and I would not be without it. For the small amount which the tools have cost it has saved me a good many dollars in trips to town. My farm consists of 80 acres.—E. Lamoureux, Gladwin County, Mich.

MY REMEDY

Would say to H. C. D., Williamston, Mich., for cow giving bloody milk, give teaspoonful of salt peter pulverized in bran mash every night for week. I have used this with good results.

To F. H., Gaylord, Mich., for warts on cows teats take one ounce of oil of clover, mix with one ounce of castor oil and apply lightly night and morning.—F. S. Copenish,

"GREASE THE TAILS"

I see where C. G. of Ithaca, Mich., has trouble with pigs tails dropping off. It is caused by a microbe working at the base of the tail and if after this he notices the tails becoming scaly and he will grease them with lard or vasoline it will cure them immediately, if they are not clear dead. It is caused by stale bedding. I have had the same trouble and know it will cure. G. M., Wheeler, Mich.

LIVINGSTON'S NEW COUNTY AGENT



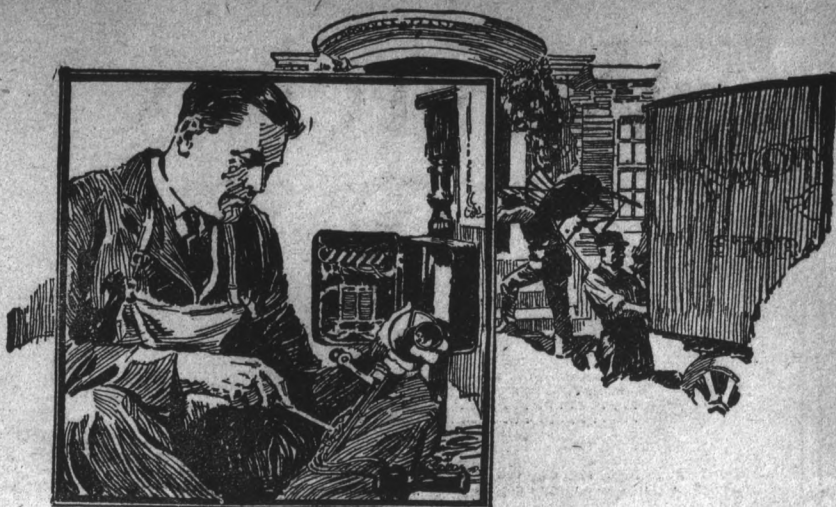
THE sensible looking young man whose picture is shown here, has recently arrived from Wisconsin to become agricultural agent in Livingston county. His name is C. L. Bolander.

There is possibly no other factor aside

from the agricultural paper, so valuable to the farmer, in giving him good returns on his investment and getting and giving new ideas to the farmer, than the County Agricultural agents.

Livingston county, who has a wide awake Farm Bureau Board, are fully aware of the fact and are doing their utmost as farmers and leaders of their respective communities to try and make the good work known.

Mr. Bolander, who was an Agricultural advisor in a bank before coming here, is getting some very constructive work under way. He has had considerable experience in Boys' and Girls' Club work and has already a number of active Calf Club members, who are in hopes of getting a trip to the State Fair, and by all indications, will have a fine line-up before July 1st. A number of farmers' picnics are being arranged for in different parts of the county to stir up a little community interest, and also as a means of getting the County Agent acquainted more quickly.



1,820,000 Telephones Moved

In the telephone business every day is "moving day." Telephone subscribers are probably the most stable and permanent portion of our population; yet during the past year one telephone out of every seven in the Bell System was moved from one place of residence or business to another at some time during the year.

The amount of material and labor, and the extent of plant changes involved in "station movement" are indicated by the fact that this item of service cost the Bell System more than \$15,000,000 in 1921.

To most people, the connecting or disconnecting of a telephone seems a simple operation of installing or removing the instrument. As a matter of fact, in every case it necessitates changes in the cables and wires overhead or underground. It also necessitates changes in central office wires and switchboard connections; in subscribers' accounts and directory listings; and frequently requires new "drop" lines from open wires or cables.

The problems of station movement are among the large problems of the telephone service. Because of the double operation of disconnecting and re-connecting, the work involved is often twice as great as in the case of new subscribers. With nearly 2,000,000 changes a year, it is only by the most expert management of plant facilities that Bell service is enabled to follow the subscriber wherever he goes.

"BELL SYSTEM"

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

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



Study your wheat
at threshing time.

Of course, you are very busy then but it will pay you to take time to find out not only the yield but the real quality.

Is the weight per struck bushel up to the standard?

Does it grade high enough to bring the top price in your market?

Is the weed seed box free from light chaffy wheat grains?

Has the clover and grass made a good set in the stubble?

If not, why not?

Six years of Potash starvation has had its effect on wheat lands. Enough German Potash has now come forward, so that those who wish can buy wheat fertilizer with 4 to 6 per cent. of Potash. Potash prices are now much lower.

Tell your dealer now what you want and insist on having it.

Potash Pays

SOIL AND CROP SERVICE, POTASH SYNDICATE, H. A. HUSTON, Mgr.
42 Broadway New York

8 000 Mile Cord Tires



Brand new, absolutely first cord tires. Guaranteed 8,000 miles and adjusted at the list price on that guarantee. The prices below include a brand new Tube.

30x3	\$ 9.50	32x4	\$16.10	33x4½	\$22.15
30x3½	11.25	33x4	17.00	34x4½	23.20
32x3½	13.50	34x4	18.60	35x4½	24.05
31x4	14.10	32x4½	21.10	35x5	26.50

Send no money. Just write today and tell us the size of your tires and the number you want. Tires will be shipped C. O. D. with section unwrapped for inspection. All tires have non-skid tread.

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The Michigan BUSINESS FARMER



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Farmer's Weekly Owned and
Edited in Michigan



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"The Farm Paper of Service"

Financing the Farmer

OWING to the apathy and in some cases the antagonism of the bankers of Michigan the War Finance Corporation loaned very few of its funds in this state. The farmers of other states, however, profited enormously by the increase in capital available for loaning which the Corporation made possible. Despite the criticisms directed against the Corporation the facts are that the loaning resources of the country were increased by nearly 300 million dollars and the pressure which was being exerted against nearly all borrowers to pay their loans was temporarily relieved. In a measure then, Michigan farmers secured some benefit from the functioning of the Corporation although the actual cash they received from that source was small.

But by far the greatest legacy which the War Finance Corporation will leave to American agriculture is the interest it has succeeded in awakening on the part of the country's financial heads in the welfare of the farmer. For years there has been a vague sort of feeling in financial circles that the credit machinery of the country was somehow inadequate to meet the needs of farmers. Nearly every year banks were stressed to carry farmers from the time they harvested their crops to the time they marketed them. Often farmers were forced to dump their products on a market already oversupplied in order to comply with the demands of their bankers that they pay up. These facts have been generally known and commented on for years but nothing was done to improve the situation until the War Finance Corporation came into being as a purely emergency organization. This has served the purpose for which it was created, and as soon as its loans are repaid it will retire from the banking field. During its brief existence it has shown how easily the farmers' credit needs can be taken care of without trespassing upon the interests of any other class.

Speaking before the Illinois Bankers' Ass'n, Mr. Dwight F. Davis, director of the War Finance Corporation, said:

"It is not sufficient to forget the lessons of an emergency until another time of emergency arises. The farmer and stockman who have suffered will demand that legislation be passed to protect them in future crises, and if legislation along sound lines is not given them, unsound schemes of all kinds will be advocated. Bankers and financiers generally should devote careful study to the problem of adjusting our laws and institutions to the needs of an industry so fundamental to the welfare of the whole country as agriculture."

Bills are already in the congressional hopper to provide permanent credit machinery for farmers. None of them may become a law at this session of the Congress, but whether they do or not, the way has been paved and another

five years at the outside will see legislation adopted which will meet every emergency of agricultural credit.

Make 'Em Pay

IF the government does not force the war grafters to come across with some of their ill-gotten gains it will be a sorry day for the Republican administration. Sufficient disclosures have been made, thanks to the investigations and courage of Congressman Woodruff of this state to warrant a congressional inquiry into a large number of the contracts between the government and private firms for war materials. It has already been shown that a few corporations, one of them a Michigan concern, has mulcted the government of millions of dollars by the padding of accounts, false entries and other immoral methods. How many hundreds of millions the government has been robbed of in this manner will never be known.

The knowledge that there were hundreds of rich men who waved the flag with one hand and picked the pockets of the government with the other makes the sacrifices of the war seem cheap and farcical. Men who in honest patriotism gave freely of their time to advance the interests of their country or who fought and returned home crippled for life must feel a sense of belittlement as they learn of the debauchery which took place while they were at the post of duty.

No tears are shed for the poor when they cross the line twixt right and wrong. But let a rich man come within the reach of the law and the bounds of compassion are let loose and every effort is made to protect him from punishment. Men in high places have sought to furnish an excuse for those of wealth and high social standing who robbed the government during the war in the expectation that the theft would never be discovered. Every obstacle has been laid before those congressmen who would uncover the acts of these defrauders and at least force them to return what they have left of their plunder. Just because the war is over is no reason for granting immunity to these offenders. The American people should insist that the war grafters return every dollar taken illegally from the government during its time of stress and war.

Who Will Pay For the Roads?

THE U. S. Department of Agriculture frankly admits that the cost of building roads is not equitably distributed.

"Development and increase in numbers of motor vehicles and the coincident need and demand for good roads have come so rapidly," says the Department, "that methods of raising funds have often been expedients for the time being. Consideration has been given not so much to the just distribution of the cost as to how the funds can be raised with the least controversy and the utmost ease. * * * It is believed that a very considerable readjustment of the source of revenues must be made so that a larger percentage will be paid by the road user and a lesser percentage from State or local taxes."

It is customary for the dancers to pay the fiddler, but under our present system of road financing the spectator pays a goodly share of the bill. It may be he enjoys the sight of automobiles jazzing down the highway at fifty miles an hour, but the entertainment is hardly worth an annual mortgage on his property.

A permanent road building policy cannot rest upon a system which often levies heaviest against the occasional user of the highway and the least against the frequent user. Make the user of the roads pay for their upkeep in proportion to the use of makes of them and the wear he gives them. Then the last valid argument against good roads will be removed.

NOTICE TO SUBSCRIBERS

Since March 25, 1922, we have been forced to issue every other Saturday and each issue thus "missed" has been credited to the expiration date of every subscription, so that in the end, no subscriber will miss a single issue of The Business Farmer, for which he has paid.

Leave It To America

THE ability of Americans to do things just a little better than they have been done before has again been demonstrated by the preference that is being shown in Switzerland, the home of the famous Swiss cheese—for American made Swiss cheese. For years the Swiss have enjoyed an exclusive market for their famous cheeses. Innumerable attempts in many different countries to ape the Swiss article have failed. But the American manufacturer has at last, it seems, brought forth a product which at least equals if it does not excel the Swiss article.

Gradually Yankee ingenuity has so improved upon the manufactures of other countries that American products are now preferred in nearly all the marts of the world. The American time-piece has superseded the Swiss; American woollens crowd the famous English goods on every bargain counter; German cutlery is giving way to American makes; and even in the making of such typically European products as fine laces, delicate linens, and fragile pottery and china, American manufacturers are rapidly taking the palm from the old world.

So long as America can retain her position in the world's industry and agriculture, her factory fires will not smoulder for long nor her farms lie idle for want of a market.

Are Your Savings Safe?

A SUBSCRIBER who owns a good-sized block of stock in a promising enterprise writes the editor for advice as to additional purchases of the stock. He has a thousand dollars in government securities and a thousand dollars from a matured life insurance policy. Shall he invest it all in the stock of the company?

In reply we reminded our subscriber of the old adage, "never put all your eggs in one basket." It might break and you know what a mess that would mean. We have the utmost confidence in the concern in question, but were it the largest and most substantial corporation in the United States we would unhesitatingly advise anyone against putting their last penny into its stock.

There are many different kinds of investment open to the public which offer different rates of interest and different degrees of security. Absolute safety and maximum return seldom go hand in hand. Men of pronounced speculative tendencies often chance the safety of an investment for the sake of a large return. Others prefer low returns and a better guarantee of security. The shrewd man never entrusts his all to either kind of investment. A part of his savings he puts into government securities or savings accounts where he knows they are reasonably safe. With the rest he speculates in the stock of corporations. If he wins his earnings are usually large. If he loses he has something to fall back upon.

Campbell for Reserve Board Member

IF President Harding wishes to make an appointment which will meet with the universal approval of farmers and farm organizations and to which no other class of people could possibly offer the slightest objection, he will name Milo D. Campbell of Michigan to the position of "dirt farmer" on the Federal Reserve Board. Campbell was the choice of the farm organizations for the vacancy on the Federal Trade Commission, but as a result of one of his unfortunate pre-election political promises the President was obliged to name another man. Mr. Harding can go a long way in undoing the mischief caused by that appointment by giving the even more important position on the Federal Reserve Board to the Michigan man. Mr. Campbell has had a wide experience in business and banking. He is progressive enough to satisfy most farmers and conservative enough to be acceptable to the banking fraternity. Moreover, he has made a special study of agricultural credits and would be able to confer with other members of the board in their own language. From the standpoint of both merit and political expediency Mr. Harding would show himself a wise executive in making this selection.

Uncle Rube Spinach Says

JEST A SMILE OR TWO

SAY, good folks, I jest want to ask you somethin'. Did you ever stop to think what a little smile was worth? What a pleasant word spoken at the right time an' in the right place would do? Well, now I jest want to tell you of a little experience I've jest been passin' through.

Long 'bout the first of April of this present year, a most forlorn lookin' young fellow dropped off'n a freight train right near where I stood on a crossin' waitin' for the train to pass. Dirty he was, covered with coal soot an' dust from the road, ragged, penniless an' without hope! Well he looked so forlorn that I tapped him on the shoulder—I guess he thought I wuz an officer 'cause he jumped 'bout a foot high—Well, I asked him where he wuz goin' an' he sed he didn't know. Lookin' for work, I sez, an' he sed 'yes, sir, an' any kind of work that'll get me somethin' to eat an' a place to sleep.' Bad as that I sez, 'cause I'd seen hundreds of fellers that only wanted the meals an' a place to sleep, an' never mentioned work a' tall. Well I talked with him jest a few minutes, he told me a lot about himself, said he couldn't read nor write, but he could work, an' some how I kinda believed his story—a great big, fine built man he wuz an' so I sez "well ol' top, I stake you to a bed an' a meal or two if you'll go with me in the mornin' an' look for a job.

So first I took him to the barber—he got trusted for a hair cut an' a shave, then I took him to my landlady and he got trusted for a room an' then we went to the restaurant where I board and would you b'lieve it—they trusted him for his meals? Well next morning I went with him and in a short time he found a job an' went to work. First payday he had only part of a week in but he paid it all out on what he owed. Next payday he squared up all his indebtedness an' kept at his work—an' friends he has sent his mother considerable money since he came here, an'—here's where I come in agin—jest today, this beautiful day, when the sun is shinin' so bright an' everything speaks of God an' His love for everything on earth this young man came into my room an' asked me to write a couple of letters for him—one to his mother—the other to his twin sister. Well I wrote the letters an' he thanked me an' started to leave my room—got to the door, stopped—turned and came back to where I wuz writin', had his pocket book in his hand an' opening it showed me a nice bunch of money an' sed, 'Dad, there's two hundred dollars, if you want it take it an' pay it back when you get ready.'

Folks, it hadn't cost me not one single red cent for what I had done for him—if he hadn't been purty nigh starved an' happened to drop off-jest where he did I'd never have seen him—I jest happened that way, happened to be my cheerful day an' I give him the benefit of it; helped him jest a little, spoke pleasant to him, somethin' I hardly ever do to anybody, but, well he's workin' with me now an' he's a good A No. 1 worker an' yet he sez himself he'd be a tramp today if things hadn't happened jest as they did.

Does it pay to speak pleasant once in a while? Well until this happened I didn't know whether it did or not—but right now I kinda think that the few words I spoke to that young man is jest 'bout the best investment I ever made, 'cause I didn't take his two hundred dollars, he's workin' every day an' I'll wait 'till he gets 'bout five hundred an' then I may hit him for the hull wad an' that'll pay purty good, won't it now?

Well, do you know I see a bigger an' brighter sun, a more beautiful world; folks look better to me an' life seems different somehow jest on 'count of this one little episode—Oh, yes, 'course it's the first kind act I've ever done that's why I'm all puffed up about it, but friends jest the same, if you want to know how it seems I feel big—to know

you're livin' jest try somethin' like this. It's a tonic all right, 'course mebbe you'll get bamboozled once in a while, but there's the two hundred dollar offer to show that I guessed right for once at least. Cordially yours—UNCLE RUBE.

(Editor's Note: Uncle Rube wants us to ask all readers who write to him to sign their names so that he can, when the spirit so directs, write them a personal letter. "Some of these letters," says Uncle Rube, "make an awful dent in my old heart and I just have to get it out." So sign your names, dear readers. Uncle Rube will appreciate and respect your confidence.)

THE SPOTLIGHT

AMENDMENTS WILL FAIL

MR. JOHN C. NAGEL, Detroit politician, has failed to impress enough people with the "menace" of a "farmer-controlled" legislature to secure the required number of names on his petition to amend the constitution to rob the rural folk of their just representation at Lansing. According to latest information Mr. Nagel must sacrifice his ambition to "save" the people of Detroit from political bondage upon the altar of their indifference.

Other amendments which it is said will also fail because of lack of signatures is the parochial school amendment, the revision of county government, and the amendment to make the office of superintendent of public instruction appointive instead of elective.

CRAMTON OR McCAREN

A few days ago I read that a "toast was drunk to Jim McCaren for the success of his congressional campaign" at the dinner given by Frank W. Hibbard at the D. A. C. Now we would like to know from their records and promises which one is most likely to have a thought for the farmers up here, he or Mr. Cramton?—N. C., Harbor Beach, Mich.

Your inquiry reminds the Spotlight editor of a story. Two Negroes driving nags who looked as if they might have been fed the same brand of sawdust, met on the highway one day. Sam said to Rastus: "Say, Rastus, I heah you wa t to trade dat mule ob yours for a better one. I've got a mule heah dat can't be beat. How trade?" Rastus straightened up with dignity and returned: "Mistuh Thompson, yuh hab been misinformed. I hab driven dis mule foh fifty yeahs and I knows what she can do. Ketch me tradin' her foh some mule dat I doan know what she can't do."

For a long time the political machine of the seventh district has taken the position that the electors of the district desired a change in their congressional representation, but every election proved that the machine had been "misinformed." A political machine does not like a legislator which it cannot control. The machine of the seventh district has never been able to control Cramton and so it has tried repeatedly to oust him, but never with any encouragement. Invariably its candidate has met with ignominious defeat at the polls.

The editor of the Spotlight is not acquainted with Mr. McCaren, his record nor his promises, but he is perfectly safe in saying that Mr. McCaren has been urged into the race by the political machine of the district because they believe they can control him if elected. Mr. McCaren may be and probably is a very fine man, but he has established no record upon which to base a belief that he knows anything about the making of laws.

On the other hand his opponent, Mr. Cramton, is a veteran legislator. Moreover, Cramton has not suffered himself to be led away from the common people as do so many who serve long years in congress. Cramton could have at any time the support of the machine of the seventh district, but he prefers to obey his conscience instead of their orders, and as a result there is no man in congress more responsive to the wishes of his constituents than Mr. Cramton. His record, the high lights of which will be published in this column in a later issue, conclusively proves that he is not only a friend to agriculture but an indefatigable worker in its behalf. The farmers have always elected him before and will do so again.



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THE PRESSURE COOKER

CANNING time is here and will remain with us another sixty or ninety days. You have all probably heard more or less about the pressure cooker which is not only handy just at canning time but thruout the year. Mrs. Betts of Hillsdale, very kindly gives us below her experience with one of these cookers.

My Pressure Cooker

"This is by far the greatest labor saver and general help that I have had for a good many years, altho I have a vacuum cleaner, dustless mops, oil stove and many other conveniences.

"My daughter calls it 'The Precious Cooker' and I sometimes think it is a very appropriate name for it, as it saves so much time, labor, food and fuel. We can cook a whole meal in it on one burner of the oil stove, if we wish, putting the meat in the bottom of the cooker, then place the little wire rack on that and set the cans or pails containing the vegetables, on that to cook. Brown bread can be steamed, a custard or pudding can be cooked at the same time.

"A little experience or experimenting may be necessary to know what foods can be cooked to have them all done at the same time. My cooker is made of aluminum and is intended to be used at 20 pound pressure, some are intended to be used at only 10 or 15 pound pressure and, of course, they take a little longer to cook a meal or to can the food. Mine holds ten quarts and is large enough for any ordinary sized family. Foods cook in it so much more quickly that one who has never used one can hardly believe it can be possible.

"When I was in Denver four years ago I saw one for the first time and realized that it was one of the conveniences that I must have, so I went to the factory and ordered one sent home for my daughters to use. The first fowl they cooked in it was so thoroughly 'done' that the meat all dropped off the bones when they attempted to take it from the cooker, altho they had processed it only 30 minutes. The book of directions said to process a year old fowl for twenty-five minutes but they could not believe that it was possible for it to be done in that length of time. I have never found a fowl tough enough so that twenty-five minutes was not sufficient time to cook it tender, after the pressure had reached twenty pounds. We killed a beef last winter and I canned nearly all of it and it has all kept perfectly. We shall kill a 'baby beef' this winter and I shall can that. If you have never had forty or fifty quarts of delicious beef in your cellar ready to serve at a moment's notice to unexpected guests, threshers or your own family, you cannot realize what a help it can be, and also what a saving in meat bills. I also can fresh pork and chicken. But one of the greatest helps is in the cold pack vegetable canning. We only process string beans thirty minutes, corn forty minutes at twenty pounds pressure, red raspberries, strawberries and similar fruits only six or eight minutes at 5 pounds pressure.

Last summer we had some guests to spend the afternoon. When it was nearly supper time they expressed a wish to have something cooked in the pressure cooker as they had never seen one before. We suggested lima beans. One of the ladies gasped and said, 'Will they be done before midnight?' The beans were the dry limas and we had to fill our oil stove, parboil the beans and cook them. In less than an hour we were seated at the table. We only process dry lima beans for fifteen minutes. I think I have never had so many compliments on a meal as I did that afternoon. The minister's wife said it was the best meal she had ever eaten. Canned beef, canned berries and I opened a can of string beans and made a salad as I wished them to see how delicious string beans are, cooked in the pressure cooker. We have found a good many people who never eat string beans cooked in the ordinary way, but who say they like them cooked in this.

It seems to have much the same

The Farm Home

A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

Dear Readers—Very often I am hunting information for you but now I come asking a favor. You know that this is an age of statistics and I am asked to find out whether the women of the rural districts like perfume. That I can answer, all women love to be dainty and enjoy being sweet like the flowers, grateful both to eyes and nostrils.

Here is the question then, which is your favorite perfume, or odor and where are you apt to buy it when you do purchase it?

Will you just write and tell me in a few words? And to show my appreciation for your help I am going to send a jute bag to the first ten ladies who answer.

So, dear friends, please tell me truly just what perfume you employ. What sweet odors fresh and fragrant are to you a perfect joy. —Editor.

effect on the fibre of meats and vegetables that the heat does on the kernel of popped corn or puffed wheat or rice. At twenty pounds pressure the temperature in the cooker is 359 degrees Fahrenheit, forty-seven degrees hotter than boiling water at the sea level. It is perfectly safe to use if directions are followed. It has a safety valve fitted with a steel automobile ball which is held in place by a bar and springs so if the pressure goes higher than twenty-five pounds, the springs stretch, the ball rises a little and a little of the steam escapes. In buying a cooker of any kind several things are to be considered, one of the most important is its weight. I have a friend who has one that is so heavy that she has to have a man lift it for her, and it requires as much time to cook articles as the ordinary water bath, cold pack. I would not like that kind.

The cookers made of tin will not last long as the tin will rust, however carefully they are cared for. An aluminum cooker will last a lifetime, and one lady who had one said it had paid for itself the first year they had it, in the lessened fuel bills. —Mrs. Claudia Betts, Hillsdale County, Mich.

HOW MANY?

Home Dept: Let all us farm women, and as many others as we can enlist, vow that we will not wear the very long skirts of former times. Granting that skirts have of late years been too short and narrow for looks, they were formerly too long, wide and heavy for comfort and were unsanitary. I for one will not wear one that picks up dirt again. Anyone else?—Dorothea.

I will enlist in your company, Dorothea.—Editor.

CORRESPONDENT'S COLUMN

Little over-drapes of bright colored organdie are lovely over white curtains. I saw one bedroom which had drapes and valance of green organdie over white lawn curtains. They were tied back at the sides with big loose bows of the same material and the whole effect was charming, so cool and summery.

Directions for doing fruit or vegetables by the cold-pack method may be had by writing to the Michigan Agricultural College, East Lansing, Mich.

One of our readers has sent me the words of "The Little Rosewood

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Address Mrs. Jenney, Pattern Dept., M. B. F.

The cross stitch is much used this summer on pockets, collars and vests; these may be made of organdie and used to trim dresses of gingham or madras. Tucked white lawn is also much used for trimmings. The sleeveless blouse pictured in the June 24 issue promises to be the more popular than the jumper of last season. It is made of any color and worn over light skirts—and is becoming for it makes one look tall.



A Popular Model With New Features 4021. Quaint and attractive are the long pockets which fall in points below the hem. Under these, one may have smaller inserted pockets, or the pointed pockets may be cut in the style shown in the smaller view. This model is pretty in cretonne or chintz or in black or natural pongee with trimming of red. White dimity with facings of blue organdy would too be attractive.

The pattern is cut in 4 sizes: small, 34-36; medium, 38-40; large 42-44 and extra large, 46-48 in. bust measure. The width at the foot in the medium size is 2 yards. It will require 5 1-4 yards of 32 inch material. Pattern mailed to any address on receipt of 12c in silver or stamps.



A New Apron 4022. The shaped bib and pockets are novel and unique. This style is nice for all apron materials. It may be finished without the tie ends. Figured percale is used in this instance, with a trimming of rick rack braid.

The pattern is cut in 4 sizes: Small, medium, large and extra large. A medium size requires 2 3-4 yards of 40 inch material. Pattern mailed to any address on receipt of 12c in silver or stamps.

A Popular Style for Slender and Stout Women

4027. Here is a model with lines that will tend to slenderize the woman of ample proportions. The fullness is placed to avoid simulating width, and the vest and lines of the tunic give an appearance of length to the form. Crepe and silk braid are here combined.

The pattern is cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 in. bust measure. A 38 inch size requires 6 3-4 yards of 40 inch material. The width of the skirt at the foot is about 2 yds. Pattern mailed to any address on receipt of 12c in silver or stamps.



A Popular Slip on Style

4028. This frock reflects the season. Its ribbon trimming may be replaced with embroidery, hemstitching or drawn work. Gingham, as well as crepe which is here portrayed may be used for this style.

The pattern is cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The width at the foot is a little over 2 yards. To make the dress for a medium size will require 4 3-4 yards of 32 inch material.

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



Casket." I will send them to the lady asking for them if she will give me her address. I have mislaid it.

Mrs. B.—I know of two good positions for a single woman with some knowledge of cooking. If really interested you may write me.—Editor.

Tunny Fish Salad (Requested)

This makes a tasty salad, resembling chicken in appearance and flavor. 1 can of white tunny, break up with a silver fork, but do not chop; add 1-2 as much finely cut celery and a very little onion cut very fine.

Dress liberally with salad-dressing made without sugar. The mayola-oil and egg dressing in a late issue will be found very good.

Shrimp a la Newburg

Cut the shrimps in small pieces, heat in 2 tablespoons of melted butter, with a little salt and a shake of paprika and 1 tablespoon of lemon juice.

Remove the shrimp and make a white sauce by adding 1 tablespoon of flour and 1 1-2 cups of milk. When slightly thickened add 1 beaten egg, turn shrimps into this and cook 1 minute. Shrimps should be rinsed when taken from the can.

Recipe for Hard Soap

Dear Readers of the Business Farmer —We have had the Business Farmer in our home several months and like it very much. I have seen some recipes for making hard soap and as I have a good one I want to have it put into the paper. I have tried it several times and like the soap as well as any you buy:

16 lbs. grease, 1-2 lb. Borax, 32 quarts water, 1 lb. rosin, 4 cans of lye. Mix the lye, borax and rosin together. Heat and put in the grease. Boil about two hours, if clear grease is used less time is required.

You who are interested in making soap try this receipt and see if you will not want to pass it around.—Mrs. J. G., Cadillac.

Making Starter Without Yeast

I saw in your paper that E. H. wanted to know how to start Bread Starter that is made without yeast cake. I will tell her how I started my starter and it is fine. Take one medium sized boiled potato, mash fine with two rounding tablespoonfuls of sugar, then add one cupful of boiling water, and place in a one quart can, put the cover on without a rubber and keep in a real warm place (as near 80 or 90 degrees as possible) till little bubbles form on it. It took mine 48 hours; then take one medium sized potato mashed with two spoonfuls of sugar, add one cup of boiling water and when luke warm add the starter you have in the can and set in a warm place till it rises (which should be in a few hours.) The potato will all raise to the top then the starter is ready for use. Now keep in a cool place till ready to use it. Then make your starter with potatoes and sugar and water and a little salt in the usual way and add the starter. Always save some for a starter before adding the flour. Keep starter in a cool place. It is lots of trouble to start the starter, but after it is once started it is fine and is as lively as any yeast cake and lots better. It may not be quite as nice bread just at first after the starter is made, but keeps getting better the more it is used.

I add one teaspoon of sugar to the starter I save as I only use mine once a week and the sugar helps keep it when it is kept so long without using. Perhaps you would like to know how I kept my starter warm while it was starting the first time. I wrapped the can in a towel and placed it in a small pail and kept it on the warming oven while using my range and at other times, and at night set the pail with can in it on the hot water reservoir and covered the pail with a thickly folded tablecloth, and it kept real warm all night. It all depends on keeping the starter warm till the bubbles begin to form. If it is not kept real warm it may take longer than 48 hours. Of course after the starter is ready for use it doesn't need only a moderately warm warm place to raise. Too much heat may sour the yeast. I hope you have good luck in making the starter.—M. E. G.

Peach, Pear, Pineapple or Rhubarb Jam

4 level cups (2 lbs.) crushed or chopped fruit, 8 leveled cups (3 1-2 lbs.) sugar, 1 bottle (scant cup) Certo.

Use fully ripened fruit for finest flavor. Peach or Pear: Peel, remove pits or seeds and thoroughly crush about 2 1-4 quarts, or 3 pounds. Pineapple: Put prepared fruit through food chopper, or chop fine Rhubarb: The strawberry variety gives finest colored jam; cut in short lengths without peeling and put through coarse chopper, or chop by hand. Measure crushed or chopped fruit into large kettle. Proceed as directed below.

Add sugar, mix well, stir hard and constantly, and bring to a vigorous boil over hottest fire. Boil hard 1 minute with continual stirring; except rhubarb, which should be boiled 3 minutes. Take from fire, add Certo, and stir it in well. Skim and pour quickly.

Gooseberry or Plum Jam

4 level cups (2 lbs.) crushed fruit, 1-4 cup water, 7 1-2 leveled cups (3 1-4 lbs.) sugar, 1-2 bottle (scant 1-2 cup) Certo.

Use fully ripened fruit for finest flavor. Gooseberry: Crush well about 1 1-2 quarts or 2 pounds. Plum: Slice, pit and crush well about 2 quarts or 2 1-2 pounds. Measure crushed fruit into large kettle and add water; stir until boiling, cover kettle and simmer 15 minutes. Proceed as directed below.

Add sugar, mix well, stir hard and constantly, and bring to a vigorous boil over hottest fire. Boil hard 1 minute with continual stirring; except rhubarb, which should be boiled 3 minutes. Take from fire, add Certo, and stir it in well. Skim and pour quickly.

The Children's Hour

DEAR Nieces and Nephews—I am "snowed under." At the time I write this the last issue of M. B. F. has been in the hands of its readers less than a week and to date I have received so many letters and stories from my nieces and nephews regarding the picture that I am buried. I am publishing a few of them this week but this is only a small portion of what I have now and each mail brings more. I had no idea that Michigan contained so many budding young authors. All of the stories are very interesting and many of them contain a good moral. Next week I hope to announce the winners of the prizes and maybe print another picture for you to write stories about. Also we will publish many more stories on our page.

Isn't this great "growing weather?" Seems to me I can fairly hear things grow in my garden. And the weeds grow the fastest of all. But I have a good sharp hoe and plenty of ambition so I guess I will be able to save my garden from the weeds. How are your gardens coming along?

OUR BOYS AND GIRLS

His Promise

It was a glorious morning in June. The stars, like little children had gone to rest. The blue sky had turned to a more soft gray. Paint streaks of purple flashed across the eastern sky; the whole world was filled with the tides of morning light, which came pouring down from above in one great ocean of radiance, till at length a flash of purple fire blazed out and turned the dewdrops on flowers and leaves into rubies and diamonds. In a few seconds the gates of morning were opened and the lord of day, arrayed in bright glories, began his course just as the lamp in the window of the little house nestled down among the trees flickered and went out.

Thus was the way of the outside world, but let us peep inside the house among the trees, the home of the Lovejoys.

Everything in this house was still rapped in silence and darkness broken only by the sobbing of a small boy of about ten years. He was lying on the lounge in the sitting room sobbing as though his little heart would break, while above him the hired man was trying to soothe his aching brow.

At this early hour the Lovejoy home was love and joy no longer—but love and sorrow for above in a small bedroom the doctors and nurses were fighting, fighting to bring back the life that was so near gone from the mother's body to the little boy who was sobbing for his mother to come back.

For four days while the mother had laid between life and death, the poor little boy had been realizing how much he loved his mother, and how much he needed her in order to grow up and to live a good and pure life, and to be a man his mother would be proud of and who would be loved by his fellowmen.

How often had he disobeyed his mother? Many and many times he had left the wood box unfilled, the water pail empty, his coat and hat lying on the floor and many other things which gave her more work to do, but she had always been cheerful and he missed her smiles and merry songs.

"O! Mother, mother!" he sobbed, "Come back to me, and I'll never disobey you again."

For hours his tired hopeless voice went on. "Mother, mother," until finally his cries reached his mother upstairs and she slowly came back to her boy and life. Half an hour later the nurse came to tell the boy that his mother would live. Love and sorrow was thrown out and love and joy reigned again.

It was many, many weeks before the mother could leave the house, but the wood box always remained filled with the best wood and the water pail was always full to the brim of the sweetest and coolest water; his coat and hat were always on the nail, except when he had them on. He tended her garden and brought her the choicest fruit and the prettiest flowers. He also gave her one of his little rabbits to love and pet as her own.

The day she was first outdoors, he and the hired man, himself an orphan and who had found in this boy's mother a woman who took the place of his own mother, brought her a basket of ripe juicy peaches for which they had walked five miles in the boiling hot sun to get. "My son," said the mother as she kissed him good-night that evening, "you are a son to be proud of and I thank God that he has blessed me with such an unselfish and obedient son."

Many years have swiftly past, happy years to the little boy, a boy no longer but a white haired man. After many years of hard work he at last became famous and now is known the world over. Many years before his cheerful mother had gone to that beautiful home above, but the boy knows that he would never become famous if he had been disobedient to his mother.

During all these years the boy has remembered that beautiful morning in June, and he has never forgotten that promise he made, but he still hopes that

all boys will be obedient as he was after his tenth birthday.—Margaret Cook, Elsie, Mich.

Dear Uncle Ned—I enjoy reading "The Children's Hour" very much. I took the eighth grade examination at Marine City this year and passed it. I think Elizabeth Steiner is 16 years old. I live on a farm. My father has 80 acres of land. I am writing a story from the picture which was in "The Children's Hour" last issue. I will close with a riddle: What is that that is often brought to the table, often out but never eaten? Answer: A pack of cards. Your friend,—Dorothy V. Hubbard, Lenox, Mich., R. 1, Box 56.

A Summer Day

It was a summer day and the sun shone bright. A mother had two boys, one was 15 years and the other 13 years old. The mother told the boys to go to the garden to get some early potatoes for supper.

The boys went to the barn to get a hoe to dig the potatoes, and their mother gave them a pan to put the potatoes in. Not long after they reached the garden gate they opened the gate and went in; one dug the potatoes and one picked them up and put them in the pan. They just had dug four hills and the pan was filled, some rolled off on the sides.

When they went home one took the hoe and the other one the potatoes. When their mother saw them come she went to meet them and with surprise she saw the large early potatoes in the pan and she was indeed very glad they had such nice potatoes to eat.

In the fall they had more potatoes than they could use so they sold those that they didn't need and they got many things with the money.

Dear Uncle Ned—Although I am not living on a farm I would like to join your merry circle of boys and girls. I used to live on a farm but don't now. I have been a silent reader of the page for quite a while as my father takes the M. B. F. and enjoys it very much. I am fourteen years of age and will be a Junior in high school when school starts in the fall. I have dark brown hair and eyes. I wish some of the boys and girls would write to me and I will be sure to answer. I have around 35 correspondents that I have never seen so you can see I am in that business. I think it is very interesting to correspond with boys and girls that you do not know. I have two English correspondents and one surely enjoys hearing from them. It takes quite a while to receive a letter from them but it is worth waiting for. I also wrote to a Chinese girl but I guess she didn't care to answer. With love to all, I am—Ethel Watson, 331 N. Faucher Ave., Mt. Pleasant, Mich.

Grandmother's Birthday Surprise

Two boys, Robert and Bennie, sat upon the old orchard fence talking earnestly together.

These boys were spending the summer at grandfather's. Only that morning had grandfather told them that day after tomorrow was grandmother's birthday. Of course they wished to give her a birthday surprise, but how? This was the question they were so earnestly talking about.

"O dear, I'm afraid we can't give grandmother a birthday surprise after all," said little Robert.

"O yes, we will," said Bennie. "Let's go talk it over with grandfather again. Perhaps he'll have some idea to offer us. He always does."

And off they ran to talk it over with grandfather. But they were unable to get any ideas from him, although they were sure he had some. All he had said was, "well, boys, suppose you try just being good."

Of course, the boys decided, that wouldn't surprise her. Hadn't they been real good since they had been with grandmother? Not once had the stolen jam from the jars in the cellar, nor chased the chickens or pulled pussy's tail, and a number of other naughty things. All they could do was to wait, and wait they did although it did seem rather hard.

The next day passed and the morning of grandmother's birthday came. When grandfather told them that morning, the boys could scarcely refrain from telling grandmother, but that would never do.

At half-past ten o'clock, grandfather and the two boys started for the potato patch. Bennie had a hoe and Robert had a pan. Grandfather found it rather difficult to keep up with the happy, joyous boys who were skipping about by his side.

What do you think they were going to do? Get potato blossoms? Why grandmother didn't like them! But no, See! Grandfather has pulled up a hill of potatoes, Bennie is digging, and Robert is picking up some objects which lay upon the ground; objects about as big as my fist and a light brown in color. New potatoes! What a surprise they would be to grandmother!

At last the pan was full and the two boys started for the house. Grandmother was busy in the kitchen, and looked around as they came in. What was her surprise to see Bennie with a hoe and Robert with a pan of new potatoes.

"Happy birthday, grandmother," cried both at once.

Grandmother was very much pleased, while the boys were very happy to know how surprised and pleased grandmother was with her pan of new potatoes.—Wilma Fry, Ithaca, Mich.

Dear Uncle Ned—I'm not a very good story writer but I said my motto was, "If at first you don't succeed, try, try again," and I can try. I hope I earn the prize.—Lena Ables, Montgomery, R. 3, Mich.

Kindness

"Mother, I want a bicycle," said a lit-

tle boy one day to his mother, "but I have no money to buy it with."

"I am sorry, my son," she said, "but I have no money to spare for a bicycle."

The boy thought for a while and said, "mother, why can't I sell some vegetables out of my garden?"

His mother said, "you may try." So he asked his brother if he would help him sell them.

In the afternoon they went from house to house but no one seemed to want any vegetables. The boy was about to give up when they came to an old lady's house. He told her he wanted to sell his vegetables and get a bicycle. She was so kind and bought all the vegetables he had and ordered more. She was rich and paid him more than they were worth. "Kindness always pays," said the woman, and that is how the boy earned his wheel.

How Frank and Allen Spent Their Vacation

One Tuesday morning Frank and Allen's mother, Mrs. Washburn, called them early.

"Aw, I don't want to get up," came from Frank's bed.

"But you must not forget that today is the last day of school," cautioned Mrs. Washburn.

"Whoop," shouted Allen as he jumped out of bed.

Mrs. Washburn smiled as she went back to the kitchen to prepare their breakfast. She had heard them planning their vacation.

They were going to their grandparents to spend their vacation. Their breakfast was eaten in a hurry. They only had a five-minute walk to their school as they lived in the city of Detroit.

They started a half an hour early. They planned their vacation on the way to school, too.

"You know grandma is lame so we must not be lazy just because it is vacation time," said Frank.

"Yes, we must help grandma and grandpa because they are not young people any more," said Allen.

The boys were at school now so they quit planning. They were only going to have a half day of school.

Frank and Allen ran all the way home to tell their father and mother that they had passed. Frank would be in the eighth grade and Allen in the fifth.

The rest of the week went very fast to the boys, soon Saturday came. In the afternoon Mr. and Mrs. Washburn took Frank and Allen out in the auto to their grandparents who lived five miles from Mt. Clemens.

They were greeted with a wealth of love such as only grandparents have.

They attended church each Sunday. They gathered the eggs, fed the chickens, got in the wood each night, got vegetables from the garden, as we see them in the picture with the potatoes. They did this for their grandma.

They got the cows each night, fed the calves and pigs for their grandpa.

They went fishing and played base ball with the other boys of the community. The boys and girls of the neighborhood went to a picnic and invited Frank and Allen. They had a fine time.

When they went home they thought that they had spent a most happy vacation.—Barbara Hall, Pontiac, Mich.

Grandma's Surprise

Once upon a time there was a little boy and he had a little garden of his own. He took very good care of his garden. One day in the summer his grandma came to see him. She had only an hour's visit, when the little boy came into the house, and got a pail and went out of the house again. He went out to the garden and got it full of potatoes. When he got to the house he stopped at the door, and called his grandma. His grandma was so surprised that she asked how he grew them. And he said, "I grew those potatoes by taking good care of them, when there was no rain I took the sprinkling can and watered them."

"Oh," said his grandma, "you must have taken good care of them."

"Well, I did," was the reply, "and I am glad, too."

His mother cooked them for supper and Oh, they were so good. And every day they had fresh potatoes to eat. At last they got ripe and they were harder to peel. The 26 of December grandma went home and the little boy gave her a bushel of 1's potatoes which grandma liked to eat.—Wm. C. Wismer, R. 6, Bad Axe, Mich.

Johnnie's Potato Crop

Johnnie was a little boy 10 years old. He was the only child in the family so he had lots of things. His mother's name was Mary Ann and his father's name was Hiram. They lived on a farm of 80 acres.

Johnnie had often heard of the clubs that were being organized in the different counties. He asked his teacher if they couldn't have some sort of a club, but she said "it would take up too much time."

One day the last part of May one of Johnnie's friends asked him to come to their last day of school. Johnnie heard many interesting talks. But the one that interested him most was the talk given by Mr. R. A. Turner on Club Work.

That night when Johnnie went home he asked his father if he would let him have a half acre of good ground. His father asked him what he wanted it for and he told him he wanted to raise some potatoes.

His father gave his consent and about the middle part of June Johnnie was real proud of his field of potatoes.

One night he heard his mother say, "Hiram, I wish you could find me some new potatoes for dinner tomorrow."

In the morning after Johnnie ate his breakfast he told his father to bring the fork and with a pan in his hand they started for the potato patch. In 15 minutes along came father and son with a large pan full of nice potatoes. Mary Ann met them at the door.

Johnnie's father said, "Mary Ann I think our Johnnie will be a better farmer than myself."—Sylvia M. Moshant, Conklin, R. 2, Mich.

How to Make Jam and Jelly With Positive Success

New Process Requires Only 1 Minute's Boiling and Never Fails

By Ann Proctor

The greatest cooking authorities in this country—Good Housekeeping Institute, Boston Cooking School, Modern Priscilla Proving Plant, government experts, domestic science teachers, etc.—and housewives everywhere are hailing with delight the New Certo Process of making all kinds of jam and jelly. Anyone, even a child, can now make jam or jelly of excellent quality, with any kind of fruit in a few minutes. Only one minute's boiling is required, and the result is one-half more product from same amount of fruit.

Certo (Surejell) is a pure fruit product, contains no gelatine or preservative. It is concentrated pectin, supplied by Mother Nature in some fruits, now bottled for household use. With it, jam and jelly making is a fascinating pastime—no guesswork or worry. Cooking authorities call it "the short-boiling process" because you boil only one minute. This short boiling saves the natural color and flavor of the fruit, permits the use of fully ripened fruit, and makes one-half more product from the same amount of fruit because no juice is boiled away.

With Certo you can make jam or jelly from any fruit. Peach, pear, or rhubarb jam, blackberry, elderberry or cherry jelly, orange marmalade, etc., are easily and quickly made and keep perfectly. Certo "jells" any fruit juice. It simply supplies the necessary pectin to "jell" all the fruit juice.

Certo is what you have been looking for. Be the first to use it in your neighborhood so you can tell your friends about it, and show them the excellent results you had. You can get Certo from most grocers or druggists, or we will send it to you by parcel post prepaid, with Book of nearly 100 Recipes for 35 cents. Be sure to include your grocer's name and address. Then we will see that he carries Certo for the convenience of yourself and friends. Try one bottle of Certo—in-vestigate the new, the highly endorsed Certo process of making jam and jelly—and save hours of time and worry and frequent failures of the old method. Pectin Sales Co., Inc., 602 East Ave., Rochester, N. Y.

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Catalog tells all—write.

Caution! U.S. Bulletin 201 shows that vibration of the bowl causes cream waste! The Melotte bowl is self-balancing. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. The Melotte has won 261 Grand and International Prizes.

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Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY.

The Melotte Separator, H. B. Babson, U.S. Mgr., Dept. B330, 2843 W. 19th Street, Chicago, Ill.



Runs so easily. bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator needs a brake. Bowl chamber is porcelain lined.

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Oil Cloth Luncheon Sets, \$1.00 and \$1.50. New line Rubber Corsets, \$1.00, \$1.50 and \$2.00. Corsetette in all sizes, 50c, \$1.00 and \$2.00. Dark Percale Bungalow Aprons, sizes up to 50, \$1.00. Super Silk Yarn for sweaters, all shades. Straw Hats for all the family, 10c. All kind of needles and supplies for sewing machines.

Hoffmann's Bazaar, Mt. Clemens, Mich.



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FARMS & LANDS

68 ACRE FARM FOR SALE. MARTIN SMITH, Rhodes, Mich.

400-ACRE MICHIGAN FARM WITH CROPS 4 horses, 10 cattle, poultry, hogs, implements, machinery, vehicles, quantity household furniture if taken soon; handy R.R. station, advantages; 140 acres rich tillage; 75-cow pasture; about 1500 cords wood; 100 apple trees, etc.; excellent 3-room house; 3 barns, tenant house, etc.; insurance \$5400. Owner retiring; \$6800 gets all, part cash. Details page 90 illus. Catalog 1200 Bargains FREE. STROUT FARM AGENCY, 814 B. E. Ford Bldg., Detroit, Michigan.

FOR SALE, 400 ACRES SANDY CLAY loam. A real shepherd's home. 8 miles from Millersburg. Small clearing. Comfortable house. Schools and good roads. \$12.50 per acre. 180 acres 3 miles from Millersburg \$11 per acre. No improvements but easy clearing. 800 acres heavy clay loam. One mile from Millersburg, small clearings all fenced, \$17.50. 10 per cent cash. Yearly alfalfa or clover seed crops will care for payments. JOHN G. KRAUTH, Millersburg, Mich.

FOR SALE—ONE OF THE BEST 80-ACRE farms in Northern Michigan, extra good buildings, also, wind mill, large orchard, close to Petoskey. Cheap for quick sale, easy terms. RURAL LETTER CARRIER No. 3, OWNER, Petoskey, Mich.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

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140 ACRES, 120 ACRES CLEARED. 20 acres wood and pasture lot, sufficient beech and maple wood for life time. Good woven wire fences, good stone basement barn 36x56. Well and windmill, good 8-room cement with full basement. Buildings alone worth what I am asking for place. 2 miles from county seat, on state award gravel road, modern improvements. Price \$8,000, half down and will accept mortgage back on farm for 5 or 10 years for remainder. Write W. F. UMPHREY, Ewart, Michigan.

FOR SALE 40-ACRE FARM LOCATED IN Branch County 2 miles from Coldwater, Mich., just out cement highway; all good heavy land, has always raised splendid crops, well drained and fenced, excellent buildings including large 8-room house, large barn, range hog barn, granary, chicken coops, machinery shed, etc., 1-4 mile from school, must sell within 60 days, disability forces sacrifice, owners moving to town. Located in heart of Southern Michigan's finest farming district. Tremendous bargain to the one that acts quick; crops included \$3500 down, balance easy terms. Write G. W. ENSMINGER, Route No. 4, Coldwater, Mich.

FOR SALE OR TRADE FARMS OF ALL sizes and at bargain prices in the rich Ionia and adjoining counties. H. C. KLOSS, Ionia Odessa, Michigan.

30-ACRE POULTRY, BERRY AND FRUIT farm. 4 acres in berries. Will sell cheap if sold soon. Crops, stock and tools. Owner O. FREDERICK, Appleton, Michigan.

FOR SALE 4 FARMS. ONE OF 160 ACRES. fenced. Nice lake front 20 acres cleared. 80 acres, fair buildings, 70 acres plowed land. 80 acres, 40 cleared, new cottage. 40 acres, good house and out building, all fenced, big young orchard. All bargains. Good soil. CHARLES T. PIERCE, West Branch, Mich., R. 2

FOR SALE—GOOD 80-ACRE FARM 10-12 miles from Alpena on M-10 highway. For particulars write I. J. FERGUSON, Herron, Mich.

WILL SELL HALF INTEREST IN STOCK, crops, and tools, in 500-acre dairy farm. Write J. A. VANDERKAM, Otter Lake, Michigan.

MISCELLANEOUS

BEES AND HONEY

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

GENERAL

WANTED: AGENTS IN OPEN TERRITORY for concrete, tile and wood sills. Good Proposition Write J. S. BARTON, 327 Brown Street, S. E., Grand Rapids, Michigan.

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(Write on margin below anything you are interested in not listed above.)

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THE MICHIGAN BUSINESS FARMER, Buyers' Bureau, Mt. Clemens, Michigan.

FARMERS GETTING READY FOR THEIR COUNTY PICNICS

(Continued from page 3)

be determined. "Please send me the rules of the game," writes Mr. Baker, "and do not be surprised if the Jersey team represents Hillsdale county at the State Tournament."

"Count on Calhoun," says County Agent Roland. "We will hold our tournament Aug. 17th in connection with our Grange and Farm Bureau picnic, at the Marshall fair grounds, Marshall, Mich."

Lapeer county picnic and the finals in the county horseshoe pitching will be held Wednesday, August 16th at Lake Pleasant seven miles straight east of Lapeer at the intersection of trunk lines 36 and 21. "The local preliminary eliminating contests," says County Agent Patch, "will be held before the county picnic and local champions will contest at the county picnic. I believe that the county farm bureau here will be willing to pay the expenses of a local team to contest in adjoining counties and at the state tournament." Mr. Patch requests 100 copies of the national rules which looks like he means business.

St. Joseph Comes In

St. Joseph county has entered the list and County Agent Hutchins is arranging for a series of township contests to be held at the several township halls on Saturday afternoon, July 22nd, the county final to be played off in August at the regular farm bureau picnic. Mr. Hutchins warns us that all indications point to St. Joseph county contestants winning the cup.

A preliminary contest was held at the Jackson county fair grounds in connection with a farmers' field day and picnic, on June 21st, when 15 competed for individual honors. The farmer throwing the highest score was Edwin Lyon, of Jackson, who will compete in the county elimination tournament. County Clerk Lyman Vincent has taken charge of the horseshoe tournament for the county and Jackson county farmers who desire to participate in the finals which will be held in connection with the farm bureau picnic in August should get in touch with Mr. Vincent or County Agent Decker.

M. A. C. NAMES NEW "HORT" HEAD

(Continued from page 2)

opening of the fall term as associate professor of Horticulture.

Prof. Halligan, who has charge of the Horticultural department since the resignation of Prof. Eustace, is an able specialist in landscape gardening, the work of which department he has been trying to conduct in connection with his other duties. Mr. Halligan now becomes professor of landscape gardening.

Other recent changes at the College include the resignation of Mary E. Sweeney, dean of home economics, who found it impossible to do justice to her work in this department in addition to the duties of dean of women which was recently thrust upon her.

GRAIN DEALERS FLEECE FARMERS OF \$23,000,000.00

THE Federal Trade Commission has just reported its findings on speculative grain marketing, pursuant to a congressional resolution passed last December through the efforts of Senator Ladd of North Dakota. The Trade Commission examined the books of all the big grain dealers, with the exception of several Baltimore exporters who refused it access to their records. These investigations revealed that the white-handed gentlemen who "market the farmers' grain" made an average net profit of 58 per cent on their capital stock, surplus and reserves for 1920, and of 30 per cent in 1921. The commission reports "the average profit of wheat exporters in 1920 was nearly 8¢ a bushel." While the 1921 average was lower, yet some of the concerns "turned their money over more than one hundred times a year." The Trade Commission also found that the grain exporters were so closely joined together that eight large concerns handle more than 50 per cent of our entire wheat exports. The findings of the Federal Trade

Commission show that these few big exporting firms took over \$23,000,000.00 from the American farmers last year for "marketing their wheat" on a speculative basis. While these speculators were waxing rich without toil, several hundred thousand farmers were going bankrupt. No wonder that farmers by thousands are forming their own co-operative marketing societies, which are already exporting millions of bushels of wheat to the Orient and the big grain markets of Europe.

SUPREME COURT UPHOLDS CO-OP. MARKETING ORGANIZATIONS

THE right of farmers and fruit growers to form co-operative marketing organizations with sole control over their crops has been upheld by the Supreme Court of the state of Washington in the case of Washington Cranberry Growers' Association versus Moore (201 Pacific 773). Moore had joined with his neighbors in forming the Co-operative Growers' Association and had signed a common contract with them making it the exclusive sales agent of his product, with provision for damages in case he did not keep his agreement. In an endeavor to crush the co-operative, outside buyers offered its members a slightly higher temporary price, and Moore fell for this bait.

The decision of the court is a sweeping victory for the principle of co-operative marketing, since it not only granted damages against the farmer who broke his contract, but further ordered an injunction prohibiting him from repeating this violation. The court also held that co-operative marketing contracts do not limit production or control prices contrary to public policy, and that specific performance of the contract should be decreed.

TEXAS FARMERS CO-OPERATE IN 2,000,000 BUSHEL WHEAT SALE

FARMERS from twenty-one wheat growing districts of the Panhandle State have formed the "Co-operative Wheat Growers' Marketing Association, Inc." to sell co-operatively 2,000,000 bushels of their best hard wheat. The association is governed by directors, one being named from each district, and is following out the methods of co-operative marketing successfully employed in other western states.

The Southwestern Wool and Mohair Growers' Co-operative Association, which sold over 1,000,000 pounds of wool co-operatively last year, is planning to market an even larger product this year. Its prosperity and success is assured from the fact that last year it secured for the co-operators from 14¢ to 17¢ a pound more for their wool than they have been offered by private buyers and speculators.

EXPERIMENT STATION QUARTERLY BULLETIN

The M. A. C. Experiment Station's bulletin for the quarter ending May 31st, 1922, is now available for distribution. Here are some of the articles:

"Michigan Live Stock Situation," "Pasture and Pork Production," "Analysis of Dairy Records," "More Beans per Acre at Less Cost per Bushel," "The Michigan Poultry House," "Making Concrete," "The Tractor as a Means of Farm Power," "The Lime Situation in Southwestern Michigan," "Bordeaux with Potatoes," "Mosaic in Potato Seed Stock," "Michigan Raspberry Diseases," "Grasshopper Bait and Redzie Mixture," "Cloth Moths," "Leg Weakness in Chickens," "Home Preservation of Fruit Juices," "Thinning Peaches," "Accounting Records for Beekeepers."

A CORRECTION

Mr. J. H. Frandsen who had in last week's issue an article on the Holstein convention calls our attention to an error in his copy. The last five lines under the sub-heading "Purebred Sire Exhibit" should have read as follows:

"Where a purebred sire heads the herd, the first generation of grades, 50 per cent purebred, is found to have an average of 6955 pounds of milk and 266 pounds of butterfat, or an increase of 79 per cent in milk yield, and 38 per cent increase of butterfat yield. When grades are 75 per cent purebred, the result is an average milk production of 12,817 pounds," etc.

Production of coffee is rapidly increasing in Dutch East Indies.

Canadian hail insurance companies lost \$2,500,000 during the past season.

The Canadian government is to institute a system of official government grading of cream, according to a report from Calgary.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

RASPBERRY LEAF-CURL

Can you tell me what is the matter with my raspberries? Some of the canes are half dead and the leaves are light colored, small and crinkled?—M. B., Macomb County.

The description is not definite enough to make it certain what is causing the injury, but it is probably a case of leaf-curl. The canes may have been attacked a year or more ago, causing the plant to die at the top, an injury which often passes for winter killing. Light-colored, crinkly foliage is characteristic of the disease. The leaves are also small and blunt, rather than pointed.

Leaf-curl is incurable, so far as is known. The only preventive is to dig out and destroy infected plants, which should be done promptly to prevent the disease from spreading. The whole plant is diseased, root and top. Plants for propagation should not be taken from infected canes, as they are liable to be infected and not only die themselves, but also spread the disease. Do not set plants unless you have reason to believe they are from healthy roots.

The disease has been spreading rapidly in Southern Michigan within recent years, till now it is a serious menace to raspberry culture. Growers of this fruit will do well to co-operate with the state authorities in their efforts to get rid of the disease. Nothing is gained by keeping diseased plants, while much may be lost.

KEEPING BIRDS OUT OF CHERRY TREES

A NEW way to keep the robins away from the cherries is to hang a yard or two of rubber hose in the middle of the tree. It is amusing to watch the little thieves come full tilt at the reddening branches then suddenly flap their wings and scamper away. Evidently the hose was mistaken for a snake and certainly it did resemble one.

Perhaps if the hose was left in the tree long enough the birds would see through the joke and get on familiar terms with the serpent, but it serves the purpose well for a time. The birds are needed to keep the trees clean of insects, but it is hardly fair for them to take the whole crop as pay. We are willing to compromise on that basis, giving them the insects if they will leave us the fruit.—G. M. B., Macomb County.

MIDSUMMER IN THE ORCHARD

FROM the first till the middle of July the orchard is cultivated for the last time. Further stirring of the ground will induce a late growth which may not have time to ripen before cold weather. Here is the cause of much of the winter injury to trees. The growing season has been continued too long, the result being tender, unripe wood, easily killed by a severe winter.

By the middle of the month the cover crop is sown and harrowed in. For this purpose oats are excellent, as they make a quick, strong growth, besides the winter kills them, so they will not be in the way next spring. Rye is good, but it lives through the winter and makes a weed hard to get rid of another year. Buckwheat has proved satisfactory on heavy land, as it loosens the soil and leaves it in good condition. Even weeds are better than nothing. Sometimes they make a fair cover for the soil, though hardly to the credit of the owner.

During July the San Jose scab breeds rapidly, but this pest, once so much feared by fruit growers, is giving comparatively little trouble. The dormant spray keeps it well in hand. However, if any treatment is needed, the summer strength of lime-sulphate spray, about 1.35, will kill the young scale.

The early broods of insects have been disposed of, or ignored, as the case may be, but there are others still to come. Among them are the fall webworm, tent caterpillar, yellow-necked caterpillar and the red-humped worm, all of them with

ravenous appetites. It is claimed that a healthy caterpillar will eat double its weight of leaves in a day. Multiply this by the number of days it lives, then by 150 or 200, the number of individuals in a colony, and an idea can be obtained regarding what one female moth may be responsible for. But these biting insects are, for the most part, easily disposed of by a spray of arsenate of lead.

Not much thinning of fruit is needed this year, except in case of plums. Nature has done the thinning among the apples, peaches and pears, and has done it well. What effect this will have on next year's crop remains to be seen, but on all fairness it should presuppose an abundance of blossom buds for another spring.

Little pruning is to be done after midsummer. Injured limbs, dead wood and water sprouts may be removed at any time, but the bulk of the pruning is done while the tree has the season of growth before it.

SOME RASPBERRY ENEMIES

DURING the summer the tips of the young raspberry canes may wilt and bend over. An examination will disclose that these tips have been girdled by two rings of punctures about half an inch apart and five or six inches below the top. This is the work of a slender beetle about three-fourths of an inch long, the yellow-necked cane-borer, so named from the color of the thorax.

Between the two girdling rings there will be seen a puncture where an egg is laid, which hatches into a grub that bores down the cane till it comes to the base, where it passes the winter. In the summer it emerges as a beetle.

The insect may cause serious injury to raspberry canes if left unchecked, yet it is easily controlled. The wilted tips should be warning enough. Snap them off at the lower girdle, so removing the little grub or the egg. If this is done promptly no damage will be done. Occasionally the season's growth on old canes will be punctured, also stems to leaves, but that is unimportant.

The adult of the raspberry cane-maggot is a two winged fly which lays its eggs near the tips of canes, causing them to wilt, but in this case there are no punctures, so the grub may get a good start down a stalk before anything wrong is noticed. It remains in the cane during the winter as a pupa, emerging in the spring.

Wilted canes should be cut out as soon as discovered. If this is given proper attention there should be no difficulty in keeping the insect in check.

The red-necked agrilus is a beetle, about one-third of an inch long, which lays its eggs on raspberry and blackberry canes. The grubs which follow bore into the canes, causing an enlargement of the bark. They pupate in the canes and emerge the following spring or early summer.

Cutting out the canes below the galls is the remedy. It is not often a serious menace to the raspberry.

Vigorous canes may suddenly wilt, or they may be broken easily at the base, when an examination will show the presence of the root-borer. This is the larva of a clear-winged moth which has considerable resemblance to a wasp.

The eggs are laid on the leaves in late summer, whence the grub bores into the pith of the stalk and downward to the root, where the cane is often girdled. The winter is passed here and in spring the borer may continue in the root or ascend another stalk. It pupates in the stalk, thus usually destroying two canes.

An insect of this type can do most of its damage before its presence is known. Destroying infested canes and roots as soon as discovered is the way to keep the pest under control.

A cure for the blights that injure pears is much needed just now. Nothing really effective has been made known, though there are scores of quick remedies.

1/3 more land cleared per dollar

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3

Filling and Tamping the Hole



1 Driving the hole



2 Cartridge Prepared and Ready to Load

AFTER the hole has been made under the stump and the charge properly primed and loaded, the next step is filling and tamping the hole. The purpose of this is to seal the hole tightly so that the gases from the explosion will not escape, but will exert all their pressure against the stump. The success of the shot depends very largely on careful and thorough tamping.

Moist clay, free from gravel and stones, fine sand or moist loam makes excellent tamping material.

First, fill up four or five inches of the hole with this substance, and tamp it down gently with a rake handle with end sawed off square, or similar tamping stick. Then continue to fill the hole, tamping more firmly, until the top is reached, and the passage securely sealed.

Stump blasting has become a cheaper operation since the development of Du Pont Dumorite. This new explosive has the heaving action of 20% dynamite and the strength of "40%," stick for stick. And you get 135 to 140 sticks of Dumorite at the same price as 100 sticks of 40% dynamite—1/3 more per dollar.

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—4—
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SHOW BULL

Sired by a Pontiac Aggie Koradyke-Hengerfeld DeKol bull from a nearly 19 lb. show cow. First prize junior calf, Jackson Fair, 1920. Light in color and good individual. Seven months old. Price \$125 to make room. Hurry!
Herd under Federal Supervision.

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SOLD AGAIN

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

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

FOR QUICK SALE WE ARE OFFERING your choice of nearly 50 purebred Holsteins. Nearly all cows and heifers. Bred well, yearly records, free from t. b. Priced right. Breeder since 1913. Write us your wants.
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WHY PAY MORE? PUREBRED REGISTERED Holstein heifer calves, fifty dollars. Circulars free. **CONDON'S HOLSTEIN CREST**, West Chester, Ohio.

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Sired by Segis Koradyke De Nijlander, a 32 lb. son of a twice Michigan ribbon winner, her dam, 29 1-2 lbs. Dams are daughters of King Segis Pontiac, a 37 lb. son of King Segis. Records up to 30 lbs. Priced at \$100 up. Federally tested. Write for list.
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Everything guaranteed, write me your wants or come and see them.

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Choice of Herd of Registered Holstein Cows FOR SALE Warner Dairy Co., Farmington, Mich.

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

SOME GOOD YOUNG REGISTERED HOLSTEIN COWS. Fair size, good color, bred to good bulls and due from July to December. Mostly from A. B. O. stock, prices reasonable and every one guaranteed to be exactly as represented.
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BULL FOR SALE—Houtwie Maple Crest Koradyke. Calved Aug. 23rd, 1918. Sired by Cornucopia Maple Crest Koradyke. Dam Houtwie Belle Koonie 2nd. Price \$200.
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HOLSTEIN CALVES, 7 weeks old, 31-32nds pure. Tub. Tested, \$25.00 each, crated for shipment anywhere. Satisfaction guaranteed.
EDGEWOOD FARMS, Whitewater, Wis.

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

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Shropshire, Southdown and Cheviot rams write to
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One red Scotch bull ready for service. Two bull calves ten months old. Poland-China weanling pigs ready to ship.

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SHORTHORNS AND POLAND CHINAS. We are now offering two ten-months-old bulls, one bred heifer, and two ten-months-old heifers.
SONLEY BROS., St. Louis, Mich.

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Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write to
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GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages both sexes. **W. S. HUBER**, Sec'y, Gladwin, Mich.

MILKING STRAIN SHORTHORNS

Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.
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Special offer on two white yearling Bulls from IMP. Cows and sired by IMP. Newton Champion.
Also several other real Bull Bargains.
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FOR SALE—OUR RED POLLED HERD BULL, Cosy Ella Laddie, and a few heifer calves.
PIERCE BROS., Eaton Rapids, Mich. R. 1.

RED POLLED CATTLE BOTH SEX. ALL AGES.
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GUERNSEYS

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

FOR SALE GUERNSEY BULLS READY FOR service and bull calves carrying % of blood of my heifer Norman's Missaukee Red Rose, World Champion G. G. Sired by her sire. Dams finishing splendid A. R. Records.
A. M. SMITH, Lake City, Mich.

FOR SALE—REGISTERED GUERNSEY COW, 6 years old, will freshen in June. **A. HATT & SON**, Napoleon, Mich.

FOR SALE REGISTERED GUERNSEY BULL STEVE STAMPFLE, Fife Lake, Michigan

ANGUS

DODDIE FARMS ANGUS of both sex for sale. Herd headed by Bardell 31910. 1920 International Jr. Champion.
Dr. G. R. Martin & Son, North Street, Mich.

REGISTERED ABERDEEN-ANGUS—BULLS, Heifers and cows for sale. Priced to move. Inspection invited.
RUSSELL BROS., Merrill, Michigan

SILAGE REDUCES MILK COST

THE cow's board bill is the largest item connected with the cost of milk. The man who buys a first class dairy herd is inclined to believe that the original cost of the cows is the expensive part. After he has a few years experience he changes his mind. It is the feed bill, in season and out, year after year, that totals up the big expense.

Our Experiment Stations have conducted many tests to determine the value of silage in the ration. These have been published in bulletin form during the past twenty-five years, and tho the figures vary to quite an extent, they all show the economic value of silage. The Ohio Station seventy-five cents on the cost of one silage saved the dairy farmer ten cents a pound on the cost of producing a pound of butter, and forty cents on the cost of producing one hundred pounds of milk. Several other Experiment Stations have shown figures that range from six to fifteen cents saving on the cost of butter and from twenty-five to seventy-five cents on the cost of one hundred pounds of milk. Many of the early cow testing associations demonstrated that the silo was one of the most important factors in lowering the cost of milk. All of these experiments and tests, however, is only a small part of the proof of the economy of the silo. The most important proof is the fact that one-half million silos are now being used by our most progressive farmers.

Silage is a succulent grass-like feed. It is cooling in effect, aids digestion, stimulates appetite and is an excellent balance for high protein concentrates. A dairy cow requires such a food because she is doing hard work when producing a good flow of milk. The cow by nature is a user of roughage, and when fed in an artificial way on grains of high nutritive value there is need for a cooling grass-like feed, and silage comes in to fill this valuable place. Silage has a high water content, but water is an important item of the ration. Milk is 87 per cent water and beef over 50 per cent.

Many dairymen who complain over the high cost of producing milk could quickly correct this trouble by feeding more silage. This feed not only lowers the cost of producing the stock and stock products but it also serves as in insurance for many crops. There are few forages, grains or grasses grown on the farm that cannot be made into silage. Plants producing large tonnage can be turned into a food supply for the cows and growing stock, and silage has the advantage of always being in a succulent and edible form.

In times of drought during the dog days when the grass turns white and vegetation is hard and woody, a liberal ration of silage will stimulate large production and will keep the cows in a good condition for fall and winter producers. Those who have had the most experience will tell you that the silo should be used for summer as well as winter, especially by the dairy farmer. A crop safely stored in a silo is a sure and dependable asset to the stock-keeper. As for the dairyman, every test has proven that silage is a most important item in economic milk production.—A. J. Haecker.

VETERINARY DEPARTMENT

DR. W. AUSTINEWALT, EDITOR

BLOODY MILK

I have a heifer giving a large flow of milk and at the very last it is bloody. The first is all right until it comes to the last stripping. Can you give me a remedy?—Reader, Midland, Mich.

From the description the indications are that this heifer's udder has been injured in some way or other by being kicked or by a bruise caused in some other way and the reason for saying that this is the cause of bloody milk is that it only comes at the last end of the milking. This is typical in an injury of this kind and usually there is a very small blood vessel that has been ruptured and it heals over between the times of milking and breaks open

again at the time of milking. You should be very careful in stripping the heifer out, causing as little manipulation of the udder as possible, and it should gradually heal up of its own accord. The milk is not injured by bloody milk. It looks rather distasteful, but is easy to eliminate by using an extra pail when the blood shows up in the latter part of the milking.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

MUSCULAR RHEUMATISM IN SWINE

I would like to learn through the columns of the M. B. F. something about my pigs. I have had four of them go lame. It starts in the left front leg. I do not know whether it is in the foot, leg or shoulder. They are in good flesh. I thought first that it was caused from being on cement floor but two of the sows have never been on cement, one of them has been lame for six months, she seems a little stiff all over. They all eat good and are in good flesh. They do not seem to get any worse nor any better. I thought that when they got out on good pasture they would come all right but another one has gone lame. They are all my brood sows. Two of them have not had pigs yet and the other two have. If there is something I could do for them I would be more than pleased to learn about it.—C. W. R., Lapeer, Mich.

Your sows are probably suffering from muscular rheumatism. The principal symptom consists of expression of pain, especially evident when the animal moves. Locomotion is interfered with, and there is a shifting lameness. If the disease is sufficiently extensive the affected animals refuse to eat. The treatment is to provide good quarters where the animal will not experience wide variations of temperature within a short time—feed a laxative diet and give twenty grains of salicylate of sodium three times daily.

CURING BOTTS

Could one cure botts on a horse by moving your hand from his head to his tail several times?—Subscriber, Northville, Mich.

No, one could not.

HIP SWOLLEN

We have a cow that lost her calf at seven months and we milked her for about two months and then quit. Now her hip is swelled. She doesn't appear lame. What would you advise me to do with her?—C. M., Harrisville, Mich.

The swollen hip must have been caused by some injury; if this swelling is hot and painful I would advise you use hot applications. If there is no heat I would recommend a liniment composed of equal parts of Aqua Ammonia, turpentine and oil to be applied morning and night rubbing well in.

CALVES COVERED WITH LICE

We have lost two calves and No. 3 is sick. These calves are fed clover hay and corn fodder, sorghum, oat straw, whole oats, skim milk once a day and carrots or cabbage. They are covered with small lice. We put on three parts lard and 1 of kerosene, on account of it being too cold to dip them. They are awful poor. While they seem to have a good appetite until 3 or 4 days before they die, then they seem to have difficulty in swallowing. Bowels are in good condition all the time up to the last.

Have a cow much the same. Poor as a crow and poor appetite; dainty, won't eat only some things. Came in and did not clean. Had the veterinary. She gave about two quarts of milk the first three months, then went dry altogether. Looks rough. Have carrots once a day but no silage, but a variety of rough feed.—Mrs. J. A., Gaylord, Mich.

No animal will do well covered with lice. Apply Kreso Dip, Parke Davis & Co., according to directions by sponging them over. It is not necessary to dip them to get rid of the lice. Feed plenty corn and oats ground together and add a little bran. Give them a good brushing at least once a day and see they get proper care. If six months old give one dram powdered nux vomice morning and night. If younger give one-half this amount.

Regarding the cow—If the afterbirth was not removed by a competent veterinarian, I would say, possibly a part of it was retained, in which case the animal would not do well. Give her plenty of grain and try the following: Powdered nux vomica two ounces, powdered capsicum one ounce, powdered gentian five ounces and soda bicarbonate eight ounces. Mix all together and give one tablespoonful three times a day.

THE PRESCOTT SALE

OVER half of the animals sold at Prescott's big sale on June 21st went to business farmers of the Thumb district. The result of the sale again showed the potency of advertising for the Prescott's carried large space in the M. B. F., telling of their sale, and it is worthy of note that the biggest circulation of the M. B. F. lies in the counties of the "Thumb."

In comparison with other sales of the current period and in view of the still unsettled conditions the interest and prices at the Prescott sale were all that could have been expected. The crowd was large and while some of the animals failed to sell to the high figures of other years, the Prescotts expressed themselves as well pleased with the outcome of the sale.

Twenty-nine heifers and cows were sold for a total of \$11,395, and eleven bulls for a total of \$2,440. John C. Clark of Harbor Beach paid \$1,075 for Sensation 2nd, and Wm. Piper of Tawas City paid an equal amount for Augusta Lee 3rd, while James Brown of Chicago got Cherry Blossom 3rd, a heifer calf, for \$1,000.

The sale was cried by Carey Jones and Scotty Milne, assisted by Martin of the Breeders' Gazette and Johnston of the Shorthorn World.

Following is a list of the animals which sold for \$200 and up:

Females
Sensation 2nd 922231, to John C. Clark, Harbor Beach, \$1,075.
Augusta Lee 3rd 922112, to William Piper, Tawas City, \$1,075.
Cherry Blossom 3rd 922220, to Jas. Brown, Illinois, \$1,000.
Fairly Lass 3rd 922116, to McLaughlin Bros., Ewart, \$600.
Richland Gladiolus 1050345, to John S. Hardy, Indiana, \$575.
Lady Duglass 8th 927610, to Robert Brennan, Indiana, \$575.
Regal Mary 922227, to W. H. Davison, Flint, \$550.
Fanny B. 44th 857135, to Lessiter & Sons, Clarkston, \$485.
Rosewood R. 922230, to Waid Donnelly, \$450.
Village Augusta 3rd 1050349, to F. W. Harding, Wisconsin, \$450.
Richland Misie 922228, to John S. Hardy, Indiana, \$425.
White Bessy 2nd 1074043, to Bruce Wheeler, Snover, \$400.
Misie 128th 1004718, to W. H. Davison, \$350.
Abbey Mains Grace 3rd 1079149, to A. Wheatlakes, Big Rapids, \$335.
Roan Lady 49th 861998, to John Ortonfer, Marlette, \$290.
Roseana 8th 922122, to Fred Willis, \$285.
Early Rose 3rd 922222, to John McClellan, Cass City, \$255.
Evangeline 5th 1041701, to Bruce Wheeler, \$245.
Richland Victoria 2nd 1050347, to Mathew Sproul, \$235.
Princess Richland 2nd 1050343, to Sam Pangborn, Bad Axe, \$225.
Victoria's Favorite 744757, to Fred Willis, Decker, \$215.
Avon's Bridal Day 845002, to J. S. Hardy, Indiana, \$210.
Elvira's Rose 35th 922223, to Mathew Sproul, Crosswell, \$210.
Bulls
Richland Autocrat 922211, to W. H. Davison, \$500.
Richland Rodney 922217, to Thomas Smith, Ann Arbor, \$425.
Village Champion 922111, to Brown & Parmeter, Rockford, \$315.

HISTORY OF ABERDEEN-ANGUS CATTLE

DURING the past decade a nationwide interest in Aberdeen-Angus cattle and consequent increase in number of breeders and members of the American Aberdeen-Angus Breeders' Association has created a new demand for information concerning the breed. To meet this call—to place before all seeking it information concerning the greatest and oldest beef breed—a short history of its origin and development in Scotland, its transplantation to America and its subsequent career has been prepared. No attempt has been made to present more than the merest outline of the breed's history, but the main facts have been brought down to date. Controversies long and bitter have prevailed touching more than one phase of the breed's development. No cognizance has been taken of them, the generally accepted view having been given in every instance. Differences as to men and matters incident to the breed's progress 50 to 100 years ago can have no possible bearing on its position today. The plain, unvarnished truth has been told, with a fair field for all and favor toward none.

For an extended and diverse history of the Aberdeen-Angus breed,

from which much of the matter in this little work was taken, the Association is indebted to Mr. R. C. Auld, New York, a nephew of the late Wm. McCombie of Tillyfour, Mr. Auld's close relational and territorial connection with Mr. McCombie and his possession of many of the great breeder's private records and memoranda, fit him eminently to give potent aid in the preparation of such a history.

From this short history and from the other statistical and descriptive publications of the American Aberdeen-Angus Breeders' Association a complete review of the Aberdeen-Angus breed's history may be obtained from its Caledonian birthplace to the proud pinnacle of fame on which it now rests wherever good beef is grown. This history can be secured from the American Aberdeen-Angus Breeders' Ass'n, 817 Exchange Ave., Chicago, Ill.

SEEING OURSELVES AS OTHERS SEE US

THE agricultural newspapers have made more discontented and listless farmers than all other demoralizing influences combined. As soon as a farmer is convinced that the farm which has been giving him a living and a little more to save, if he would save it, is a loser, he loses morale and becomes shiftless or a complete idler. With few exceptions the agricultural press have told their readers just that thing—that the farm is not a money maker; and did farmers generally believe it, their moral strength would disappear, because no one can respect himself or an occupation which he believes is no good and has no future which is not based on government largess in some form. It is the "circus and bread" of Rome in a new form. All such farmers cease to look to themselves to make their land holdings a going concern, but waste their time and lose their grip waiting for the A. F. B. F. and the economic fakirs and quacks like Ladd and Capper and the rest to lift them out of the morass they imagine surrounds them by some hocus pocus of law-making; and since law making cannot create wealth the dupes must finally degenerate into veritable mendicants.

There can hardly be a lower depth of Governmental immortality than this, and the quack editors and statesmen who deceive people by such promises will have much to answer for in the day of accounting when the results of their folly will surely come to light. Nothing is more certain than that the more that is done to relieve imaginary distress of this sort in this artificial way the more distress will be created by the process. It partakes of the evils of the poor laws and all eleemosynary expenditures. Every law and institution which protects some persons at the expense of others, or of capital, makes it easier for those some to live idle and so increases the number of those whose incentive to produce and to practice frugality is impaired or destroyed. Such laws may visibly relieve a deserving few at times but they involve unfortunately more undeserving ones and the relief will be at the cost of a larger population sunk in hopeless misery. Economic forces go before the moral ones, and unless economic interest is fostered and protected in every way, by hardships due to improvidence or by profits to be earned, the moral instinct will die. Self-interest alone produces self-control, prudence and temperance.—Price Current Grain Reporter.

Painless Dentistry

Aunt Ethel—"Well, Beatrice, were you very brave at the dentist's?"
Beatrice—"Yes, auntie, I was."
Aunt Ethel—"Then there's the half-crown I promised you. And now tell me what he did to you."
Beatrice—"He pulled two of Willie's teeth!"—Punch.

Up and Down

Flatbush—"You say your wife went to college before you married her?"
Bensonhurst—"Yes, she did."
"And she thought of taking up the law, you said?"
"Yes, but now she's satisfied to lay it down."—Yonkers Statesman.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R. 5, Vassar, Mich.

HEREFORDS

GLADWIN COUNTY PURE BRED LIVESTOCK ASSOCIATION. Hereford, Shorthorn, Jersey and Holstein cattle; Duroc-Jersey, Poland China and Hampshire hogs; Oxford, Shropshire and Hampshire sheep.
A place to buy good breeding stock at reasonable prices.
FRED B. SWINEHART, President, Gladwin, Mich.
O. E. ATWATER, Secretary

BEEF

PRODUCERS
Michigan Produces the World's Best Beef at the Lowest Cost. Raise far better feeding Cattle than you can buy. Grow Baby Beef when gains cost least in feed and labor. Avoid costly rail hauls with their shrink, bruises and loss.

SOTHAM'S EARLRIPE BEEF CONTACT

Solves your problem—insures your success. A fair intelligent, satisfying system evolved from 87 years conscientious service to American Cattle Industry by three generations of Sothams. GET THE FACTS. Write now or wire. Address T. F. B. SOTHAM & SONS, Phone 250, SAINT CLAIR, MICHIGAN

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

SWINE

POLAND CHINA

L. T. P. C. \$15-\$20-\$25

Spring pigs at above prices. Top fall gilts bred for summer farrow, priced right.
HART & CLINE
Address F. T. Hart, St. Louis, Mich

Big Type P. O. Boar Pigs, they can't be beat in Michigan. Sired by Big Bob Mastoden and Peter A. Pan a son 1,075 Peter Pan. C. E. GARNANT, Eaton Rapids, Mich.

FOR SALE, LARGE TYPE

POLAND CHINA

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

REGISTERED B T P C SPRING SOWS. Also two boars at \$15 each. JOHN W. MORGAN, Yale, Mich.

CLANSMAN BIG TYPE POLAND CHINAS ready to ship. \$10 and \$15, either sex.
H. W. GARMAN & SONS, Mendon, Mich., R. 3.

DUROCS

LUROC JERSEYS—Bred Sows and Gilts Bred for Aug. and Sept. farrow. A few choice ready for service boars. Shipped on approval. Satisfaction guaranteed. F. J. Dredt, Monroe, Mich. R1

PURE BRED DUROC JERSEY PIGS

May and June. By Fancy O. O. K. Chief 3rd, \$7 to \$10. A good chance to get a start in pure breeds reasonable. ALTON LEE SPENCER, Jonesville, Mich. R. F. D. No. 1.

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N, V. Lidgard Sec., Hesperia, Michigan.

HERE WE ARE AGAIN WITH A BUNCH of the big boned kind; \$10.00 each with Pedigree. F. A. LAMB, Cassopolis, Mich.

REGISTERED DUROC JERSEY PIGS FARROWED April 12 for sale, \$12.50 each. Papers furnished. JASPER CONKLIN, Battle Creek, R. 5, Box 149, Mich.

FOR SALE OR DUROC JERSEY BOAR 2 years old. No. 182429, Masterpiece Orion King 4th. Also some May pigs at reasonable prices. Write W. H. CRANE, Lupton, Mich.

REG. DUROC JERSEY SPRING PIGS. EITHER sex. Can furnish pairs unrelated. Also bred gilts. Priced to sell. VICTOR G. LADUKE, R. 1, Merrill, Mich.

PURE BRED DUROC-JERSEY BOAR Pigs of April and May farrow, sired by Brookwater Sensation and Model of Orleans Masterpiece. Place your order now, prices right. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

DUROC JERSEY WEANLING BOAR PIG weighing 40 pounds, from large litter. \$12 to \$15. JOS. SCHUELLER, Weldona, Mich.

AM SELLING A GREAT OFFERING OF DUROC BRED SOWS AND GILTS

March 4th, mostly mated to Orion Giant Col. a son of Ohio Grand Champion. Get on mailing list for catalog.
W. C. TAYLOR, Milan, Mich.

PURE-BRED DUROC JERSEY HOGS We usually have good boars and sows of all ages for sale. Reasonable prices.
LARRO RESEARCH FARM, Box A North End Detroit, Michigan.

BOAR PIGS BY FANNIE'S JOE ORION AND Pathfinder Orion. Priced to sell. Satisfaction guaranteed. Write, H. E. LIVERMORE & SON, Romeo, Mich.

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

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

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

DUROCS AM BOOKING ORDERS FOR March pigs, for May delivery. 12 to 15 dollars, registered. Satisfaction or money back.
B. E. KIES, Hillsdale, Mich.

85 FINE SPRING BOARS

all sired by Schalmers Top Col. a grandson of the famous Walt's Top Col. We want the room, send \$15.00 and get first selecting of these fine boars.
SCHAFFER BROS., Oxford, Mich., R. 4.

HAMPSHIRE

A CHANCE TO GET SOME REAL HAMPSHIRE. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Write for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

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

O. I. C.

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, Dorr, Mich., R. 3.

REGISTERED O. I. C. SPRING BOARS Sired by R. O. Big Prince. Write for prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

O. I. C. & CHESTER WHITE SWINE Choice boars of Feb., March and April farrow. Advance Type and Busters Giant Bloodlines. Priced to sell. Clara V. Dorman, Snover, Mich.

BIG TYPE O I C PIGS 8 WEEKS OLD Guaranteed.
E. V. BILYEU, Powhatan, Ohio

CHESTER WHITES FOR SALE AT REASONABLE prices. Apr. pigs registered in buyers name. Will ship C. O. D. if preferred. RALPH COSENS, Levering, Michigan.

BERKSHIRES

WE HAVE A FINE LOT OF BERKSHIRE spring boars for sale, sired by Longfellow's Double, Bob and Duke of Manchester. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

SHEEP

HAMPSHIRE SHEEP

A few good yearling rams and some ram lambs left to offer. 25 ewes all ages for sale for fall delivery. Everything guaranteed as represented.

CLARKE U. HAIRE, West Branch, Mich.

PET STOCK

SHETLAND PONIES

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

SHETLAND PONY, 8 MONTHS OLD, \$50. H. W. GARMAN & SONS, Mendon, Mich., R. 3.

FOR SALE—THOROUGHBRED COLLIE pups females. Natural heelers. E. J. MAURER, Marshall, Mich., R. 5.

FOR SALE THOROUGHBRED WHITE COLLIE PUPPIES CHAS KEPNER Carson City, Mich.

BEACON LIGHTS OF BUSINESS

A LONG perilous coasts, light-houses throw their guiding rays far into the night to mariners and help them safely past the shoals.

Business, too, has its beacons. They are the ADVERTISEMENTS, which throw a powerful light to guide you in your buying. They show you what to buy, where to buy and when to buy.

Spend a few minutes running through the advertisements in this publication. Then buy the products that have proved up in the light of advertising.

Manufacturers who advertise deliberately focus thousands of eyes on their products. Their wares must be GOOD, their values HONEST and their prices right or they could not advertise successfully.

In the advertisements you see products that have made good under the critical inspection of buyers. These products are FULL VALUE products. They return you dollar for dollar. Buy them.

Let the beacon of advertising guide you as it is guiding so many astute buyers.

—1—
THEN YOU CAN KNOW THAT EVERY CENT YOU SPEND BUYS ITS FULL QUOTA OF VALUE

MICHIGAN BUSINESS FARMER

"The Farm Paper of Service"

Tell your friends about it

POULTRY BREEDERS DIRECTORY

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

POULTRY

PULLETS

If you want fine Pullets for fall and winter eggs we can furnish Leghorns Anconas, Rocks, Reds, Buff Orpingtons Eight weeks and three month old; also other breeds.

Yearling Hens and Cockerels Write us for description and price. We will send you stock from our Pure Bred Practically Poultry—stock that will make money for you on your farm.

STATE FARMS ASSOCIATION.
202 Chase Building, Kalamazoo, Michigan

PLYMOUTH ROCK

BUFF ROCKS—Bronze Turkeys—For 20 years; by J. C. Clipp & Sons, Bx. M, Saltillo, Ind.

LEGHORNS

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J. W. WEBSTER, Bath, Michigan

LEGHORNS

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

LAPHAM FARMS, Pinckney, Mich.

POUND PULLETS (S. C. W. L.) HATCHED MARCH 20th. \$1.20 for May 15th delivery. Finest lot we ever raised. No sickness. No crowding. Satisfaction or money back. Will lay in August and all through the fall season when eggs are the highest.

MORSE LEGHORN FARM, Belding, Michigan

WYANDOTTE

HEIMBACH'S WHITE WYANDOTTES. Exhibition and utility—Rhode Island Reds. Chicks all sold for the season. Hatching eggs half price. C. W. HEIMBACH, Big Rapids, Michigan R. 2

RHODE ISLAND REDS

WHITTAKER'S RED CHICKS Both Combs. Blood tested for white diarrhoea. Michigan's greatest color and egg strain. Catalog free. Interlakes Farm, Box 4, Lawrence, Mich

ROSE COMB RHODE ISLAND REDS. Hatching Eggs reduced to \$1 per setting. MRS. ALBERT HARWOOD, R. 4, Charlevoix, Mich. (P)

RHODE ISLAND REDS, TOMPKINS STRAIN, Hatching eggs and baby chicks. Eggs per hundred, July \$8. Chicks twice the price of eggs. Both combs. WM. H. FROHM, New Baltimore, Mich. R. 1.

ORPINGTONS

ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season. AUGUST GRABOWSKA Merrill, Mich., Route 4, Box 41.

HATCHING EGGS

WHITE ROCK EGGS FOR HATCHING

Blue Ribbon winners. Write for prices and information. Mrs. Roy Oakes, Hartford, Mich.

EGGS \$1 SETTING, Parcel Post Paid. Thor-oughbreds, Barred Rocks, White Rocks, Buff Rocks, White Wyandottes, Anconas, Buff Minorcas, White Leghorns, Brown Leghorns, Rhode Island Reds, Buff Orpingtons. PHILIP CONDON, West Chester, Ohio.

QUALITY BARRED ROCK EGGS—15, \$1.50; 50, \$4.00. Park Strain. Postpaid; guaranteed. W. J. & R. A. WILSON, R. 2, Kingsley, Mich.

BABY CHICKS



CHICKS WITH PEP BIG JUNE AND JULY PRICE REDUCTION

Try some of our full blooded DON'T STOP LAYING KIND of chicks for June and July. They will pay you big. Rocks, Reds, Anconas, Minorcas, W. Wyandottes, 13c; Leghorns, 10c; Orpingtons, 8c. Wyandottes, 15c; broilers, 10c. Safe delivery. Prepaid. Free Catalog.

HOLGATE CHICK HATCHERY

Box B, Holgate, Ohio

CHIX FROM TWELVE LEADING VARIETIES of heavy layers on free range. Reasonable prices. Get catalog and order NOW.

SUNBEAM HATCHERY, H. B. Tiffin, Box 303, Findlay, Ohio.

BABY CHICKS

S. O. Buff Leghorns, one of the largest flocks in Michigan. My price is in reach of all, only \$15.00 per hundred. Detroit winners, none better.

LAPHAM FARMS, Pinckney, Mich

BABY CHIX

The Old Reliable Breeds

S. B. White Leghorns

English and American Strains

Barred Rocks Anconas

S. C. Brown Leghorns

Here we are, just a few hours from your door, with baby chix from the best breeds. Our growth from one small incubator to 22,000 egg capacity has been steady, and denotes honest dealing. Get our prices on chicks from our healthy, free range, heavy laying stock. Send today for handsome catalog in colors.

CITY LIMITS HATCHERY & POULTRY YARD, Route 5, Box 11, Holland, Mich.

Baby Chicks

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

J. G. PHILPOTT

R. 1, Box 74 Port Huron, Mich.

EXTRA GOOD CHICKS

Plan now on more eggs next winter. Order chicks from pure bred record layers. Tom Barron White Leghorns, Brown Leghorns, and Anconas. Postpaid anywhere. Catalog free. Ask for May and June prices.

QUEEN HATCHERY

ZEELAND, MICHIGAN

JULY, AUGUST AND SEPTEMBER CHIX—Order now. Barred or White Plymouth Rocks, R. I. Reds, Black Minorcas, White Leghorns or Anconas \$14.00 per 100, prepaid. 16c each in 25 or 50 lots. 100 percent live delivery guaranteed. Order our 12 year producing chix that please. Order direct from this ad. GREEN LAWN POULTRY FARM, R. 3, Fenton, Mich.

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

CHICKS

THREE LEADING BREEDS

TOM BARRON ENGLISH WHITE LEGHORNS, PARK'S BARRED ROCKS, S. C. R. I. REDS

PRICES FOR JULY AND AUGUST

	25	50	100	500	1000
White Leghorns	\$2.50	\$5.00	\$10.00	\$47.50	\$95.00
Barred Rocks and R. I. Reds	3.00	6.00	12.00	57.50	115.00

Broiler chicks \$7.00 per 100, \$25.00 for 500. Selected Pens \$1.00 Extra. 100 per cent live delivery prepaid to your door. These chicks are from the best layers obtainable on free range and we guarantee satisfaction or refund your money. Give us a trial and be convinced. Catalogue free. Importer.

BRUMMER'S POULTRY FARM, Holland, Mich., Box 28



BLOOD WILL TELL

Eleven years of hatching and shipping chicks assures you good first class chicks. We guarantee safe arrival and satisfaction, or your money back.

17,000 Chicks Every Week Till August 15th

S. C. English type White Leghorns are good and profitable layers, and our extra selected are of the very best layers.

It has never been our aim to put out cheap chicks, but to give our customers chicks that will be good layers and bring our customers a good profit.

We have been in the poultry business eleven years and are offering you chicks of the best layers at a very reasonable price.

PRICES FOR JUNE AND JULY, 1922

	Per 25	Per 50	Per 100	Per 500	Per 1000
S. C. English type White Leghorns, extra selected	\$3.00	\$6.00	\$12.00	\$57.50	\$115.00
S. C. English type White Leghorns	2.50	5.00	10.00	50.00	100.00
S. C. Brown Leghorns, extra selected	3.00	6.00	12.00	57.50	115.00
S. C. Brown Leghorns, Standard	2.50	5.00	10.00	50.00	100.00

We ship chicks by parcel post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

PROMPT SHIPMENT—Order from this adv. to save time, and we will write you at once when to look for the chicks and also will mail you our instructive catalogue, or write for catalogue before ordering.

THE WOLVERINE HATCHERY

H. P. Wiersma, Proprietor

ZEELAND, Mich.



POULTRY

FARM POULTRY PROFITABLE

FARM poultry is profitable because the investment is small, the cost of labor is low, feed is cheap, the chickens utilize the waste products of the farm, and they destroy weeds and insects.

A recent chart shows the profit per hundred hens of the best five flocks, and the poorest five flocks out of 18 typical farm flocks in Ohio.

The average profit per hundred hens was \$87.

One hundred hens and a good dairy cow are about equal in value. Iowa records shows that the average dairy cow makes a profit of only \$33.

Few farmers know how much profit they are getting from their poultry.

You can raise poultry more profitably than the commercial poultryman can.

Small Investment—Your investment is small. The commercial poultryman must provide expensive housing and yarding arrangements. You can let your chickens run anywhere—just so you keep them out of the garden during the spring and summer.

Little Labor—Your cost of labor is small; labor is a big item with the commercial poultryman. You can take care of a flock of chickens, and take good care of it, without spending a great deal of time. The work fits in to the rest of the farm work.

Cheap Feed—Your feed is cheap. The commercial poultryman buys feed. You raise it, and thus get it at actual cost of production.

Waste Products are Utilized—Your chickens utilize the waste products on the farm. During a great part of the year, the hens live almost entirely on what would otherwise be wasted—grass, clover, the gleanings from the grain fields, the surplus garden stuff, and the litter about the barn and feeding pens.

Weeds and Insects are Destroyed—Then, in addition, they eat weed seeds and injurious insects, bugs and worms. It is almost impossible to estimate the help given by the hens in keeping down some of the worst pests.

Record of Eighteen Ohio Farm Flocks—Several years ago the Ohio Experiment Station made a study of the profits in farm poultry. Records of 18 typical farm flocks were carefully kept.

These flocks ranged in number from 36 to 370. Some were pure bred; others were mongrels. They were kept, fed and tended just as the farmers had been caring for them before the Experiment Station asked them to keep a record.

Here are the results of the investigation. For the sake of comparison we have figured the profit from each flock on the basis of 100 hens in a flock.

The best five flocks yielded respectively \$247, \$154, \$153, \$107 and \$104 per hundred hens, while the poorest five flocks yielded \$67, \$66, \$63, \$62 and \$15 respectively. In no case was there a loss. The average profit per hundred hens of the 18 flocks was \$87.

Poultry Profits—One hundred hens are worth a hundred dollars—just about the price of a good dairy cow. Records of the Cow Testing Associations in Iowa show that the average dairy cow makes a profit of \$33. Which would you rather do—milk two or three cows, or take care of a hundred hens?

Yet if asked what profit you get from your poultry, I doubt if one of you would know—you don't keep track of a little thing like that. Most farmers have a vague idea that poultry is profitable—the wife pays the grocery bills, and every now and then gets a new piece of furniture or a new dress with the "chicken money." But probably not one farmer in a thousand could tell just how much his chickens are paying.

You probably have about a hundred hens—that's more than the

average size of the farm flocks in the United States. How much profit are they producing? Are they above the average or below? Are you getting \$247 or \$15?

CANKER OR CHICKEN POX

Will you please tell me what is the trouble with my chickens? Several in the flock rattle in their throat when breathing, and they gradually get worse, until they throw their head back and mouth open every breath they draw. They become weak and soon die. We have a nice large coop, are feeding corn and wheat, also all the sour milk they can eat. Is sour milk good for chickens?—W. Z., Ithaca, Mich.

Your chickens have possibly an infection of canker or chicken pox in the flock. The difficult breathing is caused by the thickening of the membrane lining the throat. When the air passes over this membrane a whistling or rattling noise is produced. The treatment usually recommended is 10 drops of spirits of turpentine in a teaspoonful of coal oil given to each chick. This dose may be repeated after an elapse of 5 or 6 hours. Carefully observe the mouth and throat for canker growth and if any are present they should be removed and treated with a solution of one part iodine and two parts glycerine. Sour skimmed milk is an excellent food for either growing chicks or laying hens. It has the proper physiological affect on the digestive tract, and greatly increases the palatability of other foods and assists in the operation of digestion. —C. E. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

STORY OF N. Y. DAIRYMEN'S FAMOUS POOLING PLAN

(Continued from page 4)

but where the latter system is not in use, the increased compensation is fixed at a flat 20c per hundred.

These prices are also subject to the freight differential, based on distance, the figure varying in the several specified classes. The dealer of course pays a lower rate for milk which he has to ship at a distance from the New York market—the dividing line passes through approximately the 201-210 mile point—than he does for milk bought nearer New York City.

Obviously, the prices paid in Classes 3 and 4 cannot be determined till the last day of the month of delivery. However, according to the agreement, the dealers are required to send to the offices of the association, by the 15th of each month, full reports covering milk received from members of the association during the preceding month, amounts due, etc., and likewise make settlement with the association not later than the date mentioned. Then, between the 15th and the 25th of the month, the accounting department has on its hands the nice little job of sending out something like 50,000 or more checks (the number varies from month to month) for the sums due members for their previous month's deliveries. The accomplishment of this gigantic task within ten days is made possible by the very efficient way in which the work is organized and the fact that the most modern and most approved mechanical devices are employed, these including calculating, tabulating and check-writing machines, filing systems, etc., all operated by a specially-trained staff.

Contract With Members

Every producing dairyman who goes into the pooling plan signs a contract, whereby he agrees to sell his milk to the dealers designated by the association and authorizes the association to act as his agent in fixing prices and in collecting the money due him. When the dealers settle accounts each month, the entire proceeds are pooled, the expense of operation taken out and the remainder is divided equitably among the members. Each receives an amount figured by multiplying the number of hundredweights of milk he has delivered by the rate per hundredweight for the month, taking into account of course any bonuses for superior quality, or variations resulting from freight differentials.

How does the organization finance itself? The necessary funds are raised by deductions made monthly from the amounts due members, before the checks are sent out. This

charge against each account is figured on a "per 100 lbs." basis and is of two kinds: One a direct charge, representing the money needed for running the organization, advertising, etc.; the other really a loan, for which the association issues a certificate of indebtedness. These certificates mature in five years and pay six per cent interest annually. Thus a fund is created and maintained by which the association is enabled to build, equip and operate its plants and carry on other productive activities. All resulting profits go into the pool and are eventually distributed among the members. The amounts deducted vary from month to month, depending upon the financial requirements of the association as well as other circumstances, but in the past they have ranged from 3c to 5 1-2c per 100 lbs. for the direct charge and from 10c to 20c for the deduction for certificates, the average for the fiscal year ending March 31, 1922, being 5c for the former and 16 8-10c for the latter, per 100 pounds.

The various sums collected from the dealers, instead of being deposited in one bank at Utica, N. Y., the headquarters of the association, are deposited in the local banks—about 350 in all—scattered throughout the territory in which members are located. This practice helps to create good will for the association among the large number of local banks in these communities, besides having other advantages.

At the annual meeting of the Association, held at Utica, N. Y., on June 15th, some interesting facts were brought out concerning the results of the pooling plan. During the fiscal year the total quantity of milk handled at both the dealers' plants and those of the association was 565,476,805 pounds. The average price received at the 201-210 mile freight zone, for all Grade B milk testing 3 per cent butter fat was \$2.01 per 100 pounds. Because of the relatively high average price which the association was able to obtain, the producers in the pool received \$5,800,000 more than they would have been paid had they received the average price which was paid for milk during the same period in all the other organized territories. From May 2, 1921 to June 1, 1922, the membership increased from 65,050 to 71,192. Delegates from 944 locals attended the meeting. The progress indicated is especially encouraging because of the depressed conditions in the dairy industry during the past year. The report of the treasurer showed that the organization is in sound financial condition. President George W. Slocum in his address brought out the value of co-operation by stating that prior to 1916, before the old Dairymen's League became effective as a marketing agency, the average price for milk was \$1.25 per 100 pounds, the average figure for June milk being 87 cents; in fact it was not many years ago that some dairy farmers received only one cent a quart during the flush period.

GREEN LAWN POULTRY & FRUIT FARM

Fenton, Michigan

Will you please change our ad at the earliest possible time and continue the enclosed ad for the balance of the 26 issue agreement. You may expect a larger ad for 1923 season as we are well pleased with results.

GUS HECHT, Prop.

NABOBK JUST-RITE Baby Chicks

Get our low July prices. July chicks for January layers.

Postage PAID. 95 per cent arrival guaranteed. MONTH'S FEED FREE with each order. A hatch every week all year. 40 Breeds Chicks. 4 Breeds Ducks. Select and Exhibition Grades. Catalogue Free.

NABOB HATCHERIES, Dept. 30, Gambler, O.

BABY CHICKS

200,000 for 1922. Shepards Anconas, English type White Leghorns and Brown Leghorns and Barred Rocks. Why pay two prices when you can buy direct? Our chicks are from strong vigorous flocks of fine quality and excellent layers. Chicks are sent prepaid with 100 per cent live arrival guaranteed. Order now or send for free catalogue. KNOLLS HATCHERY, Holland Mich R12

Down Go the Prices!

of Superior

Baby Chicks --- 8 Week Pullets

Tom Barron English White Leghorns, Brown Leghorns, Anconas

The World's Greatest Layers

Read This—

Mrs. Geo. Sawyer, of Dansville, Mich., says: "I received my chicks the 24th and they came in fine condition. All alive and doing fine. I can say for your hatchery that they are the nicest chicks I have ever bought. I thank you for your great pains in selecting the chicks and for the extra ones."



Read This—

Mr. W. P. Miller of Morris, Minn., says: "Our baby chicks arrived all alive. I have never seen such nice chicks before. They are all healthy. I would like 200 more June 1st, and another 200 June 15th."

Now is your chance to buy superior baby chicks and pullets at these bargain prices. Order direct from this ad and save time. We will write you at once when you can get your chicks or pullets.

BABY CHICK PRICES

JUNE—JULY—AUGUST

	Per 50	Per 100	Per 500	Per 1000
American S. C. White Leghorns	\$5.00	\$10.00	\$50.00	\$100.00
S. C. Brown Leghorns	5.00	10.00	50.00	100.00
S. C. Mottled Anconas	6.00	12.00	57.50	110.00
Tom Barron English White Leghorns	6.00	12.00	57.50	110.00
Extra Selected Stock	8.00	16.00	75.00	
Tom Barron Ex. Spec. Pen Star Mating Fed.	4.50	8.50	40.00	80.00
P. Star or mixed c. l.				

Remember these are not ordinary chicks, but selected stock. The best that money can buy. Shipped prepaid to your door. We guarantee live arrival and complete satisfaction.

EIGHT-WEEKS-OLD PULLETS AT BARGAIN PRICES

Write for free bargain list today.

Superior Poultry Farms and Hatchery

Box 2052

Zeeland, Mich.



Baby Chicks

BEST LAYING BREEDS ON EARTH

25,000 large, strong, super hatched chicks every week from Hogan tested flocks culled out semi-annually by our Poultry experts.

PRICES FOR JUNE AND JULY

	Per 50	Per 100	Per 500	Per 1000
S. C. WHITE LEGHORNS				
ENGLISH WHITE LEGHORNS				
S. C. BROWN LEGHORNS	\$5.25	\$10.00	\$47.50	\$95.00
S. C. MOTTLED ANCONAS				
BRILERS (Odds and Ends)	\$4.00	\$7.00	\$35.00	

EXTRA SELECTED STOCK AT \$2.00 PER 100 HIGHER

Thousands of Satisfied Customers Make Big Money

Mr. F. L. Hess, Chicago, Ill., writes: "I averaged 112 eggs a day from 140 of your pullets and sold \$158.00 worth of eggs in February."

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

Raise Good Stock and Reap a Golden Harvest

Intelligent chick buyers of today do not take chances with ordinary stock. Our enormous output enables us to sell these money makers at a price that positively cannot be equalled.

We Ship Thousands of Chicks Each Year

Every shipment is sent by Prepaid Parcel Post and we guarantee 100% live delivery. Order direct from ad. or send for illustrated catalogue.

Wingarden Hatchery, Box B, Zeeland, Mich.

CHICKS! CHICKS!



It will pay you to look over these low prices for June and July delivery. Better chicks at real bargain prices. Pure S. C. W. Leghorns, \$5.25 for 50; \$10 for 100; \$47.50 for 500. Pure Barron Eng. Leghorns, \$5.75 for 50; \$11 for 100; \$52.50 for 500. 100; \$52.50 for 500. Pure S. C. Anconas, \$5.75 for 50; Hatch every Tuesday in June direct from ad. Prompt shipment by insured Parcel Post prepaid to your door. Full count strong lively chicks on arrival. For quick service and an entirely satisfactory deal send us your order. Fourteen years reliable dealing. Fine instructive catalogue free.

HOLLAND HATCHERY

R. 7, Holland, Mich.

BABY CHICKS

FULL LIVE COUNT GUARANTEED

From Hens of Heavy Laying Strain

Reduced Prices for First Two Weeks in July

S. C. White Leghorns, \$ 8.00 per 100
Barred Rocks, 13.00 per 100



Prepaid Parcel Post right to your door. Order now from this ad.

Winstrom Poultry Farm & Hatchery

ZEELAND, MICHIGAN

The 'Old Reliable' OHIO HATCHERY



S. C. White Leghorns, S. C. Brown Leghorns, and S. C. Buff Leghorns \$3.50 per 25; \$6.50 per 50; \$12.00 per 100; \$110 per 1000. Barred Rocks, Mottled Anconas, and S. C. Black Minorcas, \$4.00 per 25; \$7.50 per 50; \$14.00 per 100; \$130 per 1000. White Rocks, White Wyandottes, and Buff Orpingtons, \$4.50 per 25; \$8.50 per 50; \$16.00 per 100. R. C. R. I. Reds, \$5.25 per 25; \$10 per 50; \$18 per 100; Light Brahmas, \$7.00 per 25; \$13 per 50; \$24 per 100. Broilers, odds and ends, \$3.00 per 25; \$5 per 50; \$10 per 100; THE UHL HATCHERY Box 502, New Washington, Ohio.

Egg Bred Chicks



Selected thoroughbreds. Prize winners at National Egg Laying Contest, Mo. 1922. June and July chicks make November layers. Now is the time to buy. S. C. Anconas: \$13. 100; \$7. 50. S. C. White Leghorns: \$12. 100; \$6. 50. Extra Star mating. Sheppard Anconas: \$16. 100; \$8. 50. Barron Eng. White Leghorns: \$14. 100; \$7. 50. 50. Thousands ready for shipment every Tuesday Parcel Post Prepaid. Guaranteed alive and healthy at your door. Catalog free. FRANK A. VAN BREE

Box B, Zeeland, Mich

Please Mention the M. B. F. When writing to Advertisers

MARKET FLASHES

TRADE AND MARKET REVIEW

The threat of a rail strike appeared last week like storm clouds on an otherwise serene business horizon, and commercial circles began to trim their sails for bad weather. Irrespective of the justice of the railroad men's demands one cannot help but feel that the threat of a strike coming as it does when business is just getting on its feet again, is most ill-timed. Certainly, the great American public does not take kindly to the idea just at this time.

Except for a slight uncertainty in construction activities talk of strike has really disturbed the equilibrium of business but slightly. The country has experienced a remarkable recovery from the case of doldrums which it has been suffering for well over a year, and refuses to let its buoyant spirit be dampened by the prospect. However, it cannot be denied that a nation-wide rail strike of even short duration would prove a staggering blow to the country in its present convalescent state. A year from now we might be able to weather such a strike without serious inconvenience and loss, but we can't do it now.

The coal strike is seemingly no nearer a settlement now than at any time since its inception and the average person is beginning to feel slightly uneasy as the warm days of summer come and go and fall begins to beckon. If Uncle Sam has got any punch left in his old mitt he ought to begin to use it in the coal strike and force miners and operators to accept an equitable settlement.

Excepting for these two disturbing factors the business sky is bright and clear. Old industries are gradually putting on new men and new manufacturing enterprises are springing up. In nearly all lines restriction has given way to expansion. The army of unemployed has dwindled to a mere handful and here in Michigan farmers are again complaining for lack of help. With new crops soon to be harvested putting a good many farmers back into the buying mood the immediate future looks bright.

The markets on farm crops are holding up well for a pre-harvesting period. Wheat has shown a tendency to sag, but upon the very threshold of threshing in the western states it actually advances. Black rust and other wheat enemies are doing their work and in face of the fact that we are at the bottom of the grain bin, the slightest damage to the new crop lends strength to the market.

Manufacturers of automobiles have experienced a wonderful season so far and they are anxiously inquiring of agricultural agencies as to the farmers' prospects this fall. Will the farmer who has virtually been out of the market for a year or more come back this fall? The city trade is going to drop off soon and industry must depend upon farm purchases this fall and winter to keep its factories going. There can be no question but what the farmers will spend a great deal more money the next six months than they did for the same period in 1921. They are in need of many things for both home and farm, and if prices on their products do not crash again they will become heavy purchasers as the season advances.

WHEAT

July 3—During the first week of the past fortnight prices in the wheat market showed an advance. The market started out weak but the tone soon changed and prices advanced; however, the high points were not maintained. On Monday, June 26, the market opened with a slump but after that most efforts of the market were to right itself again. The tone ruled firm to strong until the close, when weakness again asserted itself. Strength came from a belief that prices were low enough

MARKET SUMMARY

Wheat and corn steady to firm. Oats unchanged. Beans steady. Heavy receipts cause butter market to weaken slightly. Poultry in fair demand and steady. Dressed calves steady. Dressed hogs not wanted. Eggs firm and receipts light. Cattle and sheep higher. Hogs lower.

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

to satisfy the bearish conditions, a fear that black rust is about to develop in the spring wheat fields, fear of a transportation blockade and a very general belief that Europe is in immediate need of some wheat. The fear of a strike has already made itself felt in an increase in activity in the movement of cash wheat. Millers reported an increase in activity in the movement of cash wheat. Millers reported an increase in the buying of flour late in the week that might have been in preparation for the holiday or a stocking up in fear of the strike.

The crop situation came in for very close study and there is a good deal of anxiety over the situation of the spring crop. Black rust is reported and that always causes trouble. The crop in other respects is coming along very well and will be ample in case of the black rust scare does not amount to anything. Winter wheat is safe or nearly so and is a good crop. Demand for cash wheat increased a little during the week for both domestic use and export and cash handlers believe Europe is in shape to do some active buying.

Prices

Detroit—No. 2, red, \$1.19 1-2; No. 2 white and No. 2 mixed, \$1.17 1-2.
Chicago—No. 3, red, \$1.15 1-2; No. 2 hard, \$1.18.
New York—No. 2, red, \$1.31 3-4.
Prices one year ago—Detroit, No. 2 red, \$1.25; No. 2 white and No. 2 mixed, \$1.20.

CORN

July 3—This market is acting somewhat in sympathy with wheat although price declines in the latter

grain are slow to take effect in the corn market. During the week ending June 24 the Detroit market gained 1-2c and last week advances on that market amounted to 1 1-2c. Demand is good, both domestic and export. Reports received from Chicago on Saturday, July 1, showed 150,000 bushels of corn worked for export. Also it is stated that exporters are reselling corn at seaboard. Weather has been favorable for the new crop and it is showing rapid growth.

Prices

Detroit—No. 2 yellow, 67 1-2c; No. 3 yellow, 66c; No. 4 yellow, 64 1-2c.
Chicago—No. 2 yellow, 64 @ 64 1-2c.
New York—No. 2 yellow, 83 3-4c; No. 2 mixed, 82 3-4c.
Prices one year ago—Detroit, No. 2 yellow, 61 1-2c; No. 3 yellow, 60 1-2c; No. 4 yellow, 57 1-2c.

OATS

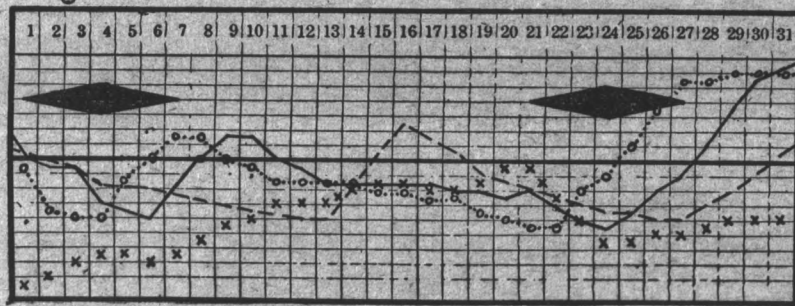
July 3—Oats are firmer along with other grains. At the end of week before last prices on the Detroit market were up 2 cents but since that time there has been a decline of 1-2 cent. Demand is fair with the exception of shipping.

Prices

Detroit—No. 2 white, 41 1-2c; No. 3 white, 39 1-2c; No. 4 white, 35 1-2 @ 37 1-2c.
Chicago—No. 2 white, 39 @ 39 1-2c; No. 3 white, 37 1-2 @ 38 1-2c.
New York—No. 2 white, 47 1-2 @ 48c.
Prices one year ago—Detroit, No. 2 white, 39 1-2c; No. 3 white, 38c; No. 4 white, 35c.

THE WEATHER FOR NEXT WEEK

As Forecasted by W. T. Foster for The Michigan Business Farmer
FOSTER'S WEATHER CHART FOR JULY 1922



Straight, heavy horizontal line is for normal temperatures; crooked lines, temperature forecasts; where they go above normal line means warmer, below means cooler; diamonds are for severe storms and rain increase; solid, crooked line for all north of latitude 36 between meridian 90 and Rockies crest; broken line for south of 36, between meridian 90 and Rockies crest, also Louisiana and Mississippi; X line, east of meridian 90, north of 36; dash line, north of 36 and west of Rockies crest.

WASHINGTON, D. C., July 6.—Within three years a destructive drought will strike a large section of North America and more than one important crop will fail for that section. At least the seed and labor of planting and sowing can be saved and other crops take the place of those that must fail on account of that great drought. I am not making errors about these future great droughts and those who keep their eyes open about these great and important weather events will profit thereby. I can take the horse to water but I cannot make him drink; some will profit by, others miss this opportunity.

The winter drought in South America is expected to show bad results during July. These results in Brazil, Uruguay, Bolivia and Argentina are expected to be similar to the effects of a winter drought on our American wheat. Their July drought matches a January drought in America. The foliage of the plant may be fair and the yield of wheat low. Cropweather in Australia and South America are now similar, except in the latter a drought and the former a shortage of moisture.

I am expecting better cotton cropweather for July; equally as good for Canadian crops, except on the northern parts of the Pacific slope; fair cropweather for American spring wheat; fair for corn east of meridian 90; not so good for corn west of meridian 90 and north of latitude 36.

Northeast—Quiet weather; temperatures a little below normal; no great extremes of temperatures; fair corn weather.

Sowing of winter grain is nearing; study the problem carefully. Not so much risk of seed waste and work is now probable. A great drought is before a large section of North America and should be prepared for. A series of great droughts have started and will be hitting some large section of the world all the time. North America's time is coming. It would not be good policy for me to publish the time and place now.

RYE

July 3—Rye followed the trend of other grains rather closely during the past two weeks and the market at Detroit closed firm last Saturday while at Chicago it was quiet. All markets report business very light.

Prices

Detroit—Cash No. 2, 88 1-2c.
Price one year ago—Detroit, No. 2, \$1.22.

BEANS

July 3—A slump took place in the Detroit bean market during the past fortnight and at the close of last week the price was off 65c. The Chicago market for navy beans took the opposite trend and while the price at Detroit declined advances were made at Chicago.

Prices

Detroit—C. H. P., \$9.00 per cwt.
Chicago—C. H. P., \$10.50 @ \$11.15 per cwt., red kidney, according to quality, up to \$8.00.
Price one year ago—\$3.45 per cwt.

POTATOES

July 3—If you have followed the potato market through the columns of the Business Farmer you will note that we predicted that prices for old stock would make a swing upward by the close of the season. Also if you have watched this market closely you know that M. B. F. had it "doped" out right. Since this jump the market has been quiet for this kind of stock and receipts show old potatoes about all gone. New potatoes are coming to market in good quantity and the tone of the market is easy with lower prices in prospect.

Prices

Detroit—Old stock, \$2.83 per cwt., sacked.
Chicago—Old stock, \$1.85 per cwt., sacked.
Price one year ago—Detroit, 92c per cwt., sacked.

HAY

July 3—Prices in the hay market took a downward trend during the past couple of weeks. The Chicago market has received only small quantities but prices have declined \$1 on that market. At the close of last week there was a firm tone prevailing. At Detroit prices have dropped \$1.50 and \$2 since our last issue. Receipts are plentiful at Detroit and the market is easy.

Prices

Detroit—Standard timothy, \$19 @ 20; No. 2 timothy, \$18 @ 19; light mixed, \$19 @ 20; No. 1 clover, \$15 @ 16.
Chicago—No. 2 timothy and No. 1 light clover mixed, \$18 @ 20; No. 1 clover, \$12 @ 16.
Prices one year ago—Detroit, standard timothy, \$18 @ 19; No. 2 timothy, \$16 @ 18; light mixed, \$18 @ 19; No. 1 clover, \$13 @ 14.

CHICAGO LIVE STOCK MARKET

Steers of better quality and finish sold on active higher markets last week. Some of them showed a 25c to 40c improvement and some sold just under the top show more gain. Steers above \$8.50 were generally higher, while below that price some sales looked 25c lower and it was hard to get rid of low grades.

Receipts last week were 16,000 larger than came in the corresponding week last year. The daily runs included a good many long-fed loads of mature steers, including comparatively large numbers selling from \$9.75 to \$10.00 and often many loads at the latter price.

Eastern beef markets held firm and showed a little strength last week. Eastern order buyers were strong contenders for the better loads daily. They paid the top price for mature steers Thursday. Packers were buying freely for their eastern connections and using some good to choice steers and yearlings locally. Exporters shipped out around 800 cattle last week.

Increased offerings of hogs last

week swelled the week's total to the largest supply in over four months, being 18,700 more than a year ago, 20,500 more than two years ago and 55,400 larger than the 11-year average. Last week's receipts at approximately 179,400 stand larger than any corresponding supply in over 11 years.

The largest week's supply of hogs to shippers since early in March was weighed to outsiders during last week, with the total shipments at 37,300, being 10,500 larger than a year ago.

Average weight of hogs last week, estimated at 240 pounds, equaled the heaviest week last month, being 5 pounds heavier than a year ago, 1 pound heavier than two years ago and 3 pounds heavier than the 11-year average.

Active outside competition on the local trade forced light weight hogs back to a level with the highest point since second week of March, when best reached \$11.50. Top last week at \$11.00, stands \$1.60 above a year ago and within \$1.05 of the 11-year average. During the past 11 years corresponding top prices range from \$6.90 in 1911 to \$22.25 in 1919.

Lack of local demand on several sessions forced the large offerings of common and in-between grades to lower levels, with the week's general average cost of hogs at \$10.25 showing a decline of 10c as compared with previous week. Last week's average stands \$1.60 above a year ago and \$1.02 lower than the 11-year average. While top hogs equal the highest level in several months, average cost stands lowest since first week of May. A general widening of the price range resulted from the neglecting of common and weighty classes, which sold sharply lower at the close.

Receipts of sheep last week at 62,300 stand smallest since early in May, being 3,500 smaller than a year ago and 31,900 smaller than corresponding period two years ago. Arrivals of sheep and lambs at Chicago last month totaling 302,818, stand 26,923 smaller than receipts in May.

Sheep values showed little or no change during the forepart of the week; however, country competition after mid-week forced a wide "spread" in prices, more especially on the weighty and medium classes, which sold far apart.

Recently, when breeding demand lacked, good to best 150@190-lb. ewes sold practically at the same money, unless in extra fancy killing flesh. However, at present, with country competition active on all classes carrying desirable breeding quality, prices advanced in many cases 50c to \$1.00 over low time week before last. Packers refused to follow the full strength of the market, resulting in an unevenness of the trade. Weighty ewes at the close were secured at \$3.50@4.00 for local slaughter.

MISCELLANEOUS PRICES QUOTATIONS

Detroit, July 3

Apples—New, \$3.25@3.50 per bushel.
Berries—Strawberries, \$5.75@6 per 24-qt. case; black raspberries, \$5@5.50 per 24-qt. case. Red raspberries, \$10@11 per 24-qt. case; huckleberries, \$4 per 16-qt. case.
Butter—No. 1 creamery, in tubs, 34@34 1-2 per lb.
Celery—Jumbo, 40@50c; Michigan, 25@30c per doz.
Cherries—Michigan, \$3.75@4 per 24-qt. case.
Currants—Common, \$4; cherry, \$4.50 per 24-qt. case.
Dressed calves—Light, 14@15c; heavy, 10@11c per lb.
Eggs—Fresh, current receipts, 22 1-2@23 1-2c; candied and graded, 23@24c per doz.
Honey—Comb, 20@22c per lb.
Live poultry—Broilers, 2 lbs. and up, 43c; Leghorns, 30@32c; large and medium hens, 24@25c; small hens, 21c; roosters, 15c; ducks, 22@23c; geese, 13c; turkeys, 30c per lb.
Popcorn—Little Buster, 7 1-2@8c; Globe, 4 1-2@5c per lb.

WEEKLY MARKETGRAM

U. S. Bureau of Markets and Crop Estimates

Washington, D. C.—For the week ending June 30, 1922.
LIVE STOCK AND MEATS—Chicago hog prices advanced 5 to 20 cents for the week. Beef steers 15 to 24 cents higher; butcher cows and heifers ranged from 25 cents lower to as much as 25 cents higher on the better grades. Feeder steers steady; light and medium weight veal calves 25 to 50 cents higher. Fat and feeding lambs 25 to 50 cents higher, yearlings up 35 to 50 cents; fat ewes up 75 cents to \$1 higher. On June 30

hogs closed weak with lights and butchers 10 cents lower and other grades 10 to 20 cents lower. Beef steers strong with some better grades 10 cents higher. June 30 Chicago prices: Hogs, top \$11; bulk of sales \$9.60@10.90; medium and good beef steers \$8@9.60; butcher cows and heifers, \$7@8.60; feeder steers, \$5.65@7.75; light and medium veal calves, \$7.25@9; fat lambs \$12.25@13.50; feeding lambs, \$11@12; yearlings, \$8.75@11.75; fat ewes, \$4@7.50. Stocker and feeder shipments from 12 important markets during the week ending June 23 were: Cattle and calves, 53,365; hogs, 7,829; sheep, 22,149. Most classes and grades of fresh meats at eastern markets showed advances for the week. Beef 25 cents to \$1 higher, veal firm to \$1 higher, lamb and mutton \$1@2 higher. Pork loins ranged from firm to as much as \$2 higher. On June 30 practically all classes and grades of fresh meat were steady with Thursdays average. Pork loins ranged from steady to \$1 lower. June 30 prices good grade meats: Beef, \$14@15.50; veal, \$12@15; lamb, \$18@26; mutton, \$14@16; light pork loins, \$18@22; heavy loins, \$13@15.

HAY—Nearness of new hay depressing market generally. Light receipts holding prices firm in few markets. Demand very light. Poor grades almost unsalable. New clover meeting slow demand. Quoted June 30—No. 1 timothy, Boston and New York, \$30, Philadelphia, \$22.50; Minneapolis, \$19; No. 1 Alfalfa, Memphis, \$19. No. 1 prairie Minneapolis, \$17.50.

FEED—The wheat feed markets continued dull and inactive with pressure to sell especially from mills in northwest. Standard middlings holding fairly firm in eastern markets. Gluten feed quoted lower by larger manufacturers practically no trading in other feed. Quoted June 30: Spring wheat bran Philadelphia, \$22.25; standard middlings blank. Linseed meal, New York, \$53.

DAIRY PRODUCTS—Butter markets firm most of week as result of unexpected export demand and continued buying for storage. Tone weak at close as prices became too heavy. Price tendency downward. Closing prices, 92 score butter: New York, 38c; Chicago, 36c; Philadelphia, 38c; Boston, 38c; Cheese markets firm; considerable activity to trading. Demand includes purchases for storage which are being bought with confidence at present prices. Cheese prices at Wisconsin primary markets June 28: Twins, 18 1-4c; Daisies, 18 1-2c; Double Daisies, 18 1-4c; Young Americas, 18 1-2c; Longhorns, 19 1-4c; Square Prints, 19 1-4c.

FRUITS AND VEGETABLES—Georgia and Florida Tom Watson watermelons advanced \$5@100 bulk per car in most eastern markets and Chicago during the week supplies decreasing in several cities. Georgia stock down \$10@35 f. o. b. shipping points. California cantaloupes, 45's, up 25 cents to 50 cents in Atlantic seaboard markets. Down 75 cents in Chicago, down 60 cents f. o. b. cash track. Brawley, Georgia pink meats flats up 40 cents in New York, weaker in other consuming centers. Potatoes weaker. North Carolina Irish cobbles 25 cents to 50 cents lower in terminal markets. Virginia cobbles down 25 cents to 75 cents per bbl. most cities, under heavy receipts; down 75 cents f. o. b. at Onley, Virginia. Mississippi tomatoes flats down 25 cents to 50 cents most markets; Texas stock up 10 cents to 25 cents in consuming centers; down 20 cents f. o. b. east Texas points. Tennessee fours generally weaker. Georgia peaches, Hileys and carmans, sixes, down 75 cents to \$1.25 in leading markets. Georgia shipping points slow and steady; Carolinas Greenboros down 50 cents most cities. Southeastern watermelons \$35@45 bulk per car in New York city on June 30th, \$35@575 in Chicago; Georgia stock \$40@175 f. o. b. Thomasville section. California cantaloupes salmon tints standards 45's mostly \$3.25@3.75 in eastern markets; \$3 in Chicago, 80 cents to \$1 f. o. b. California points. Georgia flats pink meats 75c to 90 cents in New York. North Carolina potatoes cobbles generally \$3.25@3.75 per barrel Cincinnati, \$5@5.25. Virginia eastern shore cobbles, \$4.25@4.75 in most cities, \$3.75 in Philadelphia, \$3.25@3.50 f. o. b. Onley, Virginia. South central Bliss triumphs sacked 100 pounds \$2.50@2.75 Chicago. Mississippi tomatoes fours ordinary quality, mostly 40 cents to 75 cents. Texas stock 75 cents to \$1. in New York and Chicago. Tennessee flats mostly 50 cents to 75 cents. Georgia peaches, Hileys, sixes, \$3@4. New York and Boston, \$2@2.50 other markets.

CANDLE EGGS TO MAKE SURE THEY ARE FRESH

Do you know how to tell the quality of an egg without breaking the shell? All you need is a paste-board box with a hole 1 1-4 inches in diameter, a strong light such as is furnished by a lamp or an electric-light bulb, a dark room, and the egg. When the egg is held close against the hole the strong light renders its contents visible and its quality is indicated by the appearance of the yolk, the white and the air space at the blunt end. By comparing the egg with charts furnished by the United States Department of Agriculture in Department Bulletin 51, it is possible to learn the exact condition of an egg before it is broken. This bulletin may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 40 cents.

Cynical Chap

Caller—How much for a marriage license?
Clerk—Two dollars.
Caller—I've only got one.
Clerk—You're lucky.—Boston Transcript.



Drive Out Disease

Your flocks and herds represent a cash investment. Good sense suggests that you keep them in living-quarters where they are not exposed to their ever-ready enemies—contagious disease, lice and mites.

CARBOLA
The Disinfecting White Paint

makes the job of whitewashing and disinfecting a matter of one operation—turns a mean job into easy, rainy-day work. It increases the light more than whitewash and helps make buildings clean and sanitary—a condition necessary if poultry and livestock are to be free from the losses and troubles caused by lice, mites and contagious diseases.

Use it Instead of Whitewash and Disinfectants

Carbola comes in powder form with a disinfectant already combined. It is ready to use as soon as mixed with water and can be applied either with a brush or sprayer to wood, brick, stone, cement or over whitewash. Carbola doesn't blister, flake nor peel off. It doesn't clog the sprayer and it dries out clear white. Carbola can be kept in powder form or mixed and left standing in pail without spoiling. One gallon covers 200 square feet.

And don't forget that the dry powder is unexcelled as a louse powder and costs less than most brands. Use it on poultry, cattle, horses, hogs, etc., just as other louse powders are used. Carbola is harmless to the smallest chick or to stock that licks a painted surface.

Your hardware, seed, drug or paint dealer has Carbola or can get it. If not, order direct. Prompt shipment by post or express.

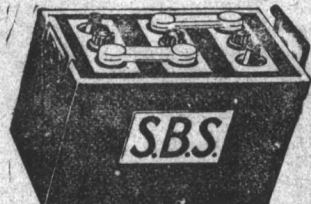
10 lbs. (10 gals.) \$1.25 and postage 200 lb. bags \$18.00 20 lbs. (20 gals.) \$2.50 delivered 50 lbs. (50 gals.) \$5.00 delivered Trial package and interesting booklet 30c postpaid

Add 25% for Texas and Rocky Mountain States

CARBOLA CHEMICAL CO., Inc., 299 Ely Ave., Dept. X Long Island City, New York

Need a New Storage Battery?

In payment of an account we have accepted a number of brand new, excellent Storage Batteries, made by a well known Detroit concern, who guarantee them for one year. We offer these, as long as they last, for just one-third off the factory price.



6 VOLT STORAGE BATTERIES, Regular Price, \$15

\$10 f. o. b. Detroit

12 VOLT STORAGE BATTERIES, Regular Price, \$18

\$12 f. o. b. Detroit

At these astounding prices we will have no batteries left in a week's time, so if you need a storage battery, if your old one is wearing out, SEND CHECK, MONEY ORDER OR REGISTERED LETTER TODAY. JUST GIVE US THE NAME AND MODEL OF YOUR AUTOMOBILE, and the battery will be shipped by express immediately. If not available your money will come back by the next mail.

This is a great offer for readers of The Michigan Business Farmer, and we hope you will avail yourselves of the opportunity.

Make your remittance payable to and address

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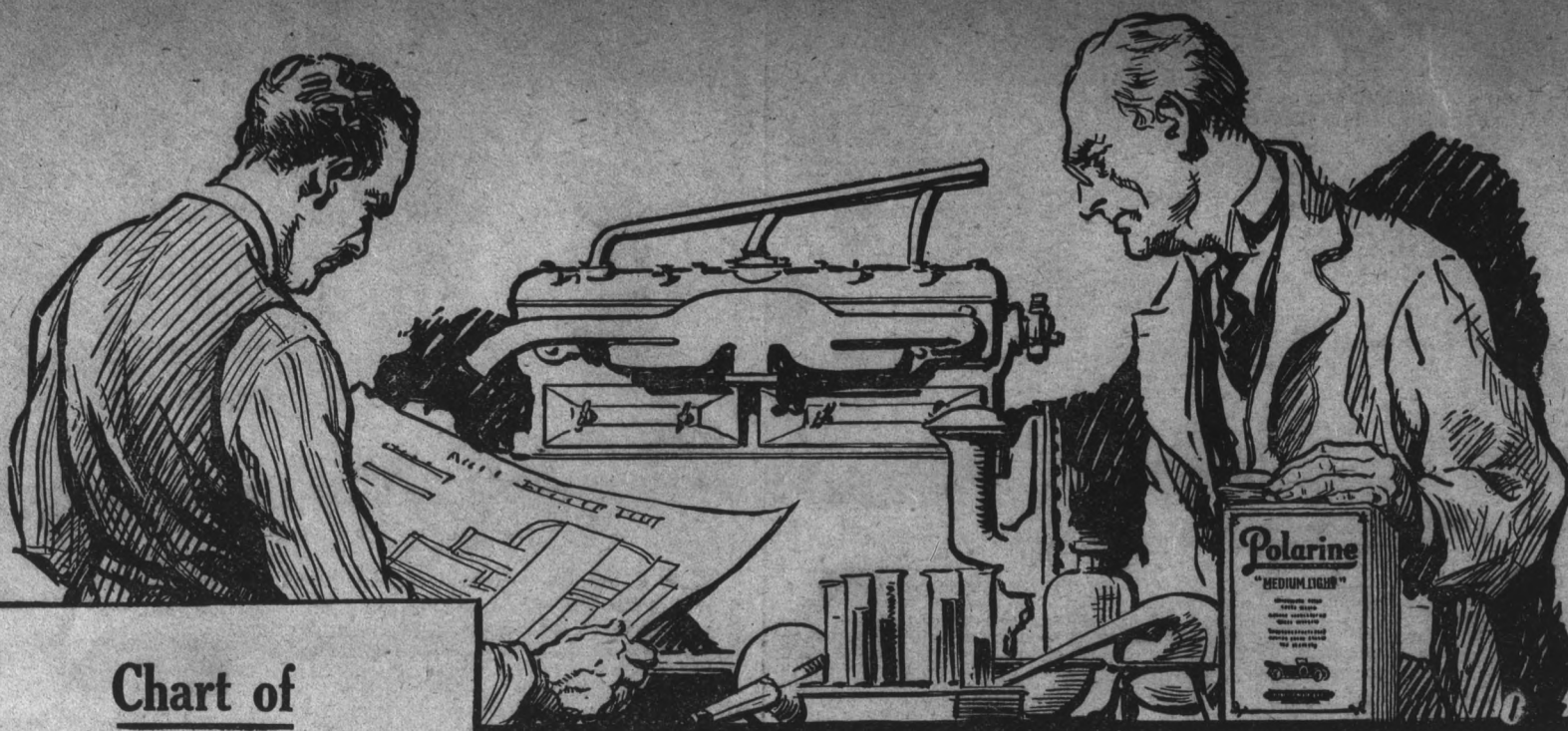


Chart of Recommendations

Name of Car	Motor Oil	Name of Car	Motor Oil
Ace.....	M. H.	Locomobile.....	M. L.
Allen.....	M. H.	Lozier.....	M. H.
Ambassador.....	H.	Maibohm.....	M. H.
American Six.....	M. H.	Marion Handley.....	M. H.
Anderson.....	M. L.	(Cont. Motor).....	M. H.
Apperson Road pl.....	H.	(Knight Motor).....	H.
Auburn.....	M. L.	Marmion 34.....	H.
Austin H. King.....	M. H.	Martin Wasp.....	M. L.
Bay State.....	M. L.	Maxwell.....	M. L.
Beggs.....	M. L.	Merced.....	H.
Biddle.....	M. L.	McFarlan Six.....	M. H.
Birch.....	M. H.	Mitchell.....	M. H.
Bradley.....	M. L.	Moline Knight.....	H.
Brewster.....	M. L.	Monitor.....	M. L.
Briscoe.....	M. H.	Monroe.....	H.
Brook.....	M. H.	Moon.....	M. L.
Buick.....	M. H.	Moore.....	M. L.
Bush.....	M. H.	Nash.....	M. H.
Cadillac.....	M. H.	National.....	M. H.
Case.....	M. L.	Nelson.....	M. H.
Chalmers.....	M. H.	Nelson & Le Moon.....	M. H.
Chandler.....	M. H.	Northway.....	M. H.
Chevrolet.....	M. L.	Oakland.....	M. H.
Classio.....	M. H.	Oldsmobile 6.....	M. H.
Cleveland.....	M. H.	Oldsmobile 8.....	M. H.
Cole 8.....	M. H.	Olympian.....	M. H.
Colonial.....	M. H.	Overland.....	M. L.
Columbia.....	M. H.	Owen Magnetic.....	M. H.
Comet.....	M. L.	Packard.....	M. H.
Commonwealth.....	M. L.	Paige.....	M. H.
Crawford.....	M. L.	Pan-American.....	M. H.
Crow-Elkhart.....	M. H.	Parenti.....	M. H.
Cunningham.....	M. H.	Patterson.....	M. H.
Daniels.....	M. H.	Peerless.....	M. H.
Davis.....	M. L.	Piedmont.....	M. L.
Dispatch.....	M. L.	Pierce-Arrow.....	M. H.
Dixie Flyer.....	M. H.	Pilot.....	M. H.
Dodge.....	M. H.	Premier.....	H.
Dorris.....	M. H.	Preston.....	M. H.
Dort.....	M. L.	Regal.....	M. L.
Durant.....	M. H.	Reo.....	M. H.
Dusenberg.....	H.	Revere.....	H.
Earl.....	M. H.	Richlieu.....	H.
Economy.....	M. L.	Rickenbacker.....	M. H.
Elcar.....	M. H.	Roamer.....	H.
Elgin.....	M. H.	(Cont. Motor).....	M. H.
Essex.....	M. H.	(Dusenberg Motor).....	H.
Ferris.....	M. L.	Rolls Royce.....	M. H.
F. I. A. T.....	H.	R. & V. Knight.....	H.
Ford.....	M. L.	Saxon.....	M. H.
Fox.....	H.	Sayers.....	M. L.
Franklin.....	M. H.	Scripps Booth.....	M. H.
Gardner.....	M. L.	Sheridan.....	M. H.
Glide.....	M. H.	Simplex.....	H.
Grant.....	M. H.	Singer.....	H.
Gray.....	M. H.	Spacke.....	E. H.
Hackett.....	M. H.	Sperling.....	M. H.
Hal Twelve.....	M. H.	Standard.....	M. H.
Halladay.....	M. H.	Stanwood.....	M. L.
Handley-Knight.....	H.	Stearns Knight.....	H.
Hanson.....	M. H.	Stephens Six.....	M. H.
Harroun.....	M. H.	Stevens.....	M. H.
Hatfield.....	M. H.	Stevens Duryea.....	M. H.
Haynes.....	M. H.	Sterling Knight.....	H.
Haynes 75.....	H.	Studebaker.....	M. L.
H. C. S.....	M. H.	Stutz.....	H.
Holmes.....	H.	Sun.....	H.
Hudson.....	M. H.	Templar.....	H.
Huffman.....	M. L.	Vellie.....	M. H.
Hupmobile.....	M. H.	Westcott.....	M. L.
Jackson.....	M. H.	White.....	M. H.
Jaquet.....	H.	Wills St. Claire.....	H.
Jordan.....	M. L.	Willys-Knight.....	H.
Kelsey.....	M. L.	Winther.....	M. H.
King.....	H.	Winton Six.....	M. H.
Kissel Kar.....	M. H.		
Kline Kar.....	M. L.		
Lafayette.....	M. H.		
Leach.....	M. L.		
Lexington.....	M. H.		
Lincoln.....	M. H.		
Liberty.....	M. L.		

N. B. For recommendation of grades to use in tractors, consult chart in any Standard Oil Co. (Indiana) station

Blue Prints Plus Chemical Formulae

IN the chart to the left the correct grade of Polarine for your car is indicated. This recommendation has been made because the oil has stood practical tests in the engine itself as well as the rigid, scientific tests in the finest petroleum chemical laboratory in the world. In working out the specifications for manufacturing Polarine, petroleum chemists and automotive engineers have co-operated. Blue prints and chemical formulae have worked side by side.

When you fail to avail yourself of this scientific lubrication, you are experimenting at the expense of your car. You are risking "scored" cylinders, "burned" bearings in the crank shaft or elsewhere, and other costly disasters.

Your engine is adjusted throughout with infinite care. It calls for a certain grade of lubricating oil. Which oil this is to be depends upon piston clearance, method of cooling, lubricating system, and other mechanical factors used by the designer of the car. The carefully trained lubricating engineers of the Standard Oil Company (Indiana) recommend

Polarine

THE PERFECT MOTOR OIL

Made in Four Grades

Seals Pistons Against Loss of Power

Each is of correct consistency to form a perfect seal between the piston and the cylinder, leaving no dry spots. It has sufficient body to prevent its being sucked into the compression chamber during the intake stroke, thus avoiding overheating, knocking and carbon.

The trained chemists working day by day in the Standard Oil Company (Indiana) laboratories exercise infinite care and minute accuracy to make sure that the lubricating oil indicated for each kind of car is scientifically correct.

Consult the Chart on the left.

Standard Oil Company

(Indiana)

910 So. Michigan Ave.

Chicago, Ill.