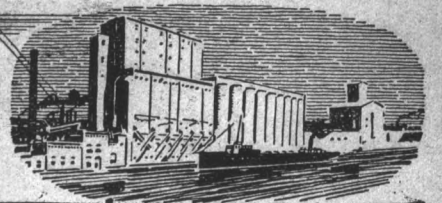


The Michigan BUSINESS FARMER



An Independent
Farmer's Weekly Owned and
Edited in Michigan



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MT. CLEMENS, SATURDAY, JUNE 26, 1920

\$1 PER YEAR

The World's Market at Michigan's Door!

A Glimpse at What the Proposed Great Lakes to Ocean Route Will Mean to the Business Farmers of Michigan

IF PLANS which are being rushed to completion are not blocked by selfish and short-sighted easterners, the beginning of a project which is destined to link the Great Lakes with the Atlantic ocean will soon be under way.

Who has not wondered as he stood on the deck of the great ships which plow our great fresh-water inland seas, why it was that he was cut off from the seas by only a narrow stretch of rapids, or the limitations of a Welland canal?

Why should the farm and factory products of the great central west be loaded aboard freight cars in tiny quantities, carried miles over mountains and through valleys, unloaded at New York, Philadelphia or Boston and lightered to ocean going ships, most of which are smaller than the great barges which carry the freight of the great lakes?

Compared with the advantages of the Panama canal to the people of the United States, this link in our transportation system should have been built first; had it been, the great war might have ended many months before it did.

Advantages to Michigan

We hope we are no more than humanly selfish, but we cannot help but point out to the farmers of Michigan and the states which have ports on the Great Lakes, the tremendous advantages which will accrue from this saving in carrying charges. From Liverpool to Hong Kong the ports of the world will be at Michigan's door, at least for nine months out of every year, and wheat, beans, potatoes or apples loaded at South Haven, Bay City

AT DETROIT, July 22d, 23rd and 24th. will be held the Great Lakes-St. Lawrence Tidewater Congress, at which it is hoped to bring to a head the many years of conscientious endeavor on the part of those who have been advocating a direct ocean outlet to the Atlantic.

Certain Eastern states because of their important ocean ports have begun an active opposition to this great forward step, selfishly they are taking the position of the dog-in-the-manger and seeking to stop progress.

With the railway situation as it is today the gross error of trying to force the great agricultural and manufactured products of the central west through the small end of the Atlantic port funnels has been only aggravated.

We are happy to voice, we believe, the earnest prayer of every business farmer in Michigan and the central west for the early completion of this great project.



or Detroit, can go direct without a transfer to compete with the products of every land.

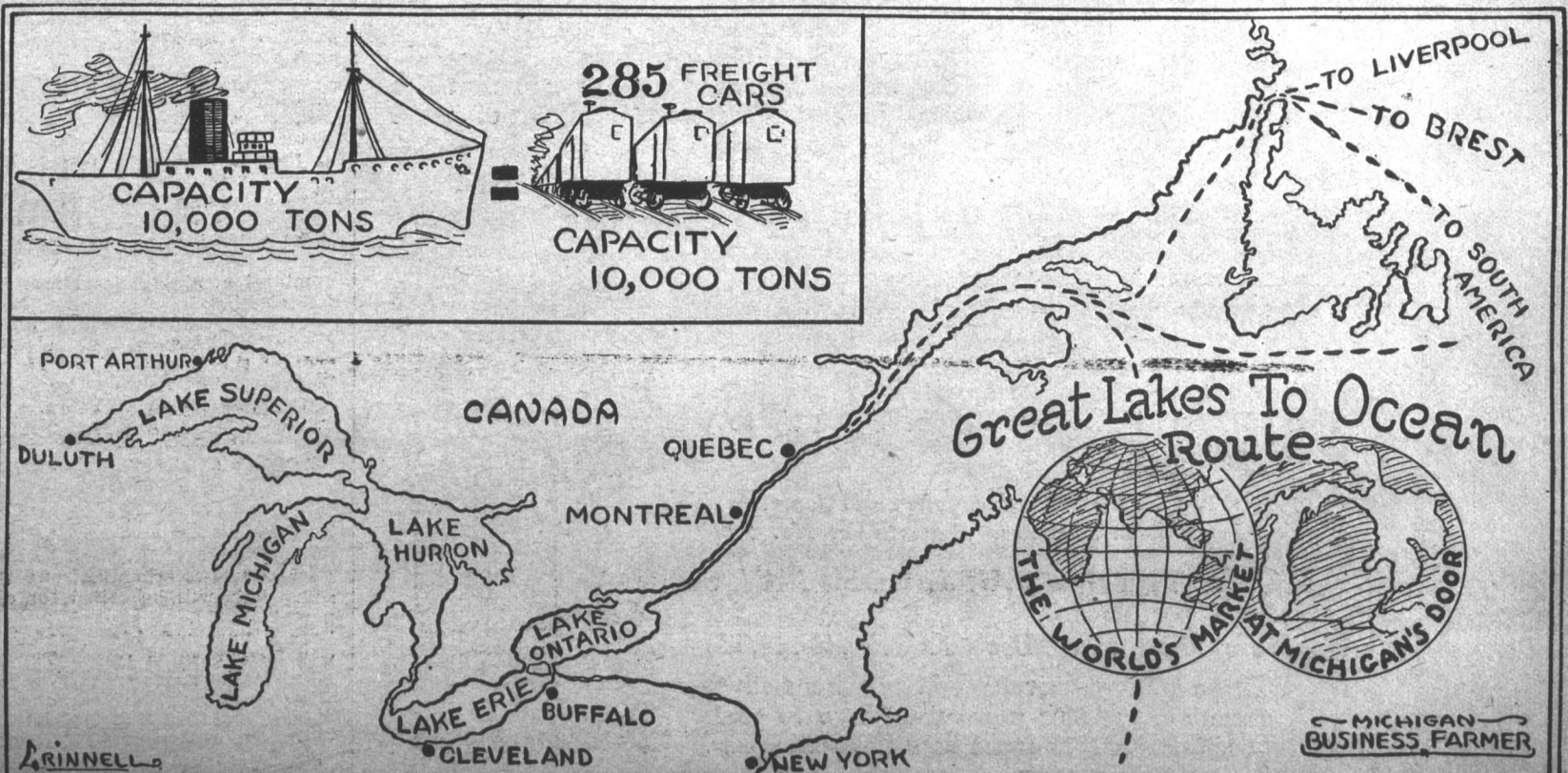
At the present time, says Hugh J. Hughes in the Review of Reviews, when a bushel of wheat starts forward on its journey to Eur-

ope its ordinary route from the plains of North Dakota or Saskatchewan is to one of the great wheat-receiving terminals on Lake Superior, and thence by boat down the Lakes to Buffalo. At Buffalo it is lifted out of the boat into an elevator, and transferred to cars that carry it to the Jersey City waterfront in New York harbor. There it is lightered to a tramp steamer bound for Liverpool.

"Now this is the all-important fact to consider: That the cost of unloading the bushel of wheat at Buffalo, plus the cost of rail haul to Jersey City, plus cost of reloading onto the ocean-going steamer, is fully one-half of the entire cost of transportation from Duluth to Liverpool. Another curious fact in this connection is that when the wheat arrives at Jersey City it is farther away from Liverpool than when it left the elevator at Buffalo! Half the incurred freight bill is spent in moving the wheat backward instead of forward to its port of destination.

"Since this cost is, in normal times, from ten to twelve cents, it follows that about five cents per bushel could be saved if we could do away with the land haul, and proceed direct on our journey by boat. And since the demand in Europe sets the price at which our wheat sells in competition with the export wheat of the rest of the world, this five cents saved would be saved to the wheat-grower.

"When wheat is selling around \$2.50 a bushel, five cents on the bushel may not appear as a matter of importance; but there have been times, and they may readily come again, when this margin of five cents net would determine (Continued on page 11)



CURRENT AGRICULTURAL NEWS OF THE WORLD

STATE DAIRYMEN'S PICNIC

July 13th and 14th are the dates chosen for a State Dairymen's picnic at Ottawa Beach and Jenison Park, a short distance from Holland on the shores of Lake Michigan and Black Lake, under the auspices of the Michigan Allied Dairy Association, an organization embracing all phases of production, manufacture and distribution of milk and milk products in Michigan. The dates are especially timed to suit best the season and also when dairymen and others engaged in the dairy industry in Michigan will be the least busy.

It is planned to make this a two-day vacation affair and elaborate preparations are in progress designed for the amusement, comfort and instruction of those attending. Unique contests between the several units of the organization will be staged. Plans are also in progress to obtain the presence of several prominent speakers for both days among whom will be Mr. N. P. Hull, of Lansing, President of the Michigan Milk Producers' Association and Mr. Milo D. Campbell, of Coldwater, President of the National Milk Producers' Association, and a candidate for governor on Republican ticket.

The picnic will be unique in that it embraces both producers and manufacturers of dairy products. Michigan is fast developing into one of the foremost diversified dairy states

of the Union. Practically every known variety of dairy products are now manufactured within her borders, and the industry is fast forging ahead as a state known for its numerous herds of pure bred animals. The industry is regarded as the backbone of Michigan agriculture and already from the standpoint of dollars and cents is exceeded only by a few other farm products in value, and one purpose of the Association under whose auspices the picnic is to be held, is to make it second to none through the principle of co-operative effort between everybody interested in the dairy industry, and which from the standpoint of the essential food elements in the products of the cow, would include everybody.

MULE MARKET STAPLE

Compact, blocky mules of good proportions, with good life and quality, are selling quickly and profitably, no matter what their size. The top prices go for mules standing 15.3 hands and weighing 1,200 to 1,250 pounds. The market for them is as staple as for wheat and corn.

Farmer producers are selling ordinary mule colts at weaning time at prices ranging from \$65 to \$125, before incurring any appreciable expense for feed. At three years, the mule standing 15.3 hands, weighing 1,250 pounds, easily brings from two to three hundred dollars, and at five, a big sugar mule commands five

hundred dollars or sometimes more.

Nor does there seem to be any risk to raising them. Mule colts are hardy and are not subject to blindness, sidebones, or other unsoundnesses common to horses. They are also capable of self protection from the time they stand on four legs until they retire from active service via burial.

D. E. Van Pelt, a farmer near Glenwood, Iowa, makes good use of their marketability. He says: "I take advantage of the fact that the heaviest demand for mules comes at a time when I can spare them. I buy eight big mining mules in winter, out of season, for about \$450 a pair, to do my spring work. When the busy season is over, I sell them at \$500 to \$550 a pair. Then a little before I sell these mine mules, I buy eight big mare mules for the sugar trade. I buy them thin at about \$450 or \$475. About January first, I sell them. Last spring (1919) I bought two pair at \$500 and \$550 and sold them in January (1920) for a total of \$1,700. They did summer and fall work and made me a profit of \$550 besides."

Your paper is a good one, fearless and progressive when the farmers buy or build their milk canning and distributing factory and also the beet sugar factory they will be making a great jump in progress.—Albert Spencer, Alcona County.

FRENCH DRAINAGE IN MICHIGAN By WHITNEY PALMER

A novel test of vertical drainage was tried last October on the farm of Henry Palmer, Manchester, Mich. There was an oval pond in one of his fields which could not be drained by ditching because the slope of the land offered no outlet. We decided to try an experiment we had read about in one of the farm papers.

The bottom of the pond was silt underlaid with hardpan and blue clay. Beneath the clay was gravel.

With an 8 ft. earth auger, we put down a bore hole eight feet deep at the point where the water was deepest, and two holes at each end five feet deep. It was the aim to get the eight foot hole down to within about three inches of the bottom of the layer of clay, or in other words to within three inches of the pervious gravel stratum. This was accomplished by making a test boring, noting the character of the soil on the auger spirals.

In each of the three holes five pounds of 40 per cent ammonia dynamite were loaded. The three charges were connected together in series and fired simultaneously with a blasting machine. No tamping of the charges was necessary as the water filled the bore holes.

The sink holes made by the blasts have been carefully watched to see whether they would keep the pond clear of water. With the exception of the time that frost prevented the water from percolating to the holes the result has been a complete success.

The job cost all told \$9 and was done in three hours time.

If the holes clog we shall blast them out again and fill them with gravel, cinders or some coarse material than cannot run together.

CLINTON COUNTY FARMERS SUPPORT CAMPBELL

Enclosed please find copy of resolutions adopted by Bath Union Farmers' Club—H. B. P., Clinton County.

"Whereas, Milo D. Campbell who is actually engaged in agriculture and has declared himself a candidate for governor and having been endorsed by the Michigan State Grange; the Ancient Order of Gleaners and the State Association of Farmers' Clubs, is our choice for governor.

"Be it resolved that in the present period of under production and industrial unrest, that business, agriculture, labor and all classes of good citizens should be represented by a man who is not for class legislation alone but who is willing to give all interests an equal showing and believing Milo D. Campbell is such a man.

Be it further resolved that as Milo D. Campbell has pledged himself to look after all these various interests of our great state and that he is a brother farmer with us and having all other interests equally at heart we believe he would execute his promises if elected and that we should give him our best support at the primaries and if he receives the nomination, also support him at the fall election.

"Resolved that a copy of these resolutions be spread upon the records of this organization and a copy be printed in one of our local papers. Roscoe J. Carl, John Yourry, Howard B. Pierce.

MACOMB COUNTY CONSIGNMENT SALE OF HOLSTEINS

The first consignment sale ever held in Macomb county will take place June 30th at the Fairchild Farms at Chesterfield. At one o'clock sharp bids will be called for on the first Holstein. Sixty-one more registered purebred Black and Whites will be offered in turn. There will be three auctioneers, Col. R. E. Haeger, Harry Robinson and B. V. Kelley, while R. Austin Backus will preside in the box.

The Fairchild Farms are located on the Gratiot Road, 25 miles from Detroit.

Silo Prices Smashed

**Startling Reductions in Saginaw Redwood Silo
Prices Made Possible by Purchase of Redwood
from Government—Saves \$100 to \$300 per Silo**

This is without question the biggest silo offer we have ever been able to make. This Redwood was purchased by the Government for war purposes. It was not used and due to our big purchasing power we were able to buy the whole lot at an astonishingly low price—much lower than present market prices. We are passing these savings along to you.

75 Ton Silo Only \$377

Think of it, a 73 ton Saginaw Redwood Silo for \$377.00. It is almost unbelievable.

And the same reductions apply on all sizes. It's your chance

It's Beautiful Redwood

We have bought millions of feet of Redwood and never have we seen any finer silo stock—clean, clear staves that will make beautiful, lasting silos. You know that Redwood is nature's own silo material.

Every Silo a Saginaw

Every one of these silos is a bona-fide Saginaw—the same type of silo that has made good for years on thousands of farms all over the country.

This Offer Appears Only Once

Once this announcement is made, these silos are going like hot cakes and these prices hold good only so long as our supply of this wonderful Redwood lasts. If you are lucky enough to get one of these silos you must act quickly.

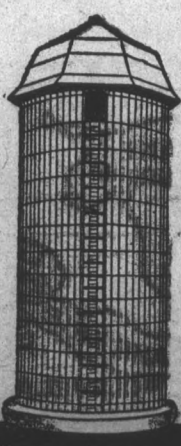
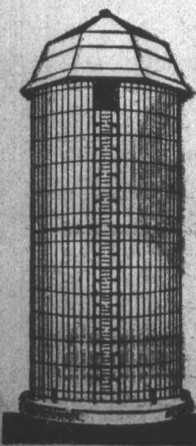
You will never have an opportunity like this again. This offer will be made only once. It's up to you to act immediately.

Write Us Now For Particulars and Complete Price List. Address Department No. 12

Saginaw, Mich. THE McCLURE COMPANY, Cobscook, Ill.

No More Than Two Silos to Each Bona-fide User

These silos positively will not be sold to speculators. Not more than two to each purchaser and he must be a bona-fide user.





DETROIT IN 1820

—Courtesy Detroit Journal.

Detroit Fourth Largest City in United States

Michigan's Metropolis Shows Largest Growth Numerically of any City Except New York; Passes

Boston, St. Louis, Cleveland, Pittsburg, Baltimore in Ten Years. Important to Farmers of Michigan

THAT DETROIT'S slogan, "A Million by 1920," which the city adopted 10 years ago, came near being realized was made known June 18th when the census board at Washington sent out a public statement giving the population of several of the largest cities in the United States. The population of the Michigan metropolis was given at 993,739 which means an advance of 113.4 per cent during the past 10 years as Detroit's population in 1910 was 465,766. This rate of increase has had only one equal in census records. Chicago being the only city to show nearly as rapid an advance. The Illinois city went from 503,000 in 1880 to 1,099,350 in 1890. Its percentage was 118.5, just a shade above the one now made by Detroit.

The statement by the census board places the "Auto City" as fourth largest city in the United States, and, according to the latest available census figures and authoritative estimates of foreign countries, seventeenth largest city in the world. In winning these two honors Detroit distinguished herself by being the only city of 100,000 or over that has more than doubled in population during the last 10 years.

In the last 20 years, or since the beginning of the twentieth century, Detroit has quadrupled in population," says the *Detroit News*. And the *News* goes on to describe the history of Michigan's metropolis as follows:

"From a hinterland trading post in the early days of the eighteenth century (Detroit was founded by Cadillac in 1701,) the city has grown to be one of the half dozen leading cities of the United States in point of population, as well as the chief industrial and manufacturing community in the North American continent.

"There were 600 souls in Detroit in the first year of its foundation, including Indians. There were no white women. This population was not maintained, however, and in fact was not equalled until 150 years later. Montreal opposed Detroit's growth by all the means within its power, fearing that the new Northwest trading post would become an important rival.

"The year 1796 found the city with 500 people. About this time there was an emigration to Amherstburg, the Canadian city opposite the excursion island, Bob-lo, which reduced the city's scanty population. In 1805 the city was practically wiped out by fire. It had 600 people at the time. In 1805 Gov. Hull and Judge Woodward went to Washington to foster a bill authorizing the rulers of the territory to lay out in lots the

new town and 10,000 acres of land on the north.

Just a Few Squares

"In 1810 Detroit's population numbered 770. In 1812 when Detroit had 800 men, women and children within its confines, the city extended along the river front between what is now Brush and Wayne streets.

"There were 900 in the city in 1817. In 1818 the Walk-in-the-Water, the first steamer to ply the Detroit River, opened up a new era of transportation.

"The growth of the city was

steady, the figures being, 1,110 for 1819; 1,412 for 1820; 1,517 for 1828, and 2,222 for 1830. Between the years 1824 and 1826 the area of the city was enlarged by the addition thereto of the military reserve. The opening of the Erie Canal in 1825 served to enhance the city's numbers. About a third of Detroit's population was slave at this time.

"Altho u g h cholera epidemics in 1832-34 brought about deaths of several hundred, the city's population in the 10 years from 1830 to 1840 increased nearly 400 per cent. In 1834 the city had 4,968; in 1840 it had 9,192; in 1845 this increased to 13,065. In 1850 the figure stood at 21,019. In the next four years the city nearly doubled in population, 1854 finding Detroit was 40,127. The growth the next six years was not so rapid, but the figure had increased to 45,619 in 1860.

"Despite the Civil War, or perhaps because of it, the city in 1864 numbered 53,170. In 1868 the population was 68,827, and in 1870 it was 79,577. In 1874 Detroit passed the 100,000 mark with the new figure at 101,225. The years 1880 and 1884 credited Detroit with 116,342 and 134,334 inhabitants respectively.

"In 1890 Detroit passed the 200,000 mark with 205,876 people. In the next ten years this increased to 285,704, the population in 1900. In 1904 this was 317,591. In 1910

Detroit attracted national attention by being the city with the third largest increase in population for the decade, its new population being 465,766. Of this number, 156,565 were foreign-born, the German and Canadian elements being the greater. There were only 5,741 negroes in Detroit in 1910. The number of negroes is now estimated at 70,000, or an increase of more than 1,000 per cent.

Four Acres in Area

"Cadillac's village and Ft. Ler-

oult, which was then outside the town were only four acres in area. The Savoyard River, which flowed across Cadillac Square near the County Building, turned west, came down Congress street and then eventually emptied into the Detroit River near the Wayne Hotel long hindered the expansion of the city.

In 1801 the town was enlarged to extend two miles back from the river and in 1815 the limits were again extended. By 1834 the boundaries of the city were extended seven times and curtailed four times. In 1890 the area of the city was 22.19 square miles, in 1900 28.35 square miles, 40.79 square miles in 1910 and at the present time 78.61 square miles."

Detroit Census Sensational

Detroit has accomplished in the last half-score of years what it took New York and Philadelphia a score and a half to do and Eastern papers say "Detroit's growth is nothing short of sensational, but what it would have been if it hadn't become the auto industry center is only a matter of conjecture."

The Board of Water Commissioners of the "Auto City" estimate "Greater Detroit" has a population of 1,200,000. By "Greater Detroit" they mean including all territory inside the city limits, as Highland Park, Grosse Point, Hamtramck, River Rouge, Oakland, Ecorse and some small scattered settlements, all of which are independent cities,

town and villages within the limits of Detroit.

"The unprecedented growth of Detroit and environs during the last decade primarily is due to the amazing growth of the motor car industry, in which the city has been called upon to furnish the world with 70 per cent of the motor vehicles produced," says the *Detroit Journal*.

Another factor that attracts the people is the high wages. Detroit workmen receive higher wages than is paid in any other industrial center in the country thus making contented workmen, and their wages are so high that the largest majority of them own their own homes, but the population is increasing so fast at present that houses cannot be built fast enough. The housing problem is the only thing that will hinder the city's growth.

Banks have played a big part in the growth of the city as they financed the automobile industry when it was in its infancy.

The Next 10 Years

What will Detroit's census be at the end of the next decade? Some men predict it will again double. Several plans under headway already should work wonders in that direction.

One of these is the "Great Lakes to Ocean Route."

Another project, of which private financing is already in sight would be the building of a \$28,000,000 bridge over the Detroit river. This would make Detroit the leading export gateway from this country to Canada.

Another factor would be the completion of the Pennsylvania railroad's improvement which will open a road for traffic from the South and East.

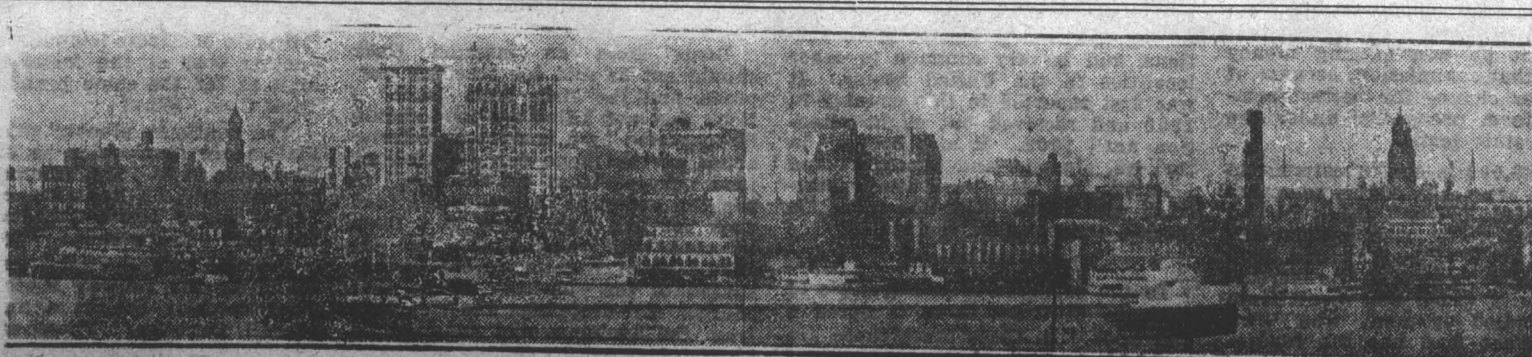
Also several big concerns are planning large plant expansions in the next few years.

There is no question as to whether Detroit's growth means much to the farmers of Michigan. It means thousands of dollars in their pockets because it provides an immediate market for all of Michigan's farm produce, thus assuring the producers a higher price than if the products were sold to dealers who must ship most of it outside of the state. While the growth of the Michigan metropolis hurts the farming industry of the state some by inducing the boys and girls to go to the city there is a time coming, especially if the "Detroit to Canada" bridge is built and the "Great Lakes to Ocean Route" is established, when farming will be profitable enough to not only keep the young people at home but many city cousins will turn farmward.

16 Leading Cities of U. S.

New York	5,621,151
Chicago	2,701,212
Philadelphia	1,787,225
Greater Detroit	1,200,000
Detroit (nat'l census)	993,739
Cleveland	796,536
St. Louis	772,900
Boston	747,923
Baltimore	733,009
Pittsburg	588,193
Los Angeles	578,489
San Francisco	564,419
Buffalo	505,875
Milwaukee	457,147
Washington, D. C.	437,414
Newark, N. J.	415,009
Cincinnati	401,158

*Figures prepared by department of vital statistics in 1919. Figures for 1920 not announced as yet.
†Estimate of Detroit Board of Water Commissioners.



DETROIT IN 1920

—Courtesy Detroit Journal.

South Dakota Bankers Endorse Rural Credits

Ninety-five Per Cent of "Sunshine State" Bankers Say Rural Credits Law is Needed in Every Agricultural State in the Union

By H. S., in PRAIRIE FARMER

SOUTH DAKOTA bankers are practically a unit in endorsing the state rural credits system which has been in operation in that state since 1917. During a week recently spent in South Dakota, every banker with whom I came in contact with spoke freely in favor of the plan under which the state loans money on farm land.

"I have watched the operation of the law in our county very closely, and am convinced that every state where agriculture is an important industry should have a similar law," said R. A. Bielski, head of the Bielski Farm Loan Company of Philip, South Dakota. That statement in substance was repeated over and over again by bankers all the way from Pierre to the Minnesota line. In addition, I have a score or more of letters from bankers in the part of South Dakota west of the Missouri River, all of them enthusiastic for the state loan system.

I want to emphasize the banker support of the South Dakota rural credits system, because bankers have always opposed to state loan systems. Bankers in states where state loan systems are under consideration are protesting vigorously against their establishment. Back in 1915, 1916, and 1917, the bankers of South Dakota were protesting also. They said that it would be an unwarranted interference with the business of loaning money for the state to loan money on the land. Some of them even said that it would compel them to shut up shop. Ninety-five per cent of the bankers of South Dakota, I am convinced, believe that the state rural credits law is one of the most forward looking pieces of legislation on the statute books.

Here and there in South Dakota I was told by Claude M. Henry, rural credits commissioner, are bankers who do not yet see the desirability of the state loan system. "I do not see how it is possible for us to operate of \$24,000,000 business, as we have done, without tramping upon somebody's toes," Henry says. "The bankers who are opposed to the system now are largely those whose business is that of loan brokers rather than commercial bankers. A few perhaps do not like us because we may not have loaned as much on land for their clients as they thought we should; the amount we loan is of course determined by our examiners, and if they report that land is not worth the loan wanted, we turn it down. A very few may be opposed to us for political reasons."

Bankers to Handle State Loans

To make the evidence stronger that South Dakota bankers are behind the state loan system, let it be known that more than 90 per cent of the loans are handled through the banks. The usual procedure when a South Dakota farmer wants a state loan is for him to ask his banker to get it for him. The bank makes the application, gets the abstract of title, and attends to practically all of the details; some banks charge \$10 for this, some \$25, and others lesser amounts, but it is much less than they used to get as commission for placing loans.

One banker at Redfield, S. D., told me that he actually lost \$3,000 in commissions last year because farmers had borrowed money from the state instead of borrowing it from his bank. He added cheerfully that he thought he was making money by losing that commission, because of the greater chance for better farming and farm prosperity under the long-time state loans.

"That \$3,000 is our investment in the future prosperity of this community," he said. "Don't think for a minute that we're losing permanently. We'll get it all back, with a good rate of interest added, in the increased prosperity which will result from farms handled by men who own them." That man has the reputation of being a long-headed banker, but there must be a good many more like him in South Dakota, judging

from the opinions expressed in agreement with him.

"The state loan system on the whole has proved very satisfactory," said W. H. McMaster of Gayville, near Yankton, cashier of the Security State bank. "Over \$20,000,000 has been loaned direct to farmers at a cheaper rate than could have been obtained from eastern loan companies, and the loans on the average are larger than could have been procured from other sources. Farmers are able to get their money with little delay and without the payment of any additional commission. In my judgment, it works the greatest benefit by stabilizing the rate of interest and compelling outside parties to do away with arbitrary rules. The eastern loan companies, for example, drew a line across the state and would not loan more than a small amount west of this line, though land values were constantly increasing."

The testimony of F. E. Swartout of Gann Valley, cashier of the Bank of Buffalo county, is similar. "The system is good for the farmers and for the state as a whole," he says. "It has worked a wonderful help to our farmers in the reconstruction period, when assistance was needed so much.

The system has worked very successfully. I think, however, that there should be a limit to the extent that the state will issue bonds and I think that it is the intention of our board to discontinue the sale of bonds when the amount outstanding is sufficiently large."

Lower Interest Rates

The rural credits plan, according to M. G. Carlisle of the Roberts Investment Company of Brookings, has been successful beyond the highest hopes of those who promoted and established it. "It opened a line of credit not hitherto available for the farmers and stockmen at a low rate and on long time," he says. "This is especially true of the region West of the Missouri River. There the loan rates were eight to 10 per cent in most cases, and on five years' time. The state loans were at 5 1-2 per cent for 30 years with amortized payments. The saving in rate was substantial, but the great benefit was in the long terms. Farmers now make their plans well into the future with a note coming due staring them in the face. Many men just starting in were enabled to buy land. I am satisfied that it is safe to loan a reliable man the limit (70

per cent of the value of the land.) Parties selling land are willing to take second mortgages if necessary, for the amortization payments are constantly reducing the principal of the loans and increasing the security of the second mortgage."

From Wessington Springs, S. W. Wright of the Farmers' Savings Bank writes: "The bankers of South Dakota are almost unanimous in their opinion that it is one of the best laws ever put into operation. There is no commission for the borrower to pay, and the long time in which to repay the loans gives land owners freedom from worry about renewals. We are finding (however, that the maximum limit (\$10,000) is too small for the high-priced land. Many real estate owners have been forced to go elsewhere to get larger loans and pay large commissions to get the money. The legislature will probably raise the limit so as to allow larger loans. Even as it is, we like it exceedingly well, and so do the farmers."

Advantage Over Federal Loans

The South Dakota system is much to be preferred to the federal loan system, say many South Dakota bankers. L. E. Ausman of Wessington Springs sums up these advantages thus:

1. There is no subscription for stock.
2. There is no local organization to be maintained.
3. There is no expense in securing bond for the secretary-treasurer.
4. The money is secured with less delay.

"The appraisements have been conservative," said Ausman. "The loans are conservative and reliable and the state is fully protected."

Helps Tenant Farmers

The state system has helped tenant farmers to buy land, according to J. D. Fargo, vice-president of the Redfield National Bank. "It has done more than anything I know of to place tenant farmers on land of their own," he says. "Tenants who had accumulated some funds to make a reasonable payment were enabled to buy land by borrowing the rest of the necessary funds."

"The state loan system benefits the farmers and the state as a whole. It has put the real estate loan brokers out of commission here. We are very much pleased with the plan as it has worked out."

QUESTIONS THAT WILL INTEREST FARMERS AND CONSUMERS

Representative Baer, Non-Partisan leaguer of North Dakota, in a recent speech in the House suggested these pregnant and pertinent "whys?"

In the last quarter of 1919 the price paid to farmers by the packers for hog products fell 43 per cent, while the price of pork in eastern markets rose 15 per cent. Why?

Texas farmers are now getting 2 1-2 cents a quart for beans. Freight to Boston is 1 1-8 cents. In Boston these beans retail at 18 cents a quart. Why?

It costs 1 cent a pound to ship butter from an Australian dairy farm by a state owned railroad and a government owned merchant marine to London. But in Wisconsin, eighteen miles from a cheese factory, the retail price of cheese is double the production cost at the factory and as high as for the same brand in New York City. Why?

The southern planter gets only a little more than twice as much for his cotton as in 1914, whereas to the consumer cotton has advanced from 20 per pound, and cotton goods have advanced 600 per cent. Why?

Perhaps one answer has been found by the railway brotherhoods. They recently bought a number of overall factories. These are producing garments of market quality 30 to 40 per cent below the market price.

Poultry Infested With Tuberculosis

We have a flock of Plymouth Rock hens that began ailing last winter. One would act dumpy a few days but eat all right, then suddenly die, making a great fuss and noise. One or two a month would go like that but before acting dumpy they seem perfectly well, laying good, red combs and singing happily. Yesterday one died and we opened her, found white spots, the size of a pea on liver and heart, literally covered with them. We caught and killed one who was acting dumpy and her liver was of a peculiar green color and covered with white spots the size of a pin head. She was a laying hen, having egg nuclea in her body. What we would like to know is the nature of the disease. If tuberculosis, would it infect the other farm animals, such as cattle, sheep, hogs and horses? Please write full particulars mals, such as cattle, sheep, hogs and horses?—L. S., Montmorency County.

THIS is tuberculosis and is a disease of great importance to the poultryman or farmer, not only on account of its destructiveness to his flock, but also on account of its relation to the health of himself and family. There are four principle types of this organism. The one most commonly affecting man is designated as the human type. The one peculiar to cattle is designated as the bovine type, and the one peculiar to fowls the avian type, and there is still another type of the tubercle bacillus which affects fish and other cold-blooded animals. While there are some differences in the shape of the organisms grown for a considerable time in the various animals and some differences when grown in artificial media after separation, yet the type peculiar to any of the warm blooded animals, will grow in any other warm blooded animal, that is, the types are interchangeable, which means that the avian type, (the type affecting fowls) may cause tuberculosis in man and the human type may cause tuberculosis in birds. It has been found that a large percentage of hogs fed swill from houses where tubercular persons have expectorated into it, became tubercular, and when slaughtered, there is a considerable loss from condemnation of those badly affected. Tuberculosis among chickens is rare in some portions, and is very common in other localities in the United States. It was first reported in this country in 1900 and received but slight attention until 1903. It also occurs in turkeys, pigeons, and pheasants and I believe two cases have been reported in wild geese. The loss from this disease seems to be increasing.

Mode of Spread

In the progress of tuberculosis of chickens at times there is noted a diarrhoea. In these cases there are tubercular ulcers of the mucous lining of the intestines and when thus affected the disease spreads very rap-

idly through the flock, as birds are continually picking feed from the ground and floors where contamination is sure to have taken place. They may also contract the disease by the introduction of a tubercular bird in the flock. Tuberculosis among wild birds has been mentioned as a possible fact. There is also danger of spread from eggs from a tubercular hen when the eggs are purchased for hatching. There is also a possibility that birds, by following tubercular cattle, may become infected, as do hogs.

Treatment

Treatment of the affected birds is not to be thought of, as the germs of the disease are so often spread thru the droppings that the only sure means of eradicating the disease from a flock is to kill all the birds in the flock and if possible move the henhouse to a new location and have new runs. If this is not practicable, thoroughly disinfect with five per cent carbolic acid or five per cent creolin, all fences, feed troughs, watering tanks and buildings should be thoroughly disinfected. A contaminated poultry yard may remain infected for a long time, many months and possibly years. The action of disinfectants on this germ is very slow; direct sunlight will kill the germ in a few hours.

Birds from an infected flock should not be sold for breeding purposes, and the birds from such a flock that are killed for food should be inspected by a competent veterinarian, so that none may be used for food purposes that are diseased to such an extent as to render the food unfit for use. All birds in a flock infected with tuberculosis that die should be burned to prevent further spread of the disease from that source. All droppings and cleanings from the henhouse and runs should be disinfected with calcium chloride, a five per cent solution of carbolic acid, or other reliable disinfectants.

Exhibiting Your Poultry at the State Fair

Birds to be Exhibited Should be Carefully Selected, Groomed and Trained

George W. Dickinson, Secretary-Manager of the Michigan State Fair, announces that the poultry show at this year's exhibition will be by far the largest in the fair's history. Prof. C. H. Burgess, Professor of Poultry Husbandry at the Michigan Agricultural College, has been put in full charge, and no restrictions are being placed on his enthusiasm. He has written the accompanying article on how to prepare poultry for a fair especially for THE MICHIGAN BUSINESS FARMER.

By PROF. C. H. BURGESS, Professor Poultry Husbandry, M. A. C.

the standard, if possible. From the day the chicks are hatched keep them in a healthy condition and keep them growing. Provide plenty of shade and good, wholesome food, provide them with clean runs and roosting

Secretary-Manager George W. Dickinson getting set for a busy day at his office in the Bowles Building, Detroit.



THE MANY advantages which a poultryman or farmer derives from exhibiting his poultry and products cannot be overestimated. To show birds that are well bred and well fitted is not only a pleasure but, when shown in connection with large classes of the same variety and breeds, a considerable profit is derived therefrom, not only from selling eggs for hatching but birds for breeding purposes as well. There are many men and women who keep a few well bred birds in their back yards for the pleasure they derive in mating and breeding of high class stock. These small breeders are usually greatest in number at poultry exhibitions.

The Michigan State Fair has done and is doing all in its power to provide a suitable building and cooping in which to exhibit. Hundreds of thousands of people pass through the poultry building every year. The cost of fitting and entry is very nominal and the advertising power is very great. The exhibit has doubled every year for a number of years. Liberal prizes are paid to the winning birds but the pleasure in winning cannot be measured by dollars and cents. Many a good bird goes down to defeat. No matter how well bred it may be it loses its place by being ill fitted for the show room.

Hatch chickens early for the fall fairs. Select the birds for the breeding pens that comply most nearly to

quarters. Keep the birds free from vermin. Wherever it is possible it is advisable to ask advice from experienced and successful exhibitors before starting out to prepare the birds for exhibition.

Training of Birds

In order to show the birds to best advantage after they have been well fed and reared and matured, next comes the training. Provide coops about the same size as those used at the place of exhibition. The training coops should be placed about three feet from the floor. This will accustom the birds to being elevated from the floor and also during the training they are not frightened by persons passing or by the operator handling them. The birds should be thoroughly tame and petted in such

a way that they gain confidence in the attendant so that a judge in approaching the cage will not frighten them. This is a very important step in the preparation of birds for exhibition.

Place only one bird at a time in the training cage. Allow no caging with more than one in order to prevent fighting. The success of the show will depend largely upon the behavior of the birds in the pen. Out of two birds equally bred, well fed, in full plumage and standard color, the one that is most easily handled will be the one that will receive the prize. Birds selected for exhibition should be free from blemish and they must conform to shape and color with the Standard of Perfection. The inexperienced exhibitor should get the

advice of an experienced exhibitor. The Poultry Department of the Michigan Agricultural College will undertake to give this advice free of charge, should it be called upon to do so.

Special attention should be given to head points because that is the first thing that attracts the attention of the judge. A single comb should not be too high, it should be of good texture and should not lop except in the case of females in the Mediterranean class. The surface and the under color should be taken into consideration and should conform to the Standard. Brass or creamy birds should not be selected if possible as it is a serious defect. The exhibitors should send the birds into the show room in perfect condition of cleanliness. This means the washing of the comb, wattles, ear lobes and toes in warm water and a brush to remove dirt from between the toes and under the scales. After the legs and toes are once clean a drop of olive oil on a woolen cloth should be used to rub the shanks and toes to bring out the best lustre.

White birds should be washed. Select three tubs of water. Birds should not be washed in rooms that are colder than 70 degrees Fahrenheit. In number one the birds should be thoroughly emerged and scrubbed with ivory soap suds. The soap suds should be rubbed clear down into the base of the feathers. The water should be at about 110 degrees Fahrenheit. In the second tub the water should be just slightly warm. Emerge the bird and thoroughly wash out every trace of soap. In the third tub the water should be at about 50 degrees and in this water bluing should be added the same as for the linens on wash day. Emerge the bird in this bluing water or rinsing water. Place the bird in a warm room that has a temperature of about 70 degrees and that is free from draft. The bird will take care of the rest.

Turning the Devastated Battlefields of France Back Into Fertile Farms

What the American Red Cross has Done to Assist French Farmers Rehabilitate Agriculture in the Stricken Area

AMERICAN modern farming machinery and scientific agricultural methods are being introduced into France by agricultural experts and it is expected that French farming will soon be upon its feet again, enabling France to feed her own population.

A thirty per cent increase in the wheat yield is expected from Cambrai's spring planting this year as the result of the use of Barbieri's new seed inoculation process. This new process, which is quite different from nitrogenous inoculations previously invented, has been thoroughly tested on every vegetable product grown in France and its colonies, including tobacco and sugar cane. The Rothschild estates experimented and found a thirty per cent increase yield for wheat and potatoes. Similar results from tests covering forty acres of assorted vegetables prove conclusively that the process is practical.

This seed inoculation process was made available to the farmers of Cambrai by the American Red Cross, who distributed in that district the samples received from Dr. Barbieri.

Dr. Barbieri's researches covered twenty years, the last three of which were spent in the chemical laboratory of the Sorbonne. His patents cover all civilized countries and a company is now being formed to exploit the invention. Owing to several processes known only to himself, the inventor can control the manufacture of the inoculus; thus he was able to allow the Red Cross the benefit of his researches for its agricultural work without risk of damage to his own interests.

The organized farmers are anxious to place larger seed orders for the fall sowing than those of last year. An adequate supply of wheat and barley seeds for the fall sowing, motor tractors, plenty of them, and farming implements and ma-

chinery of all kinds are needed by the farmers of France.

According to reports submitted at recent meetings of French farmers' syndicates, tractors supplied by the American Red Cross to these farmers' associations in the devastated regions of the north of France have in



French farmers are particularly careful that hay once cured by sunshine shall remain dry. This picture shows the canvas covering that is used to protect a wagon load of hay while it is being hauled to the barns. When farmers first came back to the devastated areas and began mowing the hay they appealed to the American Red Cross to furnish canvas and some was purchased for them from funds accumulated through the sale of Red Cross supplies, at below cost prices, to the refugees.

a large measure been responsible for the cheering crop prospects for the summer. As far as farming picks up, it is hoped, the syndicates formed last year will be in a position to buy tractors instead of merely borrowing them from the American Red Cross. In the meantime, they

are almost entirely dependent on the tractors brought to the country by relief organizations.

French farm workers are crowding to the towns and cities for employment, migrating especially to industrial centers such as Lille and Lens, where wages are higher than those ordinarily paid on the farms, thus fast reducing the agricultural population of the country. Among the distinct advantages of the tractor French farmers have found, is that it counters this growing shortage of farm hands. Each tractor that comes to France replaces several of these city going laborers.

Farm schools are being organized in France, and through these it is expected to interest the younger generations in agricultural pursuits. The Junior Red Cross of America has pledged 200,000 francs for the establishment of apprenticeships for these schools, and 50,000 francs for the purchase of modern farm machinery, and sums to be given from these amounts, at intervals, will be equal to those granted by the Ministry of Agriculture. A committee of nine Frenchmen, including a former Minister of Agriculture, agricultural experts, engineers and practical farmers, was appointed to supervise with the Junior Red Cross, the distribution of funds for these farm schools. The appointment was made by the Auxiliary Committee of the Apprenticeship Farms of the Ministry of Agriculture.

The one condition stipulated by the Ministry of Agriculture in launching the work was that the committee be charged to make known the fact that it has been made possible by the generosity of American school children. The Junior Red Cross will be given all possible facilities to investigate the functioning of the farms that receive aid.



This picture shows a typical farm in the devastated area of northern France today. The pasture in the foreground is filled with shell craters and the trees are burned beyond all hope of life. Only through the help given by the American Red Cross have farmers such as this been able to live through the winter and be ready for the summer's planting and reaping.

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Calamity Howling

SORGHUM SMITH ate a bit too heartily one evening of strawberry short-cake and the next morning he came in from the fields with half a dozen pains racing back and forth between his stomach and liver. He told Ma Smith that he guessed he'd have to lie down a spell on the parlor sofa. By and by the mail carrier came. Ma Smith hurried out to get the mail and in the little pleasantries that followed she imparted the information that Sorghum wasn't feeling well that morning. "You know," said she to the mailman, "Sorghum's been a hard worker all his life and he isn't as young as he used to be." The postman went his way and Calamity Ed, whose farm adjoined the Smith's on the south, was soon hearing about Sorghum Smith's "attack." In the next day or two all the neighbors within a radius of ten miles of Skimmilk Corners had heard of Sorghum Smith being stricken while at work in the fields, "a great strong man like Sorghum, just think of it," and were speculating on whether Widow Sorghum would have to sell the farm and go to the city in order to support herself and the fatherless Sorghum children.

Some folks are natural born calamity howlers. They magnify their own troubles and the troubles of their neighbors. It requires no great stretch of their imagination to change a harmless stomach-ache into a deadly cancer. If the doctor diagnoses a rash as scarletina they are sure he must be mistaken because anyone with half an eye can see that the child has scarlet fever or diphtheria. Chicken pox means small pox to them, and a scratch on the finger is a positive forerunner of blood poisoning.

If the sun doesn't shine it's going to be a cold summer. If the rain doesn't fall at regular periods there's going to be a drought. If there is a wet spell the seed is sure to rot in the ground. And if the sun shines just right and the rain falls just right it's a sure sign that there's going to be an early frost. A few grasshoppers in the back meadow are a plague and crops will be ruined and farms will be abandoned.

Now drought and wet weather and early frosts and grasshoppers are bad enough without exaggerating their extent or affect upon the crops. Some of the stories that have come out of northwestern Michigan about the drought and the grasshopper plague are nothing short of ridiculous. Of course, the weather has been dry. Tell us a season in the last ten years that hasn't had its dry spell and its prediction of ruined crops. Tell us a season in recent years that hasn't been cursed with grasshoppers and given rise to the widely published statement that the pests would destroy all the crops of the infested regions, and cause farmers to desert their farms.

We do not believe that the situation with reference to the drought and the grasshoppers is anywhere nearly as bad as has been pictured.

We do not believe that Michigan farms stand in danger of being deserted by the wholesale because of the dry weather or the damage to crops by grasshoppers. And we do not sanction the publishing of stories in the daily press to this effect. For such stories not only work great harm to the state as a whole, but to individual farmers as well for who wants to buy a farm that is set down in the midst of a Sahara desert or is the breeding place of a billion grasshoppers.

Crippling the Department of Agriculture

E. T. MEREDITH, Secretary of the Department of Agriculture, has published a list of forty-nine projects which the Department will either have to entirely abandon or curtail greatly as a result of Congress cutting out something like six million dollars from the Department's estimates as to its needs. The Secretary calls attention to the fact that the decreased purchasing power of the dollar makes the cut all the more serious and handicaps the work of the Department in a large measure. But Congress suffered a lapse in its economy mood and failed to cut out an appropriation of \$239,000 for that old political pap of free seed distribution, although its elimination was recommended by the Secretary.

While the public will hardly approve of Congress' niggardliness toward the Department of Agriculture at a time when the farmer needs all the assistance he can get, we would hardly claim that the agricultural interests will be jeopardized because of the Department's temporary inability to render its usual services. Moreover, we expect that the Department will find a way of carrying out its most necessary projects even under the handicap of enforced economy.

Congress is not to be entirely excused for the peculiar inconsistencies in its economy program. After a much-heralded examination of the pork barrel and the removal of a few rinds and cheap cuts, the choicest pork still remains and will be distributed as usual where best serves the political future of the pork-barrel politician. Nevertheless, we have long since learned that Congress is not a perfect machine and consequently we do not expect perfection in its economy program or any other program it might undertake. We rather feel like complimenting Congress for even thinking in terms of economy and if that thought has moved it to action against the farmer's department of agriculture, we suppose we ought to accept what is handed us and show that we can take our economy medicine with good grace. It is all very well to cry loudly for lower taxes but unless we are willing to accept our share of the consequences of reductions in appropriations our complaints will carry little weight.

Trucks and Highways

THE USE of the truck for long distance hauling has brought up an entirely new and withal a very serious problem in highway construction. It was long ago demonstrated that gravel, macadam or asphalt construction could withstand the pounding of heavily loaded trucks, but it was believed that concrete would give reasonable service. Hence, hundreds of miles of concrete roads have been built with the expectation that they would stand up for a period of years under the heaviest traffic which the law would permit to be hauled over them. But they have not done so. Concrete roads built in 1918 and subjected to heavy traffic have gone to pieces already and are in well nigh total ruin. This is not the fault of the concrete, which like every other building material has limits of strength and endurance. For ordinary road traffic, the concrete road as we know it will continue to be the popular and most economical type. But it must be reinforced many times over the usual extent, and laid to a much greater depth than customary in order to withstand the most exacting conditions to which it may be subjected in highway construction.

Another question that arises in this connection is who is to pay the cost of roads that are

torn to pieces by foreign trucks. A bill was submitted at the last session of the legislature to put trucks and other commercial vehicles in the class of common carriers, fix their carrying charges and force them to pay a high tax into the state for the use of the highways. It has more recently been proposed that commercial vehicles be required to provide their own trackage. The taxpayer's first and natural impulse is to approve of this suggestion, but a careful study of it will show that it is not well taken. The truck has found a most essential place in the nation's transportation and it should not be surrounded with insurmountable handicaps. The use of the truck should on the contrary be encouraged and the best road conditions possible provided for it. But the present method of building and maintaining roads over which it plys its way should be entirely changed.

Certain highways of the state between the larger cities have become the accustomed routes of travel for trucks. These are principally trunk line highways. Under the state law the state bears a certain large percentage of the cost of these highways and the county through which they are built the balance. Now when it is certain that the people of the average county in southern Michigan who bear a percentage of the cost of these roads do not require the use of the roads in proportion to their share of building them. A main highway is used much more by transient than by resident taxpayers. It is a well-known fact that the principal damage to the main highways has been done by the trucks of concerns located in the cities who pay no share of the local cost of maintaining the roads. Hence, it is clearly unfair to charge those who are unfortunate enough to reside in the locality of these roads with the cost of keeping them in repair.

There is a better and certainly a more equitable way of distributing the cost of maintaining principal highways. The State Highway Department should be empowered with the duty of declaring certain highways of the state as truck routes, and prevent trucks except by special permission to travel any other route. These roads should be specially constructed and the counties through which they pass should be expected to pay such proportion of the construction as they would normally require for their own purposes. But there their responsibility should end, and the state or federal government should come in and pay all the additional expense of the special construction and all the cost of upkeep.

It is bad enough to have to live on a main traveled highway nowadays without being obliged to stand for the damage done to the roads by people living fifty or a hundred miles away.

The Final Word

"WE HAVE lost our fight; there is no hope for the liquor people." So said Levi Mayer, Chicago attorney for the liquor forces, when the Supreme Court's decision was rendered that the federal prohibition laws are constitutional.

The decision of the Supreme Court of the United States is final. The constitutionality of the various acts passed by Congress, amending the constitution and providing enforcement machinery, have been held in question by various state authorities. Some states, like New Jersey, for instance, openly flaunted its defiance to the federal statutes and passed their own laws fixing the alcoholic percentage of beers and wines. They claimed that this was a state's right, the same old gag that was worked by the southern states in the slavery days and that precipitated the Civil War. But the Supreme Court holds differently and the decision of that body will stand.

The last battle in America's war against booze has been fought and the victory is at last secure.

Governor Edwards still pipes his little tune about the "personal liberty" of those who want to get drunk. Too bad, the Governor doesn't use his efforts in a better cause.



What the Neighbors Say



FARMER TURNED DAY LABORER

I am going to try and express myself on a few issues of the days especially H. C. of L. I am at present working for Henry Ford & Son in Dearborn. I am here owing to ill luck and the exorbitant rate of interest one has to pay for the use of money where I live. I am trying to pay off debts accumulated while trying to farm. If any one thinks farming is a get rich scheme and wishes to try their hand I will say that I have 160 acres partly improved land in the northern part of the state and that I will sell the same very reasonable. I would be very glad if I had the money out of it that I have in it. I guess I have run about all the risk I care to at present. I have run the risk of frost, drought, grasshoppers, losing stock and last but not least of all, I have had to take market prices for whatever it might be that I produced.

Some people seem to think it is a sure way to get rich but if they had to pay for farm products according to prices asked for other commodities you would hear a greater howl about H. C. of L. than we do. From the present outlook wages will be higher next summer than now. Even now \$6 is minimum wages in Detroit for common labor. Some concerns have offered \$6.50 for labor a day and the end is not in sight.

Very nearly every day one can hear men talking of having farms that are working in the shops. Unless a man has a farm and a good one at that and has it paid for and free of debt he will find it uphill business. He will find then that he puts in more hours for the money than if he were working in a shop. I will say this, that I was born and raised on a farm and if I had a good farm and out of debt, with stock and tools to work with, I would be there today. As it is my sympathy is with the farmer, for I know what he is up against.

If I can save enough to buy a small place and have it free of debt, I expect to go back to the land, but I do not like to be a slave to keep things going and make ends meet.

I am thinking the farmers will have to work out their own salvation with fear and trembling. If they cannot see alike and do not hang together they will have to hang separately.

The nearest to a solution that I can offer is that the people get back to the original state of things as created in the beginning. I believe all things were created for man and I do not think it was intended for one man to have a monopoly on the necessities of life.

The way of the transgressor is hard. In the beginning man didn't even need clothes and the earth brought forth in profusion. All man needed to do was to plant and prune and work a little perhaps, but because Adam ate the apple and followed his wife's advice rather than the creator, he has now to pay the bill. There is a way that seemeth good unto a man but the way thereof is death. He has to pay for every thing he puts in his face and everything he puts on his back and a good deal has to go through too many hands and they all want too big a rake-off.

The only thing will be for the working classes to own the factories and run them for the benefit of themselves. A reasonable profit could be returned to those working and a percentage go to the government. What is capital but profit on labor when we sum it all down. And why could not this be put to work for those who do the work? In my opinion if we expect to cut the cost of living we will have to cut out the middle man as far as possible and sell direct. I would like to see the day when every article would be labelled; showing what hands it went through and just how much every one got for their labor, service, work or whatever they should choose to call it. It looks like to me just now as if it would be a good idea if the farmers would build a

sugar refinery of their own and sell direct to the consumer through their own agencies or warehouses.

Now I cannot give much light on the hired man question on the farms for I do not see how a man can hire unless he gets a better price than he does for his crops in proportion to what he has to buy, so I think I will pass it up to some one else who is more able to solve the mystery.—*J. M. M., Wayne County.*

You ought to go back to the land. Things will not always be as they have been and are now. This question of capital and credit for the farmer will some day be solved and solved right. And then it will not be so hard for men who love the soil to make the soil earn them their bread and butter and a little besides for a rainy day.—*Editor.*

MR. FORDNEY AGAIN

While I am not a subscriber to your paper, one of the men I am working with has been kind enough to let me have his and I want to commend you for position you have taken on many positions, especially on Mr. Fordney's stand on the bean tariff. It seems to me as if there was ever a flagrant case of "passing the buck" that is the biggest in the bunch. If we ever needed more sense and business and less politics in our government, than we do now, it must have been long before our

generation. Hoping you'll have the nerve to say what you think in the future as plainly as the past. I wish you a very successful future.—*P. J., Munith, Mich.*

It doesn't take any nerve to say what you ought to say when the crowd is with you. But when you have to fight the battle alone, that takes courage.—*Editor.*

SCHOOL AMENDMENT

Enclosed please find \$1 for renewal of my subscription to your valuable paper. I just read what S. B. Horton said on the proposed parochial school amendment and it certainly is kind of you to print his article. I think only narrow-minded people who have no religion at all are to blame for it. You will certainly gain a lot of friends especially Catholics for your kindness in giving some of these people a little more light.—*Reader, Saginaw County.*

Yes, and we will gain friends among the right-thinking Protestants who love religious liberty. We Protestants are not so religiously narrow-minded as some of our Catholic friends think. Every religious faith has its bigots, and nearly every generation is cursed with a few fanatics who want to revive old doctrines of hate, in the name of God! This publication concedes the right of people to worship and educate their children as they please so long as they remain true to the laws and the traditions of the United States of America.—*Editor.*

The Week's Editorial

THE CANDIDATE

Ohio appreciates the honor conferred upon it by the Chicago convention. Without regard to their own partisan affiliations, citizens of this state are pleased that one of Ohio's sons has been found worthy of the highest prize that a great political party can give to anyone. The "Mother of Presidents" wears a new smile—a smile of pride mixed with no small portion of surprise.

His native state knows Warren G. Harding as a genial, warm hearted citizen, much beloved by those who know him best. As a campaign orator he won his spurs early and has never lost them. Yet his political career before he went to the United States senate was without distinction. He has been a popular senator, tho not a leader among his colleagues.

Senator Harding is the Republican nominee by virtue of his rivals' mistakes, rather than by his own strength. His nomination came thru the strategy of the "senatorial caucus" at Chicago. The "caucus" was spokesman for the Old Guard, and its triumph was an Old Guard triumph. Mr. Harding carries into the campaign the label of Old Guard.

The Harding nomination is the fruition of a program which had its beginning in the minds of party leaders months before the convention assembled. It was this—the selection of a nominee acceptable to the conservative wing of the party—that led to the insistent demand that the convention majority be made up of uninstructed delegates. The bosses knew that they could handle such a majority as they wished when the convention crisis should come. They deliberately nullified the presidential primary in enough states to give them this strangle hold on the convention.

Gov. Lowden was obviously the first choice of the Old Guard. He was to be nominated if the temper of the convention made it appear safe thing to do. Except for the facts brought out by the senate inquiry into primary expenditures he would be head of the ticket today. Even after this exposure and after the convention had begun balloting Lowden was the Old Guard's real choice. He would have been named had Penrose and the other managers not been fearful of what the country would say.

With Penrose and his spokesmen at Chicago it was a case of anything to beat Wood and Johnson. When Lowden became impossible, the switch to Harding was inevitable. Not for a moment was the Old Guard

control of the convention in any real peril.

There is, of course, not a trace of progressive blood in Senator Harding's veins. He is of the old school through and through. The bi-partisan political insurgency that has made its impress on the country since then, that has brought a new spirit into the counsels of all parties, that has written volumes of progressive legislation into state and federal statutes and awakened the consciousness of the American people to their rights and their opportunities made no impression on the mind of Mr. Harding.

To the senator, William H. Taft in 1912 was the greatest progressive of the age. Theodore Roosevelt he likened to Aaron Burr of malodorous memory. His famous "deference and devotion" speech in which he eulogized Boss Cox of Cincinnati, is part of the annals of Ohio politics. In 1916 Mr. Harding pleaded for forgetfulness of the animosities of four years before. Between now and November he will have many an occasion to wish that the dead Republican past may be permitted to bury its dead.

As a member of the United States senate, Mr. Harding has been a regular of the regulars; a follower and not a leader. He has always been ready and eloquent with his denunciations of the president. No better viewer with alarm could be found anywhere. His attitude on the treaty has never wavered in its regularity. The Old Guard always knew where to find him; always knew he would do precisely as party discipline required him to do.

So the Old Guard's happiness over Harding's nomination has no mystery about it. When the time came to assert its control of affairs, the Old Guard turned its support to one who had carried not a single primary except that of his own state—and this by nine less than a solid delegation. So far as the result at Chicago is concerned, there may as well have been no presidential primaries.

The Chicago convention has adopted a platform evasive as to one of the chief issues and silent as to another. It has named a presidential candidate guaranteed to do nothing not laid down in the book of rules. Thus functions the system sometimes called the popular nomination of presidents.—*Cleveland Plain Dealer.*

MIND OVER BODY

In the April 3rd edition of your valuable paper I saw an editorial referring to the great advance medical men have made in counteracting diseases. Whatever is done to increase the efficiency and ease of the people will have to be done through their minds—for it is obviously true that the mind OUGHT to rule the body. Or people ought to have self control. It is true that food glut-tony will cause auto-intoxication of the intestinal tract and poison the blood, but it is also true that excessive and foolish food consumption creates nests of worms for some people. The medical profession might tell us, if they have our interest at heart, that the blood is made up of 12 basic chemical salts which are extracted from our food and that this chemicalized material is turned into blood by being crossed with inbreathed air at the lungs. Then the mind ought to be trained to select proper foods to furnish these salts and also to breathe pure air so as to make pure blood.

Then the mind again needs to be freed from anger, strife, malice, unforgiveness, selfishness, greed, etc., for they all tend to poison the blood. But it would interfere with the business of drug stores and doctors to put this information clearly and persistently before the people.

As the life is controlled by the mind, or ought to be, so the physical life is in the blood. But what do you think of a doctor injecting vaccine from a sick unto death cow, into the blood of a man or woman? Strong recruits keeled over dead from serums in our late war.

Our poxes, and measles and pests are the results of eating and drinking and breathing contrary to the requirements of the blood.

We hibernate in the winter, eat plenty of meat and grease and also breathe stale, devitalized air. So of course, as a natural consequence when the temperature moderates the body throws those poisons OUT of the system in fevers and sores.

But that is not all by any means. The Bible is a book of allegories and parables dealing largely with the wonders of the human body and its proper use and purpose.

But the generally accepted theory of modern civilization is that licensed or matrimonial prostitution or the self abuse of those not so licensed or married, is essential and necessary and as a consequence people have no vitality. The old saying, "People are growing weaker and wiser" is a tremendous lie for if we were wiser we should be stronger for we should have learned self control.

Unless the medical profession go to the foundation of our troubles—the proper use of the mind in controlling the body—the selection of proper foods to furnish the mineral salts needed to make blood and the necessary pure air to breathe, and freedom from anger, malice, etc., we shall continue to swell the high cost of living by frequent visits from doctors and surgeons and add to the drug trust profits, but we shall also help the undertaker and the grave digger in their respective avocations.

The people do not want the truth yet. They do not care for the task of thinking for themselves. They are accustomed to be led and led astray. They seem to like it. Barnum made a success with his circus because he was able to see their natures in its true light. But some of us who know better dislike immensely that this age of medical experts are fastening upon us through legislation and printed propaganda.—*E. R. A., Kent County.*

You are right, "the people do not want the truth." It is as hard for them to follow right modes of living as right modes of thinking. It is easy for men and women to go astray morally and mentally. And it is equally as easy for them to disregard what their common sense tells them is the right way to eat, sleep, and care for the body. Perhaps the medical profession is to blame for this but we can scarcely believe, intentionally so.—*Editor.*



The Farm Home

A Department for the Women



Edited by CLARE NORRIS

FOR MANY, school days are over and they must now turn their thoughts to the more serious business of making a living. What vocation they shall take up depends entirely upon themselves for we can do in this day of possibilities, anything we WILL do. And wise indeed is the girl who chooses to do the kind of work she enjoys.

For the girl who loves children, there is the very commendable occupation of teaching, and with the present rating given teachers, it is now possible for a girl to fit herself for this occupation, knowing that she will be as well paid as others who engage in different lines of work. But a girl who has no patience with children should never engage in this work in the wide, wide world, for, no matter how much she knows, she will never be a successful teacher. A successful teacher not only knows, but knows how to impart to others with sympathy and understanding.

There are the business courses, for which a girl can fit herself with only a few months of concentrated work, and which bring financial rewards to those who make a specialty of their line of work. To those who just use a vocation as a money making institution, it will never mean much—not even much money, for in order to make a success of any kind of work, one must love it—love it well enough to work overtime when necessary, in fact to work for others in your chosen line as if the work which you were doing really were your own, and upon you depended the success of the undertaking. Recognition will surely come through this method of work—if not financially, then you will acquire the habit of doing so well the thing you have set yourself to do that you will become an expert, and you can branch out for yourself or others will seek you out.

Just now the State of Michigan is trying hard to recruit 1,000 student nurses. The classes open in September and for those who enjoy being able to relieve suffering, who have good health, a fair amount of strength, and an unlimited amount

of patience, there is no field which offers better opportunities. But the school in which the nurse trains has such an infinite lot to do with her success afterwards, that it behooves every girl who thinks of taking up this work to take time to thoroughly satisfy herself as to the requirements of the school and the advantages offered. Michigan has as good nursing schools as will be found anywhere, then why go to the eastern schools, where you can't spend the time and money to go and personally interview the head nurse and be shown through the dormitories and have a personal interview before signing up for three years? It's too big a gamble when you consider that after entering training school it is almost impossible to get into another school. One training school does not, except in rare occasions, accept pupils who have trained or partly trained elsewhere, except as post graduate nurses. For instance, after having trained for a definite length of time, there are Women's hospitals which will accept student nurses from other schools and give them the special training in obstetrics.

But do not accept a school because it promises to train you in a short course, because unless you are a college graduate, and have been given credit on the regular course because of this advanced preparatory work, you will find that the school is not up to par, and more often than not, the doctors treat the nurses from these schools the same as a legitimate doctor treats a quack doctor. There is no quick and easy way—it is through patient practice that one becomes efficient at this work. But it is a work which one can engage in, and later in life a woman can accept cases which are easier—cases with

invalids, where the work is not too exacting, while many other occupations call for the assistance of only the younger women, and as soon as one begins to get old, they are shelved for the younger women. This is not so with a nurse. Once a nurse, always a nurse, with always plenty to do.

There are at present 41 accredited Nurse Training schools in the state of Michigan. Of these 34 require three years' training and seven two and one half years. Young women 18 years of age are admitted in 32 schools and nine places the age of entrance is 19 years. All of the 41 schools except six, make a cash allowance to pupil nurses which varies

from \$5 to \$10 per month. Entrance requirements in 20 schools call for an eighth grade education. Four schools demand complete high school education, nine admit with two years of high school, and eight require but one year of high school work.

As further qualifications for admission to the training school the applicant must be a woman of good moral character; she must be of average height, weight and physique, in good physical condition, and free from physical defects.

The course of instruction while in training includes a prescribed number of hours in the subjects of anatomy, bacteriology, hygiene, medical nursing, surgical nursing, obstetric nursing, and a certain number of hours in the laboratory, in the operating room and the diet kitchen. The time spent in training is divided as to duty between the different departments of the hospital so that the student may acquire bedside experience in the handling of medical, surgical, obstetrical and children's diseases as well as operating room and

diet kitchen technique. Some of the hospitals furnish public health, social service and laboratory experience.

"GET MORE OUT OF YOUR HOME," SAYS UNCLE SAM

THE GOVERNMENT, in this work has wisely pointed out the fact that thrift may mean not only the actual saving of money but also the wise spending of money, spending that brings returns in comfort, happiness or efficiency. Below we quote the advice of the Department to farm women on the subject of getting more out of the home:

"By making the house and its surroundings healthful, convenient, comfortable, and attractive.

"By securing a sanitary water supply; by using running water wherever possible—a simple piped system for water may cost only a few dollars.

"By providing for proper disposal of sewage.

"By thorough screening against flies and mosquitoes.

"By adequate ventilating, lighting and heating and well arranged storage places.

"By equipping the kitchen and other workrooms as conveniently as the farm buildings—get the man to study this problem with the woman.

"By machine equipment—pump; power washer and wringer; milk separator; churn; but don't buy a \$3,000 car and carry water because we can't afford a water system.

"By cutting out waste space and useless belongings.

"By choosing furnishings that are comfortable, easy to care for, and pleasing to look at.

"By providing simple, well-cooked, palatable meals.

"By choosing clothes which are comfortable, suitable and becoming.

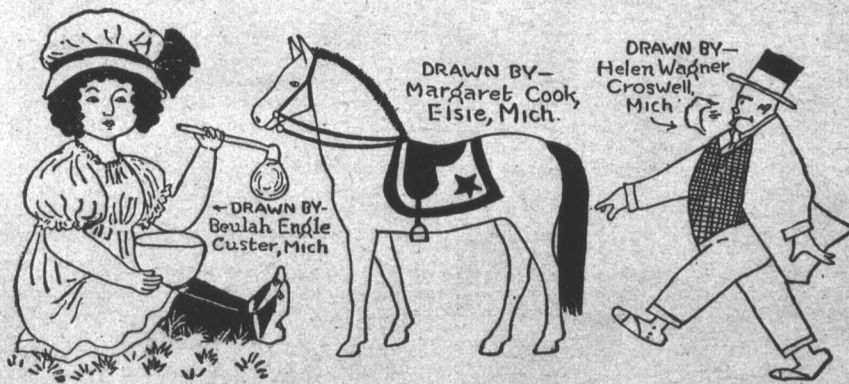
"By having a simple, practicable plan for the housework and following it.

The above advice offers a very desirable program which should be carried out to the fullest possible extent.



DEAR CHILDREN: I am very proud of all of my little nephews and nieces, and of what you can do, and this week I am especially happy to be able to award three more prizes for drawing, which appear on this page. It is so near the Fourth of July and I know every little boy and girl will just love to own a flag that I am sending a flag to the three winners, Beulah Engle, Margaret Cook and Helen Wagner, and next week there will appear the prize essay on "The Days We Display the Flag" and the winners will also receive flags as prizes. Their names will be published next week. So you see there are always plenty of opportunities for prize winning. If you can't draw, you can perhaps write.

How I wish more of the boys would write to me—all the girls keep wondering why the boys don't write more letters. I am sure they read our page, but boys never seem to enjoy writing letters as do girls. But boys like prizes just as well as girls, so come on and get busy boys; if you can't do anything else to win a prize, secure some subscriptions to OUR paper and send them direct to me, with \$1 for each new subscription and I will be glad to award you a prize. And you can have your choice of a pocket knife, a pencil box or a flag, while if you can secure two



new subscribers, I can give you some very wonderful prizes, such as a large pencil box, containing three pencils, pens, erasers, etc., or a flash light. You have plenty of time during vacation season, let's see who the winners will be. Affectionately yours.—AUNT CLARE.

OUR BOYS AND GIRLS

Dear Aunt Clare—I am a girl 10 years old and am in the 6th grade. I have no sister but I have 2 brothers Howard and Vernon. I live on an 80 acre farm. We have three horses, 4 cows and 4 calves and about 70 chickens. We take the M. B. F. and like it very much. Mabel Sargent, DeWitt, Mich.

Dear Aunt Clare—I have never wrote to you before. My father takes the M. B. F. and likes it fine. I live on a farm five miles from town. I have for pets a cat, a rabbit and two little ones. Will have to stop as it is time for dinner.—Harold Hall, Leslie, Mich.

Dear Aunt Clare—I am a girl 11 years old and in the 5th grade at school. Our school was out the 11th of May. I have one sister, Helen, she is 13 years old and one brother, Leonard, four years old. We live on an 80 acre farm. We have 4 calves, 4 horses and about 75 chickens. For pets I have a dog and a cat. My father takes the M. B. F. and likes it very much. I like to read the Children's Hour. We live eight and one-half miles west of Mt. Pleasant. Will close, hoping to see my letter in print.—Doris Wilkins, R 2, Mt. Pleasant.

Dear Aunt Clare—I am a girl 10 years old and I am in the 6th grade. My teacher's name is Miss Covert. I live on an 80 acre farm. We have four horses, 10 cows, 11 pigs and two cats. I have one dog for a pet. I thought I would send a picture of a pig to you. I drew it myself. Letha Rizer, Calhoun County.

Dear Aunt Clare—I am 12 years old and in the 5th grade next year. I go to the Eagle school. This is the first time I have written the M. B. F. We live on a sixty acre farm. My father takes the M. B. F. and likes it very well. I have a cat and dog for pets. I have two brothers. I hope to see my letter in print. Ora Rutter, Clare Mich., R 1.

Dear Aunt Clare—I read the letters in the M. B. F. and like them fine. I am 9 years old and in the fifth grade. We moved from Illinois about three months ago. I like it fine up here. We live on an 80 acre farm. We have 4 horses and 2 cows. I have two sisters and two brothers older than myself. Genevieve Mulvany, Breckenridge, Mich.

Dear Aunt Clare—I am a girl 10 years old and in the 4th grade. My school is out the 30th of April. The other day Ma let me make a cake the first one I ever made. It was fine. I live in Highland township, 8 miles straight west of Marion. I can hardly wait until we get our M. B. F. For the last day of school we had a program. I will close, hoping to see my letter in print. I wish some of the little girls would write to me.—Edna M. Eaby, Tustin, Mich., R 2.

Answer to Last Week's Puzzle
Early to bed and early to rise, makes a man healthy and wealthy and wise.

"IT IS the powder that smokes with the heat of its own containment," said Torres, at the same time feeling into the bottom of his coat pocket. He drew forth a pinch of crumbs of tobacco, match, splinters, and cloth-fluff. "This will not burn," he challenged, inviting invitation by extending the pinch of rubbish over the bowl as if to drop it in.

The Queen nodded consent, and all saw the rubbish fall upon the liquid metal surface. The particles made no indentation on that surface. Only did they transform into smoke that sheened upward and was gone. No remnant of ash remained.

"Still is it cold," said Torres, imitating Francis and feeling the outside of the bowl.

"Thrust your finger into the contents," the Queen suggested to Torres.

"No," he said.

"You are right," she confirmed. "Had you done so, you would now be with one finger less than the number with which you were born." She tossed in more powder. "Now shall each behold what he alone will behold."

And it was so.

To Leoncia was it given to see an ocean separate her and Francis. To Henry was it given to see the Queen and Francis married by so strange a ceremony, that scarcely did he realize, until at the close, that it was a wedding taking place. The Queen from a flying gallery in a great house, looked down into a magnificent drawing-room that Francis would have recognized as builded by his father had her vision been his. And, beside her, his arm about her, she saw Francis. Francis saw but one thing, vastly perturbing, the face of Leoncia, immobile as death, with thrust into it, squarely between the eyes, a slender-bladed dagger. Yet he did not see any blood flowing from the wound of the dagger. Torres glimpsed the beginning of what he knew must be his end, crossed himself, and alone of all of them shrank back, refusing to see further. While the Sun Priest saw the vision of his secret sin, the face and form of the woman for whom he had betrayed the Worship of the Sun, and the face and form of the maid of the Village of the Long House.

As all drew back by common consent when the visions faded, Leoncia turned like a tigress, with flashing eyes, upon the Queen, crying:

"Your mirror lies! Your Mirror of the World lies!"

Francis and Henry, still under the heavy spell of what they had themselves beheld, were startled and surprised by Leoncia's outburst. But the Queen speaking softly, replied:

"My Mirror of the World has never lied. I know not what you saw. But I do know, whatever it was, that it is truth."

"You are a monster!" Leoncia cried out. "You are a vile witch that lies!"

"You and I are women," the Queen chided with sweet gentleness, "and may not know of ourselves, being women. Men will decide whether or not I am a witch that lies or a woman with a woman's heart of love. In the meanwhile, being women and therefore weak, let us be kind to each other."

"—And now, Priest of the Sun, to judgment. You, as priest under the Sun God, know more of the ancient rule and procedure than do I. You know more than do I about myself and how I came to be here. You know that always, mother and daughter, and by mother and daughter has the tribe maintained a Queen of Mystery, a Lady of Dreams. The time has come when we must consider the future generations. The strangers have come, and they are unmarried. This must be the wedding day decreed, if the generations to come after of the tribe are to possess a Queen to dream for them. It is well, and time and need and place are met. I have dreamed to judgment. And the judgment is that I shall marry, of these strangers, the stranger allotted to me before the foundations of the world were laid. The test is this: If no one of these will marry, then shall they die and their warm blood be offered up by you before the altar of the Sun. If one will marry me, then all shall live, and Time hereafter will register our futures."

"Hearts of Three"

By JACK LONDON

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

The Sun Priest, trembling with his anger, strove to protest but she commanded:

"Silence, priest! By me only do you rule the people. At a word from me to the people—well, you know. It is not an easy way to die."

She turned to the three men saying:

"And who will marry me?"

They looked embarrassment and consternation at one another, but none spoke.

"I am a woman," the Queen went on teasingly. "And therefore, am I not desirable to men? Is it that I am not young? Is it, as women go, that I am not beautiful? Is it that men's tastes are so strange that no man cares to clasp the sweet of me in his arms and press his lips on mine as good Francis there did on my hand?"

She turned her eyes on Leoncia.

"You be judge. You are a woman well loved of men. Am I not such a woman as you, and shall I not be loved?"

"You will be ever kinder to men than to women," Leoncia answered—cryptically as regarded the three men who heard, but clearly to the woman's brain of the Queen. "And as a woman," Leoncia continued, "you are strangely beautiful and luring; and there are men in this world, many men, who could be made mad to clasp you in their arms. But I warn you, Queen, that in this world are men, and men, and men."

Having heard and debated this, the Queen turned abruptly to the priest.

"You have heard priest. This day a man shall marry me. If no man marries me, these three men shall be offered up on your altar. So shall be offered up this woman, who, it would seem, would put shame upon me by having me less than she."

Still she addressed the priest, although her message was for the others.

"There are three men of them, one of whom, long cycles before he was born, was destined to marry me. So, priest, I say, take the captives away into some other apartment, and let them decide among themselves which is the man."

"Since it has been so long destined," Leoncia flamed forth, "then why put it to the chance of their decision? You know the man. Why put it to the risk? Name the man, Queen, and name him now."

"The man shall be selected in the way I have indicated," the Queen replied, as, at the same time, absently she tossed a pinch of powder into the great bowl and absently glanced therein. "So now depart and let the inevitable choice be made."

They were already moving away out of the room, when a cry from the Queen stopped them.

"Wait!" she ordered. "Come, Francis. I have seen something that concerns you. Come, gaze with me upon the Mirror of the World."

And while the others paused, Francis gazed with her upon the strange liquid metal surface. He saw himself in the library of his New York house, and he saw beside him the Lady Who Dreams, his arm around her. Next, he saw her curiosity at sight of the stock-ticker. As he tried to explain it to her, he glanced at the tape and read such disturbing information thereon that he sprang to the nearest telephone and, as the vision faded, saw himself calling up his broker.

"What was it you saw?" Leoncia questioned, as they passed out.

And Francis lied. He did not mention seeing the Lady Who Dreams in his New York library. Instead he replied:

"It was a stock ticker, and it showed a bear market on Wall Street somersaulting into a panic. Now how did she know I was interested in Wall street and stock tickers?"

(Continued next week)

BLACKING HARNESS

From time to time formulas are given in articles appearing in farm papers for making a good harness blacking. The formula calls for the purchase of four or five different ingredients and involves considerable work and time in compounding them.

It is not necessary to further burden the housewife by asking her to make a homemade harness blacking, for at any leather store and at most drug stores, it is possible to buy a small can of leather renewer, all ready for use and costing little if any more than the separate ingredients used in the home compound. This is merely a labor saving suggestion, and who is more deserving of being saved from unnecessary work than the overworked farm housewife.

THE SIGN OF



QUALITY

The Brawn That Made America Great Came from Flour

The pioneer men and women whose strength and stamina laid the rock-like foundations of America's greatness were bread eaters. In wholesome bread made from good flour they obtained the nutrition that gave them strength to work and achieve.

For nearly sixty years the particular women of Michigan have used

Lily White

"The Flour the Best Cooks Use"

Look for the ROWENA trade-mark on the sack

In this flour they found the means to give their families the good main-stay. Save for milk, bread is the food of greatest nutrition. LILY WHITE is scientifically milled to retain all the nutrition values of the wheat. Only the best wheat obtainable is used. It is cleaned four times, scoured three times and actually washed before going through the processes of breaking and milling. Every atom of dirt and undesirable material are eliminated.

This is why three generations have found bread made from LILY WHITE FLOUR delicious, palatable, wholesome and healthful. Looks good, bakes to a perfection that makes "homey" women proud. The same with biscuits and pastry. LILY WHITE is guaranteed to give perfect satisfaction.

VALLEY CITY MILLING CO.

GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years"

MARKET FLASHES

WHEAT FIRM

WHEAT PRICES PER BU., JUNE 22, 1920				
Grade	Detroit	Chicago	N. Y.	
No. 2 Red	2.97		3.00	
No. 2 White	2.95		3.00	
No. 2 Mixed	2.95		3.00	

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
No. 2 Red	2.44			
No. 2 White	2.42			
No. 2 Mixed	2.42			

Wheat has moved only moderately the past week. The overseas demand is continuous at Chicago but movement is light at present. Of course if cars could be secured a little more readily there is not much doubt but that the demand would pick up briskly. Higher prices may prevail in the near future owing to the reports coming from the growing sections showing the crop to be in rather poor condition. We are unable to prove the sincerity of these reports but the crop is far enough along to seriously affect the trend of prices if dealers believe them to be true. The 1920 wheat crop of Argentina is estimated at 214,140,000 bushels. The estimated acreage and yield in Australia are 6,570,402 acres planted and the yield 46,210,380 bushels. France and England are buying all of their imported grain from this country now owing to the export duty that Argentina has placed on her wheat. This duty makes the wheat a higher price than is asked here.

CORN STRONG

CORN PRICES PER BU., JUNE 22, 1920				
Grade	Detroit	Chicago	N. Y.	
No. 2 Yellow	1.90		2.00%	
No. 3 Yellow	2.00			
No. 4 Yellow	1.95			

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
No. 2 Yellow	1.82		1.93%	
No. 3 Yellow				
No. 4 Yellow	1.84	1.92		

Great strength has been shown in the corn market owing to the unfavorable condition of crops in general. Some news has come from the districts where corn was planted early and many of the growers report damage from the cutworms.

Another worm that promises to raise havoc with America's corn later in the season is the corn-borer.

Secreted in a cargo of broom corn imported from Austria, the unbidden guest has invaded 2,750 square miles in four states—Massachusetts, New York, New Hampshire and one county in Pennsylvania.

The so-called corn borer, named by reason of its tunneling operations through the stalks and ears of corn, is the worst of pests, destroying from one-fourth to one-half of the infested crops of corn, millet, hops and hemp in its native lands of Europe and Asia. Its depredations in the cornfields of this country have been such as to deprive the worm of none of its unsavory reputation as the arch enemy of plant life yet introduced into the United States.

OATS ADVANCE

OAT PRICES PER BU., JUNE 22, 1920				
Grade	Detroit	Chicago	N. Y.	
No. 2 White	1.28	1.21 1/2	1.33	
No. 3 White	1.27	1.17		
No. 4 White	1.26			

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
Standard	.75			
No. 3 White	.74 1/2		.71 1/2	
No. 4 White	.70 1/2			

Rain is needed badly in many sections where oats were mudded in and then hot and dry weather came on baking the ground. Some sections report oats to be heading with straw very short. Large orders for oats to be shipped East have had to be cancelled because it is impossible to get the grain. Threshing has started on a large scale in Texas but very little of the Texas crop will be available for shipment East as most of the surplus has been promised to the southern trade.

RYE HIGHER

Rye has advanced again and is quiet and easy on the Detroit market at \$2.28 for No. 2. The market is very congested at present and



DETROIT—Wheat not active. Oats firm and in good local demand. Corn higher. All live stock markets strong.

CHICAGO—Corn sets new high price mark. Favorable crop reports keep oats easy. Wheat active. Hogs lower.

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

Weekly Trade and Market Review

DEMAND for money does not relax, and restrictions on borrowing are forcing liquidation and more careful buying. Such luxury dealers as those selling automobiles and jewelry are having a dull season. There is a distinct but reluctant decline in the prices of these luxuries. The West is finding it hard to secure money for cattle operations. The Southwest has its money tied up in considerable of last year's wheat which they still have on their hands owing to the inability to get cars, and the new crop is ready to harvest.

The future trend of commodity prices is still a question. It will take the next six months to find out whether the unwillingness of the public to buy at present prices will be counteracted by the curtailment of production. Late mercantile reviews appear to forecast lower prices but conditions in the money market will have much to do with future prices. If money remains tight prices will be lower as the merchant will need his money to purchase new stock but if the money market loosens up so the merchant can secure credit again watch out for higher prices.

Grain markets in general are enjoying a feeling of strength owing to unfavorable reports of the growing crops coming from the country.

more advances are looked for if the situation does not clear up within a few days. There is considerable export business going on and clearances are holding up well. Actual exports for the week of June 12th amounted to 2,287,000 bushels. It is estimated that there is around 3,000,000 bushels yet of the visible supply.

BEANS DECLINE

BEAN PRICES PER CWT., JUNE 22, 1920				
Grade	Detroit	Chicago	N. Y.	
C. H. P.	7.25	8.50	8.25	
Red Kidneys		15.00	16.00	

PRICES ONE YEAR AGO				
Grade	Detroit	Chicago	N. Y.	
C. H. P.	6.25			
Prime Red Kidneys		11.50		

The bean market at Detroit has made two declines during the last week; one of 25c and another of 15c. Chicago and New York markets are firm.

Professor Cox, head of the farm crops department at the M. A. C. thinks Michigan ought to plant more red kidney beans.

"The Japanese have not competed heavily with red kidney beans," says Professor Cox. "These are in great demand, and it would appear that a considerably larger acreage of red kidneys could be planted on the bet-

ter soils of Michigan. As for white beans, Michigan's product is so well known for quality that it can stand very strong competition.

"All indications are that Michigan bean growers will find a better market next winter, (particularly late in the winter) for Michigan grown beans than the pessimistic forecast of the past fall and winter indicated."

NEW POTATOES EASY

SPUDS PER CWT., JUNE 22, 1920				
	Sacked	Bulk		
Detroit	7.75			
Chicago	6.50			
Pittsburg	6.67			
New York	6.75			

PRICES ONE YEAR AGO				
	Sacked	Bulk		
Detroit	2.40	2.33		
Chicago	2.05	2.00		
Pittsburg				
New York				

New spuds are lower on nearly all markets. There is no such a thing as old potatoes on the Detroit market. Prices for potatoes of the 1919 crop are all shot to pieces at Chicago. One drop of \$4.50 was made in one day but advances followed and \$9 per cwt., potatoes sold for \$6.50 at the close.

The weekly crop report of the American Steel & Wire Co., gives the condition of the 1920 crop in several

of the leading potato states as follows: Michigan, good to fair; Maine, good; Minnesota, fair to 100 per cent; Ohio, good; Illinois, poor to fair.

HAY SCARCE

[No. 1 Tim.] Stan. Tim. [No. 2 Tim.]				
Detroit	37.50 @ 38.50	37.50 @ 38.50		
Chicago	45.00 @ 46.00	47.00 @ 48.00		
New York	42.00 @ 43.00	43.00 @ 44.00		
Pittsburg	40.00 @ 41.00	42.00 @ 43.00		

[No. 1] [No. 1] [No. 1]				
[Light Mix.] [Clover Mix.] [Clover]				
Detroit	36.50 @ 37.50	36.50 @ 37.50		
Chicago	47.00 @ 48.00	49.00 @ 50.00		
New York	38.00 @ 39.00	40.00 @ 41.00		
Pittsburg	40.50 @ 41.50	42.50 @ 43.50		

HAY PRICES A YEAR AGO				
[No. 1 Tim.] Stan. Tim. [No. 2 Tim.]				
Detroit	38.50 @ 39.50	38.50 @ 39.50		
Chicago	44.00 @ 45.00	46.00 @ 47.00		
New York	46.00 @ 47.00	48.00 @ 49.00		
Pittsburg	42.50 @ 43.50	44.50 @ 45.50		

[No. 1] [No. 1] [No. 1]				
[Light Mix.] [Clover Mix.] [Clover]				
Detroit	37.50 @ 38.50	36.50 @ 37.50		
Chicago	33.00 @ 34.00	35.00 @ 36.00		
New York	44.00 @ 45.00	46.00 @ 47.00		
Pittsburg	40.00 @ 41.00	42.00 @ 43.00		

BOSTON WOOL MARKET

The Commercial Bulletin says, "The wool market is still waiting developments. Very little business has been done here or in the West and quotations are largely nominal still. Some consignments are reported from the West."

"The manufacturing situation, also is very uncertain and mills are running generally on three to four days schedule a week, sometimes less."

"The foreign markets have steadied somewhat on the lower London basis."

Michigan and New York fleeces.—Fine unwashed, 60; delaine unwashed, 70@73; 1-2 blood unwashed, 63@70; 3-8 blood unwashed, 59@60.

DETROIT PRODUCE MARKET

Buyers are paying more attention to hens and chickens and a firmer tone is quoted. The market is not troubled so much as it was with hold-over supplies. Dressed calves are doing a little better and there is a steady market for hogs. Dairy products are in liberal supply and active. The feeling in eggs is easy, but there is active buying of butter and the market holds steady.

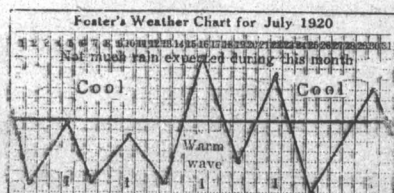
LIVESTOCK MARKETS

DETROIT—Cattle: dry fed strong, grassers dull; canners 50 to 75c lower; best heavy steers, \$14.50@15; best handy weight butcher steers, \$14@14.75; mixed steers and heifers, \$11@11.50; handy light butchers, \$10@10.25; light butchers, \$9@9.50; best cows, \$8.50@9; butcher cows, \$6.50@7.50; cutters, \$5.50@5.75; canners, \$4.50@6; best heavy bulls, \$8.75@9; bologna bulls \$7.60@8; stock bulls, \$7@7.50; feeders, \$9@10.25; stockers, \$8@8.75; milkers and springers, \$85@110. Veal calves: opened strong, \$1 higher, closing dull with advance lost best, \$15@15.50; others, \$9@14. Sheep and lambs: market steady; best lambs, \$17@18; fair lambs, \$13@14; light to common lambs, \$10@12; yearlings, \$13@14; fair to good sheep, \$4@8; culis and common, \$2@3. Hogs: Market strong; pigs, \$14; mixed hogs, \$15.50@15.60; heavy, \$15.25.

CHICAGO—Cattle: Bulk beef steers steady to 25c lower; top heavy, \$16.90; yearlings, \$16; other grades 25c to 40c lower; few choice cows and heifers steady, other she-stock mostly 25c to 40c lower; bulls steady stockers and feeders weak, unevenly 25c to 40c lower; calves 25c lower. Hogs: Market active, opened 10c to 25c lower, closed strong to 10c to 15c higher than early; top, \$15.75; bulk light and light butchers, \$15.40@15.70; bulk 250 pounds and over, \$14.35@14.40; pigs, 25c lower, with bulk at \$12.25@13. Sheep: Over half direct to packers; very good Idaho lambs, \$16.25; best native, \$16; bulk, \$14@16; California lambs, \$15.50; best yearlings, \$12; choice ewes, \$6.50@7; few, \$7.50; California ewes, \$7; best feeder lambs, \$13.65@13.90.

THE WEATHER FOR THE WEEK

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



WASHINGTON, D. C., June 26, 1920.—Warm waves will reach Vancouver, B. C., near June 26, July 2, 7, and 13 and temperatures will rise on all the Pacific slope. They will cross crest of Rockies by close of 27 and July 3, 8, 14; plains section 28 and July 4, 9, 15; meridian 30, upper great lakes, Ohio-Tennessee and lower Mississippi valleys 29 and July 5, 10, 16; lower great lakes and eastern sections 30 and July 6, 11, 17, reaching vicinity of Newfoundland about July 1, 7, 12, 18. Storm waves will follow about one day behind warm waves, cool waves about one day behind the storm waves.

These disturbances will control the cropweather from near June 26 to

July 18. Moderate temperatures are expected up to near July 13 and warmer following. Frequent thunder storms are expected and a general average of less rain than usual but well distributed moisture, bringing rather favorable cropweather for all sections. Southern parts of plains sections are in doubt and may be sufficient short on rain to threaten a raid by grasshoppers. Showers in Ohio and other middle latitudes are expected to check the Hessian fly. Middle to northern latitudes are expected to get fairly good weather for harvesting but may have to dodge the showers which are not expected to be heavy enough to do much damage.

General results of July cropweather will check the hopes of big crops but no serious extensive drouth is expected. Crop prospects are expected to be better at the end of June than they were at the end of May. Some hail is expected before the season ends. July and August are the most dangerous hail months.

W. T. Foster

THE WORLD'S MARKET AT MICHIGAN'S DOOR

(Continued from page 1)

whether or not the American wheat-grower could remain in business. And since the plains of the Dakotas and the Canadian Northwest are capable of feeding bread to a large part of the bread-eating world, the question of rates and profits assumes world-wide importance.

"Take your map of North America, and put your finger on Duluth in Minnesota, or Port Arthur in Canada. Then follow down Lake Superior to the "Soo" Canal at Sault Ste. Marie, where the waters of Superior drop twenty feet to the level of Lake Huron. Here there are locks deep enough, long enough, and wide enough to let through the gigantic 10,000 ton Great Lakes freighters—locks large enough to handle all but about 5 per cent of the ocean-going freight-carrying shipping of the world.

"Passing on through Huron we come to the St. Clair and Detroit rivers, and these likewise can carry any ocean-going ship except such vessels as the Mauretania and Leviathan.

"The next stop on our all-water route from the Middle West to Europe is at the new Welland Canal. Canada is building this to meet the capacity of the "Soo" locks, and when completed any of the great freighters of the Upper Lakes can comfortably drop down through it onto Lake Ontario.

"Below Montreal, all the way to the sea, the St. Lawrence affords a broad, deep, safe ship highway that would bring Europe one thousand miles closer to our Middle West were it not for less than fifty miles of tumbling rapids in the upper St. Lawrence. The improvement of this fifty miles, by the creation of two great dams to hold back the waters of the river, is now becoming a matter of international concern.

"Engineers are agreed that this work can be done at a cost approximating \$110,000,000, and that the four million horse-power of electrical energy that will be released by creating these artificial lakes will more than pay the entire carrying charges of the undertaking. So that from a financial standpoint the proposition appears entirely feasible. With these dams built, and their locks in operation, a steamer of 5,000 tons capacity could enter the St. Lawrence, carrying a cargo from Europe, lay down that cargo at any one of the Great Lakes ports, and then proceed to the head of the lakes to re-load with wheat or flax or livestock for the return journey. The effect would be to thrust an arm of the ocean midway into the heart of the American continent, and bring the prairie region west of Chicago and Duluth into overnight contact with the sea.

"This would place all the central region of the United States and Canada in a much more favorable situation in the coming competition for world commerce.

"But this is by no means all that the canalizing of the St. Lawrence would mean.

"It would help to solve in a very large measure, the pressing transportation problem, because it would shorten the rail haul of products west of the Alleghenies destined for overseas consumption; and by so doing it would in effect add materially to the carrying capacity of the present rail equipment.

"It is a well-established fact that car congestion and car shortage, the twin bugaboos of the rail men and shipping public, are largely due to the long overland haul of shipments originating at, or bound for, points west of Chicago. The vast network of railways draws the streams of cars into the already locally congested area east of Pittsburgh and Washington; and when the wheat shipments of early fall begin, the congestion becomes a jam, and the jam becomes a tie-up.

"This situation, bad enough when the all-rail shipments alone are considered, is made materially worse when the stream of lake-and-rail traffic comes pouring down the Great Lakes and debarks at Buffalo and Cleveland, demanding cars and right of way and side-track space that is needed by the traffic already on the ground.

"The opening of the St. Lawrence route would cause this stream of

lake-and-rail traffic bound for overseas ports to move along the easier and cheaper and quicker all-water route, and a fair part of the all-rail that now reaches the Atlantic parts would find its natural route to Europe through its most convenient lake port and thence by ocean-going shipping direct to Europe.

"It has been estimated that four billions of dollars are necessary for the development of the American railways to the point where they can properly take care of the growing volume of transportation. If the expenditure of less than 5 per cent of this amount will provide an all-water route from the heart of the American continent to the sea, if this expenditure will bring the Mississippi Valley and the plains of Canada a thousand miles nearer to Europe, and if, finally, it will divert from the Eastern states a volume of through traffic that serves no other purpose than to congest roads already breaking down under local traffic and continental traffic originating within the manufacturing area along the Atlantic coast—then it would seem that immediate steps should be taken to add the St. Lawrence all-water route in order to relieve our overloaded and crumbling system of continental transportation."

TEXAS FARMERS GET \$2.50 FOR THEIR WHEAT

New wheat was selling for \$2.25 to \$2.50 a bushel from farmer to dealer in and around Fort Worth, Texas on June 21st. This was declared to be the highest price paid there in several years.

Crop Reports

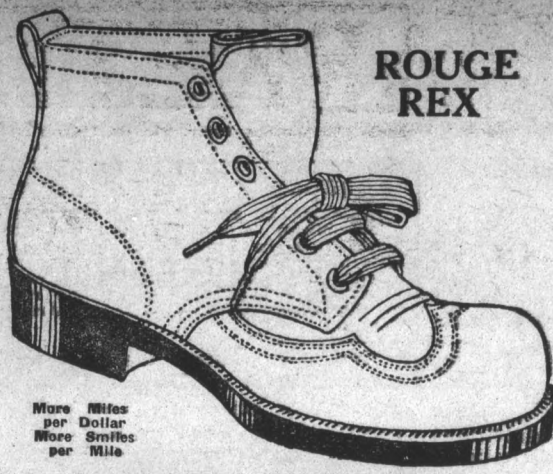
ARENAC (E)—Well the rain reached us at last and has been sending down the moisture every day, so much that farmers cannot get on their fields to cultivate or finish getting in their beans etc. It looks like another one of those high-priced years. On clay ground it is utterly impossible to do a thing, and will at least be a week before farmers can, provided it does not rain any more. Good old Democrat times is here and as the M. B. F. stated a few days ago, the banks are very careful who they let out loans to—more tight here every week. Prices on farm commodities are lowering. Wool is nearly a dead issue and unless you wish to take a small price, better hold on some time. The storms were ferocious and did enormous damage, tearing down silos, blowing fruit trees down and the hail was responsible for some damage. Poultry took some drop last week and looks like lower price in the face of high priced feed.—M. B. R.

TUSCOLA—Farmers are still planting potatoes and beans, sowing buckwheat and millet, cultivating corn and early potatoes. Corn looks very yellow and not a good stand. Cutworms and crows took a lot of it. Hay is going to be a light crop by the looks of it now. Weather has been very dry and hot until Monday when it started to rain and it has rained hard for two days. Tuesday night we had the worst storm of the season, lightning, rain, hail and wind, doing a lot of harm to trees and beans. One man had a nice horse killed by lightning. The following prices were offered at Caro: Wheat \$2.90; corn, \$1.75; oats, \$1.05; rye, \$1.90; buckwheat, \$3.50 cwt.; beans, C. H. P., \$7 cwt.; hay, \$24; potatoes, \$3 @4 per bu.; beans, 25@28c; broilers, 50c; butter, 45c; butterfat, 55c; eggs, 36c; beef steers, beef cows, 6@9c; veal calves, 10@14c; sheep, 5@8c; lambs, 13@14c; hogs, 13 1-2c.—R. B. C.

SHIAWASSEE—The drought of the past month or more has been a severe handicap to the bean growers, as many who have their fields fitted decline to plant while the ground is so very hot and dry, especially where the ground is of a sandy nature. Wheat as a rule is not doing as well as it was before the drought came on. Oats and corn seem to be practically at a standstill. Early potatoes are up enough to cultivate but the late crop as a rule are just being planted. Potato bugs have not made their appearance as yet, at least none have been reported. The following prices were offered at Durand: Wheat, \$2.80; oats, \$1.05; rye, \$3.10; beans (C. H. P.) \$6.75@7.05; hay, \$24@28; potatoes, \$4; butter, 55c; butterfat, 65c; eggs, 38c; veal calves, \$10@12.—D. H. M.

MONTCALM (N. W.)—We have had plenty of rain fall the last few days. Helping crops considerably, especially wheat and rye which is just beginning to head. Quite a lot of live stock is being sold. Silos are being built this year throughout the country. The following prices were offered at Lakeview: Wheat, \$3.25; corn, \$1.80; oats, \$1.50; rye, \$2.25; No. 1 timothy \$30; No. 1 light mixed, \$30; potatoes, \$3; onions, 8c lb.; cabbage, 10c lb.; cucumbers, \$3 cwt.; hens, 25c; butter, 50c; butterfat, 55c; eggs, 34c; strawberries, 30c.—G. B. W.

MIDLAND—The following prices were offered at Midland: Wheat, \$2.80; corn \$1.80; oats, \$1.05; rye, \$1.80; buckwheat, \$3; beans (C. H. P.) \$6.75; peas, \$3.25; barley, \$3.15.—O. B. & G. C.



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Tanners—Shoe Manufacturers

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GRAND RAPIDS, MICH.

STATEMENT

OF

Citizens' Mutual Automobile Insurance Co.

As of June 1st, 1920

CLAIMS PAID

	No.	Amount
Since organization	3,431	\$458,226.98
First 5 months of 1920	667	95,850.85
During May, 1920	161	23,134.00

RESOURCES

Current—		
Cash in Banks, Commercial Acct.		\$ 39,331.74
Cash in Banks, Savings Account		22,000.00
U. S. Bonds and Stamps		26,240.50
		\$ 87,572.24

Capital—		
Insurance Building and Site	\$27,547.67	
Up-to-date Office Equipment	10,806.96	\$ 38,354.63

Total Resources\$125,926.87

Why insure in a small company with a small surplus when you can insure in the largest exclusive automobile insurance company in the world organized on the mutual plan, with experienced officers and adjusters to take care of all serious claims.

Call on our local agent, or write the Home Office.

Citizens' Mutual Automobile Insurance Co., Howell, Michigan

If Does More and Goes Farther Than Any Product Known



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Tix-Ton ANTISEPTICS

the year around keep stock healthy and free from disease germs, worms, stock conditioner—saves you big money.

Send \$3.00 for a box of "TIX TON-MIX" by parcel post. It will medicate a barrel of salt. For hogs, sheep, cattle, horses, and poultry.

PARSONS CHEMICAL WORKS, Grand Ledge, Michigan
Leona Park Farms Experiment Station
Write for Club Offer

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What Are You In the Market For? Use This Coupon.

Every reader of M. B. F. will be in need of one or more of the following items before spring. The next few months is the time you will do your buying for the coming season. Check below the items you are interested in, mail it to us and we will ask dependable manufacturers to send you their literature and lowest prices free and without any obligation on your part.

AUTOMOBILES	DAIRY FEED	INCUBATORS	SHOES
AUTO TIRES	DYNAMITE	KEROSENE ENG.	STOVES
AUTO SUPPLIES	ELECTRIC LG'T	LUMBER	STUMP PULLER
AUTO INSUR.	GAS ENGINE	LEME	SEEDS
BEE SUPPLIES	GUNS	MANURE SP'DR	SPRAYERS
BERRY BASKETS	PANNING MILL	NURSERY STK	SILLO
BUILDING SUP.	FERTILIZER	MOTORCYCLES	TANNERS
BICYCLES	FUR BUYERS	MILKING MACH.	TRACTORS
BINDER TWINE	FARM LANDS	AUTO TRUCKS	VET. SUPPLIES
CHEM. CLOSETS	FORD ATTACH'M	PAINT	WAGONS
CLOTHING	FURNITURE	FLOWERS	WATER SYSTEM
CULTIVATOR	HORSE COLLARS	POTATO MACH.	WASHING MACH.
CREAM SEPR	HARROWS	ROOFING	WINDMILL
CARRIAGE	HAY BAKES	SAWING MACH.	WIRE FENCING
DRAIN TILE	HARVESTERS	STOCK FOOD	WOOL BUYERS

(Write on margin below anything you want not listed above.)

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THE MICHIGAN BUSINESS FARMER Service Bureau, Mt. Clemens, Mich.

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

10,000 MILE GUARANTEE

We want an agent in every community to use and introduce these wonderful tires at our astonishingly low prices to all motor car owners.

FREE TIRES for YOUR OWN CAR to a representative in each community. Write for booklet fully describing this new process and explaining our amazing introductory offer to owner agents.

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DEPT. 189 PHILADELPHIA, PA.

80 Glasses From One Package

A package of Hires Household Extract—25c at your grocer's, a yeast cake and some sugar. These will make 40 pints or 80 glasses of the best rootbeer you ever tasted. And it's so easy to make.

The actual juices of roots, barks, herbs, berries—and pure cane sugar make Hires Household Extract pure and healthful.

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Be sure you get this package. It brings you the genuine Hires Household Extract.

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The Ottawa Log Saw falls trees or cuts off stumps level with ground. Saws up logs, cuts up branches, ice cutter, runs pump jack and other belt machinery. Mounted on wheels. Easy to move anywhere. 10 Year Guarantee. 30 Days Trial. Write for Free Book and Cash or Easy Terms. OTTAWA MFG. CO., 1481 Wood St., Ottawa, Kans.

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YOUR FAVORITE DAILY
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Names of Newspaper	Special Price
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Ypsilanti Press	3.10
Detroit Free Press	4.50
Jackson Citizen-Patriot	4.50
Manistee News-Advocate	3.50
(In County)	
Manistee News-Advocate	4.50
(Elsewhere)	
Pt. Huron Times-Herald	4.50
Detroit News	5.50
Bay City Times-Tribune	4.50
Grand Rapids Herald	4.50

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(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. Subscribers desiring a personal answer by mail to a question of a legal nature should enclose \$1 for reply.)

REQUIREMENTS OF ASSESSOR

In taking an assessment is the supervisor obliged to have his tax roll with him? Does he have to write with pen and ink? Also will he have to give the owner a receipt showing his assessed valuation or hasn't the owner any right to this information.—A Reader, Arenac County.

The law requires the supervisor or assessor to ascertain the taxable property of his district and for this purpose SHALL require each person having taxable property to make a statement of his property under oath. It is made a criminal offense to refuse to make it or to make a false one. He does not need his roll with him when he requires such statements. He is not obliged to fix the values when he visits the taxpayers and owners. Such action should be after he has viewed all of the property. The copying in the names and descriptions of property is clerical and should be done in ink and may be done by a clerk but the fixing of the values is an act that the officer must fix for himself and can not thus allow a clerk to merely copy a roll of former years. He is not required to give the owner the amount of the assessment but must furnish the information if requested.—W. E. Brown, legal editor.

GREEN LEG PLYMOUTH ROCKS

Are there any pure bred Barred Plymouth Rocks having dark colored feet and legs?—Mrs. I. N. M., Standish Mich.

Barred Rock pullets often show a dark green or slate green leg, owing to, I think, the fact of exhibition breeding to increase the number of bars on the feather that the yellow pigment has about left the beak and the leg in the modern bred Barred Plymouth Rock. The cockerels show yellow legs and are very apt to have green in the beak. The cause of this is the breeding more black into the fowl, which of course is moving towards the Black Java blood that was originally crossed to produce the Barred Rock.

By the standard of perfection you will notice that the Black Java shanks and toes are black or nearly black with a tendency towards willow but black preferred. This would give ample chance for the dark colored shank. For a good many years there were green spots on the shanks of the Barred Rock female but later on of course we find the greenish slate leg on most all of them.—C. H. Burgess, Professor of Poultry Husbandry, M. A. C.

WORDING OF CONTRACT SHOWS

Last August I listed my farm for sale with our local agent, gave him the exclusive sale of it for 12 months, but he did not bring any one around for eight months (I had signed a contract with him for a five per cent commission.) Last February I saw an ad in the Chicago Daily News which I answered. The Chicago broker came out with the owner of Chicago property and we made a deal here to trade equity for equity, I agreeing to pay the Chicago agent \$450 commission. Now our local agent after hearing that I had traded, comes along with a proposition for a trade, after I had signed a contract with the Chicago man. Can our local agent hold me for commission?—A Subscriber Van Buren County.

Your question is a complicated one and may be controlled by the wording of the contract you made with the first broker. Unless that contract would control I am of the opinion you would still be able to make a deal yourself and not be liable to him for any commission. Such a matter should be submitted to your attorney with all of the facts to assist in construing the question of liability.—W. E. Brown, legal editor.

HOMES FOR THE AGED

Is there an old peoples' home in Michigan, if so, where is it located and what are the terms and conditions under which a person of nearly 70 years old can gain a home there?—A Reader.

There are several homes of this kind in the state; some are maintained by lodges for their members, some by churches for their members; a few are for women only and several are for aged people of any faith

of sect. Of the last named there are three: "Home for the Aged," located at Grand Rapids; "Old People's Home," located at Muskegon; "Old People's Home," located at South Haven. These homes are open to aged people of 60 years or more and are maintained by individuals, charities and contributions by inmates.—Editor.

WIFE NOT LIABLE FOR HUSBAND'S DEBTS

I would like to have you print in your paper what you know in regards to the paying of notes signed for men going to the war and not returning. Now these widows refuse to pay same after they have signed their name on the renewal note for the first one signed by their husband. I have a note that I paid a year ago that I signed with a young man that was working for me when he was drafted. His wife renewed this note and signed her own name to the renewal now she receives her insurance from her husband who was killed in France and refuses to do anything with it at all. Please print your advice on this as there are perhaps others who would like to know this same thing.—E. M. G., Osceola County.

A married woman is not liable for her husband's debts even though she signed the note. It would not make any difference how much money she had. If the deceased left no estate of his own from which the amount of the indebtedness could be collected you would be without a remedy in law.—W. E. Brown, legal editor.

SHEEP HUSBANDRY BOOK

Where can I get a book describing the different kinds of sheep?—O. P., Vestaburg Mich.

We are offering for sale a book that treats this subject very thoroughly. If you will look on page 19 of your June 5th issue of THE BUSINESS FARMER you will find an ad describing this book and the price of it.—Editor.

RAISING WATER ON LAKE

Have individuals owning lake frontage which embraces an outlet to several lakes the right to raise the water level of these lakes by damming the outlet? What procedure would be necessary, on the part of parties wishing to raise the level, to make the damming legal. The raising of the level would be detrimental in several instances to parties owning frontage on the lakes to be raised. Have the parties who would be seriously affected any powers to prohibit the raising of the water level?—A Livingston County Subscriber.

The parties who desire to raise the water on the lakes must have the right of flowage of all of the bordering land to legally raise the water. They can acquire this right of flowage only by purchase. The persons likely to be injured by threatened flowage would be entitled to an injunction upon a proper bill in chancery paying for such injunction.—W. E. Brown, legal editor.

THE COLLECTION BOX

NEW YORK COMPANY RETURNS SUBSCRIBER'S MONEY

I have noticed an article in the last issue which corresponds somewhat with the predicament I am in. On Nov. 11, 1919, I sent an order amounting to \$30.21 to the B—H Co., of New York City and have never heard a word from them, although I wrote many times. Will you please see what you can do, and I, like the other reader you helped would be willing to pay you amply.—Miss M. A. K., Huron County.

We took the matter up with the B—H—Company and received a reply from them stating that they were mailing a check to our subscriber covering the entire amount due and on June 12th we received the following letter from Miss M. A. K.:

Your letter received in regard to my trouble with the B—H—Co. and after seven months I have received my money. Many thanks to you. Very truly yours.—Miss M. A. K., Huron County.

(We do not make any charges to our subscribers for making collections.)

CREAM BUYER LIABLE FOR CAN

Last summer a cream buyer bought cream in this neighborhood. He would call once a week, take a can of cream and bring back an empty and pay for the one he took away the week before. Now the last trip was Dec. 16 and he has not returned the empty can nor paid for it or the cream. Is there any way I can collect? He lives in the next county.—W. J. Y., Roscommon County.

The purchaser of cream is liable in a personal action for the price of the cream, and for the can, if he refuses to return it. I would be of the opinion that a demand would have to be made upon him for the can before an action for the price would lay, unless you have an agreement with him as to the time of its return. Unless the goods were obtained by what in law would amount to false pretenses there would be no criminal action. You having trusted him there would be only an action for the amount he owes you. You can sue him in the other county or in your own county if you can have summons served on him in your county.—W. E. Brown, legal editor.

VALUE OF ENSILAGE

What is a fair price per ton for a good grade of silage? How many tons per foot will two year old silage weigh in the bottom six feet of a 12 x 42 silo that has been filled both years?—A Huron County Reader.

The value of ensilage will depend upon the class of livestock to which it is to be fed, the maturity of the corn, and the distance necessary to haul the ensilage. At the present price of hay, from \$12 to \$14 per ton is a fair estimate. The weight per cubic foot of ensilage varies greatly at different depths. In a 12 x 42 ft. silo, the ensilage will weigh from 30 to 35 pounds per cubic foot, 10 feet from the top, while the bottom 6 ft. will weigh from 60 to 70 pounds per cubic foot. Assuming that the weight per cubic foot is 65 pounds, each foot of silage will weigh approximately 3.6 tons at the depth mentioned.—C. R. Megee, Asst Professor of Farm Crops, M. A. C.

TENANT FURNISHES ALL

When a man rents his farm on shares, getting one third of grain and one-half of hay, should he furnish seed and fertilizer?—Subscriber, Sanilac County.

It is usual to provide in the lease what each shall furnish but if there was no such agreement and the tenant was to have two-thirds and the landlord one-third I would be of the opinion that the tenant furnished all.—W. E. Brown, legal editor.

NEW ERA ASSOCIATION

I would like to learn everything possible about the New Era Association of Grand Rapids, Michigan. It doesn't look very solid to me, appears to be too much of a speculation. How about its financial standing? Is it growing? Won't the rates soon be boosted way up? What is its future? Several around here are carrying insurance in the association, some that are not financially able to lose their protection.—Anxious Kent County.

In accordance with your request of May 19th, we are giving you below a statement of the financial condition of the New Era Association, Grand Rapids, Michigan, as of December 31, 1919, as shown by its annual report filed with this Department: Admitted assets, \$82,433.36; liabilities, \$88,883.73.—Frank H. Ellsworth, State Insurance Commissioner, Lansing.

DEED WITHOUT RESERVATION

C and F bought a 40 acre farm together (joint deed) of W, a single man. According to contract they were to pay W \$100 per year and he make it his home with them for 20 years. Last September F signed off fair and square of his own accord to C with C's consent, F making no reservations whatever, it being recorded at the time. What I want to know is F entitled to any share of the new seeding that was made before he signed off?—A Subscriber, Genesee County.

A deed without reservation would convey all seeding that he had any interest in at the time of the execution of the deed.—W. E. Brown, legal editor.

BUSINESS FARMERS' EXCHANGE

FIVE CENTS A WORD PER ISSUE. Minimum size accepted, 20 words. To maintain this low rate, we are compelled to eliminate all bookkeeping. Therefore, our terms on classified advertising are cash in full with order. Count as one word each initial and each group of figures, both in the body of the ad and in the address. The rate is 5 cents a word for each issue, regardless of number of times ad runs. There is no discount. Copy must reach us by Wednesday of preceding week. You will help us continue our low rate by making your remittance exactly right.—Address, Michigan Business Farmer, Adv. Dep't., Mt. Clemens, Michigan.

FARMS & LANDS

232-ACRE FARM WITH HORSES, 25 COWS, tools, crops. Big steady income; fine location, near town; close creamery; broad machine-worked fields, 4-cow spring-watered pasture; 2-story 10-room house, spring water, maple shade; big stock barn, silo, water supply, poultry house; owner unable occupy, throws in horses, cows 3 yearlings, two 2-year olds, machinery, tools, part growing crops; less than \$30 an acre for everything, part cash easy terms. Details of this and another at \$2,900 page 29 Strout's Big Illustrated Catalog, Farm Bargains, Michigan, Ohio, Wisconsin, Indiana and 29 other states. Copy free. **STROUT FARM AGENCY, B. E. Ford Bldg., Detroit.**

STRIPPED HARDWOOD LAND, RICH clay loam—easy terms, \$12.50 to \$15.00 an acre. Neighbors, roads, schools. Four to five miles from Millersburg. Never failing clover seed will make your payments. **JOHN G. KRAUTH, Millersburg, Mich.**

FOR SALE—80 ACRE FARM, EXCELLENT soil, all under cultivation, good house, fair barn, plenty water. Will sell entire equipment including 8 high grade Holstein females, 4 miles from town. Inquire **LYLE SHARP, Clifford, Mich.**

FARM FOR SALE—78 ACRES, CLAY LOAM well drained. Best of soil. No county ditch. Good buildings, newly painted. Acetylene lights, will sell with or without stock, tools and crop. 60 rods to school, 2 miles to good market main road. **A. R. ZIMMERMAN, Newaygo, Mich.**

FOR SALE—120 ACRES, GOOD BUILD- ings, 80 acres improved; flowing well, water in house and barn. Also stream through pasture. Will sell part or all. Price \$60 per acre. For further information write **Wm. VANDEPOL, Marlon, Mich., R. No. 4.**

FOR EXCHANGE—EQUITY IN A THREE story Chicago Flat Bldg., consisting of two stores on 1st, 2-6 and 2-4 rooms on the second and the same on the third floor. All rented and in fine shape. Income better than \$5,000 for a clear Michigan farm. Give full particulars in first letter. Address **J. A. ROCKWOOD, Hastings, Mich.**

STORE AND 4 ACRES, 13 MILES FROM Alpena on Mich. Pike, \$1,800. Stock at invoice price. Owner, **JAMES J. LINC, Ossineke, Mich., R. R. 1.**

MISCELLANEOUS

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

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

FOR SALE—AVERY TRACTOR 12-25 AND P. & O. four bottom plow. Good second hand condition. If taken soon, \$600. **HARVEY POWERS, Fremont, Mich.**

WANTED—GOOD CART AND HARNESS for a pony 43 inches high. **GEO. FLEMING, R. 2, Grand Ledge, Mich.**

WANTED—FOREMAN FOR LARGE FARM. Rent and living free. Salary \$1,200 per year. **MICHIGAN STATE PRISON, Jackson, Mich.**

RESULTS!

April 6, 1920

Michigan Business Farmer,
Mt. Clemens, Mich.

Gentlemen:—Enclosed please find check for \$14.60, the sum due for 13 weeks' chicken ad and one week strawberry ad. If we need any more ads we will let you know later.

Your ads surely bring business. We're all sold out for April and May. Yours is the best paper for Michigan farmers that there is in the state. Continue in the same good way and you will have the support of every bona fide farmer.

Cordially yours,
C. W. HEIMBACH,
Route 5, Big Rapids, Mich.

M. B. F. brings them

Is Your Farm for Sale?

Write out a plain description and figure 50 for each word, initial or group of figures. Send it in for one, two or three times. There's no cheaper or better way of selling a farm in Michigan and you deal direct with the buyer. No agents or commissions. If you want to sell or trade your farm, send in your ad today. Don't just talk about it. Our Business Farmers' Exchange gets results. Address The Michigan Business Farmer, Adv. Dept., Mt. Clemens.

Veterinary Dep't

GRUBS IN CATTLE

My cattle have big grubs in their backs, some of them have about a hundred and others not so many. Can you inform me how to get rid of them and what causes them to get there?—**H. F. Sanilac County.**

The grubs to which you refer appertain to the life history of the Bot-fly. This grub, or the larvae of this fly, when grown, is smooth, white, and transparent, as it enlarges it becomes browner, and about the time of its full growth it is of a deep brown color. The larvae having attained its full growth and size, effects its escape from the abscess of the back of the affected animal and drops to the ground, it is then of a dark brown color, narrower at one end than at the other, flat on one side and very round and convex on the other. They remain in this state for about six weeks, and the fly appears. The grubs usually escape during the months of May or June. Sometimes these grubs are very numerous and cause a great deal of pain and uneasiness in the animal, which becomes thin in flesh, hide-bound and feverish, more frequently, however, they do no harm except to the hides. Treatment: Whenever cattle have these tumors along the back, it is advisable to press out the grub, and apply either alcohol or Tr. Iodine.—**W. A. Ewalt, Veterinary editor.**

TUBERCULOSIS IN CATTLE

How is tuberculosis in pure bred cattle found to be present, and what is the method of cure. Can an outsider when coming to a strange barn detect that tuberculosis is present in a herd? I have heard the remark that calves standing by their mother is a good advertisement for no tuberculosis. How much linseed meal is safe for a horse when used as a tonic.—Subscriber, Mason County.

Tuberculosis in pure bred cattle is identically the same as tuberculosis in grades; the only positive method of diagnosing the disease is by means of the tuberculin test, however, the symptoms in some cases are very pronounced, for where the lungs are affected the animal usually presents a chronic cough. When the mesenteric glands are involved there is apt to be a persistent or periodical diarrhoea. One familiar with the disease may be able to detect its presence by a casual examination. There is no cure and the barbering of this or any other contagious disease will sooner or later mean a great loss. Calves standing beside their mother is no indication the disease is not present. One or two tablespoonfuls of linseed meal morn-

ing and night is sufficient to feed a horse.—**W. A. Ewalt, Veterinary editor.**

RAISING COLT BY HAND

I would like to ask through your valuable paper if any of your readers have had any experience raising a colt by hand. Mare died. Am feeding cows milk diluted a little. Have been told to feed an egg a day. Veterinary prescribed Cascara Sagrada at first. Would you advise giving a little now and then. Colt is 12 days old. About how much milk would be enough. Its my first experience and don't want to overfeed.—**W. M. H., Shiawassee County.**

When raising a colt by hand the following is recommended. Dilute cows milk with an equal amount of water and to one quart of this mixture add five drahms of sugar. The amount that is required depends on the size and breed of the colt. It would be advisable to feed the colt about six times a day, warming a fresh supply of milk each time.—**F. O. A. Taylor, Division of Veterinary Science, M. A. C.**

LET BULL ENDORSE YOUR NOTE

The Better Sires campaign conducted by various states in co-operation with the Bureau of Animal Industry, United States Department of Agriculture, is developing the fact that bank credit is available to the progressive live stock farmer as to the progressive business man of the city.

A letter received by the Bureau of Animal Industry reports the following announcement published by a Wisconsin bank to its farmer patrons:

"Why not keep some of those pure bred Holsteins home? Many fine animals will be sold at the first annual sale of the Brown County Holstein Breeders' Association to be held in the Brown County fair grounds, West De Pere, Wis., on Monday, May 10. The Bank is ready to stand back of any of its customers who wish to purchase some of the stock to be offered for sale and who do not feel able at present to carry the investment. Call at the bank and the accommodation can be easily arranged."

THE ONLY DIFFERENCE

The busy millionaire climbed into his beautiful and purring automobile. A ragged newsboy rushed alongside and offered the sale of a paper. The successful business man had already read that particular edition and to the lad's insistent demands that he "Please buy a paper, mister," finally replied rather tartly, "No, I said no." The unabashed newsboy came back with, "Aw, don't get grouchy, governor, the only difference between you and me is that you're making your second million and I'm still working on my first."—*Co-operative World.*

Genuine Aspirin

Name "Bayer" means genuine
Say "Bayer"—Insist!



Say "Bayer" when buying Aspirin. Then you are sure of getting true "Bayer Tablets of Aspirin"—genuine Aspirin proved safe by millions and prescribed by physicians for over twenty years. Accept only an unbroken "Bayer package" which contains proper directions to relieve Headache, Toothache, Earache, Neuralgia, Rheumatism, Colds and Pain. Handy tin boxes of 12 tablets cost few cents. Drug-gists also sell larger "Bayer packages." Aspirin is trade mark of Bayer Manufacture Monoaceticacidester of Salicylicacid.

BLACK FLAG

15c Milk in Comfort

Kills flies in closed milking shed. Fold piece of paper, put in it two teaspoonfuls of Black Flag; blow into air in milking shed ten minutes before milking in cows. Will kill almost every fly. Kills insects by inhalation. Bugs don't eat it—they breathe it, and die. Destroys ants, flies, fleas, bedbugs, roaches, mosquitoes, some moths, and lice on animals, birds and plants. Harmless to people and animals. Look for BLACK FLAG trademark and red-and-yellow wrapper. At grocery, drug, department and hardware stores, or direct by mail on receipt of price.

I.P. U. S. Gov't (Bulletin 771, Agri. Dept.) shows that glass containers keep insect powder strongest. Buy Black Flag in the SEALED GLASS BOTTLE instead of "insect powder" in paper bags or boxes.
BLACK FLAG
Baltimore, Md.

CORN HARVESTER One man, one horse, one row. Self Gathering. Equal to a Corn Binder. Sold direct to Farmers for 22 yrs. Only \$75 with fodder binder. Free Catalog showing picture of Harvester. **PROCESS CORN HARVESTER CO., Salina, Kan.**

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Registered Holsteins

1st Macomb County Consignment Sale

June 30th, 1920

Sale at 1:00 p. m.

11:16 A. M. Limited from Port Huron and
12:10 Limited from Detroit will stop at the door.

Also hourly local service both ways.

COL. R. E. HAEGER,
HARRY ROBINSON,
B. V. KELLY,
AUCTIONEERS.

Fairchild Farms,
Chesterfield, Mich.

(25 miles from Detroit on Gratiot Ave.)

R. AUSTIN BACKUS,
In the Box



BREEDERS DIRECTORY



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

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

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens.

June 30, Holsteins. Fairchild Farms, Chesterfield, Mich.
Aug. 8, Duroc-Jerseys. O. E. Foster, Pavilion, Mich.
Oct. 26, Poland Chinas. Wesley Hill, Jonia, Mich.
Oct. 27, Poland Chinas. Boone-Hill Co., Blanchard, Mich.
Oct. 28, Poland Chinas. E. R. Leonard, St. Louis, Mich.
Oct. 29, Poland Chinas. Clyde Fisher, St. Louis, Mich.
Oct. 30, Poland Chinas. Chas. Wetzel & Sons, Ithaca, Mich.
Oct. 31, Poland Chinas. Brewbaker & Sons, Elsie, Mich.

CATTLE

HOLSTEIN-FRIESIAN

MR MILK PRODUCER

Your problem is more MILK, more BUTTER, more PROFIT, per cow.
A son of Maplecrest Application Pontiac—182652—from our heavy-yearly-milking-good-but-ter-record dam will solve it.
Maplecrest Application Pontiac's dam made 85,103 lbs. butter in 7 days; 1344.3 lbs. butter and 28421.2 lbs. milk in 365 days.
He is one of the greatest long distance sires. His daughters and sons will prove it.
Write us for pedigree and prices on his sons. Prices right and not too high for the average dairy farmer.
Pedigrees and prices on application.
R. Bruce McPherson, Howell, Mich.

BUTTER BOY ROSINA PRINCE

257572, herd sire, son of King Ona. His sire is from a 30 lb. cow that made 1,345 lbs. in one year and dam, Butter Boy Rosina 2nd 200, 540, made 29 lbs. and almost 800 lb. in ten months, she has a 33 and 34 lb. sister. Have some fine young bulls and heifers and some heifers bred to him, all from A. R. O. cows with records from 22 to 30 lbs. Write for prices.
Hampshire hogs, fall hogs, ready for service and gilts. Booking orders for spring pigs.
Belgian and Percheron Stallions and mares. Imported and American bred.
SAGINAW VALLEY STOCK FARM.
E. Sprunger & Son, Props., Saginaw W. S., Mich.

FOR SALE

5 HEIFER CALVES
age from 2 to 3 months
3 BULL CALVES
one ready for heavy service
7 COWS

two with 18 and 20 lb. seven day records. Five with good profitable cow testing records. Write for pedigrees and prices.
Herd free from disease.
H. E. BROWN, Breedsville, Mich.
Breeder of Reg. stock only

BABY BULLS

Grow your own next herd sire. We have three beautiful youngsters—straight as a line, big-boned rugged fellows. They are all by our 38 lb. senior sire, KING KORNDYKE ORISKANY PONTIAC from splendid individual dams of A. R. bucking and the best of blood lines.
Write for our sale list.

BOARDMAN FARMS

JACKSON, MICH.
Holstein Breeders Since 1906

\$125.00 TAKES A HOLSTEIN BULL
calf born Nov. 23, 1919.
Evenly marked. Two nearest dams average 22.5 lbs. Sired by a son of Alcatraz Pontiac Butter Boy. Federal tested herd.
H. L. VOEPEL, Sebawaing, Mich.

CEDAR BROOK FARM

Offers for sale

TWO YEAR HOLSTEIN BULL

Sired by VALLE ELZERVIERE VASSAR BELL PAUL, dam LADY GERDA PONTIAC KORNDYKE, whose coloring is about 2-3 white. From the herd of H. C. Crandall & Son of Elba.
Price \$150
THOS. LEE MUIR, Almont, Mich.

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

MUSOLFF BROS.' HOLSTEIN

We are now booking orders for young bulls from King Pieter Segis Lyons 170506. All from A. R. O. dams with credible records. We test annually for tuberculosis. Write for prices and further information.
Musloff Bros., South Lyons, Michigan

BULL CALF LAST ADVERTISED SOLD.
Nicer marked, straight back line, a fine individual, large growthy fellow with the making of a large bull. Would do someone a lot of good. Dam has a 27 lb record, a large cow and a great milk producer. Sire a son of Poland Hengerveld DeKol Butter Boy, one of the great bulls.
JAMES HOPSON, JR.
Owosso, Mich.

HATCH HERD

(State and Federal Tested)

YPSILANTI, MICH.

OFFERS YOUNG SIRES

Yearlings and younger, out of choice advanced registry dams and King Korndyke Art's Vale. Own dam 34.16 lbs. butter in 7 days; average 2 nearest dams, 37.61, 6 nearest 33.93, 20 nearest, 27.83.

BAZLEY STOCK FARM

YPSILANTI, MICH.

Increase Your Production at the Price of \$50

Bull born May 3rd. Sire a grandson of John Hengerveld Lad 61 A. R. O. Daughter, Dam a 2 year old granddaughter of a 21 lb. cow that will be tested at next freshening. We have just finished testing 2 cows. One made over 30 lbs., the other made 27.65 from 779 lbs. of milk in 7 days.

JOHN BAZLEY

319 Atkinson Ave.

DETROIT, MICHIGAN

REGISTERED HOLSTEINS OF BOTH SEXES

WM. GRIFFIN, R. S., Howell, Michigan

Bulls From an Accredited Herd

HILL CREST FARMS, MUNSON, MICHIGAN
RISINGHURST JOHANNA ORMSBY DIMPLE 195063

born Nov. 25, 1915, is offered for sale. His sire is by Johanna Concordia Champion 60575 (29 A. R. O. daughters, two 30 lbs. 5 above 20 lbs.) who is by Colanthe Johanna Champion 45674 80 A. R. O. daughters) a son of Colanthe 4th's Johanna, 35.22, the only cow to ever hold at one time 11 world's records in every division from one day to a year. His dam, Lindenwood Dimple 2nd 139424, 27.33 lbs. butter, 465.30 lbs. milk, average per cent fat 4.70, is by Duke Ormsby Pieterde De Kol 44764 (10 A. R. O. daughters, 2 above 30 lbs.) and out of Lindenwood Dimple 194601. She has 75 per cent the same breeding as Lindenwood Hope, 30.61. Write for price and other information.
EDWARD E. BENSON & SONS, Munson, Mich.

A NICE STRAIGHT LIGHT COLORED BULL
A calf born February 1st. Sired by Flint Hengerveld Lad, whose two nearest dams average 32.66 lbs. butter and 735.45 lbs. milk in 7 days. Dam, a 24 lb. daughter of a son of Pontiac De Nijlander 35.43 lbs. butter and 750 lbs. milk in 7 days. Write for prices and extended pedigrees to
L. C. KETZLER
Flint, Mich.

36 pound son of KING OF THE PONTIAC'S Heads our Herd

Several 30 pound cows all under Federal Supervision, good bull calves and a few bred heifers for sale.

HILL CREST FARM, Ortonville, Mich.
or write
John P. Hehl, 181 Griswold St., Detroit, Mich.

OUR HERD SIRE

MODEL KING SEGIS GLISTA

His sire a 30 lb son of Lakeside King Segis Alban De Kol.
His dam, Glista Fenella, 32.37 lb.
Her dam, Glista Ernestine, 35.96 lb.
His three nearest dams average over 33 lbs. and his forty six nearest tested relatives average over 30 lbs. butter in seven days. We offer one of his sons ready for service.

GRAND RIVER STOCK FARMS
Corey J. Spencer, Owner. Eaton Rapids, Mich.

BIG ROCK HOLSTEINS

Herd Headed by Johan Pauline De

Kol Lad 236554

a son of Flint Hengerveld Lad and Johan Pauline DeKol twice 30 lb. cow and dam of Pauline DeNijlander (Mich. Champion two years old.)

Bull calves from dams up to 28 pounds.
Roy E. Fickies, Chesaning, Mich.

TWO BULL CALVES

Registered Holstein-Friesian, sired by 39.87 lb. bull and from heavy producing young cows. These calves are very nice and will be priced cheap if sold soon.

HARRY T. TUBBS, Elwell, Mich.

SHORTHORN

SHORTHORNS

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

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

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

FOR SALE—POLLED DURHAM BULLS AND Oxford Down Rams
J. A. DeGARMO, Muir, Mich.

Shorthorns at Farmers' Prices

FOUR SCOTCH TOPPED BULL CALVES under one year old. These are all roans and choice individuals.
FAIRVIEW FARM, Alma, Michigan

F. E. Boyd

SHORTHORNS ONLY A FEW LEFT

AT OLD PRICE.
Wm. J. BELL, Rose City, Mich.

FOR SALE
TWO REG. SHORTHORN BULLS ready for service. Also one Reg. Shorthorn heifer. Herd tuberculin tested. Write
M. B. HALLSTED, Orion, Mich.

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

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

Maple Ridge Herd of Bates Shorthorns Of- fers for sale a roan bull calf 7 mos. old. Also 2 younger ones. J. E. TANSWELL, Mason, Mich.

HEREFORDS

Hardy Northern Bred Herefords
BERNARD FAIRFAX 624819 HEAD OF HERD
20 this year's calves for sale. 10 bulls and 10 heifers.
JOHN MacGREGOR, Harrisville, Mich.

REGISTERED HEREFORD CATTLE

KING REPEATER HEADS OUR HERD
We still have eight good bulls and some heifers for sale. Come and see them.

MARION STOCK FARM

Tony B. Fox, Prop.

Marion, Mich.

120 HEREFORD STEERS. ALSO know of 10 or 15 loads fancy quality Shorthorn and Angus steers 5 to 1000 lbs. Owners anxious to sell. Will help buy 500 commission. C. F. Ball, Fairfield, Iowa.

MEADOW BROOK HEREFORDS

Bob Fairfax 495027 at head of herd. Registered stock, either sex, polled or horned, mostly any age. Come and look them over.
EARL C. McCARTY, Bad Axe, Michigan.

ANGUS

The Most Profitable Kind

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

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

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

GUERNSEYS

GUERNSEYS FOR SALE. 1 BULL, ST. AU- tell Sultan, sire Longwater Prince Charmant (18714) 4 A. R. daughters, 416 lb. fat at 2 1-2 years old. Dam, Dagna of Hillhurst (35969) A. R. 548 lb. fat at 2 1-2 yrs. old. 1 bull calf, 6 mos. old of similar breeding. Also a few fine heifers of the above bull. It will pay you to investigate. Prices and pedigree on application.
MORGAN BROS., R 1, Allegan, Mich.

REGISTERED GUERNSEYS

ORDER YOUR BULL CALF NOW for later shipment. Let me send you a real pedigree of better breeding.
J. M. WILLIAMS, North Adams, Mich.

JERSEYS

Highland Farm--Jerseys

Offers: Bulls of serviceable age, of R. O. M. Sire and Dam's, with high production records. Also bull calves. Write for printed list of prices and description.
HIGHLAND FARM, Shelby, Mich., R. 2.

For Sale—Jersey bull calves. Oxford and Majesty breeding. Dams are heavy producers.
J. L. CARTER, R4, Lake Odessa, Mich.

IMPROVE YOUR JERSEY HERD WITH ONE of our Majesty bulls.
FRANK P. NORMINGTON, Ionia, Mich.

AYRSHIRES

SPECIAL SALE

REGISTERED AYRSHIRES

Beginning June 12th., for 30 days we will sell bulls fit for service for \$100. Bull calves and heifer calves for \$50.

FINDLAY BROS

Vassar, R 5, Mich.

SWINE

POLAND CHINA

BIG BOB MASTODON

Sire was champion of the world, his Dam's sire was grand champion at Iowa State Fair. Get a grand champion while the getting is good. Booking orders now. Bred gilts are all sold, but have 10 choice fall pigs sired by a Grandson of Din- der's Giant, 3 hogs and 7 sows. Will sell open or bred for Sept. farrow, to BIG BOB.
C. E. GARNANT, Eaton Rapids, Mich.

WONDERLAND HERD

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

WALNUT ALLEY

My 1920 crops will be sired by Giant Clansman No. 324731, sired by Giant Clansman and Art's Progress No. 377041.

A. D. GREGORY, Ionia, Mich.

HERE'S SOMETHING GOOD

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

BIG TYPE POLAND CHINAS WITH QUALITY
Nine fall gilts out of litters of eleven and thirteen, for sale.
J. E. MYGRANTS, St. Johns, Mich.

L S P C FOUR CHOICE SPRING AND FALL
boars left. A few extra nice gilts left bred for April farrow.
H. O. SWARTZ, Schoolcraft, Mich.

T. P. C. SOWS ALL SOLD. ORDERS
booked for boar pigs at weaning time from Mich. champion herd. Visitors always welcome.
E. R. LEONARD, R 3, St. Louis, Mich.

BIG TYPE P. C. SOWS OF CHOICE BREED-
ing, bred to Big Bone Bone Boulder No. 726-672 for Sept. farrow. Spring pigs either sex. Healthy and growthy. Prices reasonable.
L. W. BARNES & SON, Byron, Mich.

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

Big Type Poland Chinas. Am offering three boar pigs at weaning time at reasonable price. Registered in buyers name. Sired by Big Long Bob. Write for pedigrees and prices.
MOSE BROS., St. Charles, Mich.

I Am Offering Large Type Poland China Sows; bred to F's Orange at reasonable prices. Also fall pigs. Write or call.
CLYDE FISHER, R3, St. Louis, Mich.

T. P. C. FOR SALE. SPRING PIGS OF
both sex. Sired by Wiley's King Bob the Big Smooth kind.
JOHN D. WILEY, Schoolcraft, Mich.

The Best Breeders

advertise in The Michigan Business Farmer. It will be worth your while to read the livestock advertisements in every issue to keep posted on what they have to sell.

LIVE STOCK FIELD MEN

E. N. BALL, Cattle and Sheep
FELIX WITT, Horses and Swine

One or the other of the above well-known experts will visit all live-stock sales of importance in Michigan, northern Ohio and Indiana, as the exclusive Field Men of The Michigan Business Farmer.

They are both honest and competent men of standing in their lines in Michigan and they will represent any reader of this weekly at any sale, making bids and purchases. Write them in care of this paper. Their service is free to you. They will also help you arrange your sale, etc. They work exclusively in the interests of Michigan's OWN live-stock weekly!

L. T. P. C.

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

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

BIG TYPE POLAND CHINA BRED GILTS, one fall boar, spring pigs both sex, and tried sows while they last.

HOWLEY BROS., Merrill, Mich.

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

JOHN C. BUTLER, Portland, Mich.

FAREWELL LAKE FARM

large type P. C. Have a fine lot of spring pigs by Chasman's Image 2nd. The Outpost and King's Giant. I will sell King's Giant No. 327, 749. He is a real sire. He was first prize yearling boar at Jackson Co. fair, 1919.

W. B. RAMSDALL, Hanover, Mich.

L. T. POLAND CHINAS. Orders Booked for spring pigs from Line Lucans Strain.

ELDRED A. CLARK, St. Louis, Mich., R 3

REGISTERED POLAND CHINA PIGS 3 BOARS AND 3 SOWS 8 WEEKS OLD FOR SALE. ADDRESS:

C. H. WHITE, Pontiac, Mich.
R. F. D. No. 1

DUROCS

DUROCS WITH QUALITY
Spring pigs by Walt's Orion, First Sr. Yearling
Detroit, Jackson, Gd. Rapids and Saginaw, 1919

Phillips Bros, Riga, Mich

DUROC BOAR PIGS Sired BY SECOND Wonder, \$20 at 10 weeks. Paper furnished.

GEORGE W. BEHNKE, Gladwin, Mich., Second Rt.

DUROC JERSEYS, FALL BOARS, WEIGHT 200 lbs. each. Sired by a 800 lb. boar.

Priced reasonable.
C. E. DAVIS & SON, Ashley, Mich.

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

INWOOD BROS., Romeo, Mich.

DUROC JERSEY FALL BOARS sired by Orion Cherry King Col. 2nd, first aged boar at Detroit in 1919. These are growthy and the right type

priced to sell.
W. C. TAYLOR, Milan, Mich.

DUROC Jersey Sows and Gilts bred for Aug. and Sept. farrow. 1,000 lb. herd boar.

JOS. SCHUELLER, Weidman, Mich.

DUROCS OF BREEDING SIZE AND QUALITY.

C. L. POWER, Jerome, Mich.

DUROC sows and gilts bred to Walt's King \$2949 who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroc boar.

Newton Barnhart, St. Johns, Mich.

DUROCS EXTRA GOOD MAROH BOAR PIGS by Defender's Cherry King from Brookwater-bred sows, \$25 to \$35. Registered.

E. E. CALKINS, Ann Arbor

DUROC BOARS, GILTS AND BROOD SOWS of all ages. Sows bred or open. Newton & Blank, Hill Crest Farms, Perrinton, Mich.

Farm 4 miles straight south of Middleton.

FOR SALE: ONE DUROC BOAR FROM Brookwater breeding stock. Choice spring pigs.

JOHN CRONENWETT, Carleton, Mich.

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

MEADOWVIEW FARM REG. DUROC JERSEY hogs. Spring pigs for sale.

J. E. MORRIS, Farmington, Mich.

OAKLANDS PREMIER CHIEF

Herd Boar—Reference only—No. 129219

1919 Chicago International

4th Prize Jr. Yearling

A few spring pigs left at \$25

BLANK & POTTER

Pottsville, Mich.

MAPLE LAWN FARM REG. DUROC JERSEY swine. Sows bred to Model Cherry King 10th for Aug. and Sept. farrow. Write me your wants.

VERN N. TOWNS, R 6, Eaton Rapids, Mich.

REG DUROC JERSEY SPRING PIGS EITHER SEX

Can furnish stock not akin. Also yearling sows. Will breed for early fall litters. Satisfaction guaranteed.

F. HEIMS & SON, Davison, Mich.

DUROCS Spring bred sows all sold. Have good Sept. pigs, both sex, sired by Liberty Defender 3rd, from Col. bred dams. Gilts will be bred to an Orion boar for Sept. farrow.

H. G. KEESLER, Cassopolis, Mich.

WE OFFER A FEW WELL-BRED SELECTED spring Duroc Boars, also bred sows and gilts in season. Call or write

McNAUGHTON & FORDYCE, St. Louis, Mich.

DUROC GILTS BRED FOR AUGUST FAR- row. Spring pigs either sex.

JESSE BLISS & SON, Henderson, Mich.

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ONE OF THE BEST HERDS IN MICHIGAN

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

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LARGE ENGLISH RECORDED BERKSHIRES. Bred gilts and spring pigs for sale.

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"BERKSHIRES ARE QUALITY HOGS" equipped with that delicious lean streak and not so much blubber. A few choice sow pigs to offer, splendid individuals.

ARZA A. WEAVER, Chesaning, Mich.

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CHESTER WHITES Spring Pigs in Pairs or trios from A-1 mature stock at reasonable prices. Also a few bred Gilts for May farrow. F. W. Alexander, Vassar, Mich.

CHESTER WHITE AND O. I. C. SWINE. SOME good March pigs for sale. Good bloodlines. Will ship O. O. D. and register free.

J. A. MILLER, Swartz, Creek, Mich.

REGISTERED CHESTER WHITE PIGS FOR sale at prices that will interest you. Either sex. Write today.

RALPH COSENS, Levering, Mich.

HAMPSHIRE

TWO FALL BOAR PIGS LEFT. BOOKING orders for spring pigs, \$15.00 at 8 weeks old.

W. A. EASTWOOD, Chesaning, Mich.

HAMPSHIRE A FEW BRED GILTS LEFT and fall boar pigs from new blood lines.

JOHN W. SNYDER, St. Johns, Mich., R 4

HAMPSHIRE

Am all sold out on sows and gilts bred for spring farrowing. Have a few sows and gilts bred for June and July farrowing that are good and priced right. Spring boar pigs at \$15 ea. at 8 weeks old. Satisfaction guaranteed. Call or write

GUS THOMAS, New Lothrop, Mich.

O. I. C.

O. I. C. Boar Pigs, Eight Weeks old, Sired by Mountain Giant. Reg. in your name. \$20 each.

HARLEY L. FRY, North Adams, Mich.

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

O. I. C. AND CHESTER WHITE SWINE Choice sow pigs of March farrow. Bloodlines of the Grand Champions Prince Big Bone and C. C. Schoolmaster. Write your wants to

CLARE V. DORMAN, Snover, Mich.

FOR SALE—REGISTERED O. I. C. BRED sows and sucking pigs.

JOHN ODOERFER, Marlette, Mich.

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MUD-WAY-AUSH-KA FARM

offers O. I. C. spring pigs, also special summer prices on breeding stock in White Wyandottes, Barred Rocks, White Chinese Geese and White Runner Ducks. No more eggs this season.

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A. J. GORDEN, Dorr, Mich., R 3.

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O. LEMEN, Dexter, Mich.

FOR SHROPSHIRE YEARLING RAMS that have size and type write or call on

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Also 10 mighty nice ewe lambs for \$350. Come and see them.

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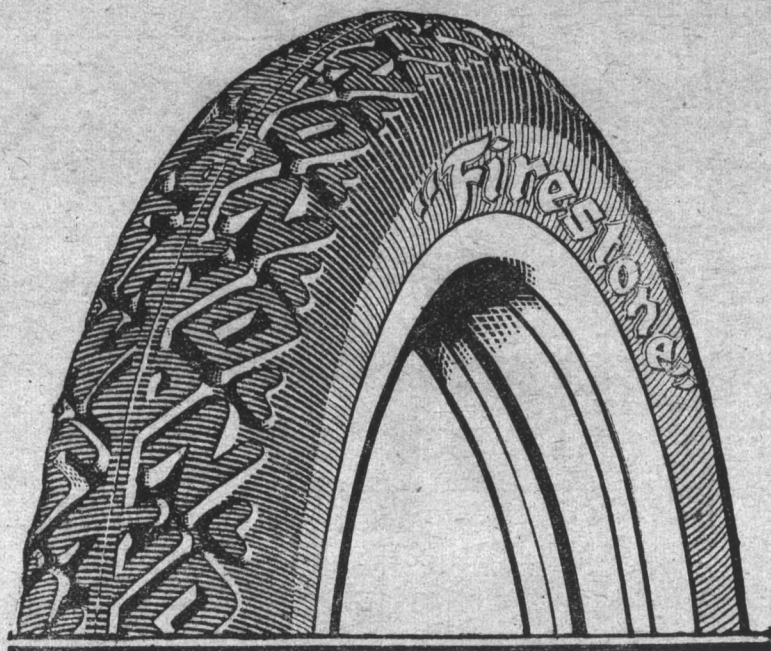
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