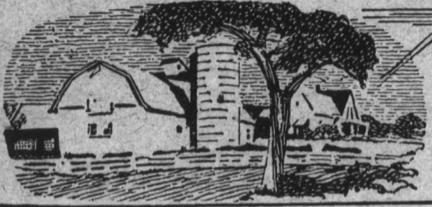
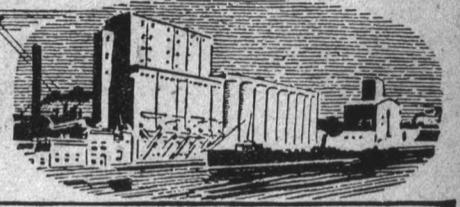


The Michigan
BUSINESS FARMER



An Independent
Farm Magazine Owned and
Edited in Michigan



VOL. X, No. 15

SATURDAY, MARCH 17, 1923

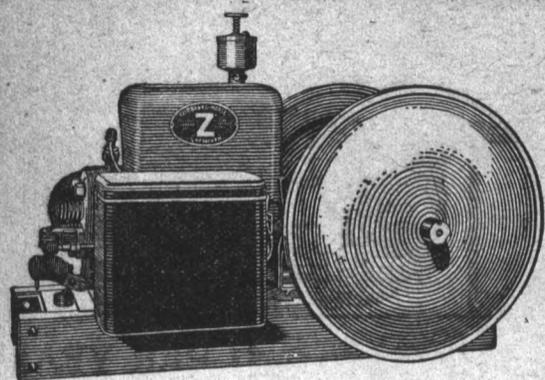
\$1 PER YEAR



Helping Mother

Read in this issue: "Can We Reduce Taxes, Yet Insure Receipts?"—"Growers Should Get 50c per Pound for Wool" says McBride—"Properly Prepared Lambs Bring Top Prices"—"How Shall I Apply Fertilizer to My Corn Crop to Increase the Yield?"

FAIRBANKS-MORSE



'Z'
ENGINE
1 1/2 H.P.
BATTERY EQUIPT
\$48
F.O.B. FACTORY

Cut down your expenses with this willing helper

Reduce your farming costs. Don't waste your own valuable time and strength—or pay high priced help—to do the hundred time-killing jobs that this Fairbanks-Morse "Z" Engine will do for you so much quicker, easier and cheaper.

At present low prices, this 1 1/2 Horsepower, Battery Equipt "Z" Engine is the cheapest farm help any man can have. It does more work for less money than any other aid you can employ.

Uses gasoline alone. Has high tension battery ignition, hit-and-miss governor and balanced safety fly wheels. Control lever gives

six speed changes. Carburetor requires no adjusting. A remarkable value.

The magneto equipt 1 1/2 H. P., 3 H. P., and 6 H. P. are real kerosene engines, but operate equally well on gasoline. Have simple high tension oscillating magneto. Throttling governor assures steady speed. Prices, F. O. B. Factory. Add freight to your town.

1 1/2 H.P. \$71 3 H.P. \$105 6 H.P. \$165
Other "Z" Engines up to 20 H. P.

Write for complete details. See the engines at your dealer's.

FAIRBANKS, MORSE & CO.
Manufacturers Chicago

Current Agricultural News

RIVALRY MUST STOP, LEADING CATTLE BREEDERS AGREE

At a meeting called in Washington, February 5, by the Chief of the Dairy Division, United States Department of Agriculture, representatives of five dairy cattle breeders associations agreed to make special efforts to suppress destructive rivalry and to work together in every way possible to develop the dairy industry and particularly the purebred dairy cattle business. The breeds represented were the Ayrshire, Brown Swiss, Guernsey, Holstein-Friesian, and Jersey. More than 20 representatives were here from various parts of the country, including the presidents of four of the breed associations and the secretaries of all five.

Resolutions passed at the conference called attention to the need for more widespread testing for production records among breeders of purebred cattle; means of causing a wider distribution of purebred cattle; the recognition in counties and states of superior sires; rules governing sales of purebred cattle; means of lowering the cost of recording animals in herd books; supervision of production records; means of making the showing of cattle at fairs more educational to farmers and other visitors; rules governing public sales; scope of the work of field representatives of breed associations; and other subjects concerning the conduct of breed associations and the furthering of the interests of purebred dairy cattle. The need of more support for tuberculosis eradication by the area method was also emphasized.

and all industry connected with the beet industry.

This organization will get out circular letters to every member explaining the new 50-50 contract in a general way and showing its merits and the importance of this great step in Michigan agriculture.

All local beet growers organizations will be asked to co-operate and call meetings at which the state organization will furnish speakers if possible to explain to the growers all the details and answer all questions pertaining to all three of the contracts now offered. Since all banks and all chamber of commerce boards are directly interested in the welfare of the farmer and his welfare they also are asked to co-operate with this organization in their efforts to place great Michigan industry on a little firmer basis.

Since the U. S. imports three-fourths of the sugar it is one of the crops that cannot be over-produced easily so long as Europe, where half of this sugar was produced, must devote their acres to producing grain to feed their hungry millions who have not the money to buy our excess crops of wheat, rye, corn, pork and potatoes, at prices that we can afford to raise them. It seems a few acres of beets may be a good investment for the farmer for 1923 and a good cash crop to chance especially since the consumption of sugar is increasing rapidly and also the price is advancing rapidly.—C. E. Ackerman, Manager, Mich. Sugar Beet Growers Ass'n.

MEXICAN TARIFF FAVORS WHEAT IMPORTS

A DEMAND for American wheat is looked for throughout the Saltillo and other Mexican districts following the recent increased duty on imported flour. Flour mills of Saltillo, in spite of the fact that they are located in the heart of Northern Mexico's richest section, have been closed for some time on account of depleted stocks of wheat, says Vice Consul Earl W. Eaton, Saltillo, in a report just received by the Department of Commerce. The mills have not been buying in the United States on account of the hope that the Mexican of four centavos per kilo might be removed, this duty making it impossible for the mills to compete with flour from the United States bearing a Mexican duty of but five centavos per kilo.

U. S. STOCKMEN FACING RIVALS

AMERICAN agricultural interests and farmers can expect real competition from Argentina in the next few years, in the opinion of A. M. McKinstry, vice-president of the International Harvester Co., who has completed an extensive tour of this country and Brazil.

He said he found an increasing demand for North American agricultural machinery in Argentina and felt that, aside from the low ebb in the livestock industry, the farmers here were in as good condition as those in the United States.

"I never saw such splendid Short-horn cattle," said Mr. McKinstry, discussing his trips to the big Argentina ranches. "They mean that sock raisers in the United States have serious competition. The same is true of the grain that they raise here. The soil in the grain country is similar to that of Iowa, and the crops are immense. Argentina is developing some splendid farmers. They are coming along rapidly in adopting the most up-to-date farming methods.

"The Argentina corn crop has been quite seriously hurt by the intense heat this summer, and the wheat crop will fall short of early predictions."

EXPORT MARKET FOR U. S. PRODUCTS

Secretary Hoover announced last week that under appropriation made recently by Congress, the Department of Commerce is at once undertaking an exhaustive investigation of all the facts bearing upon the present situation and the outlook of our export market in agricultural products with the cooperation of the Department of Agriculture.

BEEF GROWERS ASS'N DIRECTORS MEET

A VERY important directors meeting of the Michigan Sugar Beet Growers Association was held February 23rd in Owosso at the Hotel Wildurmuth. The meeting was called to order by President Tom C. Price of Saginaw.

A sworn itemized financial report was presented by General Manager C. E. Ackerman in which it was shown that \$2,992.90 came into his hands from the 113 local organizations in the state. The balance, \$1,156.72 after all bills were paid, handed directly by him, was turned over to Sec'y-Treas. R. P. Reavey of Caro, Michigan. A great many locals sent their money direct to Sec'y-Treas. Reavey which is not included in the above figures. A complete report will be made in Saginaw to the Growers at their annual meeting which will be called by President Price in the very near future. The recorded membership of the organization is around 10,000 members. Membership fees were \$100.00 each one-half of which was to be paid the state organization. Many locals have not as yet remitted their share and on this account the organization is hampered somewhat.

The new 50-50 contract was indorsed unanimously by the directors of the organization and a resolution was passed in which all growers of beets were urged to give the Owosso Sugar Company their acreage for beets on one of their contracts, for beets enough to give them a full capacity run this year. Being the first to recognize the principal of the 50-50 contract and their willingness to meet with this organization and iron out the details of sugar beet contracts all efforts will be made by this organization to assist the agricultural department of this company and any and all other companies that recognize the principal of the 50-50 contract for beets as the Owosso Sugar Company has done.

Mr. C. D. Bell, Sec'y & Gen. Mgr. of the Owosso Sugar Company was present at the meeting and explained their position to the directors in every detail to the utmost satisfaction of the board.

The meeting adjourned amid much feeling of good will and all expressed their desire to do everything possible to co-operate for the general good of the sugar beet industry and will ask all farm organizations and farm papers to also co-operate in making this important step a success and of financial gain to the farmer

Renew an Old Acquaintance



Every old-line smoker has known of CHAMPION—fifteen, twenty, twenty-five years ago. It still has the same standard quality and unvarying taste.

If you are favoring another brand right now—or "experimenting"—you can't do better than get acquainted with a CHAMPION again.

HEMMETER'S CHAMPION CIGARS

Your Dealer Always Has Them

No blends or artificial flavoring—just good old ripe tobacco



28 Years of constant favor. Still hand-made, still the same tobacco.

THE HEMMETER CIGAR CO., DETROIT

4 TIMES Around the World with ONE OILING 100,000 Miles Without Stopping for Oil



An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The Auto-oiled Aermotor after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write **AERMOTOR CO.** Chicago, Kansas City, Dallas, Minneapolis, Des Moines, Oakland

Detroit Incubator \$1245

140-Egg Size—Guaranteed—has double walls, copper tank, full-size nursery, automatic regulation thermometer held so that chicks cannot break it when hatching. Detroit Brooders, too. Double walled, hot water heated. Write for special low prices on both machines.

Detroit Incubator Co. Dept. 10 Merritt St., Detroit, Mich.



FRENCH'S SALVE
CURES Piles—Blood Poison—Infected or Running Sores of days and years standing—draws out poison and heals permanently. For Piles relieves within 24 hours those who have suffered years. Postpaid \$1.00. A. TRUDEAU & CO., Box 146, Cheyboysan, Mich.

SATURDAY
MARCH 17th,
1922

VOL. X. NO 15

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

"How to the line, let the chips fall where they may!"

The Michigan BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

\$1 PER YEAR

Entered as second-class mat-
ter, August 22, 1917, at the
post-office at Mt. Clemens,
Mich., under act of March
3rd, 1879.

Can We Reduce Taxes, Yet Increase Receipts?

Business Farmer's Correspondents Suggest Many Novel Plans to Answer this Paradox which is Uppermost in Minds of Our Farmers. If You Do Not Agree, Let's Have Your Plan

TAXING FARMERS OR TAXING INCOMES

MICHIGAN farmers and wage earners recently helped to defeat an income tax. They are coming to see that they should not have defeated it; sometime they will correct their mistake, and Michigan will have an income tax that will exempt such incomes as those of wage earners and farmers.

A tax on gasoline is now proposed, and some farmers and some wage earners are supporting it. The proposal should be considered a bit carefully. To put a tax on gasoline might be making another mistake that would have to be corrected. Taxing gasoline was a real issue in Nebraska lately. Farmers and wage earners there gave unusual attention to it, and they defeated the tax.

There are three chief sources of mechanical power: steam, electricity and gasoline. Steam and electricity give power for railroads, factories and big business generally. Gasoline is the fuel of the farm engine, the tractor, the truck. Big business almost entirely escapes a gasoline tax. Michigan's power dams would escape it. Railroads would have no gasoline tax to pay. On the contrary the truck would be taxed, and the truck is the railroad's chief competitor, the railroads have good reason for supporting a gasoline tax: it would tend to free the railroads from taxation and to keep trucks from competing with them. The truck has been the farmers' reliance and hope in avoiding high freight rates; a gasoline tax would serve the railroads by handicapping trucks, by helping to put trucks out of business.

More is said about the rich man's automobile than about the farmer's Ford, which also uses gasoline. An income tax would reach the big income and would not touch the farmer's income, but a gasoline tax would be a tax on every trip the Ford makes to town with cream or eggs. Farmers have to go to town now and then, for marketing, for repairs to machinery, or to see a doctor. The car proves cheaper than horses for such trips, and commonly a farmer finds that he has to have a car. In general, the farmer who has no car is hoping to have one. Taxing gasoline is not a help to the farmer; it is taxing his Ford, his tractor, his buzzsaw. To tax the men best able to pay, a gasoline tax is not necessary; an income tax will do the work.

Living far from town is a disadvantage. A gasoline tax makes the disadvantage greater; the farmer who has ten miles to go must pay five times the tax paid by the farmer who has two miles to go. It is an unfair tax, not a tax proportioned to ability to pay.

A gasoline tax is a sales tax, and a sales tax is wrong in principle; it is a tax on the consumer, the man least able to pay. Organized farmers and organized labor have thought the subject through, and national organizations are positively on record against sales taxes. They have defeated sales tax proposals in Washington.

Sales taxes are no new thing. They were tried out in Egypt and Babylon and have been tried out very many times since. Regularly wherever they have been tried they have made trouble. It was sales taxes that started the American Revolution. A national sales tax would be a device to put the cost of the world war on men least able to pay it. A great American authority on taxation (Professor Seligman of Columbia University) says that it would make

THE State of Michigan could wipe out debts amounting to \$63,500,000 within the next ten years if a four per cent income tax were adopted, as such a tax would yield a sufficient surplus over the amount needed to run the state to accomplish this task.

If the income tax law were drawn in such a manner as to require the reporting of all incomes, large or small, the grand total reported under the law would not be far from two billion dollars in an average year. From this amount would be deducted the personal exemptions allowed. If such exemptions averaged \$1,000 for persons reporting, they would amount to about \$1,400,000,000. The income subject to the four per cent tax rate in an average year would therefore be around \$600,000,000, and the tax thereon would amount to \$24,000,000.—David Friday, President of Mich. Agricultural College.

such trouble in this country as the country has never yet known. Nebraska farmers chose to stop sales taxes before they started; and the gasoline tax proposal was an attempt to start them. Michigan farmers may yet decide that they want an income tax and no sales taxes.

Taxation should be according to ability to pay. A graduated income tax is a tax of exactly that kind. Small incomes are exempt because they are needed; they can not be taxed without lowering the standard of living of the taxpayers. Big incomes may be taxed without any harm; but men who have big incomes are interested in advocating taxes of other kinds. The way to tax the rich man is to tax his income, not his gasoline.

A state income tax is not unfair even for meeting some local expenses, such as the expense of the country school. The incomes of millionaires are not derived from their own school districts; they are contributed by farmers and other producers who must pay for freights, gasoline and farm implements (including Ford cars). Some of the tribute that the people pay to the profit system should come back to them in support of local schools by a state income tax. A real unfairness is giving a poor education to a child merely because the child's parents happen to live in a poor district; that unfairness may be seen in many places in Michigan. There is talk of discontinuing the help that the state now gives to rural schools; instead, that help should be reaped. An income tax would supply the money to increase it.

Taxes on farm lands are clearly too high. They are among the reasons

why Michigan no longer produces its own food and why the farm population of the United States was 1,700,000 less in 1920 than in 1910 while cities were growing rapidly. Unless some change is made in the system of taxation, Michigan farm lands are likely to have more to pay. There is now a project to prohibit the sale of "lands absolutely unfit for agricultural purposes." Nobody will pay taxes on land that can never be sold. Sending lands back to the state would make heavier taxes to be paid by the rest of the land. That land also would tend to become "unfit for agricultural purposes" because the taxes would be more than farmers could pay.

The project seems honest but a few years ago Kalamazoo celery land and other good Michigan lands were held worthless by everybody. In its time the whole state has been condemned as worthless. We know that our plains are seldom "absolutely unfit" to grow potatoes and cherries, for example. If farming were more profitable, more of Michigan's land could be farmed. Michigan land does not need investigation as much as the marketing system that makes cities pay ten cents apiece for such apples as Michigan farmers can not sell.

There is not need to tax farm land more heavily; there is no need for the state to tax it at all. There is no need to discourage the use of gasoline. The Wall Street Journal says that the profits of the Ford Motor Company in 1922 were over \$125,000,000. This is one of the indications that income taxes could easily pay the total expenses of state government in Michigan without hardship to anybody, without lowering

anybody's standard of living. In comparison, a gasoline tax is too little a thing to talk about; but the little thing will do much harm if it keeps people from thinking about an income tax and getting it.—C. F., Ansley, Mich.

TAXES \$120 IN 1905, JUMP TO \$602 IN 1921

I HAVE just read the article by David Friday published in The Business Farmer of February seventeenth, which is interesting. Dr. Friday states the farmers should not expect prices of farm produce to go higher, and I believe Dr. Friday is right. I read an item in the "Grand Rapids Press," written by Ed. Kissenger, of Ashton, who owns one of the best farms in Osceola county. Mr. Kissenger says "tax farms according to their producing value, and tax gasoline 4c per gal., tax cars by their weight, have every one pay a poll tax of \$5. In fact try and get every one to bear their share of the tax burden," and Mr. Kissenger is right. Everyone says something must be done for the farmers or our country will go to ruin, and everyone is right, but what must be done?

At our first good roads meeting held in LeRoy, in 1913, one of our progressive farmers (John A. Nelson) stated it was not our work to build the public roads, it was the Federal Government's job, the same as was done in the country he came from, and many other countrys, and Mr. Nelson is right, but when will it be done?

With the present auto traffic the government should build and maintain all Trunk Line and mail routes, it is the only permanent cure for our present condition. Any other system must be inferior, and a make shift, owing to the present distribution of our wealth. Our law makers in Washington are wasting a lot of wind and have been for several years but have done very little to benefit our hundred million people. One bunch wants to cover the ocean with U. S. Ships to compete with foreign countries, another bunch wants to build another Panama canal, another bunch wants to increase the farm loan from \$10,000 to \$50,000. All this is rot and a damage to our country. Any farmer who demands more than \$10,000 is a capitalist, and should be able to farm without suffering.

What do we want with another Panama canal, or why build more ships while our harbors are full of them rotting. Our country cannot compete in ocean freight rates with countries where wages are so much lower, and we must have lower rates if we sell our produce. With the great auto factories turning out thousands of cars every day, and the public calling for more roads and better roads, and our state school department demanding of our rural school districts more expensive equipment and continually raising the amount of tuition they must pay the graded schools, and the higher wages for teachers added to our regular township, county and state tax, has raised the taxes to about six times what they were in 1905. I have just looked up my tax receipts for 1905, and I paid on a certain lot of property, \$120.69, and on the same property without any improvements made since 1905 the tax for 1921 was \$602.32 and the prices on farm products are not much different. Many farmers are leaving their farms and taxes unpaid, this will bring bad results, some of our statesmen are trying to find a remedy, but have met

(Continued on Page 15.)

Growers Should Get 50c Pound for Wool

I HAVE had repeated requests for advice on wool markets and prices. I have several folios of reports, forecasts and subject matter relating to foreign and domestic wool conditions. These can be reduced to advices on prices which is that the average Michigan wool clip should bring the grower 50c per pound. Any forecast or price advice based on statistics may be negated by a concerted effort to lower the market by buyers during the marketing season, or by the timidity of the sellers failing to hold to a fair market value. There is little possibility of local dealers exerting marketing influences as in the case of beans, for example. Many dealers are "financed" or are simply commission buyers for some wholesaler. Unfortunately there is no community of advices in agriculture operating to advise sellers and acquaint them of the common demonator of values, as Master of the Mich. Stat. Grange A. B. Cook says, the "mark to shoot at."

From the consensus of markets in London, Boston and feelers being tried out in the west, the figures quoted seem probable. Based on production costs, the price is also equitable. However if losses sustained during the last three years are considered the price is low. The general price level of wool on this basis is according to the price index 166 as compared to 100 in 1914. The general price level of all commodities is 164. Iron 170. Lumber 193. Railroad rates 188. Cotton 209. Wool at 50c per pound is not out of line with other staple products. Michigan is second only to Ohio in the production of bright wools, producing around ten million pounds, this including pulled wools. Wool west of the Mississippi river is rated lower than Ohio and Michigan. Ohio and Michigan can make their prices to correspond to the cost of production by consistently holding for 50c per pound for average clips of wool.—Jas. N. McBride, Pres. Michigan Sheep Breeders Assn.



Lambs for market should be docked as they are more attractive to the buyers. Docking makes the hind-quarters appear more blocky and it also adds to the cleanliness of the animal.

Properly Prepared Lambs Bring Top Price

Market Value of Lambs Greatly Increased Through Docking and Castration

DOCKING and castration of lambs destined for the market materially increases their market value because of improvement in quality, according to the United States Department of Agriculture.

There are several reasons for this. Docking makes the hind-quarters of lambs appear more blocky and deep and it also adds much to the cleanliness of the animals. Thus they appear more attractive to the buyer when they reach the market. Ewes which are to be kept in the breeding flock should also be docked as a large portion of the undocked ewes will fall to breed.

Ram lambs over three months of age tend to grow thin and develop coarse shoulders and neck. Thin-fleshed, coarse, open-shouldered lambs are not of a desirable quality and when they reach the market they are discriminated against by the buyers because of these features. If the lambs are castrated and docked when they are a few days old their growth will not be retarded. On the other hand they will present a better appearance and if they have been properly fed will have a smooth, desirable finish at four months of age. Lambs of good quality in this condition command a premium over bucky and undocked lambs at the markets. Oftentimes during the period when the Jersey City market is receiving large numbers of lambs from the Eastern states, lamb prices at that market fluctuate sharply because of the high percentage of undocked and

bucky lambs which are discriminated against by buyers seeking a high-quality product. Improving the quality of the lambs intended for that market will help to stabilize prices, according to members of the trade represented there.

Wether lambs are quiet and easily handled. They feed well and make good gains in flesh, particularly in the hind-quarters, the region of the high-priced cuts. Thus a better quality of carcass is secured together with higher market prices for wether lambs. Meat of this quality when sold by the retailer will result in a well satisfied customer and a future demand for more meat of the same quality. It is often stated that lambs which are to be shipped to the market before they are four months old need not be castrated. This is a

mistake as some of the ram lambs will begin to worry the rest of the flock and to lose flesh before this time. Furthermore, the market may not be strong at the time the lambs reach this age and they may be held back by the owner for several weeks for higher prices. During this time the ram lambs will not only rapidly lose in weight but if kept with the rest of the flock they will also cause the ewes and ewe lambs to lose flesh.

Neither docking nor castrating are dangerous operations if properly performed. Lambs should be docked and castrated when they are from seven to fourteen days of age, as there is practically no retarding of growth and less pain than is the case when they are older. Lambs may be both docked and castrated at the

same time, thus avoiding the necessity of handling them twice. The operations should be performed on a clear, cool morning and care should be taken that the animals are not excited or overheated either before or after the work is done.

A sharp knife or some type of docking irons may be used to do the docking. In either case the tail should be cut at the first joint which occurs about one inch from the body. If a knife is used the lamb should be held with the feet up, the rump resting on the top of the fence or upon the knee of the person assisting in the work. There is less pain when the knife is used but there is more loss of blood and it is sometimes necessary to tie a string around the stump to prevent the lamb from losing a large amount of blood. This string must be removed a few hours later. When hot irons are used it is necessary to rest the lamb on a board. The irons sear the stump as the cut is made and this prevents the loss of blood. The wound will heal more slowly, however, than when a knife is used.

In castrating, the lamb should be held in the same position as for docking. The lower third of the scrotum should be cut off and the testicles pulled straight out. It is highly important that the wound be washed with an antiseptic solution and that the hands and knife be disinfected for each operation. It is also necessary to furnish clean quarters for the lambs in order to prevent infection of the wounds.

More and Better Potatoes to the Acre

MY certified seed was grown on five acres of well manured clover-sod ground. On four acres I used two tons of commercial fertilizer but did not use any on the other. On the four acres I planted certified seed; on the other mixed seed, mostly Russets. The unfertilized seed yielded 252 bushels; the other four acres 419 bu. In experimenting with the fertilizer I used one ton on the first acre and one third of a ton each on the other three. The one acre yielded 504 1-2 bushels, the other three averaged 390 1-3 bushels. The

potato rows were thirty inches apart each way, with an 85 percent stand. I am a firm believer in more and better potatoes to the acre rather than more acres.

My certified seed won first prize at the Michigan potato show in Grand Rapids in December. I also won four other prizes at the exhibit.

I hill-select my seed to plant, taking hills with vines free from disease and with from nine to nineteen perfect potatoes in each.—By E. Sutton, First Prize Winner at Michigan Potato Show, 1922.

"How Shall I Apply Fertilizer to My Corn Crop to Increase the Yield?"

By Special Correspondent

THIS is a question of interest to many corn growers in Michigan and one on which there is not a little difference of opinion among farmers and students of soil fertility as well. The best method, undoubtedly, will vary somewhat in accordance with soil and climatic conditions and with farm practice. Sandy soil, low in organic matter, and heavy clay soil rich in organic matter respond very differently to fertilizers. Rainfall during the growing season is also an important factor in determining the results to be obtained from an application of fertilizer.

Some farmers prefer to apply the corn fertilizer in the hill or row, while others are convinced that it should be drilled solid or broadcast. The arguments for and against the two methods can be stated briefly.

Fertilizer is applied in the hill so as to be near the seed and give the young corn a "running" start. The corn gets ahead of the weeds and can be cultivated several days ahead of corn that has been fertilized broadcast. The increased yield is usually larger in proportion to the amount of fertilizer used in the case of hill or row application. The claim is made, however, that when only 75 to 125 pounds of fertilizer are applied in the hill or row, it is all used up by the corn crop or if there is a residual effect on the next crop it is only in the old hills or

rows and not of much value. It is also claimed by some that small applications of fertilizer cause the crop to draw more heavily on the supply of plantfood in the soil. But so does anything else that is done to increase the yield, such as the use of good seed or careful cultivation. The old adage, "You can't eat your cake and have it," applies very well in this instance. Every bushel of corn takes its toll of plantfood and the only question is, how can this plantfood be supplied most economically?

There is a common impression that fertilizer in the hill cause "bunching" of the roots and that as a result corn fertilized in this way is more likely to be injured by summer drouth. The Michigan Experiment Station has carried on a careful investigation and has concluded that there is no "bunching" of roots nor injury from drouth that can be traced to hill application. The Wisconsin Experiment Station has obtained similar results and it would therefore seem that this objection to



There is no need for explanation as to where fertilizer was applied in this field and where it was not—results speak for themselves.

hill application of fertilizer may not be so important as was formerly thought to be the case.

Fertilizer attachments for corn planters are, in many cases, poorly constructed. They too often drop the fertilizer in a "bunch" and do not mix it with the soil. Some of them even deposit the fertilizer in direct contact with the seed and this is very likely to delay or even to prevent the germination of the seed. There is little if any danger in the hill fertilization of corn if the fertilizer is distributed so that it is mixed with the soil near the seed but not in direct contact with the seed.

It is pretty generally agreed that the bulk of the fertilizer used in a general rotation should be applied broadcast. Corn fertilized in this way, however, starts slowly and is not benefited materially by the fertilizer until several weeks after planting. There is, of course, a large residual effect from a broadcast application of 200 to 300 pounds of fertilizer on corn.

All things considered, the best results will be obtained if a small amount of fertilizer, say 75 to 125 pounds, is applied in the hill or row and the rest of it applied broadcast. In this way the advantages of both methods of application can be obtained. The corn will be given a quick start, the demand of a larger crop for plantfood will be met, and the residual effect on the following crop will be worth while.

PICTURES FROM FAR AND NEAR



MICHIGAN WOMAN FIRST TO TALK OVER TELEPHONE.—“As near as I can recollect it was in the summer of 1874,” says Mrs. E. G. Sovereign of Bay City, first woman to speak over the telephone. “The first words I spoke were, ‘Can you hear my voice?’ and was surprised when I turned to listen to hear Dr. Bell answer, ‘Yes, I can hear what you say.’” This conversation took place over a wire one and one-half mile long—at Brantford, Ont.



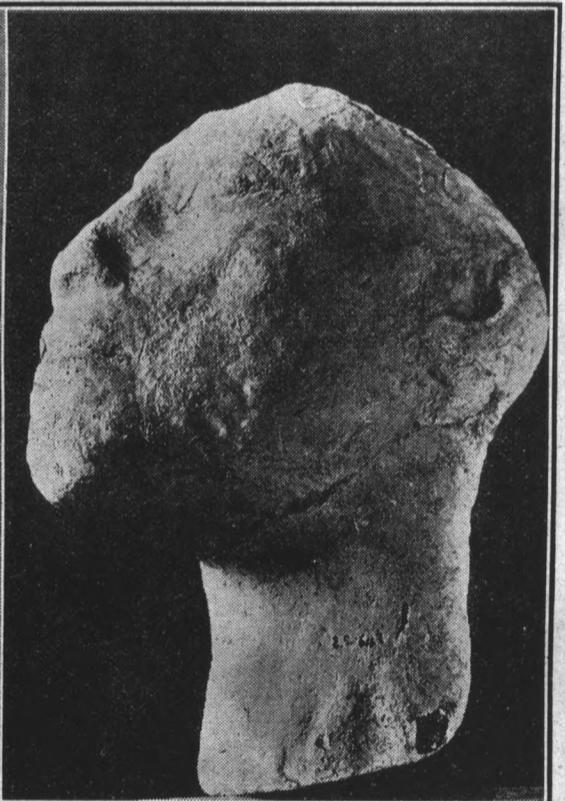
COW TESTERS MEET AT M. A. C.—The members of the Michigan Association of Cow Testers met last month at the M. A. C. The aim of the meeting was to get a better understanding of the value of the work being done by the testers. The officers and members are as follows, reading from left to right: Front row—B. L. Peck; Harold J. Schaner; S. P. Sexton, Director; Roy Chilberg; Eldon Bruce; Karl S. King; Nicholas Gordon; J. H. Mathieson, Secretary-Treasurer; H. F. Simmons. Middle Row—Ernest Johnson; H. E. Frank; Leslie Wilcox; Fred Leonard, Vice President; Hans Kardel; Oscar Sundell; Hoyt Shisler, President; Eldron Barclay. Back Row—Percy Parkyn; R. G. Powell; Paul Hayward; L. J. Carter, Director; Jesse Huggett; L. D. Leisenring; Fred Walker.



KING WINTER PLACES HIS SEAL.—Together with Mother Nature, he has produced a picture that for loveliness and grandeur surpasses anything mere man could do. Here is Niagara Falls, in the winter time, with ice and snow adding to the splendor of the scene.



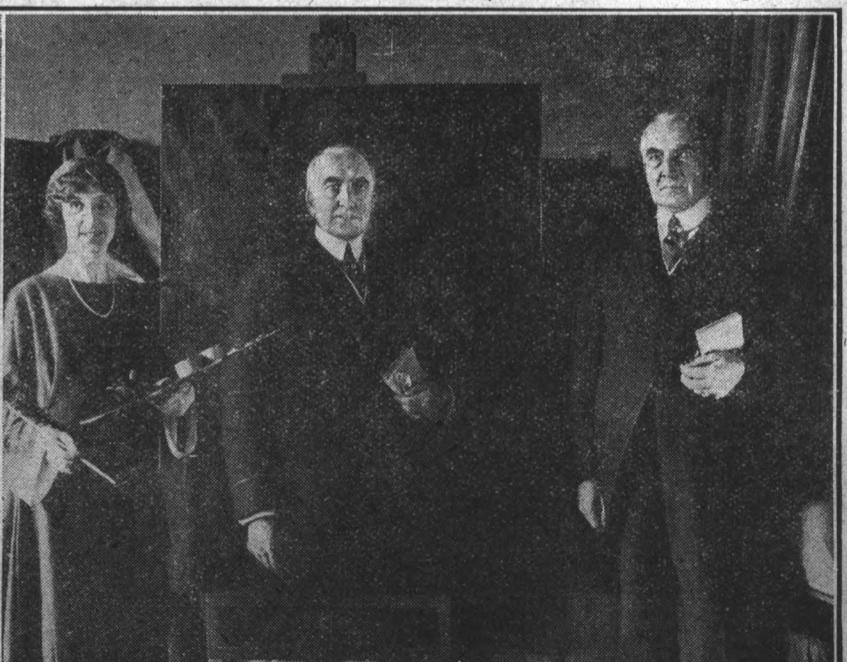
JACKIE COOGAN ACHIEVES AMBITION OF HIS LIFE.—Little Jackie, 8-year-old screen actor, reached the height of his ambition when under the kindly instruction of the big traffic cop on 42nd St., and 5th Ave., New York City, he told them when to “stop” and “go”.



RELIQS OF KING TUT'S FATHER-IN-LAW.—Cast of a death mask of Akhnaton, father-in-law of King Tut-Ankh-Amen, whose tomb was opened recently. The death mask was found in an undertaker's establishment at Tel-el-Amarna, Egypt, and is now on view in the University Museum, Philadelphia, Pa.



SEVEN CHILDREN IN FOURTEEN MONTHS.—That is the record of this southern Maryland ewe. It is rather hard to believe, but here is the record: Twins first in November 1921 and again in May 1922 and final triplets January 1923. The home of this prodigy of the sheep world is the birthplace of Francis Scott Key, author of our national anthem “The Star Spangled Banner.”



COMPLETES PAINTING OF PRESIDENT HARDING.—Miss Margaret Lindsay Williams, an artist of renown, came here from Cardiff, Wales, to paint a portrait of the president for the London branch of the English speaking union. Miss Williams completed her work and had the president for his last sitting at the White House, where he consented to be photographed with the artist and her canvass.

85 Pound Standard Slate Surfaced Roofing

\$2.00
Per Roll

Lay Your Own Roofing This Spring



Do it in your spare time. No experience needed. Only hammer and jack knife required. Use our standard Radio Slate Surfaced Roofing.

Approved by Fire Underwriters. Spark proof. Fire resisting. Better protection than wood shingles. Extra durable and not affected by heat or cold. Best Standard Quality You Can Buy.

Only \$2.00 per roll (enough to cover 100 sq. ft.). For old or new roofs, or over old wood shingles.

Red or Green
Non-fading crushed slate surface beautifies as well as protects your home. Guaranteed for 15 years but should last longer.

You Can Do The Same!
"I saved 50c a roll, buying my roofing from you."

Geo. Webber, Hookstown, Pa. (Used with permission)

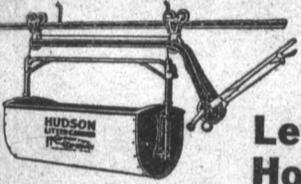
Send for **FREE SAMPLES**

It puts you under no obligation to buy. \$2.00 per roll includes all nails and cement. (Add 8c if wanted with extra long nails.)

Shipped from Chicago, Kansas City, St. Paul, York, Pa.; Southern, Ill., or New Orleans, La. (\$2.10 per roll from Kansas City or St. Paul.) Write to our house nearest you. Address Dept. C-18

Montgomery Ward & Co.
Chicago Kansas City St. Paul Fort Worth Portland, Ore.

HUDSON



Lever Hoist Litter Carriers

Speed up your barn work! Roll out 13 bushels of manure in one trip with the Hudson—less effort than handling a single wheel-barrow load!

THE LEVER HOIST, found only on the Hudson, means no dirty chains to handle. It is quick and easy to operate, and forms a handle for pushing. Tub is soldered and will not leak. Clean the barn in your Sunday Clothes if you wish.

Write for our illustrated catalog on modern barn equipment and name of your HOME-TOWN HUDSON DEALER.

HUDSON MFG. CO.
Dept. 3255 Minneapolis, Minn.

Fence Prices Lower

17c A Rod and Up **Peerless Fence NOW**

Sold Direct from Factory

Wonderful money saving opportunity for fence buyers. Farmers Peerless Fence now selling for as low as 17c a rod—lowest prices ever quoted on Peerless fence.

FREE Write today for 104-page catalog giving low direct from factory prices on Fence, Gates, Barb Wire, Steel Posts, Roofing and Paints. Since Peerless' big factories opened their doors direct to farmers it means a clear saving of 40%. Write for catalog today.

PEERLESS WIRE & FENCE CO.
Dept. 3908 CLEVELAND, OHIO 8
Factories at: Cleveland, O., Adrian, Mich., Memphis, Tenn.

ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE

It's through the right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features, will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. KOVAR has the most successful Spring Tooth Corn Cultivator, also Harrow Cart. Write for further information and prices.

JOS. J. KOVAR, OWATONNA, MINN.

FREE MEAT CURING BOOK
To learn the best methods of curing meat, write to E. H. Wright Co., 850 Broadway, Kansas City, Mo., and get absolutely free a new \$1 book, "Meat Production on the Farm," which tells all about meat curing. Free to farmers only. Send name to day.—Adv.

Farmers Service Bureau

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

WORKING FARM FOR THIRD

Please inform us the terms working on a farm for a third.—Mrs. C. E. G., Concord, Michigan.

—Under the one-third stock lease the landlord furnishes farm machinery and all stock and tenant furnishes the labor and gets one-third of the proceeds. Such expenses as thresh bill, seeds, etc., are divided in same proportions as proceeds.

If the landlord furnishes nothing but the farm and the tenant furnishes horses, machinery and labor, he is entitled to one-third of the small grains as the proceeds and the tenant pays for the seed and thresh bill.

The hay is usually divided equally and if baled the landlord pays half. Such crops as hay the landlord furnishes the seed.—F. T. Russell, Prof. of Farm Management, M. A. C.

ENTITLED TO HALF OF STRAW

I have been working on a farm on shares beside of my own farm. The man that is agent of the farm reserves the house and I am working the fields. We do not keep any stock on the farm, raising mostly grain. The agent of the farm sold the straw and refuses to pay me half. The contract doesn't say anything about the straw but it does say: "Each to get one-half the proceeds derived from the sale of all grains, produce, etc., taken off said farm." Am I entitled to one-half the money from the straw? This straw amounts to about \$70.00. I raised the straw and consider I ought to have half of it. Will the farm hold the straw in such a case.—P., Concord, Mich.

—The clause in the contract providing that each shall receive one-half the proceeds derived from the sale of grain, produce, etc., taken from the farm would include proceeds derived from the sale of the straw, and in the absence of a stipulation relative to the straw, each would be entitled to one-half the proceeds from its sale. Some settlement might have to be made to cover the cost of marketing of the straw.—Asst. Legal Editor.

APPLICATION FOR DRAIN

I am working a farm which is owned and occupied by my father and mother. My father ditched the farm several years ago but made no outlets and we have no county ditches in our neighborhood and father's ditches are not large enough to take the water away. What must I do in order to have the drain commissioner establish a drain as such a drain is badly needed and would be a great benefit to the neighborhood? Would I have the right to get out an application the same as if I owned the land and would I have the right to sign an application were one made out and how many signers would it have to have in order to secure the drain?—Subscriber, Vassar, Mich.

—If you have the power of attorney from your father and mother, giving you general powers to deal with their property you would thereby be authorized to sign an application for the construction of a drain.

Section 1 of Chapter 3 of the Drain law provides that a commissioner will have authority to act upon receipt of an application signed by not less than one-half of the free holders whose lands are traversed by the drain. You should therefore obtain an application from the Drain Commissioner of your county and procure the signatures of not less than half of the property owners whose lands would be traversed by the drain to be applied for.—H. H. Partlow, State Highway Dept.

QUESTION OF NEGLIGENCE

Two of my horses got out in the road. I went after them, while driving them home I met a car. It was just getting dark. A few rode in front of the car the horse walked up into the road. The car struck it and broke its leg. I called a veterinary and he advised me to kill the horse. The driver claims he did not see the horse although he had the lights lit. He was driving at the rate of about fifteen miles per hour. His car was

slightly damaged and he told me that he would expect me to settle his bill, on the ground that I was not carrying any light. Can I get pay for my horse?—C. C., Lake Odessa, Mich.

—Your recovery in this case would depend upon the question of negligence. In a recent case, the Michigan Supreme Court held that it is negligence for the driver of a car to drive at such a rate of speed that he is unable to stop within the distance covered by the range of his lights. If your horse had been standing still in the road, it would be negligence on the part of the driver to fail to see it in time to stop. However, if the horse ran into the road in front of the car so as to take the driver by surprise, his failure to stop his car in time would not be negligence. The only way you can recover is by showing that the driver was negligent and that you were not negligent.—Asst. Legal Editor.

NATURAL GAS

I know where there is a place that if you light a match and pass it over it burns like gas. No snow lies on it in winter and it burns till s'noothered and there is no smell of gas.—H. L., Gladwin, Mich.

—I would advise that very probably the inflammable gas is actually natural gas. It may have a slightly different composition than ordinary natural gas which will account for the lack of smell. I suspect that you have found one of the numerous gas seepages which occur in a number of areas in this State.

In southwestern Macomb and southeastern Oakland counties the farmers use some of the surface gas, which is struck in wells, for heating and lighting their homes. A gas spring in Montmorency county is so large that probably if the flow could be successfully trapped it would be sufficient for lighting a group of houses. Gas wells of considerable size have been struck in Manistee county around Portage Lake. Such signs are not significant since they are in areas of leakage and not of accumulation. The pool, if the gas is derived from one, in most cases is distant from the seepage. Drilling in the vicinity of such signs therefore would be of little use in most instances. Many wells have been drilled on the basis of these signs and nothing worthy of mention has been found.—R. A. Smith, State Geologist.

REFUSES TO PAY DEBTS

Your Service Bureau seems to answer all questions I would like a reply to this one. A signs notes with B to the extent of \$2,000.00 and secures no mortgage. B in about two years refuses to either pay interest or notes or to even renew them. A gets a judgement on stock and machinery being forced to hold a sheriff's sale, and secured about \$300 that way. B and his wife own 90 acres in joint deed and A has been told that there is no way to secure a hold on this farm as it is held in a joint deed. If this is a law in Michigan, why couldn't any man that holds a joint deed with his wife on property, refuse to pay his honest debts?—G. G., Breckenridge, Mich.

—The property could not be reached for the satisfaction of the debt. However, if the husband purchased the property after the debt accrued, taking a joint deed with his wife, his undivided half interest could be levied upon for the debt.

Before any person extends credit to another or takes his note without security, he should be sure that the debtor is financially responsible, and if he is depending on certain property out of which to satisfy the debt, he should ascertain whether that property can be reached by creditors.

The law always looks to the securing to every man of his rights and aims to protect him in those rights from unscrupulous practices by others. However, it expects in return that every man will exercise reasonable prudence in his business dealings, and it cannot always furnish a remedy when the injured party has not taken proper precaution in protecting his own interests.—Asst. Legal Editor.

JOINT STOCK LAND BANK

Could you explain the joint stock land bank and how loans are obtained from them, and the difference between is and the federal farm loan.—J. N., Sanilac County, Mich.

—The Federal Farm Loan Act provides for a dual system of banking, consisting of Federal Land Banks and Joint Stock Land Banks. Both are under the same supervision. Federal Land Banks loan their funds through National Farm Loan Associations, and each borrower must take 5 per cent of his borrowings in stock with a double liability on that stock, and must help maintain the association while he is a member. These associations are limited to loans of \$10,000.00 and to men who are actually living on the farm. This bank is limited to loans not to exceed \$37,500.00 to one individual, but is not limited to men who actually live on the farm, just so they use the funds for agricultural purposes.

The purpose of these two types of banks was to give the farmer the choice of joining a co-operative institution or making a loan direct through a Joint Stock Land Bank without any further liability. This is the reason why there has always been a difference of one-half of one per cent between the interest rate charged by the Federal Land Banks and by the Joint Stock Land Banks. The actual cost of the money to the Borrower is the same.

There is no commission charge in our loans. The total charge we make is a flat charge of \$5.00 per thousand to cover the services of the Federal Appraiser and the Title Examiner. We require that every application coming to us be accompanied by an application fee of \$12.50, which is credited to the \$5.00 per thousand charge when the loan is closed. Our Mortgages are exempt from the Mortgage Registration Tax in the State of Michigan.

On account of the limited profits, however, to Joint Stock Land Banks in this business, it is necessary that we receive a number of applications at one time in order to enable us to make all inspections at a reasonable cost, unless an application is for a large amount.

If any of your neighbors or friends whom you feel would be desirable moral risks, and who own well managed farms, wish to avail themselves of this type of financing, we will gladly write them at your or their request.—John H. Kraft, Vice-Pres., First Joint Stock Land Bank, Cleveland, O.

HUNTING WITH FERRET ON OWN FARM

I would like to find out if a person is allowed to hunt with a ferret on their own farm, and do they have to get a permit to have one in possession?—W. K., St. Charles, Mich.

—The law provides for the issuing of permits to farmers and fruit growers only, to use a ferret in hunting rabbits on their own lands. These permits are issued at the discretion of the Director of Conservation.—Dept. of Conservation.

LOGS FOR BARN FLOOR

Would poplar logs eight inches through at small end flattened on one side be strong enough for barn floor with three lengths for barn 36 feet wide? That is with 12 feet between supports in basement. 16 feet to eaves of barn. How close would they need to be spaced? Would peeling them when green help the strength of them?—R. R., Farwell, Mich.

—Poplar logs 8 inches through at small end placed 18 inches apart would give sufficient strength. Peeling them would lessen the likelihood of their decaying and would be advisable.—F. E. Fogle, Asst. Professor of Farm Mechanics, M. A. C.

HOW TO PROCEED TO COLLECT NOTE

On Dec. 12, 1921, our rural carrier borrowed \$25 from me. He said some of his checks were lost in the mail and he needed the money. I gave him a check for \$25 and he gave me a note for \$30 due in six months. When the note was due in June I asked for the money. He said he could not pay until July. In July he put me off until August and in August he said he would pay it in the fall. In December, 1922, I left the note at the bank for collection. The cashier of the bank sent him

notice to which he paid no attention. This man has no one to care for but himself. Would you please let me know how to collect this money. Any information you can give will be greatly appreciated.—F. O., Minden City, Mich.

—If there were any indorsers on the note, you could proceed against them, after making proper presentation to the maker for payment, and after giving notice to the indorsers, your only recourse would be to sue on the note.—Asst. Legal Editor.

SMALL WHITE BUG AROUND LILY ROOTS

I have a lily and there are small white bugs in the ground around it. When I put water on the lily they come to the top and float on the water and when water settles down they go back in the ground again. What can I put on to kill them? The lily is doing fine. The bug has been in the ground about one year.—A. W. H., Fairgrove, Mich.

—I cannot, of course, be sure what the insect is but I would suggest that a little black leaf forty or fifty percent nicotine sulphate be added to the water which is applied to the plant, about one teaspoonful to a pint of water should be sufficient and if this is used several times in watering the plant I have no doubt that the insects will be destroyed without injury to the plant.—R. H. Pettit, Professor of Entomology, M. A. C.

ENTITLED TO DOWER INTEREST

I am writing for information. Can an old lady, marrying an old man, collect anything from the estate on the death of man, the woman not helping accumulate any of the property but merely taking care of man?—H. D., Big Rapids, Mich.

—Upon the death of the husband without having made a will, the widow would be entitled to her dower right interest, that is, the use during her natural life of one third of the lands which her husband owned while they lived together. Or she may choose instead of dower, her interest as an heir of her husband. In the latter case, if the husband had two or more children, the widow would receive one-third and the children two-thirds of the estate. If there were only one child, the widow would receive one-half and the child one-half. If there were no children, nor heirs of a deceased child, the widow would receive one-half and the husband's father, mother, brothers, sisters, nephews or neices one-half. If there were neither of the above named relatives living, then the widow would receive the entire estate.—Asst. Legal Editor.

HIRING SCHOOL TEACHER

Can a director alone or the three officers of a school district alone hire a teacher at the time of the Xmas vacation or first of January? Has the law changed in the last few years when they used to take a vote of all the one at the school meeting in July? A few years ago no teachers were hired until the night of the school meeting in July. Last Xmas our director hired the teacher again for another year.—E. M., Clifford, Mich.

—The board of education is the authority for the employment of teachers and they may do so at any time during the school year. The director alone cannot legally hire a teacher. The legal voters have not had the right to direct the employment of the teacher in over forty years at least. Section 13 of Chapter 3 of Act 164 of the Public Acts of 1881 provides that the board is the authority for employing the teacher and such has been the law ever since.—W. L. Coffey, Dept. of Public Instruction.

CAN MOVE OR SELL

A rents a house and barn from B for cash rent, no land included. A buys feed for all his stock, draws it there and feeds it. Is B entitled to the manure because it is not on boards or can A move or sell it if he wishes?—L. B., LeRoy, Mich.

—Under the circumstances you mention, the manure would be personal property, and A could remove it. The fact that it is not on boards makes no difference except that it is more difficult to ascertain the amount A is entitled to.—Asst. Legal Editor.

Keep the Business Farmer Coming —See page 18.

The Eyes of The World Are On

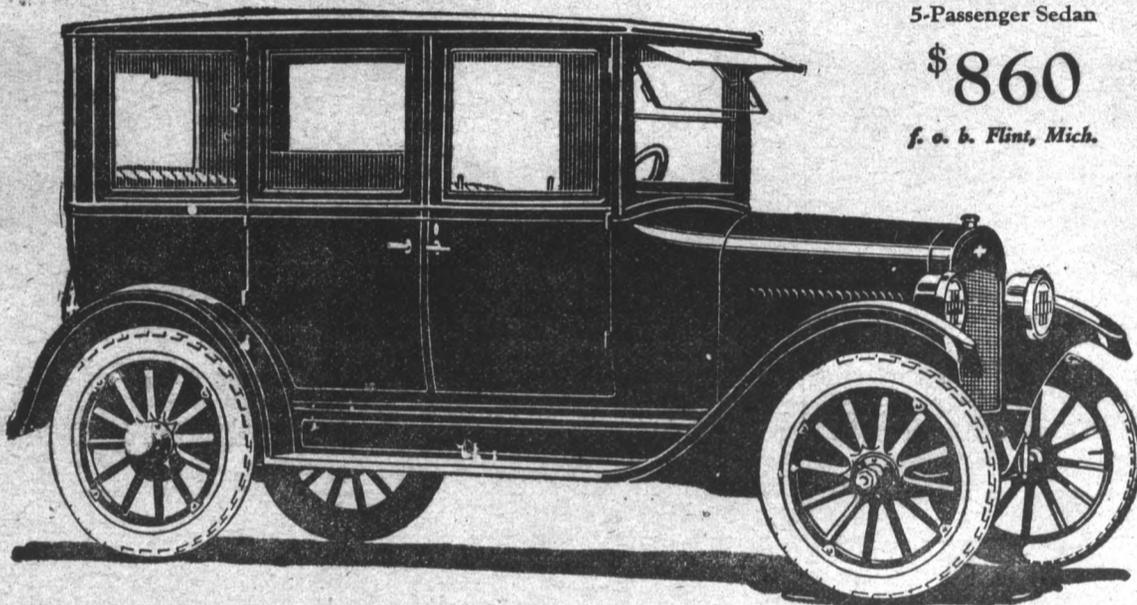


for Economical Transportation

SUPERIOR Model
5-Passenger Sedan

\$860

f. o. b. Flint, Mich.



Holds First Place Among All Show Cars in Number of 1922 Sales

During 1922 the public bought more than 50% more Chevrolets than of any other fully equipped car, giving Chevrolet first place in number of cars sold among all cars exhibited at the 1923 N. A. C. C. Shows.

The remarkable rise of Chevrolet during the last twelve months has proved that the Chevrolet Motor Company has correctly gauged the shift of public sentiment towards the most economical unit of transportation that also meets modern requirements as to quality.

Just count the Chevrolets along the great highways and parked at the curbs of every town and city.

Prices F. O. B. Flint, Michigan

SUPERIOR Two Passenger Roadster	510
SUPERIOR Five Passenger Touring	525
SUPERIOR Two Passenger Utility Coupe	680
SUPERIOR Four Passenger Sedanette	850
SUPERIOR Five Passenger Sedan	860
SUPERIOR Light Delivery	510

Chevrolet Motor Company, Detroit, Mich.

Division of General Motors Corporation

There are now more than 10,000 Chevrolet dealers and service stations throughout the world

Applications will be considered from high grade dealers in territory not adequately covered

Herold-Bertsch Michigan-Made Shoes

Household name for shoe satisfaction in Michigan farm homes for 30 years.

**Stylish, Sturdy
Oxfords, \$5 to \$6**

Made by skilled Michigan workmen of long training, with painstaking workmanship



Genuine high quality leather throughout

Roomy, comfortable, yet stylish in appearance. Fine for dress and business wear. No better shoe value for men and boys anywhere. Sold by a good shoe store in almost every town and village in Michigan.

Herold-Bertsch Shoe Co.
Grand Rapids
Send for Booklet



Wheat and Other Cereals

at present selling prices will yield a substantial profit from a spring top-dressing of 100 pounds of

Nitrate of Soda

per acre
Experiment Station reports confirm my own demonstration results that an increase of 6 to 10 bushels may be expected from the use of each 100 pounds of Nitrate of Soda. The residual results on the following crops will be good.

If your dealer does not sell Nitrate send for my list of dealers who do and for my free Bulletin Service information, issued periodically for farmers.

Dr. William S. Myers, Director
Chilean Nitrate Committee
25 Madison Avenue New York

Make It Grow!

As your strength grows
your appetite grows, too,
you begin to eat heartily—
your bodily health improves.

Scott's Emulsion

through its rich, nourishing qualities, helps build up the general strength of the body. Take Scott's Emulsion, watch it help make your strength grow!

Scott & Bowne, Bloomfield, N.J. 22-52

Get Low Prices on Berry Boxes and Baskets

Free Catalog! Shows you how you can save money by buying direct from the largest Berry Box and Basket Factory in the Country.
New Albany Box & Basket Co., Box 137 New Albany, Ind.

FOR SALE

MEMBERSHIP SILVER BLACK FOX CLUB.
\$500 gets pedigree pair. \$5.00 monthly.
JOHN KOTKE, Secretary, Rodney, Michigan.

PATENTS Write today for free instruction book and "Evidence of Conception" blank. Send sketch or model for personal opinion.
CLARENCE O'BRIEN, Registered Patent Lawyer, 1053 Southern Building, Washington, D. C.

The Truth About Henry Ford

By Sarah T. Bushnell

Mr. Ford and Religion—His Wife and His Home

(Copyright by Reilly & Lee Co.)

(Continued from March 3rd Issue)

The Ford residence is of gray native stone and built along the Gothic lines. His study is in the round tower. Long bookcases shelter his books, the technical ones among them showing plainly their constant use, and a large window looks toward the bungalow which Mr. Ford built in the first days of his prosperity as a resting place where he would be safe from intrusion. Its broad veranda and great fireplace surrounded with easy chairs make it comfortable in summer or winter. The study windows overlook what at first glance seems an Indian mound, but which is the natural shelter for the electric boat which Mrs. Ford drives up and down the river. All the windows give a view of the River Rouge, which has been compared to the James in Virginia.

Within a short distance of the residence is the gray stone garage in which are Mr. Ford's laboratory and experiment rooms, and where he perfected the tractor on which he worked harder than on any other of his inventions. In reality this garage building is a modern power plant with exceptionally heavy walls to shut in all noise. Here the inventor often labors until late in the night, just as he did in the red brick barn in Bagley street, Detroit, where he made his first car.

About ten years ago a certain clergyman in Detroit, who was ambitious to build a costly church, went to Mr. Ford for a contribution, hoping to get a large sum.

"No," replied the millionaire, "I don't believe in expensive churches."

"Then," said the clergyman, "will you come to my next service and let me preach a sermon especially for you? I hope to convince you that you are wrong."

The following Sunday the minister cast a searching eye over his congregation; then he announced his text. It was from I Chronicles, 17 chapter and first verse; "And it came to pass, when David dwelt in his house that David said to Nathan, the prophet: 'Lo, I dwell in a house of cedar, but the ark of the covenant of the Lord dwelleth under curtains.'" The minister raised his eyes from his Bible and exclaimed: "The word curtains used here means tents." He followed the text by reading the verses one, two, four, five and nine with especial emphasis on the fourth, fifth and ninth. Then he turned the pages to II Samuel, 7 chapter, and read:

"And Nathan said to the King, 'Go, do all that is in thine heart; for the Lord is with thee.'

"And it came to pass the same night, that the word of the Lord came unto Nathan, saying:

"Go and tell my servant David, 'Thus saith the Lord, Shalt thou build me an house for me to dwell in.

"I have been with thee whithersoever thou wentest and have cut off thine enemies from before thee and I will make thee a great name, like unto the name of the great ones that are on the earth.'"

The Clergyman launched into his sermon. After he was well started he fixed his eye on Henry Ford and said: "The church is the dynamo of the Lord's business. It is right and proper that churches should be beautiful and should be as lovely as it is possible to make them. Why should we live in fine houses, houses of cedar, and worship the Lord in tents? There is a rich man in this city, a very rich man, who considers that his engine is the dynamo of his factory. It has always been the custom to place such engines near the rear, in an ugly section of a factory, facing an alley. This rich man had put his engine in the front part of his factory, it is in a beautiful room with pure white tiling. He keeps men constantly polishing and cleaning it; he has surrounded it with handsome plate glass windows. The engine faces the most expensive thoroughfare in our city. Sightseers stop to admire its immaculate beauty. The very rich man loves

this engine; he surrounds it with the best that money can buy. He considers it the dynamo of his business. This is true with churches. They are the dynamo of the Lord's business. They should have in and around them everything that is lovely and beautiful. No expense should be spared in the construction of a church nor its location."

The minister went on and on with his argument. The following week he went to see his richest parishioner. No mention was made of the sermon until he was leaving.

"I haven't changed my mind," said Mr. Ford then. "I feel just as I did. I don't believe in expensive churches. But I do think that a minister should be paid a salary that will enable him to live in comfort, and lay by something, so that he can buy a home or a farm or a little place in the country where he can round out his last days. I'm going to disappoint you; I'm not going to give you anything for your new church." He handed the minister an envelope. "Please give that to your wife when you get home, just a little token of my regard for you both."

When the rector returned home he told his wife of the disappointing visit and handed her the envelope. In it were twenty one-hundred dollar bills.

The rector later built his big church. He succeeded in his ambitions. He was taken abroad, and sent to various parts of the country by the millionaire; eventually he received a large salary.

Eventually the minister and his wife drove into the country; they found a little fruit place, with a tiny house on it, something to tie to in case of old age or misfortune.

It is characteristic of Henry Ford that he took no offense to the frankness of the sermon, but did not change his mind.

In order to keep his factory running full blast through December, 1920, Mr. Ford took a loss of fifteen millions. Against the advice of his business associates he kept production going until after Christmas Day. When New York reporters telephoned his office he refused to give his reasons for the shut down, his idea being that a statement regarding his retrenchments and the re-organization of his business might depress the market. Immediately there arose wild rumors that he was in financial difficulties. Happily, these were untrue. His aversion for borrowing has placed his gigantic undertakings on a safe financial footing. Detroit is not New York; Griswold is not Wall Street, but a prominent Detroit banker has said: "If Henry Ford should need large sums of money, Detroit will secure it for him."

However, it was the serious illness of his son, who went through an appendicitis operation, which caused Mr. Ford grave concern during the winter of 1920-21, and not financial difficulties.

A joy he is getting from his money is refurbishing his mother's old home, which he bought from his brother, John. As stated before, the town line when finally surveyed ran through this house. The county commissioners ordered the house moved so that a road called "Townline" could be built. Accordingly, the dwelling was thrust back to make way for progress, and the forest trees in the yard were hewn down because they interfered with the grading. Mr. Ford is having similar trees placed around the old home. He has gone into the attics and barns of his brothers' houses and has found discarded furniture which he associates with his mother's memory and he has said to the rest of the family: Before many years roll by we will begin to grow old. We will fix the home place like mother and father had it. We were so happy when we were children there together."

More than his vast wealth, Mr. Ford's real riches consist of a wife, whose constant thought is his health and well being; a loving son and two

small grandsons, who are his pride and joy.

CHAPTER X

His Wife and His Home

No one could hope to write an adequate review of the development of Henry Ford's life and character without including some account of the wife who has meant so much to him in so many ways from the day he devised the watch with four hands, through all his struggles, disappointments and successes, down to the present time. During all these years the home life of Mr. and Mrs. Ford has been ideal.

One must know Mrs. Ford intimately to understand fully her part in the Ford achievements. She is thoroughly home-loving, capable and charming. So considerate is she, so unpretentious and gracious, that visitors to the Ford home forget that their hostess is one of the richest women in the world, owning in her own right a one-third interest in the corporation that is reported to pay an annual tax of eighty millions.

Mrs. Ford dresses in shades of brown or blue, and mink and sable are her favorite furs. She is small of figure, youthful in appearance, with chestnut eyes. Her voice is low and musical. We sat one winter afternoon in the sun parlor of her home watching the birds about the weather-worn stump on which each winter day she places fresh grain for her feathered friends. Beyond, the River Rouge wound in and out among tall forest trees, snow covered the ground and the frozen water was a sheet of gray ice. Behind us in the drawing room, which is paneled in French-bleached American walnut and furnished with cozy chairs and heavy velvet draperies of mulberry color, long hickory logs were crackling cheerfully in the carved white marble fireplace. The conversation drifted to the part that woman must take in present day affairs.

"There are so many demands for help that it would be unfair to take them lightly or to consider them in a haphazard, happy-go-lucky fashion," she said softly. "If they are handled carefully and systematically women can uplift, not pauperize, those they seek to help. Every village, city and state has its problems to solve. It seems to me that every homeloving woman should use her personal influence to cope with all the issues that directly and indirectly touch her home. If she does this," she added with a smile, "she will be compelled to take an active interest in politics. She may have to get out her school books and brush up on community civics and the science of government, for woe be unto her if she fails to understand exactly what she is undertaking. Of course," she added whimsically, "it would be easier and pleasanter to sit at home by the fire and knit, or chat idly over our teacups; but those times are slipping from us."

Mrs. Ford seldom has an idle moment. Large wealth has brought her pleasures and privileges; it has also brought heavy responsibilities. Each day she receives volumes of mail. Her desk overflows with appeals for help; to answer them personally would be an endless task. Her name and assistance are sought by local, state, national and international welfare workers. Personally she visits the detention homes; she lunches at the House of Correction; she consults with the women's police board officials. Each case she seeks to help is first investigated by experts through authoritative channels. Some of us know of thousands of families she helped while the factories were closed; many of those she visited; to others she sent her agents. She works constantly for the Girls' Protective League and other active organizations. For many years she has been treasurer of the Priscilla Inn, a home in Detroit, where girls can lead carefully chaperoned lives and enjoy comforts not easily obtained in an overcrowded manufacturing city like Detroit.

Three miles beyond the Ford's

Dearborn estate, and half-way between Detroit and the University of Michigan at Ann Arbor, is a square red brick home, "Valley Farm." Passers-by, in automobiles, gaze at it with frank curiosity. It is understood that Mrs. Ford is deeply interested in social welfare problems and that this Valley Farm belongs to her. If the inventions and vast wealth of Henry Ford have made him a world figure, they have made the activities of his wife of interest wherever their name is known. The general public knows little of the work accomplished at Valley Farm; except that it is some sort of rescue work. The old house is bravely facing new conditions. It is doing ultra-modern work; developed scientifically, by professionally trained workers, for the benefit of posterity. This is possibly the strongest link in the chain of work of the Dunbar Memorial Woman's Hospital, and the most far-reaching of all the great and good achievements of Detroit women. The farm, thirteen miles out in the country, has proved a boon to the hospital in Detroit, which is located on the busy, noisy corner of Frederick and St. Antoine.

Through Mrs. Ford's courage and thoughtfulness in sponsoring this work, its results will be felt to many generations. It has meant the salvation of thousands, whose successful reclamation has bleazed the trail for welfare workers.

What has actually been accomplished is of more importance than any general theorizing. Mrs. Ford has been affectionately called "the erring girl's friend." She says, "Men are willing to help boys and pulsiveness have brought trouble and distress to many girls and to their families. It is wonderful what has been done for them by those in charge at Valley Farm. They do it beautifully and sympathetically. They reach the girls when they are friendless, depressed and often bitterly antagonistic to the world. The quiet activities include two months' training and hygiene, household arts and parental duties. The kindly, far-sighted board of trustees and the tireless, unselfish trained nurses assist each one to secure work and establish a clean, wholesome home."

Mrs. Ford has opened the door of opportunity for many ambitious people, and has put success within the grasp of others. She is constantly lending a helping hand to those who need it most. Each day she is confronted with a round of duties, for she is the energetic, capable type of American womanhood which is playing a tremendous part in world affairs today. Her creed is that "Money should be used to make the world better, not to create envy and breed selfishness."

Being a musician, Mrs. Ford has a concert piano in her family living room; a pipe organ in the walls of her drawing room; in her library, which is lined from floor to ceiling with much-read books, is a Victrola; in her sun-parlor an Edison. "Music is refreshing," she says.

She organized the Dearborn Garden Club, of which she has long been president, and through her influence the members combine welfare work with nature study. This club holds two annual flower shows. Blue Ridge Mountain rhododendron, which in June is laden with gorgeous pink blossoms, flanks the Ford doorway and the lovely graystone mansion is very comfortable, very homelike.

Seven thousand acres are in the estate. The land stretches back to the city limits and in the opposite direction toward the tractor plant a River Rouge. The first home built by Mr. Ford still stands in the grounds. It is an attractive, frame farm house, with awide veranda and green roof, and is furnished as it was during their early housekeeping days. Near it is a rustic bungalow, where guests are sometimes entertained.

In spring and summer a rush of lilac and heliotrope fragrance surges through the open windows of Mrs. Ford's rooms. These purple flowers are banked around the gray-stone walls, border the flagstone walk and cluster under the big trees. The heliotrope trees she propagated are from slips which the mistress of the house raised with infinite care. In autumn they are taken into the conservatory; the following spring they

are re-set outdoors. This cycle, followed year by year, has produced specimens five feet in height, with trunks four inches in circumference. Some of her other flowers are blue larkspur, yellow gaillardias, bronze salpigolossis, blue seabosa, sweet peas, asters, shirley poppies, marigold and gourds which she raises to please her grandchildren. The rose garden is the only bit of formal landscape. She said one day while talking about her flowers: "I cannot buy everything I crave. Like my mother I love old-fashioned pinks. I haunted florists' shops, old homes and cemeteries in search of these tiny, red-flecked, spicily scented plants. It was my dress-maker's sister who, generously, sent the basket of roots to form the nucleus of my large beds."

Two miles from the estate can be seen the twinkling lights of the little village of Dearborn. To it she has given a library site, and has built and given to the Episcopal church a large brick rectory; she is a member of the social service committee of her church. Greenfield, where she was born and reared, is five miles from Dearborn. In the summer Mrs. Ford takes a family party for a cruise on their yacht. She

has traveled the world over, but, with the exception of a small place at Fort Myers, Florida, which Thomas Edison persuaded them to purchase next to his winter cottage, the Fords have never owned a home outside of Detroit or Wayne County. "We have lived here always," she says, "and here we love to stay."

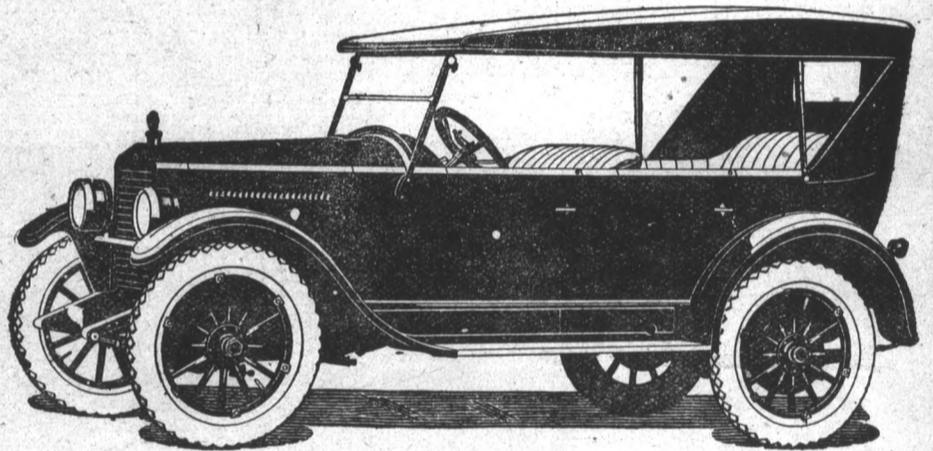
Persistent sightseers have made it necessary to keep the gates of the estate locked and guarded. All the servants, both in and outside the mansion, have held their positions many years. They have an air of courteous consideration and softness of voice which they seemed to have caught from the owners of the home.

The country and the wide outdoors hold for Mrs. Ford more attractions than the social life of any city, yet in her home she has entertained inventors, statesmen, capitalists and titled visitors. John Burroughs was a frequent guest. He enjoyed the birds, flowers and native trees which are under the care of Longfeather, a southern Indian. In the library is an autographed set of Burroughs' books; in a secluded part of the grounds is a rough bronze statue of him, and on the drawing-room table an exquisite

miniature of the great naturalist. John Burroughs once sent to Mr. and Mrs. Ford a carload of red sandstone from the Catskill mountains of his beloved native state, New York. These stones were worked into a sort of shelter for the bronze figure and for the bird pool near it. This spot the Fords called their "Burroughs Nook." Many rare birds, including Kirkland's Warbler and other unusual members of the feathered family, tarry at this quiet retreat, and here Burroughs, himself, discovered several northern birds, including the Bohemian wax-wing, which he had long hoped to see, but had never been able to find elsewhere.

Since his death Mrs. Ford and Mrs. Edison have been made members of the executive board of the Burroughs Memorial association. They attended his funeral and went to New York two weeks later to formulate plans for preserving Woodchuck Lodge, Slab Sides (where Burroughs had his study and where he used to write his books) and Riverby, which was a more pretentious home near Poughkeepsie, just outside of the small town of West Park, New York. (Continued on Page 19.)

ESSEX



Hidden Values

They Keep Essex Young

From the first Essex wins the admiration of owners.

But the greatest Essex enthusiasts are those who have driven their cars 50,000 miles or more. They have discovered the hidden values.

Design and construction details not observable in the new car assert their importance as use increases. They keep the car young.

Essex values extend to the minute details. The finest bearings made are used throughout. They are to an automobile what jewels are to a watch. Parts that wear are inexpensively replaced.

In chassis and body, Essex throughout possesses qualities essential to long hard service. That means economical service, always.

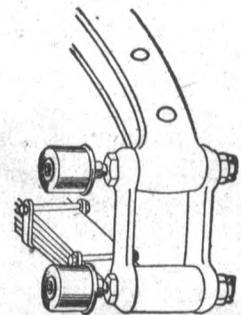
ESSEX MOTORS—DETROIT, MICH.

Touring

\$1045

Cabriolet **\$1145**

Freight and Tax Extra

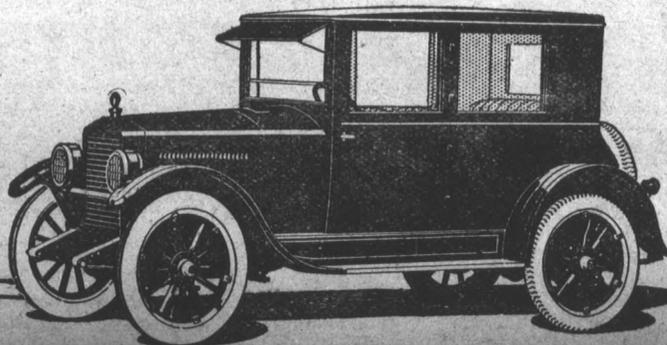


Chassis oil cups are lubricated with an oil-can—clean, simple, effective. Large size, require infrequent attention. Patented and exclusive to Hudson-Essex. Also compare shackle adjustment with average type, which require insertion of metal washers or shims. Only costly cars share this Essex feature.

The Coach

\$1145

Freight and Tax Extra



Closed Car Comforts at Open Car Cost

If Ruptured Try This Free

Apply it to Any Rupture, Old or Recent, Large or Small and You are on the Road That Has Convinced Thousands

Sent Free to Prove This

Anyone ruptured, man, woman or child, should write at once to W. S. Rice, 408B Main St., Adams, N. Y., for a free trial of his wonderful stimulating application. Just put it on the rupture and the muscles begin to tighten; they begin to bind together so that the opening closes naturally and the need of a support or truss or appliance is then done away with. Don't neglect to send for this free trial. Even if your rupture doesn't bother you what is the use of wearing supports all your life? Why suffer this nuisance? Why run the risk of gangrene and such dangers from a small and innocent little rupture, the kind that has thrown thousands on the operating table? A host of men and women are daily running such risks just because their ruptures do not hurt nor prevent them from getting around. Write at once for this free trial, as it is certainly a wonderful thing and has aided in the cure of ruptures that were as big as a man's two fists. Try and write at once, using the coupon below.

Free for Rupture
W. S. Rice, Inc.,
408B Main St., Adams, N. Y.
You may send me entirely free a Sample Treatment of your stimulating application for Rupture.
Name
Address
State



With prices where they are, only a bumper crop can make the farm pay a good return this year—and the first essential of a big profitable harvest is **Hardy, Big-Yielding, Michigan-Grown**



Your name and address on a post card will bring you this valuable book—this Guide to Better Crops. It describes the best in seeds—gives cultural directions—shows how Isbell seeds are grown and quotes direct prices. It is one of the most helpful catalogs in America. And samples showing quality of Field Seeds in which you are interested will be sent free on request. Send today—It's Free.

S. M. ISBELL & COMPANY
736 Mechanic St. (48) Jackson, Mich.

"VICTORY PLANTS"

5 butternut trees, \$1.00. 5 beautiful Virginia Cedars \$1.00. 100 Gibson or Dunlap and 100 Everbearing strawberry plants for \$2.00. 1,000 choice strawberry plants for \$3.50. 25 choice mixed Gladoli bulbs for \$1.00. One Spirea or two Concord grape vines free with every order of \$4.00 or over. 5 Spirea V. H. for \$1.00. 1,000 fine Concord grape vines for \$40.00. \$30.00 or \$20.00. 20 or 12 Concord grape vines for \$1.00. 12 gooseberry bushes for \$1.00. 100 asparagus roots for \$1.00. Not the cheapest but the best. Live and let live prices. All above small bargains post paid catalogue.

THE ALLEGAN NURSERY
Desk 10 Allegan, Mich.

20 APPLE TREES FOR \$1

postage paid. Start then from my perfected grafts. Jonathan, Delicious, York Imperial, Spies, Live-land Raspberry, Yellow Transparent, Duchess, Wealthy, Rome Beauty, Steel Red, and many other good ones. Lucretia Dowberry, 1 doz. \$1.00, postage paid. Grape Vines, 15c each. **MARSHALL VINEYARD**, Ben L. Marshall, Paw Paw, Mich.

SENATOR DUNLAP, WARFIELD AND GIBSON STRAWBERRIES

Priced as low as \$3.00 1000. Send for special price list complete. Our customers making \$1,000 per acre, so can you. Also grape vines and other small fruit.

BABION'S FRUIT AND POULTRY FARM, Chesaning, Michigan.

CHOICE STRAWBERRY PLANTS, \$3.75 Per 1,000. All standard varieties at \$3.75. Guaranteed first class or money refunded. Catalogue. **MRS. FILENA WOOLF**, ALLEGAN, MICH.

STRAWBERRY PLANTS \$3.00 per 1000. History and valuable illustrated book free. You will learn. Address **MAYER'S PLANT NURSERY**, Merrill, Mich.

SENATOR DUNLAP, DR. BURL GIBSON strawberry plants all \$3.00 per M. **W. M. FANGER**, St. Johns, Michigan.

FARM MECHANICS

SAFE AND EFFICIENT TOOLS FOR THE USE OF EXPLOSIVES

To use high explosives with the maximum of safety and efficiency, various tools and accessories are necessary or desirable. Of course the character of the work governs to a great extent the kind of tools required and to certain extent the blasting accessories also.

A four-pound hammar and a drill are necessary tools for shooting boulders that can not be blasted in any other way. A round soil punch bar pointed at one end and with an expanded head on the other, with a heavy sledge hammer or maul is necessary for quick work in shooting stumps or tree planting or subsoiling in hardpan or dry clay. A punch bar of different type is useful in moist ground, muck and swampy land. This consists of a length of two inch galvanized iron pipe about five feet long, pointed at one end and threaded to receive a "T" at the other. Two shorter pieces of pipe about a foot long each threaded into this "T" which forms a handle. This make a convenient punch for one or two men to operate where the soil permits but it is not adapted to being driven down by a hammer. An axe or mattock are convenient tools for clearing brush around stumps and boulders and a sawed off broom stick or rake handle makes a very efficient tamping stick. A shovel handle with the rounded end sawed off square, leaving the offset end to hold by, makes a convenient tamping stick in some kinds of work. The tamping stick is used for pressing the charges of dynamite into the bore hole and for pressing in the tamping such as earth, clay or sand to confine the charge. It is not safe to hammer this at any time; in fact, it is extremely dangerous. The charges are pressed in firmly but not pounded.

Various types of soil augers are used, but an ordinary two inch wood auger with an extension welded on the shaft which ends in a ring through which a wagon spoke can be used as a handle, answers the purpose very well. Do not make the mistake of using too small an auger. Two inches in diameter is about the minimum. A straight steel bar sharp pointed at one end and chisel-pointed at the other, about seven feet long, made out of one-inch or one and one-quarter inch drill steel

makes a very handy tool for making holes under stumps and boulders, getting between roots which the auger becomes tangled with, and for cutting off rootlets with the chisel end.

In the blasting accessories line you will require besides the dynamite, some blasting caps and fuse or electric blasting caps, leading wire and a blasting machine. The electrical method is much safer than the can and fuse method but the initial cost is somewhat greater as you have to buy a blasting machine and leading wire. The electric blasting caps however do not cost much more than blasting caps with the required amount of fuse. Cap crimpers are a desirable and necessary part of your equipment if you use the cap and fuse method, and are convenient even with the electrical method, as one leg of the crimper is pointed for the purpose of punching a hole in the dynamite cartridge in which the electric blasting cap is inserted. The most convenient leading wire is called duplex wire because it has two wires laid parallel to each other and insulated from each other and from the ground. This is generally sold in lengths of 250 feet. A shorter amount than this is not particularly safe for shooting large size stumps in the open. The No. 2 blasting machine is the best all round arrangement for generating current for electric blasting as the terminals are dead except at the moment the machine is operated. Many accidents have occurred when dry cells or storage batteries are used, due to the fact that their terminals are always alive until the battery runs down.

A necessary rule in all kinds of electrical blasting which is put with all possible emphasis is this: Disconnect the leading wire from the battery immediately after firing a shot of attempting to fire one. In looking for a broken wire anywhere in your circuit, first make sure that the battery is disconnected, otherwise there may be an accident.

A galvanometer for testing the continuity of the circuit is desirable but not absolutely necessary, for the general run of agricultural blasting unless you expect to go into the business. The same may be said of the rheostat which is an instrument for testing the blasting machine to see that it is in working order.—Arthur LaMotte, Mgr. Technical section, Explosives Dept., E. I. du Pont de Nemours & Co.

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

MAKING UNPROFITABLE ORCHARDS PAY

MEASURED by the abundance and regularity of the crops of high-grade fruit produced, there are many apple orchards of bearing age that are not successful. Because a large number of these unprofitable orchards can be made to yield good crops of high-quality fruit by special treatment, the United States Department of Agriculture has prepared Farmers' Bulletin 1284, Apple Orchard Renovation, by H. P. Gould, which discusses the principal practices found useful in bringing neglected trees back into profit-producing condition.

Orchards in need of renovation are found not only in sections where the home orchard or fruit garden is the prevailing type of fruit growing, and in regions where orchards of considerable size occur only occasionally, but also in the recognized commercial apple-growing districts. Some orchards are not worth the time and expense necessary to renovate them. In deciding what is to be done the following factors need to be considered: The orchard must be on a good site with no rock ledges or hardpan near the surface, well drained and without unusual danger from frosts; the trees must have good vitality, without decayed trunks, cankers that girdle the limbs, or weakness that would make good growth impossible; finally, the varieties must be good unless it is practicable to top-graft the trees.

A neglected orchard is always a menace to other orchards in the neighborhood and in sections where

there are many commercial plantings much damage may be done by insect pests and diseases that have their source in badly infected trees. In some states a neglected orchard is practically declared by law to be a public nuisance and is treated accordingly. If the owner will not clean it up, public officials do it and the expense becomes a lien on the property until paid.

As a rule, says the author of the bulletin, a much-neglected orchard does not justify its existence. If an orchard is worth keeping it is worth giving good attention; otherwise, the trees merely encumber the ground and interfere with its use for other purposes. If an apple tree is not of value for fruit production it may be worth converting into tool handles, plane blocks, and other useful things.

Persons interested in renovating orchards or those who wish to decide whether or not a certain orchard is worth the attempt should get the bulletin, which may be obtained without cost from the Department of Agriculture, Washington, D. C.

RENEWING THE STRAWBERRY BED

RATHER than plow it up and set a new one, the old strawberry plantation may be renovated when it has become unprofitable. As soon as the berries have been picked, and new runners have begun to root, plow up the row, leaving a strip a foot wide in the center between rows where plants have rooted. Then harrow down level. Some of the plants will be destroyed with the harrow, but if an old bed has been al-

Your Tractor

For threshing, plowing, road grading, or any other kind of heavy work you want a Tractor that will deliver ample power easily—surely—steadily—and continuously day after day and week after week until the job is done.

Then it must be ready for the next job. In addition you want a tractor that is so strongly and well built that it will stand up under this heavy work for a long period of time, with a low up-keep cost.

Ability to do the required work for a long period of years and at low operating and upkeep costs makes a heavy duty tractor profitable.

All these requirements are met in the

NICHOLS-SHEPARD Oil-Gas Tractor

It's a strong, well-built tractor designed to do big work.

Has a slow speed, 2-cylinder powerful motor that burns kerosene perfectly at all loads.

Starts easily on the coldest mornings. Does not burn out or shake itself to pieces like the light-weight, high-speed tractors.

It has the power—at all times—and is a giant for work.

The Nichols-Shepard Oil-Gas Tractor drives a thresher with just as steady, even motion as a steam engine.

Is is THE Tractor for heavy duty.

Write for Free Circulars

Nichols & Shepard Co.

(In Continuous Business Since 1876) Builders exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines

Battle Creek, Michigan



\$4 to \$10.00 More Per Ton

Hay cured "Nature's Way" — air-cured instead of sun-scorched — contains more nutrition — grades higher. No additional work — no extra tools required. All you need is the John Deere-Dain System Rake—the only rake with inclined frame and curved teeth.

FREE BOOK—"John Deere-Dain System of Air-Curing Hay." Tells how to make hay that brings you extra dollars. Address John Deere, Moline, Ill., and ask for Booklet DB-433.

JOHN DEERE

Cord Tires Cut Prices

No price advance on GEM CORDS—the tire that gives 8000 miles satisfactory service. Cut your tire costs by these excellent tires at low prices. Best tire ever seen.

Send No Money

All GEM CORDS shipped C. O. D. Take tire home and examine it; if it isn't the best buy you ever made, return the tire and get all your money.

Size	Cords	Tubes	Size	Cords	Tubes
30x3	5.85	1.05	33x4	10.45	1.90
30x3 1/2	6.45	1.25	34x4	10.95	1.95
32x3 1/2	8.45	1.55	32x4 1/2	13.45	2.00
31x4	9.75	1.65	33x4 1/2	13.95	2.10
32x4	9.95	1.75	34x4 1/2	14.45	2.25

5% Discount for Cash With Order. Do Not Delay. Order your season's cord tires now at Bargain Prices. **GEM RUBBER CO.** Dept. 38

1915 S. Oakley Blvd., Chicago, Illinois

GOOD SEEDS

Grown From Select Stock—None Better—53 years selling good seeds to satisfied customers. Prices below all others. Extra lot free in all orders I fill. Big free catalogue has over 700 pictures of vegetables and flowers. Send your and neighbors' addresses. **J. H. SHURWAY**, 211 E. 12th St., Des Moines, Iowa.

lowed to fill out solidly from row to row there will still remain plenty of plants. The fresh earth that is dragged around the plants will be of benefit, while the teeth of the harrow will loosen the crust. After ground has produced two or three crops of berries it is likely to need fertilizer, and this may be scattered along the plowed strip between the new rows. The strip that has been plowed up should be stirred frequently through the summer, and as much fresh soil as possible pushed in between the plants. If the plants should be very thick, a strip even less than a foot in width will be sufficient for the new row. Stable manure should be used only when the ground may be cultivated to destroy weeds and grass.—H. F. Grimstead.

PRUNING AND PROPAGATING BOX

Is it possible to root boxwood from cuttings? The kind I have is the tall-growing variety; not the low bushes, usually found in old gardens along the path. Is this the proper time to trim them?—C. H. P., Mich. —Boxwood can be rooted from cuttings made of young shoots, 4 or 5 in. long, either in the spring or fall. Some growers are quite successful in rooting them planted in sandy soil in early spring, but the surest and most successful method is to handle them under glass, either in the green house or cold frame. In either case they should be planted in good propagating sand, and the glass shaded with whitewash to keep the temperature down on bright days. Boxwood, like mostly all other evergreens, may be pruned any time that the wood is not frozen.

PRUNING CHERRY TREES

I have some cherry trees, planted last year and year before, and ask just where they should be pruned.—V. W. B.

—When planting is done in the fall there should be no pruning until spring. If one-year-old trees are planted, they should not be touched except to be headed off at the proper height in case they would otherwise make too high a head. If older trees are planted, all branches not needed for the framework of the tree should be removed, and the remaining branches should not be pruned. The newly planted tree should have plenty of foliage, and as soon as possible. The last year's growth which is left for the framework will give more foliage if left entire, since the large perfectly developed buds at the ends of the branches, which would be removed if pruned, are the buds which give the most luxuriant foliage in the shortest time. Further than this it is not good practice to prune cherry trees at all, except to remove dead and broken branches incident to picking, and to remove entire such other limbs as are not desired.

SAVING THE HAY THROUGH RADIO

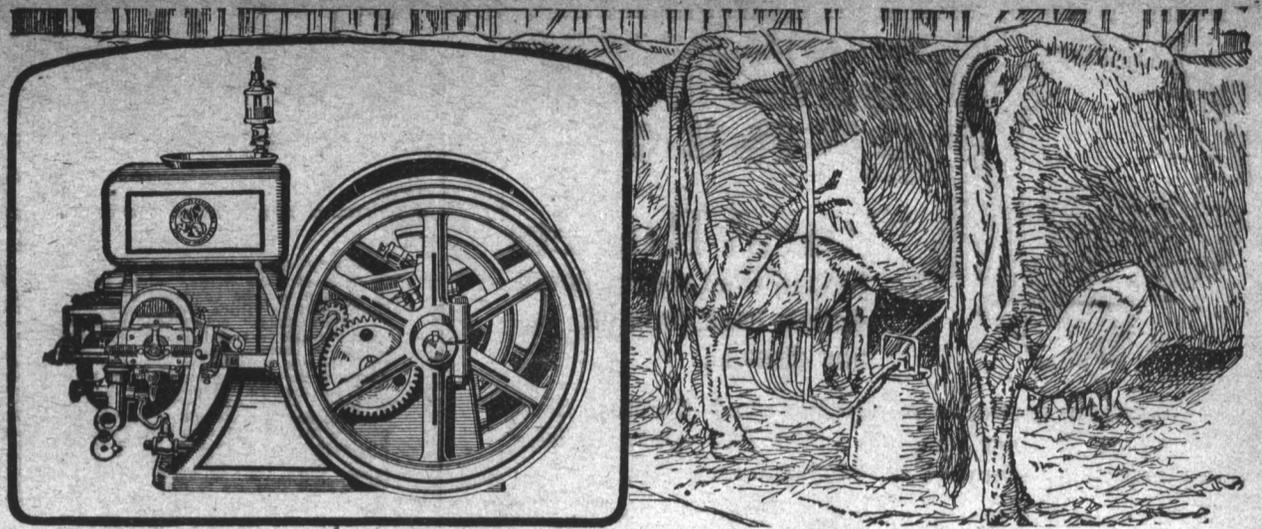
LAST June and July were two of the wettest months so far as rainfall is concerned that New Jersey has ever seen. Farmers all over the state lost thousands of tons of hay because the heavens wept so continuously that it was impossible to get hay sufficiently dry and well enough cured to put in the barns before it had turned black with rot and spoiled. If a farmer could always know exactly when the rain was coming he could beat the game by not mowing down his hay until old Sol, the sun and boss of all hay makers was going to show his face.

E. Smith Hoover, Manager of the State Farm of Annandale obtained this information over the radio and as a result has his barns full of an one-hundred percent crop of fine alfalfa and clover hay. He never lost a load all summer.

During haying season every morning at eleven either Mr. Hoover or his wife tuned up their set and listened for WJZ, the Newark Broadcasting Station of the Westinghouse Company, which gives out the U. S. Weather Bureau forecast. As soon as the news came Mr. Hoover knew whether to tell his boys to mow down more hay for the morrow or to stop cutting and hustle that which was curing in the mow.

A REAL "BROTHER"

Dear Mr. Editor: Enclosed please find one dollar for which enter my brother's name on your list for one year along with my renewal for one year. I think it is a worthy little paper to be in the house as it gives good reading for all in the house and I know my brother will appreciate it very much.—C. G. McC., Peterburg, Mich.



"Seven and a half years' service —and still going strong"

IN Rummerfield, Pennsylvania, Mrs. Boyle runs a dairy farm with the help of one steady man and a Hercules Engine. The herd consists of from twenty-five to thirty cows and she says that one man can do the milking in two hours. Here is an extract from her letter:

"Our 1½ H. P. Hercules Engine has spent seven and one-half years running a five-single-unit milker. I could not speak too highly of the engine, as it has been run by all sorts of help. The cost of operating and repairs has been a very small item. 5000 hours would not cover the running time of this little servant."

Mrs. Boyle's farm is one of more than three hundred and fifty thousand where the Hercules is bearing the brunt of the hard work—doing the milking, running the dairy, grinding feed, running the wash-

ing-machine, the workshop, the water-pump, the grindstone—doing the thousand and one things that must be done and that are downright hard work.

A boy can run a Hercules. It starts easily, winter or summer. *And sticks to the job till it's done.*

Operating costs are surprisingly low. One Hercules owner wrote us that his engine "pays for itself three times every year."

There is a Hercules for your farm. They range in size from 1½ H. P. to 12 H. P. Back of every one of them is the five-year guarantee of The Hercules Corporation.

There should be a Hercules dealer near you. If there isn't, drop us a postal. Let us show you how you can lighten the burden of work on your farm. An inquiry puts you under no obligation.

THE HERCULES CORPORATION

Engine Division

Evansville, Indiana

HERCULES ENGINES



Sweepstakes Pedigree Sweet Corn

(Copyright 1915)

More food Per Acre than any other. The Standard Silage Corn. Send for complete information before you order from anyone. Beware of Imposter and his Counterfeits. Post yourself. Authorized Agents. Have Certificates of Agency. Ask them for it. 10c will bring Our Standard Sweepstakes CALENDAR direct to you. We pay the freight. I. O. R. ASSOCIATION, INC., M. B. F. ELMIRA, N. Y.

Reliable Agents Wanted Every Township.

ELECTRICITY from the WIND!

A complete electric light plant that generates current by wind power alone. AEROLECTRIC—invented and perfected by Perkins—a leader for 60 years in windmill manufacturing. **FREE Fuel!** Consider this! From the AEROLECTRIC you get all the "juice" you want for light and power and it doesn't cost you a cent for fuel. Wind is as free as the air you breathe and there is no engine to fuss with and care for.

Current for 11 days without wind No fear of wind shortage with the AEROLECTRIC. Charges on faintest breeze, as low as 6 miles an hour. Big batteries have ample storage for enough "juice" to last 11 days even if no wind blew for that length of time. And the government says this never happens. AEROLECTRIC has 14 ft. Perkins Wind Wheel with a Westinghouse Generator built in. Hyatt Roller Bearings and finest equipment throughout. Current is carried along a wire to the batteries where it is ready for instant use for either light or power at the touch of a button and at no expense. AEROLECTRIC completely installed for \$800 plus freight. Insurance Policy \$1500. Insuring against wind blowing mill down. **Book Free** Write for a copy. Learn about this modern Electric Plant. **PERKINS CORPORATION** 924 Main Street Mishawaka, Ind. **DEALERS:** There are big sales possibilities in this amazing invention. Write for dealer arrangement.

BOWERS Colony Brooder

More Chicks—Less Cost

This brooder is a chick-saver and a money maker. It raises more and better chicks, at less cost than other brooders. Stove is best in the world to hold fire—air-tight and self-regulating. It burns soft coal—the cheapest brooder fuel—perfectly. Cuts fuel costs in half. Stove will also burn hard coal, wood, coke, etc. Regulator maintains even heat night and day. No trouble. Sizes for 500 or 1000 chicks. **Low priced Write TODAY.** F.M. Bowers & Sons Co. 1416 W. Wash. St. **INDIANAPOLIS, IND.**

\$67.00 Farm With Your Ford

The Ford-A-Tractor makes your Ford car or any old Ford chassis into a powerful tractor. Plows discs, harrows and all tractor jobs. Dependable and guaranteed. More powerful than three horses. Write today.

G. L. WILLITS 2561 University Avenue S. E. MINNEAPOLIS, MINNESOTA

FREE—To introduce our Pedigreed Everbearing Strawberries we will send 25 fine plants free. **MASON NURSERY CO.,** Piedmont, Mo.

KENTUCKY TOBACCO—BEST OBTAINABLE 3-year-old leaf. Free flavoring and directions. Pay for tobacco and postage when received. Chewing 10 lbs. \$3.25; smoking 10 lbs. \$2.75. **OLD HOMESPUN CO.,** Hawesville, Ky.

Brake Equalizers

Are much more needed on automobiles than front wheel brakes.

Why add more trouble to your car when an investment of \$5.75 to \$8.50 will nearly double the average brake power of an automobile not equipped with brake equalizers.

Mohler Engineering Co., Ypsilanti, Mich

TRAVEL

and sell your own products. Two thousand formulas. Write us for any you need not listed.

A FEW MONEY MAKERS Metal and Wood Paints and Polishes. Commercial Candy, Syrups, Beverages. Photo Developers, Soaps and Hair Tonics. Hair Silk (similar to the widely advertised) Hair Groom and Stacomb, keeps hair smooth. How to make rubber stamps. Lover's Ink, Fades away in four weeks, prevents abuse of letters. Formulas 50c each, 3 for \$1.00. **INTERNATIONAL CHEMICAL CO.** 2431 N. Harding Ave., Chicago.

FOR HORSE and HUMANS

Canton Flannel Bandages, 4 inch by 3 yards, boxed, worth 50c, price 18c; 7 for \$1. Has score of uses. All kinds of Medicines, Gauzes, Rubber Goods, Novelties, **HALF PRICES.** YOU can make easy PIN money showing your friends **ACEY BARGAIN LISTS.** Genuine Aspirin tablets, 5c doz; 100, 32c; 500, \$1. Laxative wafers same prices. Write **A. C. SMITH,** Lighter Building, Detroit. Wholesale Manufacturing Druggist 28th year. **OLDEST Aspirin House.**

Ear Tags FOR STOCK

Tag your stock—best and cheapest means of identification for Hogs, Sheep and Cattle. Name, address and number stamped on tags. Catalog mailed free on request. **F.S. Burch & Co., 279 W. Huron St. Chicago**

CORD-WOOD SAW FRAMES

BUZZ SAW FRAMES, BLADES, MANDRELS, belting, pulleys, wood-working machinery, etc., of every description. Low prices, prompt shipments. Catalogue free. Write **GEO. M. WETTSCHUR-AOK,** La Fayette, Indiana.

NATURAL LEAF TOBACCO, CHEWING 5 pounds \$1.75; 10 pounds \$3. Smoking, 5 pounds \$1.25; 10 pounds \$2.00. Send no money. Pay when received. **TOBACCO GROWERS' UNION,** Paducah, Ky.

TOBACCO—EXTRA SMOKING, 5 LBS., \$1; 10 lbs., \$1.50; 20 lbs., \$2.75. Chewing, 5 lbs., \$1.50; 10 lbs., \$2.75. Quality guaranteed. **O'CONNOR SMOKEHOUSE,** Mayfield, Ky.



PETOSKEY Potatoes

"Rural Russets"
King of the Late Potatoes!
Resists heat, drought
and disease.

Our Michigan grown, carefully inspected Certified Seed Potatoes are the best for yield and flavor. Ohio, Indiana and Pennsylvania demand 78% of them every year.

They are Northern grown under climatic and soil conditions adapted to Potato production.

Michigan Certified Petoskeys and proper spraying increased Pennsylvania's average yield from 78 to 120 bushels per acre.

If your Local Cooperative Association or County Agent cannot take your order write to

Michigan Potato Growers' Exchange
Cadillac, Michigan, or

Michigan State Farm Bureau
SEED DEPARTMENT
Lansing, Michigan



Rheumatism

A Remarkable Home Treatment
Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

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

MARK H. JACKSON

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

Aspirin

Say "Bayer" and Insist!



Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

- | | |
|-----------|------------|
| Colds | Headache |
| Toothache | Lumbago |
| Eurache | Rheumatism |
| Neuralgia | Pain, Pain |

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoacetic-acidester of Salicylicacid. (2)

For Healthy Orchards Plant Michigan Grown Trees

Buy handsome, thrifty trees, grapevines, berry bushes, roses and shrubs from your own state and secure prompt receipt in vigorous condition. Kalamazoo County is famous for hardy, well-rooted stock. We guarantee healthy and true to name. You ought to plant more fruit trees this season. Special rates if you order now. Our handsome catalog of dependable trees free for the asking.

Celery City Nurseries,
Box 202, Kalamazoo, Mich.

Direct to You, At Wholesale Prices

Corrugated Metal 3 1/2" 10" ROOFING

Think of it. We can now sell Excell Metal Roofing, 28 gauge corrugated at only \$8.10 per 100 sq. ft. painted. Galvanized, only \$4.80. If you have been waiting for metal roofing prices to come down, here they are—direct from factory prices—lower than you can get anywhere else. Send for our New Catalog covering all styles Metal Roofing, Siding, Shingles, Ridding, Ceiling, etc., will save you money. **PREPARED ROOFING ONLY \$1.05** Don't buy Roofing, Paints, Fencing, Gas Engines, Tires—anything you need until you get our latest catalog. You can see and try our roofing before you pay. All sold on money back guarantee. Write for Money Saving Catalog today. The United Factories Co., 705 Marlen Bldg., Cleveland, Ohio

Why Not PUT THIS NEW OLD TOWER

Albion steel and wood mill are used and powerful. One-third the working parts of any other mill. Only main frame bearing subject to wear. This is a solid, and easily replaceable. Covers by dependable weight without springs. Fits any 4-foot steel tower. Why not shorten your chain hoist now with a good Windmill? This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to Union Steel Products Co. Ltd. Dept. 34 Albion, Mich., U. S. A.

The Hunted Woman

By James Oliver Curwood

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

(Copyright by James Oliver Curwood)

SYNOPSIS

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

(Continued from March 3 Issue)

FOR a moment Joanne stood facing the little lake, and when she spoke again there was a note of thankfulness, of subdued joy and triumph in her voice.

"Before that day had ended I had displeased Mortimer FitzHugh," she said, and Aldous saw the fingers of her hands close tightly. "I told him that until a month had passed I would not live with him as a wife lives with her husband. And he was displeased. And my father was not yet buried! I was shocked. My soul revolted.

"We went to London and I was made welcome in the older FitzHugh's wifeless home, and the papers told of our wedding. And two days later there came from Devonshire a woman a sweet-faced little woman with sick, haunted eyes; in her arms she brought a baby; and that baby was Mortimer FitzHugh's!

"We confronted him—the mother, the baby, and I; and then I knew that he was a fiend. And his father was a fiend. They offered to buy the woman off, to support her and the child. They told me that many English gentlemen had made mistakes like this, and that it was nothing—that is was quite common. Mortimer FitzHugh had never touched me with his lips, and now, when he came to touch me with his hands, I struck him. It was a serpent's house, and I left it.

"My father had left me a comfortable fortune, and I went into a house of my own. Day after day they came to me, and I knew that they feared I was going to secure a divorce. During the six months that followed I learned other things about the man who was legally my husband. He was everything that was vile. Brazenly he went into public places with women of dishonour, and I hid my face in shame.

"His father died, and for a time Mortimer FitzHugh became one of the talked-about spendthrifts of London. Swiftly he gambled and dissipated himself into comparative poverty. And now, learning that I would not get a divorce, he began to regard me as a slave in chains. I remembered, one time, that he succeeded in laying his hands on me, and they were like the touch of things that were slimy and poisonous. He laughed at my revulsion. He demanded money of me, and to keep him away from me I gave it to him. Again and again he came for money; I suffered as I cannot tell you, but never once in my misery did I weaken in my promise to my father and to myself. But—at last—I ran away.

"I went to Egypt, and then to India. A year later I learned that Mortimer FitzHugh had gone to America, and I returned to London. For two years I heard nothing of him; but day and night I lived in fear and dread. And then came the news that he had died, as you read in the newspaper clipping. I was free! For a year I believed that; and then, like a shock that had come to destroy me, I was told that he was not dead but that he was alive, and in a place called Tete Jaune Cache, in British Columbia. I could not live in the terrible suspense that followed. I determined to find out for myself if he was alive or dead. He is down there—dead. And I am glad that he is dead!"

"And if he was not dead," said

Aldous quietly, "I would kill him!"

He could find nothing more to say than that. He dared trust himself no further, and in silence he held out his hands, and for a moment Joanne gave him her own. Then she withdrew them, and with a little gesture, and the smile which he loved to see trembling about her mouth, she said:

"Donald will think this is scandalous. We must go back and apologize!"

She led him down the slope, and her face filled with the pink flush of a wild rose when she ran up to Donald, and asked him to help her into her saddle. John Aldous rode like one in a dream as they went back into the valley, for with each minute that passed Joanne seemed more and more to him like a beautiful bird that had escaped from its prison-cage, and in his mind and soul were absorbed in the wonder of it and in his own rejoicing. She was free, and in her freedom she was happy!

Free! It was that thought that pounded steadily in his brain. He forgot Quade, and Culver Rann, and the gold: he forgot his own danger, his own work, almost his own existence. Of a sudden the world had become infinitesimally small for him, and all he could see was the soft shimmer of Joanne's hair in the sun, the wonder of her face, the marvellous blue of her eyes—and all he could hear was the sweet thrill of her voice when she spoke to him or old Donald, and when, now and then, soft laughter trembled on her lips in her sheer joy of the life that had dawned anew for her this day.

They stopped for dinner, and then went on over the range and down into the valley where lay Tete Jaune. And all this time he fought to keep from flaming in his own face the desire that was like a hot fire within him—the desire to go to Joanne and tell her that he loved her as he had never dreamed it possible for love to exist in the whole wide world. He knew that to surrender to that desire in this hour would be something of a sacrilege. He did not guess that Joanne saw his struggle, that even old MacDonald mumbled low words in his beard. When they came at last to Blackton's bungalow he thought that he had kept this thing from her, and he did not see—and would not have understood if he had seen—the wonderful and mysterious glow in Joanne's eyes when she kissed Peggy Blackton.

Blackton had come in from the work-end, dust-covered and jubilant. "I'm glad you folks have returned," he cried, beaming with enthusiasm as he gripped Aldous by the hand. "The last rock is packed, and tonight we're going to shake the earth. We're going to blow up Coyote Number Twenty-seven, and you won't forget the sight as long as you live!"

Not until Joanne had disappeared into the house with Peggy Blackton did Aldous feel that he had descended firmly upon his feet once more into a matter-of-fact world. MacDonald was waiting for the horses, and Blackton was pointing over toward the steel workers; and saying something about ten thousand pounds of black powder and dynamite and a mountain that had stood a million years and was going to be blown up that night.

"It's the best bit of work I've ever done, Aldous—that and Coyote Number Twenty-eight. Peggy was going

Buy Now AT WHOLESALE
Markets advancing. We expect much higher prices later. We can save you money if you buy now. We bought early, big stocks on lower markets and are now selling at a big discount under present prices. Don't buy field seeds of any kind until you see our samples and prices. We specialize on Guaranteed Quality. Fested Clover, Timothy, Alfalfa, Sweet Clover, and Alsike, sold subject to your approval and government test. Write today for our samples and Big Seed Guide all FREE. American Field Seed Co., Dept. 127, Chicago, Ill.

FARMERS WHO OWN FORDS

Now carry their cream cans, egg cases, poultry crates and other produce on the new Six-in-One Bumper. Carries a load up to 800 pounds. Has six conveniences not carried by ordinary bumpers. If not carried by your dealer, write to

SIX-IN-ONE BUMPER COMPANY
1047 Security Building, Minneapolis, Minnesota.

to touch the electric button to Twenty-seven to-night, but we've decided to let Miss Gray do that, and Peggy will fire Twenty-eight to-morrow night. Twenty-eight is almost ready. If you say so, the bunch of us will go over and see it in the morning. Mebby Miss Gray would like to see for herself that a coyote isn't only an animal with a bushy tail, but a cavern dug into rock an' filled with enough explosives to play high jinks with all the navies in the world if they happened to be on hand at the "Fine!" said Aldous.

"And Peggy wants me to say that it's a matter of only common everyday decency on your part to make yourself our guest while here," added the contractor, stuffing his pipe. "We've got plenty of room, enough to eat and a comfortable bed for you. You're going to be polite enough to accept, aren't you?"

"With all my heart," exclaimed Aldous, his blood tingling at the thought of being near Joanne. "I've got some business with MacDonald and as soon as that's over I'll domicile myself here. It's bully of you, Blackton! You know—"

"Why, dammit, of course I know!" chuckled Blackton, lighting his pipe. "Can't I see Aldous? D'ye think I'm blind? I was just as gone over Peggy before I married her. Fact is, I haven't got over it yet—and never will. I come up from the work four times a day regular to see her, and if I don't come up I have to send up word I'm safe. Peggy saw it first. She said it was a shame to put you off in that cabin with Miss Gray away up here. I don't want to stick my nose in your business, old man, but—by George!—I congratulate you! I've only seen one lovelier woman in my life, and that's Peggy."

He thrust out a hand and pumped his friends limp arm, and Aldous felt himself growing suddenly warm under the other's chuckling gaze.

"For goodness sake don't say anything, or act anything, old man," he pleaded. "I'm—just—hopin'."

Blackton nodded with nodigious understanding in his eyes.

"Come along, when you get through with MacDonald," he said. "I'm going in and clean up for to-night's fireworks."

A question was in Aldous' mind, but he did not put it in words. He wanted to know about Quade and Culver Rann.

"Blackton is such a ridiculous forgetful fellow at times that I don't want to rouse his alarm," he said to MacDonald as they were riding toward the corral a few minutes later. "He might let something out to Joanne and his wife, and I've got reasons, Mac—for keeping this affair as quiet as possible. We'll have to discover what Rann and Quade are doing ourselves."

MacDonald edged his horse in nearer to Aldous.

"See here, Johnny, boy—tell me what's in your mind?"

Aldous looked into the grizzled face, and there was something in the glow of the old mountaineer's eyes that made him think of a father.

"You know, Mac."

Old Donald nodded. "Yes, I guess I do, Johnny," he said in a low voice. "You think of Mis' Joanne as I used to—to—think of her. I guess I know. But—what you goin' to do?"

Aldous shook his head, and for the first time that afternoon a look of uneasiness and gloom overspread his face.

"I don't know, Mac. I'm not ashamed to tell you. I love her. If she were to pass out of my life to-morrow I would ask for something that belonged to her, and the spirit of her would live in it for me until I died. That's how I care, Mac. It wouldn't be the square thing. And yet she won't remain in Tete Jaune very long. Her mission is accomplished. And if—if she goes I can't very well follow her, can I, Mac?"

For a space old Donald was silent. Then he said, "You're thinkin' of me, Johnny, an' what we was planning on?"

"Partly."

"Then don't any more. I'll stick to you, an' we'll stick to her. Only"

"What?"

"If you could get Peggy Blackton to help you—"

"You mean—" began Aldous eagerly.

"That if Peggy Blackton got her

to stay for a week—mebby ten days—visitin' her, you know, it wouldn't be so bad if you told her then, would it, Johnny?"

"By George, it wouldn't!"

"Yes—"

"Bein' an old man, an' seein' mebby what you don't see—"

"Yes—"

"That she'd take you, Johnny."

In his breast John's heart seemed suddenly to give a jump that choked him. And while he stared ahead old Donald went on. "I've seen it afore in a pair of eyes just like her eyes, Johnny—so soft an' deeplike, like the sky up there when the sun's in it. I seen it when we was ridin' behind an' she looked ahead at you, Johnny. I did. An' I've seen it afore. An' I think—"

Aldous waited, his heart-strings ready to snap.

"An' I think—she likes you a great deal, Johnny."

Aldous reached over and gripped MacDonald's hand.

"The good Lord bless you, Donald! We'll stick! As for Quade and Culver Rann—"

"I've been thinkin' of them," interrupted MacDonald. "You haven't got time to waste on them, Johnny. Leave 'em to me. If it's only a week you've got to be close an' near by Mis' Joanne. I'll find out what Quade an' Rann are doing, and what they're goin' to do. I've got a scheme. Will you leave 'em to me?"

Aldous nodded, and in the same breath informed MacDonald of Peggy Blackton's invitation. The old hunter chuckled exultantly. He stopped his horse, and Aldous halted.

"It's workin' out fine, Johnny!" he exclaimed. "There ain't no need of you goin' any further. We understand each other, and there ain't nothin' for you to do at the corral. Jump off your horse and go back. If I want you I'll come to the Blackton's 'r send word, and if you want me I'll be at the corral or the camp in the coulee. Jump off, Johnny!"

Without further urging, Aldous dismounted. They shook hands again, and MacDonald drove ahead of him the saddled horses and the pack. And as Aldous turned back toward the bungalow old Donald was mumbling low in his beard again, "God ha' mercy on me, but I doin' it for her an' Johnny—for her an' Johnny!"

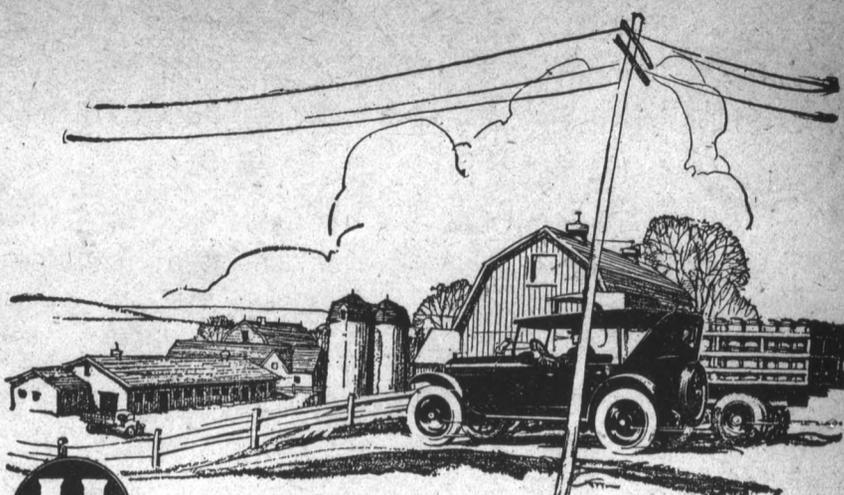
(Continued March 31st issue)

UGANDA CATTLE AID TO MATRIMONY

SINCE the earliest days in the Uganda territory of Africa, the measure of wealth of the various tribes has been the number of domestic animals owned. Practically all of the live stock in the territory is owned and raised by natives. Animals constitute the natives bank accounts and their trading assets. Even since the introduction of coins, animals form an important medium of exchange and in some parts of the colony one cow may be worth several people, says a report from Consul William L. Jenkins, Nairobi, to the Department of Commerce according to official figures for 1922 the cattle in that country numbered 680,764, while there were 632,206 goats and 221,524 sheep, with the exception of certain provinces from which no statistics could be received. It is believed, however, that the cattle population of the Protectorate is about one million. Family life is still dependent upon the ability of young men to acquire the number of animals demanded by his prospective father-in-law. These young men are often-times up against it, because the country is very susceptible to cattle diseases.

"Without my hogs," said Nathan Boggs, "I surely would be lost; My nice purebreds, both blacks and reds, Bring in twice what they cost."

I am taking advantage of your offer to get something for nothing and am inclosing check for one dollar and coupon to renew subscription. We enjoy the paper and are interested in the letters concerning the schools and taxation especially as we are in a newly consolidated school and have had chicken-pox, whooping cough and pink eye, our doctor bill for same and one hundred dollars extra school tax besides the loss of sleep and damage to temper and expect to have the itch before spring. Wishing the paper success along with the farmer, I am— Wm. A. Smith, Wexford County, Mich.



It is a fact, proved over and over again, that the Hupmobile costs less to maintain over a period of three years, or longer, than any other car built today.

Owners of passenger car fleets have demonstrated Hupmobile's unequalled economy beyond any possibility of doubt.

After experimenting with various cars, they have finally standardized upon the Hupmobile as giving lowest cost service in the long run.

There is no secret about Hupmobile economy. It

begins with its better engineering design, and comes down to the fact that finer, more durable parts are used where wear and durability promote longer life and lower costs.

Most of these parts are concealed within the motor, transmission, or rear axle, where the average owner never sees them.

Any disinterested repair man will tell you, however, that, judged solely by the way it is built, the Hupmobile is really a fine car at a low price.

Touring Car, \$1115; Roadster, \$1115; Special Touring Car, \$1215; Special Roadster, \$1215; New Two-passenger Coupe, \$1385; Four-passenger Coupe, \$1535; Sedan, \$1675. Cord tires on all models. Prices F. O. B. Detroit—Revenue Tax Extra

Hupp Motor Car Corporation, Detroit, Mich.

Hupmobile

TWO YEARS FOR \$1

—if YOU act at once!

\$1

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

—or will enter a NEW subscriber's name for TWO FULL YEARS

—or will renew your subscription for ONE YEAR and enter the name of a NEW subscriber for ONE YEAR.

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

(We acknowledge every remittance received with a receipt by first class mail)

THE MICHIGAN BUSINESS FARMER,
Mt. Clemens, Michigan

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

My Name _____ R. F. D. No. _____

P. O. _____ State _____

(If you are renewing kindly send address label from recent issue)

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

New Name _____ R. F. D. No. _____

P. O. _____ State _____



PETOSKEY Potatoes

"Rural Russets"

King of the Late Potatoes!
Resists heat, drought
and disease.

Our Michigan grown, carefully inspected Certified Seed Potatoes are the best for yield and flavor. Ohio, Indiana and Pennsylvania demand 78% of them every year.

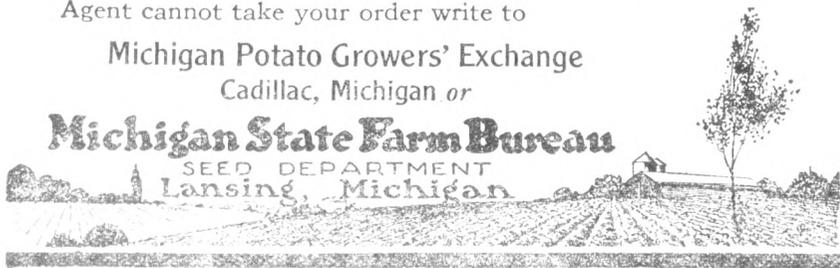
They are Northern grown under climatic and soil conditions adapted to Potato production.

Michigan Certified Petoskeys and proper spraying increased Pennsylvania's average yield from 78 to 120 bushels per acre.

If your Local Cooperative Association or County Agent cannot take your order write to

Michigan Potato Growers' Exchange
Cadillac, Michigan or

Michigan State Farm Bureau
SEED DEPARTMENT
Lansing, Michigan



Rheumatism

A Remarkable Home Treatment
Given by One Who Had It

In the year 1891 I was attacked by Muscular Rheumatism. It was the most severe I have ever known. It lasted for over three years. I tried every remedy known to me, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a painful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, and one of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and subcutaneous swelling (the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send for a sample mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long looked for means of getting rid of such a serious rheumatism, you may send the price of it. One dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON

2631 First N. Bldg., Syracuse, N. Y.
Mr. Jackson's statement above statement true.

For Healthy Orchards Plant Michigan Grown Trees

It is a fact that the trees which you plant in your orchard will determine the success of your orchard. We guarantee healthy and true to name. You ought to see our special catalogue. It is free. Send for it. It is the best thing you can do for your orchard. It is the best thing you can do for the asking.

Celery City Nurseries,
Box 202, Kalamazoo, Mich.

Direct to You, At Wholesale Prices

Corrugated Metal ROOFING

Think of it. We can now sell Excell Metal Roofing, 28 gauge corrugated at only \$3.10 per 100 sq. ft. painted. Galvanized, only \$4.30. If you have been waiting for metal roofing prices to come down, here they are—direct from factory prices—lower than you can get anywhere else. Send for our New Catalog covering all styles Metal Roofing, Siding, Shingles, Kidding, Ceiling, etc., will save you money. **PREPARED ROOFING ONLY \$1.05** Don't buy Roofing, Paints, Fencing, Gas Engines, Tires—anything you need until you get our latest catalog. You can see and try our roofing before you pay. All sold on money back guarantee. Write for Money Saving Catalog today. **The United Factories Co., 704 Marion Bldg., Cleveland, Ohio**

Buy Now AT WHOLESALE
LOVER
Markets advancing. We expect much higher prices later. We can save you money if you Buy Now. We bought early, big stocks at lower prices and are now selling at a big discount under present prices. Don't buy Field seeds of any kind until you see our samples and prices. We specialize on Guaranteed Quality, Tented Clover, Timothy, Alfalfa, Sweet Clover, and Alkali, and subject to your approval and government test. Write today for our Samples and Big Seed Guide all FREE. **American Field Seed Co., Dept. 127, Chicago, Ill.**

Aspirin

Say "Bayer" and Insist!



Genuine

Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

- Colds
- Headache
- Toothache
- Lumbago
- Earache
- Rheumatism
- Neuralgia
- Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoacetic-acidester of Salicylicacid. (2)

WHY NOT PUT THIS NEW ALBION MILL ON YOUR OLD TOWER

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only mass Pittman bearing subject to wear. This is a self-oiling, and easily replaceable. Get this by dependable weight without springs. For any kind steel tower. Why not then use your tower now with a good Windmill? **This is your chance—F. O. B. Albion.** List it yourself. Ask your dealer, or write direct to **Union Steel Products Co. Ltd., Dept. 34, Albion, Mich., U. S. A.**

FARMERS WHO OWN FORDS

Now carry their cream cans, egg cases, poultry crates and other produce on the new Six-in-One Bumper. Carries a load up to 800 pounds. Has six conveniences not carried by ordinary bumpers. If not carried by your dealer, write to **SIX-IN-ONE BUMPER COMPANY, 1047 Security Building, Minneapolis, Minnesota.**

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest
(Copyright by James Oliver Curwood)

SYNOPSIS

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

(Continued from March 3 Issue)

FOR a moment Joanne stood facing the little lake, and when she spoke again there was a note of thankfulness, of subdued joy and triumph in her voice.

"Before that day had ended I had displeased Mortimer FitzHugh," she said, and Aldous saw the fingers of her hands close tightly. "I told him that until a month had passed I would not live with him as a wife lives with her husband. And he was displeased. And my father was not yet buried! I was shocked. My soul revolted.

"We went to London and I was made welcome in the older FitzHugh's wifeless home, and the papers told of our wedding. And two days later there came from Devonshire a woman a sweet-faced little woman with sick, haunted eyes; in her arms she brought a baby; and that baby was Mortimer FitzHugh's!

"We confronted him—the mother, the baby, and I; and then I knew that he was a fiend. And his father was a fiend. They offered to buy the woman off, to support her and the child. They told me that many English gentlemen had made mistakes like this, and that it was nothing—that it was quite common. Mortimer FitzHugh had never touched me with his lips, and now, when he came to touch me with his hands, I struck him. It was a serpent's house, and I left it.

"My father had left me a comfortable fortune, and I went into a house of my own. Day after day they came to me, and I knew that they feared I was going to secure a divorce. During the six months that followed I learned other things about the man who was legally my husband. He was everything that was vile. Brazenly he went into public places with women of dishonour, and I hid my face in shame.

"His father died, and for a time Mortimer FitzHugh became one of the talked about spendthrifts of London. Swiftly he gambled and dissipated himself into comparative poverty. And now, learning that I would not get a divorce, he began to regard me as a slave in chains. I remembered, one time, that he succeeded in laying his hands on me, and they were like the touch of things that were slimy and poisonous. He laughed at my revulsion. He demanded money of me, and to keep him away from me I gave it to him. Again and again he came for money; I suffered as I cannot tell you, but never once in my misery did I weaken in my promise to my father and to myself. But—at last—I ran away.

"I went to Egypt, and then to India. A year later I learned that Mortimer FitzHugh had gone to America, and I returned to London. For two years I heard nothing of him; but day and night I lived in fear and dread. And then came the news that he had died, as you read in the newspaper clipping. I was free! For a year I believed that; and then, like a shock that had come to destroy me, I was told that he was not dead but that he was alive, and in a place called Tete Jaune Cache, in British Columbia. I could not live in the terrible suspense that followed. I determined to find out for myself if he was alive or dead. He is down there—dead. And I am glad that he is dead!"

Aldous quietly, "I would kill him!"

He could find nothing more to say than that. He dared trust himself no further, and in silence he held out his hands, and for a moment Joanne gave him her own. Then she withdrew them, and with a little gesture, and the smile which he loved to see trembling about her mouth, she said:

"Donald will think this is scandalous. We must go back and apologize!"

She led him down the slope, and her face filled with the pink flush of a wild rose when she ran up to Donald, and asked him to help her into her saddle. John Aldous rode like one in a dream as they went back into the valley, for with each minute that passed Joanne seemed more and more to him like a beautiful bird that had escaped from its prison-cage, and in his mind and soul were absorbed in the wonder of it and in his own rejoicing. She was free, and in her freedom she was happy!

Free! It was that thought that pounded steadily in his brain. He forgot Quade, and Culver Rann, and the gold; he forgot his own danger, his own work, almost his own existence. Of a sudden the world had become infinitesimally small for him, and all he could see was the soft shimmer of Joanne's hair in the sun, the wonder of her face, the marvellous blue of her eyes—and all he could hear was the sweet thrill of her voice when she spoke to him or old Donald, and when, now and then, soft laughter trembled on her lips in her sheer joy of the life that had dawned anew for her this day.

They stopped for dinner, and then went on over the range and down into the valley where lay Tete Jaune. And all this time he fought to keep from flaming in his own face the desire that was like a hot fire within him—the desire to go to Joanne and tell her that he loved her as he had never dreamed it possible for love to exist in the whole wide world. He knew that to surrender to that desire in this hour would be something of a sacrilege. He did not guess that Joanne saw his struggle, that even old MacDonald mumbled low words in his beard. When they came at last to Blackton's bungalow he thought that he had kept this thing from her, and he did not see—and would not have understood if he had seen—the wonderful and mysterious glow in Joanne's eyes when she kissed Peggy Blackton.

Blackton had come in from the work-end, dust-covered and jubilant.

"I'm glad you folks have returned," he cried, beaming with enthusiasm as he gripped Aldous by the hand. "The last rock is packed, and tonight we're going to shake the earth. We're going to blow up Coyote Number Twenty-seven, and you won't forget the sight as long as you live!"

Not until Joanne had disappeared into the house with Peggy Blackton did Aldous feel that he had descended firmly upon his feet once more into a matter-of-fact world. MacDonald was waiting for the horses, and Blackton was pointing over toward the steel workers, and saying something about ten thousand pounds of black powder and dynamite and a mountain that had stood a million years and was going to be blown up that night.

"It's the best bit of work I've ever done, Aldous—that and Coyote Number Twenty-eight. Peggy was going

to touch the electric button to Twenty-seven to-night, but we've decided to let Miss Gray do that, and Peggy will fire Twenty-eight to-morrow night. Twenty-eight is almost ready. If you say so, the bunch of us will go over and see it in the morning. Mebby Miss Gray would like to see for herself that a coyote isn't only an animal with a bushy tail, but a cavern dug into rock an' filled with enough explosives to play high jinks with all the navies in the world if they happened to be on hand at the "Fine!" said Aldous.

"And Peggy wants me to say that it's a matter of only common everyday decency on your part to make yourself our guest while here," added the contractor, stuffing his pipe. "We've got plenty of room, enough to eat and a comfortable bed for you. You're going to be polite enough to accept, aren't you?"

"With all my heart," exclaimed Aldous, his blood tingling at the thought of being near Joanne. "I've got some business with MacDonald and as soon as that's over I'll domicile myself here. It's bully of you, Blackton! You know—"

"Why, dammit, of course I know!" chuckled Blackton, lighting his pipe. "Can't I see Aldous? D'ye think I'm blind? I was just as gone over Peggy before I married her. Fact is, I haven't got over it yet—and never will. I come up from the work four times a day regular to see her, and if I don't come up I have to send up word I'm safe. Peggy saw it first. She said it was a shame to put you off in that cabin with Miss Gray away up here. I don't want to stick my nose in your business, old man, but—by George!—I congratulate you! I've only seen one lovelier woman in my life, and that's Peggy."

He thrust out a hand and pumped his friends limp arm, and Aldous felt himself growing suddenly warm under the other's chuckling gaze.

"For goodness sake don't say anything, or act anything, old man," he pleaded. "I'm—just—hopin'."

Blackton nodded with prodigious understanding in his eyes.

"Come along with you get through with MacDonald," he said. "I'm going in and clean up for tonight's fireworks."

A question was in Aldous' mind but he did not put it in words. He wanted to know about Quade and Culver Rann.

"Blackton is such a ridiculously forgetful fellow at times that I don't want to rouse his alarm," he said to MacDonald as they were riding toward the corral a few minutes later. "He might let something out to Joanne and his wife, and I've got reasons, Mac—for keeping this affair as quiet as possible. We'll have to discover what Rann and Quade are doing ourselves."

MacDonald edged his horse in nearer to Aldous.

"See here, Johnny, boy—tell me what's in your mind?"

Aldous looked into the grizzled face, and there was something in the glow of the old mountaineer's eyes that made him think of a father.

"You know, Mac."

Old Donald nodded. "Yes, I guess I do, Johnny," he said in a low voice. "You think of Mis' Joanne as I used to—to—think of her. I guess I know. But—what you goin' to do?"

Aldous shook his head, and for the first time that afternoon a look of uneasiness and gloom overspread his face.

"I don't know, Mac. I'm not ashamed to tell you. I love her. If she were to pass out of my life to-morrow I would ask for something that belonged to her, and the spirit of her would live in it for me until I died. That's how I care, Mac. It wouldn't be the square thing. And yet she won't remain in Tote Jaune very long. Her mission is accomplished. And if—if she goes I can't very well follow her, can I, Mac?"

For a space old Donald was silent. Then he said, "You're thinkin' of me, Johnny, an' what we was planning on?"

"Partly."

"Then don't any more. I'll stick to you, an' we'll stick to her. Only"

"What?"

"If you could get Peggy Blackton to help you—"

"You mean—"

"That if Peggy Blackton got her

to stay for a week—mebby ten days—visitin' her, you know, it wouldn't be so bad if you told her then, would it, Johnny?"

"By George, it wouldn't!"

"Yes—"

"Bein' an old man, an' seein' mebby what you don't see—"

"Yes—"

"That she'd take you, Johnny."

In his breast John's heart seemed suddenly to give a jump that choked him. And while he stared ahead old Donald went on.

"I've seen it afore' in a pair of eyes just like her eyes, Johnny—so soft an' deeplike, like the sky up there when the sun's in it. I seen it when we was ridin' behind an' she looked ahead at you, Johnny. I did. An' I've seen it afore. An' I think—"

Aldous waited, his heart-strings ready to snap.

"An' I think—she likes you a great deal, Johnny."

Aldous reached over and gripped MacDonald's hand.

"The good Lord bless you, Donald! We'll stick! As for Quade and Culver Rann—"

"I've been thinkin' of them," interrupted MacDonald. "You haven't got time to waste on them, Johnny. Leave 'em to me. If it's only a week you've got to be close an' near by Mis' Joanne. I'll find out what Quade an' Rann are doing, and what they're goin' to do. I've got a scheme. Will you leave 'em to me?"

Aldous nodded, and in the same breath informed MacDonald of Peggy Blackton's invitation. The old hunter chuckled exultantly. He stopped his horse, and Aldous halted.

"It's workin' out fine, Johnny!" he exclaimed. "There ain't no need of you goin' any further. We understand each other, and there ain't nothin' for you to do at the corral. Jump off your horse and go back. If I want you I'll come to the Blackton's 'r send word, and if you want me I'll be at the corral or the camp in the coulee. Jump off, Johnny!"

Without further urging Aldous dismounted. They shook hands again, and MacDonald drove ahead of him the saddled horses and the pack. And as Aldous turned back toward the bungalow old Donald was mumbling low in his beard again, "God ha' mercy on me, but I'm doin' it for her an' Johnny—for her an' Johnny!"

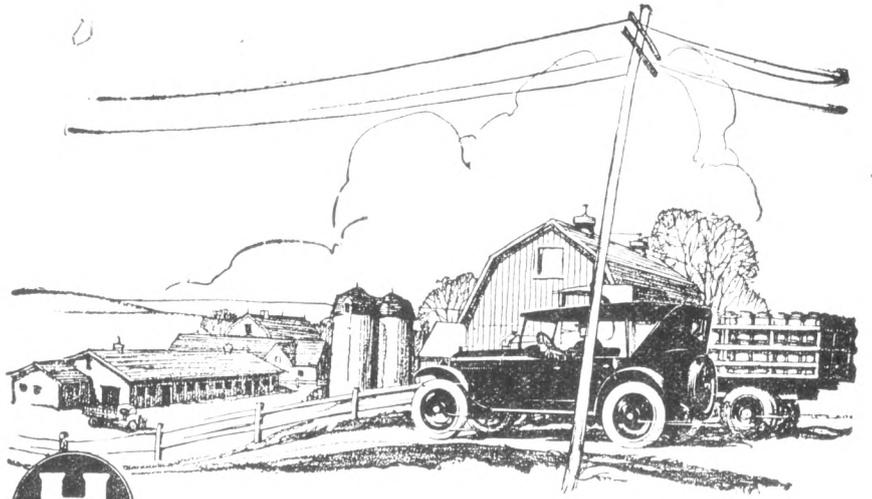
(Continued March 31st issue)

UGANDA CATTLE AID TO MATRIMONY

SINCE the earliest days in the Uganda territory of Africa, the measure of wealth of the various tribes have been the number of domestic animals owned. Practically all of the life stock in the territory is owned and raised by natives. Animals constitute the natives bank accounts and chief trading assets. Even since the introduction of coins, animals form an important medium of exchange and in some parts of the colony one cow may be owned by several people, says a report from Consul William L. Jenkins, Nairobi, to the Department of Commerce, according to official figures for 1922 the cattle in that country numbered 680,764, while there were 632,205 goats and 221,524 sheep, with the exception of certain provinces from which no statistics could be received. It is believed, however, that the cattle population of the Protectorate is about one million. Family life is still dependent upon the ability of young men to acquire the number of animals demanded by his prospective father-in-law. These young men are often-times up against it, because the country is very susceptible to cattle diseases.

"Without my hogs," said Nathan Boggs, "I surely would be lost; My nice purebreds, both blacks and reds, Bring in twice what they cost."

I am taking advantage of your offer to get something for nothing and am inclosing check for one dollar and coupon to renew subscription. We enjoy the paper and are interested in the letters concerning the schools and taxation especially as we are in a newly consolidated school and have had chicken-pox, whooping cough and pink eye, our doctor bill for same and one hundred dollars extra school tax besides the loss of sleep and damage to temper and expect to have the itch before spring. Wishing the paper success along with the farmer, I am— Wm. A. Smith, Wexford County, Mich.



It is a fact, proved over and over again, that the Hupmobile costs less to maintain over a period of three years, or longer, than any other car built today.

Owners of passenger car fleets have demonstrated Hupmobile's unequalled economy beyond any possibility of doubt.

After experimenting with various cars, they have finally standardized upon the Hupmobile as giving lowest cost service in the long run.

There is no secret about Hupmobile economy. It

begins with its better engineering design, and comes down to the fact that finer, more durable parts are used where wear and durability promote longer life and lower costs.

Most of these parts are concealed within the motor, transmission, or rear axle, where the average owner never sees them.

Any disinterested repair man will tell you, however, that, judged solely by the way it is built, the Hupmobile is really a fine car at a low price.

Touring Car, \$1115; Roadster, \$1115; Special Touring Car, \$1215; Special Roadster, \$1215; New Two-passenger Coupe, \$1385; Four passenger Coupe, \$1535; Sedan, \$1675. Cord tires on all models. Prices F. O. B. Detroit—Revenue Tax Extra

Hupp Motor Car Corporation, Detroit, Mich.

Hupmobile

TWO YEARS FOR \$1

—if YOU act at once!

\$1

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

—or will enter a NEW subscriber's name for TWO FULL YEARS

—or will renew your subscription for ONE YEAR and enter the name of a NEW subscriber for ONE YEAR.

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

We acknowledge every remittance received with a receipt by first class mail.

THE MICHIGAN BUSINESS FARMER, Mt. Clemens, Michigan

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

My Name _____ R. F. D. No. _____

P. O. _____ State _____

(If you are renewing kindly send address label from recent issue)

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

New Name _____ R. F. D. No. _____

P. O. _____ State _____

The Michigan BUSINESS FARMER

SATURDAY, MARCH 17, 1923

Edited and Published by
THE RURAL PUBLISHING COMPANY, Inc.
GEORGE M. SLOCUM, President
Mt. Clemens, Michigan

Represented in New York, Chicago, St. Louis and Minneapolis by
the Associated Farm Papers, Incorporated
Member Agricultural Publishers Association
Member Audit Bureau of Circulations

Milton Grinnell Managing Editor
Grace Nellis Jenney Farm Home Editor
Frank D. Wells Fruit Editor
J. Herbert Ferris Radio Editor
William E. Brown Legal Editor
William W. Slocum Treasurer
Henry F. Hopkins Plant Superintendent

Address All Communications to the Publication, Not Individuals.

ONE-DOLLAR PER YEAR

The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: 45c per agate line. 14 lines to the column inch, 772 lines to the page. Flat rates.
Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.

RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

ADJUST PRODUCTION TO DEMAND

FARMERS have just as much right to organize to control their output as union labor has to organize for the purpose of shortening hours and increasing wages. They have as much right to cease production wholly or in part as union labor has to strike. It is no more wrong for farmers to reduce products when prices are below cost of production than it is for the United States Steel Corporation to cut pig iron production in half when prices are rapidly falling.—H. A. Wallace, in a recent address.

THE FARMER IS A BUSINESS MAN

REPORTS of the success met by the acreage men of the sugar factories in Michigan who have adopted the now famous "50-50" contract by which the farmer becomes a co-partner of the factory, in the profits derived from the manufacture and sale of beet sugar, seems to prove the fact which The Business Farmer has reiterated so many times; that the farmer is not afraid to take every risk which the business man in any other line will, if he is given an equal chance at the profits.

There is, of course, the possibility that everything possible will be done this fall by the manufacturers who have refused to enter into the growers contract, to discourage its further practice, even if they find it necessary to curtail their own profits by lowering the price of sugar to do it.

Let every grower who has signed the "50-50" contract, pledge himself to stand by the plan for three years—win or lose—if he will, we risk the prediction, that before the three years have elapsed, every manufacturer in Michigan will have offered the same or a more attractive proposition to the growers.

When you hear a man knocking the "50-50" contract, ask him how long he's been on the other fellows "pay-roll", its a safe bet he is there, one way or another!

NOW ADVISES PARTICIPATION IN LEAGUE

THEY do President Harding and the present Republican administration an injustice who seek to poke fun at the recent announcement that the president and Secretary Hughes are about to stomp the country in favor of participation in the World Court of the League of Nations, as did Woodrow Wilson, only a few years back.

Better late than never! And far better for the United States, leader of civilization, that we accept our responsibility and contribute our strength to a plan which has for its foundation, at least, the abolishment of wholesale slaughter of human beings, in the avowed cause of patriotism, to settle disputes between nations.

What matters it now, if in the heat of partisan politics our eyes were clouded by the smoke screen of propaganda, three years ago? What matters it whether Democrat or Republican is to be given the credit of helping to form the League? What matters anything under Gods heaven, when the question is whether it is possible to prevent so fruitless a butchery of mothers sons, as we who live to-day have just witnessed!

Families live in peace, communities live in peace, states and provinces in peace, great

nations with thousands of miles of boundary as witness the United States and Canada, live in peace, why cannot the nations on this old globe live in peace? But you say, families, communities, states and nations have disputes to settle—surely, but the individual who kills to settle a dispute is a murderer and the nation which kills to attain the same result is no less a murderer and should be so appraised in the eyes of the world.

That is the reason for the World Court and the League of Nations is simply the power, the police force, to enforce the mandates and the punishments prescribed by the court.

Let those who will scoff at President Harding and the apparent turn-about-face of his administration to the policies proposed by Woodrow Wilson, have their fling. As for The Business Farmer, although steadfast in our belief in the League of Nations, as the best step out of the pit-fall of future wars, we would rather see the United States go in wholeheartedly and with the unanimous approval of our people now, than three years ago, with the mind of the press and the public so divided.

It takes a braver man to admit he was wrong, than it does to fight blindly on, altho knowing he is wrong!

A WISE APPOINTMENT

PRESIDENT HARDING has appointed Charles Townsend, retiring senator from Michigan, to the chairmanship of the joint-committee which cooperates with the Canadian government in the control of interrelations between the two great nations of the North American continent.

The zealots who have fought and fostered the Great Lakes-to-Ocean plan, have thus taken new heart, because they believed the last election which deprived them of Senator Townsend as the leader in their fight, was a staggering blow to the rapid progress the plan had been making during the past few years.

The new position gives Mr. Townsend even a more direct point of advantage and citizens of Michigan and the whole northwest, who are so vitally concerned over the early consummation of this great project will commend the president on his wise selection and appointment.

COUNTERFEIT MONEY

THE secret service has very recently unearthed the most daring and extensive operations of counterfeiters ever discovered in the United States. The operations of this gang have extended from coast to coast and it has been in operation for almost six months unchecked, while the government sleuths have been attempting to reach the master-minds behind the gigantic scheme. When the net was finally complete, a campaign of arrests was begun which is expected to enmesh a thousand persons, men and women in all parts of America.

Most of the money has been in large sized bills, principally of \$20 denomination. A greater part of it was passed through the illicit whiskey ring, but naturally found its way into countless hands.

Sooner or later a part of this money will reach the rural districts, it therefore might not be bad advice to suggest, that you have your banker look over any considerable amount of currency you are receiving.

A "NEW" CONTINENT DISCOVERED

WHEN you hear the word "Africa", what springs up in your mind? Roaring lions, charging elephants, crouching tigers or boa constrictors hanging from trees ready to embrace you! Or should not one of these animals get you, from the rank jungle, hideously painted cannibals brandishing feathery shields and poisoned spears, leap forward to impale you for their evening meal!

Is that your Africa? We confess that it was ours until the very recent few weeks while we have been following the traveler Newman from Cape Town to Cario, which would be somewhat similar to traveling from Panama to Hudson Bay in our own continent.

From the spot where Stanley found Livingstone, then in the midst of a wilderness as you remember it described in your geography, motion pictures (which cannot lie or exaggerate as the Marco Polo's of old were inclined) show a railway station, giant steamships and in the background the tall stacks of the copper mining companies.

Copper, gold, zinc, tin, and radium mines that will rival the better known diamond fields further to the south, in their output of wealth, now are developing the heart of Africa. The fierce cannibal tribes of Stanley's time, have been converted into sober workers who listen for the factory whistle, come home to eat baked beans canned in America and go in the evening to

laugh at the antics of Charley Chaplin on the silver screen!

That is Africa—central Africa—today, as the pictures prove it.

Millions of acres of fertile prairie, that have never felt the scratch of plow; billions of feet of fine lumber, from mahogany to teak-wood; enough coal to heat the world for a thousand years; water-power, unharnessed that could do the work of the world!

What open space for the teeming millions of China, India, Japan and Europe to migrate to and bring into productiveness. Here is a great continent, once the very cradle of civilization, which is almost as undeveloped to-day as was North America, before the war of the Revolution.

It may occur to you, too, as you read this that some of our allies in the great war, knew something of all this when they divided up German South Africa among themselves. The land Belgium acquired in Africa is twenty times the area of the mother country in Europe. The copper mines which Great Britain acquired will produce probably more than all of the copper mines in America combined, and at a cost of production which may threaten our own copper in the worlds market.

Africa beckons to the adventurous youth of the world, as once did America, and the same type of sturdy pioneers are hearing her call.

STATE INSTRUCTION FOR MOTHERS

WHEN you know that 145 babies out of every thousand born in one county in Michigan died at birth last year, you will know why the women leaders in Michigan are backing the Bohn bill, which ratifies the acceptance by the state of the funds provided from the national treasury by the Sheppard-Towner act, for the purpose of instructing prospective mothers.

If the bill passes the state will contribute \$29,000 which will be met with a similar sum from the national treasury. In every county in Michigan one or more nurses will be provided to help lower the mother and child death-rate.

If there is any possible way in which the state and nation can repay the mother for risking her life to furnish its life-blood, then let that means to be speedily provided regardless of the cost. There is a time when dollars lose their significance only as a means to an end. This is one of the times!

THE "HIRED" HELP

HAVE you, father, ever been called a "hired man"? Or have you, mother, ever come suddenly into the dining room to hear your mistress telling her guests that you were their "new hired girl"?

If you have ever worked in either capacity for someone else, this little message will not be intended for you. It will not be necessary to remind you of the sting which these seemingly simple words have when they come to your ears for the first time, and you realize that you are a "hired man" or a "hired girl".

This message is to the mothers and fathers of growing children, who are in circumstances which permit them to employ extra help on their farm, whether in the home or in the fields. It is a plea for the abolition of the hated words "hired man" and "hired girl" from the vocabulary of every farm home.

Learn to speak of your employed help as your "assistants"—explain it to your children that the work is too heavy for mother or father and that "John" or "Clara", have come to assist you with your work. Teach your children to respect those who are helping you and you will be surprised at the result.

In the first place, you will find it easy to keep better employees. There is something so un-American and akin to slavery, about the hated terms "hired man", "hired girl", or "servant" that no intelligent and self-respecting American will remain in a place where it or the attitude which means the same thing are continually expressed in word or action.

There are no "servants" in America, thank God! Servant, means servile, and we free citizens of this great republic, all of us, except the parasite and the loafer, are all helpers, cooperating, assisting one another; no matter what our position be in societies stratas.

The Agricultural & Business Survey, appears again this issue on page 29, it shows the trend of change in every phase of business or finance which reflects on agriculture. It looks like a lot of figures that you want to miss, but once you find out how much information it contains, you would not miss it for a farm! The sweetest meat is always in the nut that is hardest to crack!

The best thing about hearing a political speech over the radio is that you can shut it off!

PUBLISHER'S DESK

WARREN McRAE FARM AGENCY

We assume that by this time our friend, McRae, the philanthropic farm agent at Logansport, Ind., has joined the ranks of those who are not particularly fond of The Business Farmer. It is lucky that we do not reach every farm home in Michigan or Mr. McRae would have to change some of his tactics in getting farms to sell.

Since our exposition of his letters and methods in the February 17th issue we have had any number of letters from our readers, not all of whom paid the ten dollars, but all of whom got similar letters to those we published in that issue.

The one that interests us most and should encourage those who have paid Mr. McRae his listing fee, whether \$10 or \$2, is one dated September 21st., 1922, and addressed to a reader at Cloverdale, Mich., which contains the following paragraph:

If you are looking for a good quick cash sale, kindly fill out the enclosed listing form and return it to me with the regular listing fee of \$10.00 and I will guarantee to furnish you with a buyer for your property at your price and terms within 90 days or I will return your \$10.00 in full. When the deal is closed you pay me 2 per cent commission of the selling price. In case the first buyer does not buy notify me and I will keep on sending you buyers until you make a deal.

If Mr. McRae will make this proposition to every reader who has a farm for sale and will prove to us that he will return the listing fee, if he has not sent a buyer for the farm within 90 days, we will agree that his proposition is perfectly legitimate and he has only erred in the manner in which he has presented it.

It seems a little strange however, that in the many form letters, most of them dated later than the one quoted above, we have seen no mention of this very important "sell-your-farm-or-money-back" guarantee.

"We are subscribers to your paper and we, too, got a letter from Warren McRae. He ran an ad. in the Allegan News for a few weeks and we were thinking of selling our place so I told my husband that I would answer the ad thinking that it was a man that wanted a small farm in Mich. and I enclosed an envelope addressed with 2c stamp for reply but instead in a few days we got a letter and some papers to fill and if we would send \$10 he would send a buyer and if the first didn't buy he would keep sending until our place was sold and then he would return our \$10.00. The letter was similar to the one you printed in the paper but we didn't answer and in a few days we got another letter stating that for a limited time he would reduce it to \$5.00. He is very generous but I think he didn't get any one around Allegan county and we are sorry for that widow woman that sent her money to him, because it is doubtful if she ever gets it. I see in the Grand Rapids Press that he is running an adv in it for Kent county. I hope nobody falls for him. All we are out is the 2c stamp and I am sorry he got that much. Such people should be punished.—Mrs. J. H. P., Allegan Co., Mich.

POOR HENRY!

Few days pass but what The Business Farmer receives a letter from some reader who wants to put a proposition up to Mr. Henry Ford. It may be like the one before me, a farmer who owns sixty acres on which he has been paying taxes for years, up in the Minnesota iron ore country. It lies in between the property of a great mining company. Our reader claims it has been illegally lumbered over and now he is afraid the mining company is going to take out the ore from beneath his land! That's being attacked from above and below, we should say.

Where can our reader turn for advice? He comes to us. Where can he get help to fight the gigantic financial groups that is robbing him of his heritage? From Henry Ford,

of course! He makes enough millions while his eyes are closed in slumber to relieve half of the financial worries that beset the poor folk.

So they come. But, we have to advise that about the hardest man in the civilized world to reach with any proposition, philanthropic or business, is our worthy neighbor at Dearborn. His personal mail is larger, 'tis said, and his staff of personal secretaries busier than that of the president of the United States.

Mr. Ford is a plain man, very human, emotional and extremely modest. Yet he represents a mass of worldly wealth which attracts to Dearborn the dreamers and the schemers from every corner of the world. Probably most of them are honest in their purpose, but it still remains, that all of them come to get some part of that pile of gold, whether their desire be for much or little of it.

They used to say that "everybody sometime in a lifetime has an overwhelming desire to write a book," now if this old saw were changed to "everybody some time in a lifetime wants to put a proposition up to Henry Ford" it would be more truthfully a statement of fact.

TAXES \$120 IN 1905, JUMP TO \$602 IN 1921.

(Continued from Page 3)

a club at every turn, the State Income Tax, would have helped, but met defeat last fall. A tax on gasoline would also bring some relief, but some of the city auto clubs, object because the farmers use it to run their farm machinery, (however I never talked with any farmer who objected). Then some propose to tax the weight higher, this plan has met with the objection that the rich cannot sell their old cars to the poor as they could not pay the tax, and it would not be just to tax an old worn car with such high tax. Another wants a poll tax of \$5, on each voter, I would be glad to see them all passed in order to get something out of those who are now paying no tax, but have full use of our roads and schools.

Our large manufacturing cities where wealth is concentrated, are paying millions of dollars in large salaries to people who pay no taxes, but who own and operate large and expensive cars and the tax on real estate must build their roads and schools for their children, they rent city homes, and the city land lord gets back at them for his high tax by boosting his rents. The farmer has no way of getting back at any one.

There is only one way to help the farmer, that is to relieve him of some of the burden he is now bearing in heavy taxes, and until our national government takes over the roads, our state should take some action at once. There is a way to relieve the real estate tax, which no honest person can object to. Put a tax of 4 per cent on the selling price of all autos trucks and vans of all kinds as well as on motor cycles, etc. This on the selling price when new, then make a reduction of 10 per cent for depreciation for each year the vehicle is run, for five years, after that tax it for 50 per cent of its value new as long as it is run. This 4 per cent could be increased or decreased as the times may require, but at present some of the real estate is paying 7 per cent on an inflated valuation set by out State Tax Commission at a time that was premature for such an act, and he is not allowed 10 per cent on his property each year for depreciation. The government is offering him a Federal Loan, but that is like knocking a person in the head with a club and then selling him a plaster.

The only relief to any one staggering under a heavy load is take part of the load from him. Remember the laws of Confucius, "The Strong must help the weak bear their heavy burdens." Yours for a good and honest Government.—Ed C. Allen, Osceola County, Mich.

President Harding broke White House records of several months standing when he shook hands with 1,450 persons in a recent reception.

First Mortgage Real Estate Gold Bonds

Here is a new guide book to Safe Investment that you can have free, simply by asking for it. Mail us today your request for Booklet AG806.

Tax Free in Michigan

6 1-2% First Mortgage Bonds

Free from Federal Income Tax of 4%

FEDERAL BONDS

(806)

Are Better Bonds

FEDERAL BOND & MORTGAGE COMPANY

FEDERAL BOND AND MORTGAGE BUILDING, DETROIT

Send No Money!

Best Overshoe Values in U.S.A.

Yes, the biggest bargains of their kind in the country—bar none. But Chase does not ask you to take his word for it. Read the specifications of these splendid 4-buckle arctic and boots. Then let us send your size on approval—without one penny in advance. You can try them on right at home and show them to your friends. Make any comparison. If not simply delighted with your saving, return the goods and you aren't out a cent.

\$2.38
and
Postage



Mens Heavy

All Rubber 4 Buckle Arctics

You can't appreciate the value of these arctics until you see them. First quality heavy black rubber throughout, with extra weight corrugated rubber soles and heels, reinforced with rubber strip all around. Warmly lined and recently built for wide toe, broad heel sheet. Hi-cut 4-buckle tops. Tremendous value. Sizes 7 to 13. Order No. 2123. Price, \$2.38 and postage.

Send Quick. Remember, no money—just number and size wanted. When shipment arrives, pay only balance price and postage. Then examine goods carefully. If not satisfied, return and we will refund your money instantly. Order today!

Mens Hip or Knee Boots



Pure Gum Rubber

Pure gum rubber; better than leather; well padded. Solid rubber soles and heels. Sizes 6 to 13. 2120. Knee Boots, No. 2120. Price, either style, \$2.98 and postage.

\$2.98
and
Postage

CHASE SHOE CO. Dept 120 Minneapolis Minn.

SEND FOR OUR NEW SPRING CATALOGUE

MONEY TO LOAN

On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

FIRST JOINT STOCK LAND BANK OF CLEVELAND

Guardian Building, Cleveland, Ohio



Planter Profits

AFTER you have spent weeks behind the plow, the disk, and the harrow—after your fields have been worked down to a perfect seed bed—then comes the time to make planter profits. Big yields are largely the result of perfect planting—every hill in its place and every hill a full hill. Year after year the profits of good planting follow

International and C B & Q Corn Planters

They plant accurately and evenly whether set for checking, drilling or power drop. Without stopping the team the variable clutch can be set to plant 2, 3, or 4 kernels to the hill. Edge, flat, and full hill plates interchange in the same hopper. The automatic markers require no attention. Valve mechanism is so carefully fitted and so accurately timed that missing and stringing are entirely eliminated.

The tongue adjustment for leveling the boots insures an even cross check. Fertilizer attachments always available.

This year, pocket the profits of good planting by using an International or C B & Q Corn Planter.

See your McCormick-Deering dealer and write for our catalog

INTERNATIONAL HARVESTER COMPANY
CHICAGO OF AMERICA U S A
(INCORPORATED)

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

IS ALFALFA BELL BRAND Michigan Grown

Send For Isbell's 1923 Catalog

Whatever kind of soil you have, there's an Isbell strain of alfalfa that will give wonderful yield, richness and vitality are bred into Isbell seeds. Send today for your copy of Isbell's Seed Annual—the authoritative book on seeds and crops. Samples showing quality sent with it FREE. S. M. ISBELL & COMPANY 737 Mechanic St. (43) Jackson, Mich.

\$24.95 ON TRIAL
Upward
American
FULLY GUARANTEED
CREAM SEPARATOR

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

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

Western orders filled from Western points.

AMERICAN SEPARATOR CO.
Box 3067 Bainbridge, N. Y.

The Remedy of 100 Uses

For Ills of All the Family

VICKS is good for all cold troubles—common colds, sore throat, bronchitis, catarrh, croup, tonsillitis and grip. These are all inflammations of the nose, throat or lungs. The ingredients—camphor, menthol, eucalyptus, turpentine, juniper tar, cedar leaf, etc.—make Vicks equally effective for inflammation of the skin such as cuts, burns, sores, bruises and skin itchings. An ideal household remedy—useful almost every day.

Write to Vicks Chemical Co., Box 1-94 Greensboro, N. C., for a test sample.

VICKS VAPORUB

OVER 17 MILLION JARS USED YEARLY

CLOVER AND TIMOTHY BARGAIN

\$4.50 Per bu.

Red Clover and Timothy mixed—the standard grasses cannot be surpassed for hay and pasture. Contains good Joe Jess clover, just rich to sow. Thoroughly cleaned and sold on approval, subject to government test. Ask for this mixed seed if you want our greatest bargain. Have Pure Clover, Sweet Clover, Timothy and all Field and Grass Seeds. Buy now. Prices are advancing. SAMPLES and 116-p. catalog. FREE.

A. A. Berry Seed Co., Box 627, Clarinda, Iowa

What the Neighbors Say

MISSES SERMON

DEAR Editor: We have been reading M. B. F. for two years and like it very much, we find lots of information in it too. The only thing we miss is a scripture text, Sermon. We out here in the woods feel rather lonesome on account of not having church preveliges.

In reading our M. B. F. we also enjoy "What the Neighbors Say" and it is indeed a pity that we as people of our good America can not cooperate together. Where is the democracy of our good U. S. A. going to? Our Government is ever ready to fix a price on Farmers Products, as during the war to cut the high cost of living, but the consumer had to pay very near the same old price for his flour as before. Now today the farmer has to sell his stuff at a sacrifice, but who is gaining by it; surely not the consumer? For instance, cattle that farmers sell, from 3 to 6 cents per pound, how much do consumers in cities pay for their beef in butchershops? Who gets the profit, surely not the farmer and the consumer!

Why can't we see the pure fabric law passed? The "all-wool" garments we buy nowadays don't last at all, the best that can be made out of pure virgin wool would be none too good for the consumer. Had ought to pass by all means.

Now they talk of reducing the taxes, but we farmers have to pay more every year, how about it? Our government should adopt "Single Tax" (Canadian style) so farmers would not have to pay a "fine" every time they improve their Farms. Farmers are all anxious to sell out and move to the city. The boys have gone already, who is going to product the nation's grub in the future under such conditions if this city move can not be stopped? Why can we as a nation not take an example from Europe? It has gone to the dogs just because of oppressing the poor. We read in Luke 13:1-3, "There were present at that season some that told Him of the Galleans, whose blood Pilate had mingled with their sacrifices * * * and Jesus answering said unto them, 'Suppose ye that these Galileans were sinners above all Galileans, because they suffered such things? I tell you nay; but except ye repent, ye shall all likewise perish.'" The judgement of God has come upon the old countries, and will unfailingly come upon us unless, we repent. The heavy tax burdens have to go or we farmers of America will not much longer be able to produce stuff to live. May God guide our leaders and keep our country from disaster. If not, judgement will come as we read in James 5:1-6, "Go now, ye rich men, weep and howl for your miseries that shall come upon you. Your riches are corrupted and your garments are moth-eaten. Your gold and silver is cankered; and the rust of them shall be a witness against you, and shall eat your flesh as it were fire. Ye have heaped treasure together for the last days behold, the hire of the laborers who have reaped down your fields, which is of you kept back by fraud, crieth; and the cries of them which have reaped are entered into the ears of the Lord of Sabaoth. Ye have lived in pleasure on the earth and been wanton; ye have nourished your hearts, as in a day of slaughter. Ye have condemned and killed the just; and he does not resist you." We have felt it our duty to write these words, may the Lord bless them to his glory.—C. S., Oscoda County.

and now she will manage it to suit herself, do her work just to suit herself. She sure must know how by now, after being told for 16 years, that she will relive him of the duty to see to it, also from now on to use her own butter and cream money also egg money as she see fit. Tell him kindly but firmly and plainly that she means it and stick to it. It may not be pleasant for her for a time, but she can win out if she has the grit. Do not quarrel with him or have any angry words. Kindly tell him just what is what and mean it too.

The very idea of his buying her dresses. Does she buy machinery for him? Oh no, of course not, she doesn't know what kind he likes best. He may try a new kind next time. How about the dresses, she might like a change too and surely the liberty of getting just what you want and being suited is worth a lot, and if ever you have any rights while you are young enough to enjoy them and use them the time is right now. What they have earned together is hers as much as his. Suppose she, not being used to having her own money, does make a few mistakes in buying. He, I know, has not always hit the market just right. It is worth something to try and to feel you really live and not just simply exist. Get your nerve up and stand up for yourself, don't cry or scold. He will honor you twice as much for being his equal.

Now as to a way to go to church. Are not the horses as much hers as his? I say yes. Tell him you want one to drive and have it, or if you can't, just hire someone to take you and let him pay the bill a few times. He will soon see it is cheaper and sounds better to take you yourself.

Now I am a farmer's wife have always lived on a farm. I have been married 24 years. We always talk things over and work together. I have never asked for a horse and been refused, but I never ask when I know they are busy; in fact I have a horse of my own. He always works my horse and I never interfere but when I need him I say so. I always sell my eggs and cream and we use the money the same as when he sells grain or stock. If he did not then I would keep the egg and butter money for my own self but I think it better to work together, but equal rights I shall have.

I have always worked in the field and do yet. I do not believe in either one being the boss. I have no children. He goes where he likes to sales, all men enjoy them. I go where I wish. We do not always think alike—far from it—but we compromise and I think any man thinks more of his wife if he understands she is his equal.

I do not belive in parting or divorces but can say Mr. R. B. should have changed his ways long ago. If he loves her as he should the mother of his children he will see his mistake and gladly make right the wrong she has endured. If not, quit. The world is wide and there is room for us all. The days of tyranny are past. What good time is she having, to always live on an uncertainty, never know whether she can go anywhere or do anything unless he says so. This is what I think. What do the other readers say?—"Mollie Brown," Michigan.

THE FARMERS' TROUBLE—OVER-REPRODUCTION

THE woes of our farmers are chiefly due to the same cause that has deranged our coal mining industry. To many are in the game, causing overproduction. The great rise in the price of land, which has doubled, and in some cases trebled and quadrupled, in the last ten years, proves this. If the poor and remote farms and mines (which comprise over one-fifth of the total) were abandoned, it would encourage the others to produce to capacity, insuring bigger crops at lower cost, and it would release a lot of first class labor to other industries. Farmers, instead of deploring should welcome every increase of wages in other occupations, as it decreases the number

(Continued on Page 19)

The Remarkable Growth of Fur Farming

BY DR. C. B. SHORE

SINCE the creation of the world and man's inhabitation upon the earth, the first clothing worn was that of furs. Man's first choice of wearing apparel has been passed down through generations and has been in continuous use by all nations and peoples.

Since the rapid advance of civilization, those wild animals that bear suitable furs for wearing purposes, are very fast becoming extinct, and today the trapper must of necessity, look elsewhere for profitable income. Furs of all species are in constant demand throughout the whole world.

I believe no other industry in this Northwest country promises such profitable returns as may be realized from the domestication of fur bearing animals.

I shall speak principally of the domestication and production of the standard bred silver fox fur. This fur, exclusive of the Russian sable, which cannot successfully be raised in the United States, is of a distinctive class, and cannot be successfully imitated. For this reason its pelt is capable of procuring very profitable results for the rancher.

Silver and black foxes are classified into four distinct types, depending on the quantity of silver tipped guard hairs present in the pelt. The classes are designated as black, dark silver, medium silver and light silver. All types are necessary on the average ranch. The demand at present is for dark and medium pelts and these are produced largely by mating black animals with light silvers. Much care and thought is given to the mapping out of a definite breeding program on the large ranches.

Most of the northern states are admirably adapted for fox raising. The humid, cool atmosphere in the northern states makes a dense, dark pelage on fur animals that always commands top prices in the fur markets. In addition, the entire region possesses a wealth of lakes, marshes and rocky, hilly, timbered lands unfit for cultivation, but furnishing unequalled sites for the prospective fur farmer.

Early breeders thought that foxes would not do well in captivity unless ranches in secluded spots. This has been disproved by the phenomenal successes of American ranchers, most of whom operate in thickly settled communities. It would, of course be inadvisable to build a ranch immediately adjacent to a large factory along railroad or trolley tracks or in the heart of a city. Ranches may be built on the outskirts of villages and towns, along rural highways or within a reasonable distance of farm buildings without danger of creating unfavorable conditions.

The chosen ranch site should, first of all, be carefully considered from the drainage standpoint. Fox pens should be erected on a well-drained piece of high land. Foxes will not do well in a swampy hollow, where the soil stays damp for long periods. Disease breeds readily in damp locations of this character. Clay or heavy black loam top-soil should be avoided. If possible, choose a location with a clay subsoil and a gravel or sand top-soil.

Many ranchers make the mistake of placing too much stress on the shade requirements of a fox farm site. Proper soil and drainage are and should be foremost. Some of the most successful ranchers have discovered that foxes kept in pens erected in the open have been remarkably free from disease. This is undoubtedly due to the fact that disease germs cannot exist in soil subject to the direct burning rays of the sun.

Considering the value of the animals, guard fences, pens and kennels are comparatively inexpensive. Frame works can be built of cheap

lumber left in the rough or of the best, carefully fitted and painted. In building a large ranch it will pay to lessen depreciation by using high grade materials. Wire should always be the best obtainable.

The size and shape of breeding and rearing pens differ considerably according to the area and physical characteristics of the site. The dimensions of pens vary from 90 feet in length by 30 feet in width to 30 feet in length by 10 feet in width. Height depends on the average snow-fall. The pen should be high enough to permit an average sized man to walk around in same without stooping. Allowance must be made for depth of snow.

In some ranches pens are laid end to end and side by side across the ranch, pens and alleys detached or separated by alleys from two to ten feet in width.

A successful breeder has experimented with various types of fox kennels or dens. After giving them thorough and conscientious trials he has found that a simple double kennel with separate entrances will suffice. The remarkable record of 2 1-2 to 3 1-2 pups average to the pair on his ranches would indicate that his adopted style of kennel is far superior to any other.

His kennels are double walled and are placed on a block foundation two or three inches from the ground, thus insuring warmth and dryness. The roof is hinged and serves as a lid. The kennel is divided into two separate compartments with covered chute entrances approximately four feet long inclining from the kennel opening to the ground.

The breeding season on the fox ranch lasts from late January to March. The gestation period is approximately fifty-one days. This period, together with the early rearing or pupping season, constitutes the most critical time of the year on the fox ranch.

As a rule, the animals are monogamous, the dog rarely mating with more than one female. Segregated pairs must be carefully watched during the breeding season and if harmony does not prevail, the vixens are paired with new mates, the object being to produce a litter of fox puppies in every den if possible.

The litter ranges in numbers from one to nine, the average on many of the ranches being 2 1-2 to 3 1-2 which is remarkable. Males are left with the mother and young. They take care of their share of the parental duties and are absolutely necessary in the pen for the first few days after the young are born, as the vixen relies largely on her mate to carry food to her.

Fox puppies are blind for the first two weeks of their existence. They grow rapidly and usually appear outside the kennel when one month old. Within a short time they learn to lap milk from a basin and when two months old include solid foods in their diet. The mother fox will wean them when three months old. Fox puppies attain sufficient size and quality of pelt by the first of December following the month in which they were born that they may be pelted at that time.

Even if the price of breeding stock be brought to one-half or less of its present level, and pelts bring only \$100 apiece, there will be left enough profit to make the industry worth while.

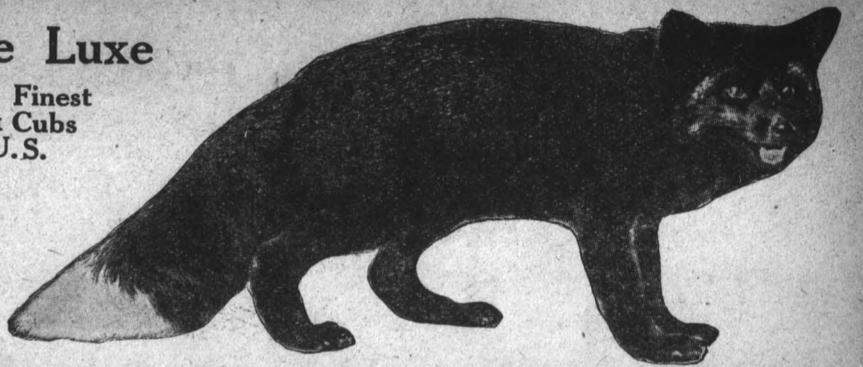
An open invitation is extended by many breeders during the summer months, to visit their ranches. Some raise, besides hundreds of pairs of silver foxes, deer, buffalo, raccoon, wolves, different species of birds, and German police dogs.

"Everything" comes to him who waits
But here is something slicker.
The man who goes after what he wants
Gets it a darn sight quicker."



De Luxe

The Finest Fox Cubs in U.S.



Get Rich Raising Foxes

We Show You How--We Start You Right

The money you can make in raising foxes, if you get the right start—the right help, advice and co-operation, is so enormous when compared to ordinary farming, as to be almost unbelievable. Six months old fox cubs of our quality bring from \$2,000.00 a pair up to \$5,000.00. Single pelts from \$300.00 to \$1,000.00. It takes some capital to start—\$500.00 to \$1,000.00,—but our installment payment plan takes care of that—your profits will soon start you on the road to a fortune.

De Luxe Silver Black Fox Ranch

is owned and operated by men who have had years of experience. Quality has been our slogan and as a result we have breeding stock that is second to none in the United States. We are now booking orders for 1923 cubs. Our supply will be limited, so we advise writing to us promptly. We are fully equipped to care for your foxes, breed them to unrelated stock, help you sell your offspring, get you started right and then assure your success. Write for full particulars today, if you want to get into the most profitable and fascinating kind of farming you ever experienced.

De Luxe Silver Fox Ranch, Manistee, Mich.

Don't Send One Cent!

Men's or Boys' Work Blucher

Men's tan wax leather work blucher built on wide, roomy last with solid grain leather insoles and combination oak and toughest green chrome leather outsoles.

No. 5000. Sizes 6 to 12. Price. \$1.93

Same style as above in black for boys. Wonderful bargain.

No. 8810. Sizes 1 to 5 1/2. Price. \$1.83

Special value in Little Gents' tan blucher.

No. 8870. Sizes 9 to 13 1/2. Price. \$1.83

Your Choice

\$1.83 up

Plus Postage

Men's or Boys' Tan Grain Scout Shoe

See what a bargain we offer in this men's excellent tan grain leather Scout Shoe. Built with solid grain leather insoles and genuine oak leather outsoles. Wonderfully comfortable and really an astounding value.

No. 0966. Sizes 6 to 12. Price. \$1.93

Same model as above in Boys' sizes 1 to 5 1/2. Price. \$1.83

No. 9660. Little Gents', sizes 9 to 13 1/2. Price. \$1.83

2 absolutely sensational shoe bargains! But don't take our word for it and don't send one penny. Let us ship your choice on approval at our risk—not yours! Compare with similar styles at \$2.50 and \$3.00 elsewhere. If not the biggest values in America today, just send them back and you will not lose a cent.

CHASE SHOE CO. Dept. 109 **MINNEAPOLIS MINN.**
SEND FOR OUR NEW SPRING CATALOGUE

Rest Island Silver Fox Co.

Get the right start by choosing Rest Island Superior Quality Silver Foxes for your foundation stock. Prolific breeders. "Expert Service to Customers" our motto. Visit our ranches or write for prices and FREE descriptive booklet.

Rest Island Silver Fox Co.
Lake City, Minn.
Arthur Schleicher
Sec. & Mgr.

Largest in the World

Don't Wear a Truss

BE COMFORTABLE—
Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet sent free in plain, sealed envelope.

Brooks Appliance Co., 463G State St., Marshall, Mich.

FENCE BARGAINS

Prices Slashed

Here is the greatest money saving sale you ever heard of. Prices cut to the bone on Fences, Gates, Steel Posts, Roofing and Paint.

GET BROWN'S FACTORY PRICES
Don't spend a cent until you get my prices. You'll be surprised when you compare with others. Remember I pay freight and sell only direct from my factories to you.

FREE 104-PAGE BOOK OF BIG BARGAINS
The greatest bargain book ever printed. Every page is like finding money. Buy now during this sale. Prices dropped to the bottom. Get your name on a postal and mail NOW. Jim Brown, Pres.

Brown Fence & Wire Co., Dept. 3907 Cleveland, Ohio

Only \$2 DOWN ONE YEAR TO PAY

\$44 Buys the New Butterfly Jr. No. 233
Light running, easy cleaning, close skimming, durable. NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 5 1-2 shown here; sold on 30 DAYS' FREE TRIAL and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money.

ALBAUGH-DOVER CO., 2260 Marshall St. Chicago

Raise Silver Foxes

Most Profitable Livestock.

We sell outright or for monthly payments within your reach. Write NOW.

SILVERPLUME FOXES
Box B-31, Keeseville, N. Y.



Hirth-Krause Shoes
STRONG
More Mileage
Guarantee with
Every Pair

On the better farms you always find implements of the highest type—because they assure the modern agriculturist long and efficient service and the greatest crop return.

Then why not assure yourself of the greatest possible use of your feet by protecting them, your health, and pocket-book by always demanding—**Grief Defying ROUGE REX SHOES** For Wear and Comfort for Dad and Son!

HIRTH-KRAUSE CO.

FROM HIDE TO YOU

Shoe Manufacturers and Tanners

GRAND RAPIDS, MICHIGAN

BUSINESS FARMERS EXCHANGE

Ads Under this Head 10c per Word, per Issue

FARM AND LANDS

\$1500 GETS 80. MICHIGAN FARM. 80 acres fully equipped 110 bu. corn 25 bu. beans, 50 bu. oats, 187 sugar beets grown to acre; schools, stores, churches; convenient R. R. town; city markets; 70 acres tillable, wire-fenced pasture; apples, pears, plums, cherries, peaches, berries; comfortable 2-story 8-room house, 70-ft. basement barn, granary. Owner unable to operate \$6600 gets it. 3 horses, 100 hens, vehicle, tools, implements, hay, straw, corn, oats, rye, wheat included if settled soon. Details page 19 Free Illustrated Catalog Bargains. Just out. STROUT FARM AGENCY, 427KJ Marquette Building, Chicago, Illinois.

200-ACRE FARM LOCATED IN CALHOUN COUNTY, 6 miles from Battle Creek; large barn, large house, silo, best of fences; one of the best kept up farms in miles; best of market facilities; owner too old to work farm, must sell; this has always been an excellent money-making farm; price \$80 per acre; we invite inspections. Address ALBERT J. HUGGERT, Bancroft, Mich.

ONE DOLLAR AN ACRE—LET ME TELL you how to obtain 40 to 640 acres of valuable sub-over farm land in Gladwin county, Mich., at \$1 per acre each year for 4 years without interest. Balance 5 year mortgage at 5% interest. U. G. REYNOLDS, Gladwin, Mich.

FOR SALE CHEAP 13 ACRES WITH FRUIT—1400 trees, also lot of berries, land good, fruit good, all inside the limits of this city. Have other business. H. J. HEARD, Crosswell, Michigan.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer.

120 ACRES NUMBER ONE LAND, BEST OF buildings, fruit, timber, one mile to Dixie Highway station, church, school, 80 miles from Detroit. R. W. ANDERSON, Clarkston, Mich.

MY GOOD 120-ACRE FARM, STOCK AND Tools cheap. Part cash, small yearly payments \$9. For particulars write owner, MISS MINNIE HORNING, White Cloud, Michigan, R. 2.

15 FARMS AND 3 RANCHES AT BARGAIN Prices to close an Estate. These productive central Michigan farms can be purchased on easy payments. C. L. ROUSE, Executor, Evart, Mich.

FOR RENT 175 ACRE FARM, NEAR NEW Baltimore good farming land. HERMAN BEN KENNICK, 99 Clinton, Mt. Clemens, Michigan.

WRITE FOR OUR FREE LIST OF 50 GOOD farms. DeCOURDES, Blossburg, Mich.

HELP WANTED MALE

SALESMEN, GREAT OPPORTUNITY FOR pushers to make big money selling silo and hoppers on liberal commission and bonus. Unlimited prospect for men who know how. Old company. Quality products. Attractive prices. Secure deal. Write today to Dept. A-23, MANUFACTURERS OIL & GREASE COMPANY, Cleveland, Ohio.

WANTED—SINGLE MAN FOR YEAR. Prefer some feeding experience, good wages and good home. State wages in first letter. Position open April 1st. CHAS. HAUGH, Whittemore, Michigan.

MARRIED MAN TO WORK A LARGE FARM in Oakland county, on shares. This is one of the best equipped farms in the county, rich level black land bordering on a beautiful lake, with large dairy and stock barn, lots of other buildings. Good large house for tenant. Silo, or chard pleasant place to live. Owner a business man and necessarily absent much of the time, therefore the tenant must be the best man obtainable. Must be able and willing to work every day and not lay down on the job. Farm has every possible equipment, even to tractor. Owner will furnish up to 30 cows for dairying. Tenant not required to furnish anything excepting his own automobile. Contract for one year with privilege of five. General farming and dairying. Man will be compelled to furnish high class references as to honesty, ability, and as a successful farmer, and to such a man I am ready to make the most liberal sharing proposition ever offered a tenant farmer. Unless you are a hustler and use your head as well as your hands, and want to make good, don't apply. Write JAMES SLOCUM, 5705, Woodward Avenue, Detroit, Michigan.

WANTED POSITION—OUR SUCCESSFUL farm manager, 35 years of age, widower, no children. This man is honest, clean and a hard intelligent worker. Graduate U. of Wis. and life experience as farmer. Address him, HERMAN R. FRANZEN, Akron, Lancaster County, Pa.

WE PAY \$200 MONTHLY SALARY, FURNISH rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, 2682, Springfield, Ill.

WANTED—TWO SINGLE MEN TO WORK on farm. Good environments. MITCHELL BROS., Holly, Michigan. Bell Phone 64-P-21.

PLANTS AND SEEDS

STRAWBERRY PLANTS FOR SALE. SENA- for Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, \$4.00 per thousand. Postpaid. Progressive Everbearers, \$1.00 per hundred. Postpaid. Outhbert Red Raspberries, \$1.00 per hundred, \$9.00 per thousand. Postpaid. ROBERT J. DeGUESE, Ovid, Mich.

STRAWBERRY PLANTS FOR SALE—SEN- Dunlap \$8.50 per 1000. Gibson's \$4.50 per 1000. Five other varieties. Also Raspberry plants. Prices list free. FRED STANLEY, 124 Main St., Bangor, Michigan.

CERTIFIED COLLEGE WOODER OATS. Purity 99.7%, germination 92. Test weight 37 pounds. Write for prices. HOMER GOULETT, Kawkawin, Michigan.

CERTIFIED WOLVERINE OATS—MICHIGAN'S leading variety. O. D. FINKBEINER, Greenwood Farm, Clinton, Mich.

GENERAL

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides for Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FUR CO., Rochester, N. Y.

FARMERS, BOOK-KEEPERS, STUDENTS, I can and will teach you in one minute's time the absolute proof of any sum in addition, also simplified methods in addition, division and multiplication. Errors are costly, my method will eliminate them. Send \$1 for the lessons, they cost me \$100. Address G. H. HOLLISTER, Twining, Michigan.

WANTED—TO BUY BLACK PERCHERON Stallion or dark Belgian. What have you? G. M. CULBERT, D. V. S., Chesaning, Michigan.



DEAR Nieces and Nephews: Did you ever hear of a tree called the "cow tree?" There is such a tree and it grows in South America on the broad barren plateaus of Venezuela. The sap of this tree resembles milk both in taste and appearance, and, is not only wholesome but nourishing as well, according to naturalists who have examined it. It is said to be not very different from rich cream aside from a slight balsamic flavor. The trees often grow to a height of one hundred feet and have no branches within less than eighty feet of the ground. The bark of the tree is generally smooth. If a hole is bored or any sort of a wound made on the bark, the milk-like fluid will commence to flow and continue for days until it coagulates at the mouth of the wound and forms a waxy substance which prevents further flow. I would like to see one of these trees, wouldn't you?—**UNCLE NED.**

OUR GIRLS AND BOYS

Dear Uncle and Cousins: I wrote a letter last fall, and seeing it in print, I thought I would write again. When I wrote I ask the boys and girls to guess if I was a boy or a girl, by my name, Leslie. I said if they guessed correctly I would write them a long letter. I received about fifteen answers of which some were right and some were not. I am now corresponding with five or six of them. Well, as my friend and I want go skiing I will close with a few riddles. How many peas in a pint? Answer: One p. What is the commonest put-up job you know of? Answer: Paper on the wall. Why does a tall man eat less than a short one? Answer: Because he makes a little go a long way. What kind of a cape does a prisoner like best? Answer: Es cape. Where can all the words of our last foolish conversation be found? Answer: In a dictionary. Patch upon patch and has seams. Answer: Cabbage. Well I guess it is too late to go skiing now, so I guess I will close for sure. Your cousin and niece, Miss Leslie Hillard, Cadillac, Mich., R. No. 2, Box 69.

Dear Uncle Ned: I was out to my grandpa's Feb. 19th and got interested in reading the Children's Hour in M. B. F. This is the first time I have ever written you a letter. I am twelve years of age and in the sixth grade. I have six blocks to go to school and live right on the river bank. I have two sisters, one eleven years old and the other four years old. How many Valentine did you get? I got between one and twelve, and the one that guesses how many I got I will write a letter to. We just posted our Africa maps and are about to take up the study of Australia. My father is the general delivery groceryman in St. Louis. I use to live one a farm one mile and half west of Forrest Hill. We had sixty acres of land, and believe me we used to raise crops. We have a farm two miles south of Elm Hall now but I live in St. Louis. My dad has a different car or farm nearly every day. Well I guess I had better close for this time—Clayton J. Anderson, St. Louis, Michigan.

Dear Uncle Ned: I see by the M. B. F. that I am not the only silent reader of your paper. My father is a reader and subscriber of the M. B. F. and likes it real well, especially the article about Henry Ford. I thought I would write a few lines tonight as I just took a notion to write a letter. I just wonder if this letter will escape the waste basket. I don't see many letters in the M. B. F. from here. I am sweet sixteen, and have five sisters and one brother. I am the oldest and my youngest sister was a week old last Friday. The answer to the riddle of L. D. Biddle is, a flat iron. Say, I like the poem about "The Wood Box." I don't have to help carry in the wood but I have to help saw it and I don't like that very well. I haven't sawed any for over two weeks, on account I was sick a week and the other week I had to keep house. Say, Uncle Ned, I am not getting the spring fever but have already had it. Ha! Ha! Well, I

guess I must close as this is getting to be a long letter. Best wishes to you and the cousins. Your niece, Miss Treceel Sweeney, Cadillac, Mich., R. R. No. 2.

Dear Uncle Ned: This is my first time writing to you I am a girl of 16, I'll be 17 May 20th. I have dark hair and eyes. I am five feet tall and have passed the 9th grade. I signed for the Michigan Business Farmer just last summer and I like it very much. I am writing to a girl in Lansing. I found her address in M. B. F. I like her very much. I will tell you her initials and if you guess her name I shall write another letter (E. P.) Will some of the nieces and nephews write me a letter, please? Your loving niece—Louese Irene Barker, Route No. 3, Box 102, St. Louis, Mich.

Dear Uncle Ned: I have never written before. May I join your merry circle? I enjoy reading the letters in the Children's Hour. I am nine years of age and in the sixth grade at school. Well, I will tell you about our valentine day at school although my letter is a little late, the old saying is "better late than never." We had valentine cookies and pop corn. I got twenty-nine valentines and my brother got nine. We are writing a composition about George Washington. Who ever has the neatest one gets a prize. No one got the prize yet. Please, some of the girls and boys, write to me.—Ruth Pobanz, Owendale, Michigan, R2, Box 59.

Dear Uncle Ned: I have read the M. B. F. so long I thought I would write to you. I am 5 ft. 4 in. tall. I have a light complexion and brown hair and blue eyes. My age is between 12 and 16. Any one guessing my age will receive a nice long letter from me as I love to write letters. My birthday is on July 22. I live on a 160-acre farm. We have 8 cows, 2 pigs, 2 horses and 4 sheep. I have one sister and 3 brothers at home. My sister is 11. Her name is Amy. My oldest brother is 17. His name is Harold. One is 15. His name is Carl and the third one is 6 years old. His name is Leon Graves. Well, I guess this is enough for now, so will close with a few riddles. Why is a caterpillar like a pancake? Answer: Because its the grub that makes the butterfly. What is the key of good manners? Answer: B natural. See who can guess this one. Why is an important young lady like a music book? I will tell the answer in my next letter if no one guesses it. Will close hoping to hear from some of the boys and girls. Will answer everyone I can. I remain Your niece, Miss Marie Graves, R. 1, Box 88, Manton, Mich.

Dear Uncle Ned: I suppose you will be very much surprised to hear from me as I have not written for so long. I am a girl 14 years old and in the seventh grade at school. I go to the Greenwood school on the M-10 trunkline road. My father and mother take the M. B. F. and like it fine. I have one sister. Her name is Muriel. I live on a farm of 160 acres. We have 7 horses, 8 cows, 10 calves and 85 chickens. We have a thoroughbred Shorthorn Sire and 2 thoroughbred pigs and 7 little pigs. My daddy shipped two large pigs which weighed 620 pounds. I think that is pretty good for pigs at 7 months old. We have a creek that runs through our farm and in the winter it is covered with ice and my cousin comes over and goes skating with my sister and I. We go coasting down the hill in front of our house. My grandmother, who is a widow, is staying with us this winter. We girls like her to tell us stories about when she was young. For pets I have a cat named "Tetedills" and two kittens. I hel my daddy milk and my sister washes the dishes for mother. It is pretty cold for me to go out to milk in the morning. If you guess my sister's age I will write you a long letter. She is between 9 and 13. Well I guess I will close wishing some of the boys and girls would write to me.—Leona Brown, Tawas City, Mich., R. F. D.

UNCLE RUBE SPINACH SAYS

THE FOUR SEASONS.

WINTER, the time of year 'at most everybody dreads, is nearly past. In a few days it'll be spring. Spring is so beautiful an' lovely 'at everybody loves it. Flowers begin to bloom in springtime an' folks al'us say "Ah spring is the most beautiful time of the whole year." Mebbe 'tis, mebbe not, it's jest as we look at it, what makes it beautiful or not. The springtime sure is a lovely time. Summer comes right after the spring an' who can say 'at summer isn't a lovely time? An' then when Autumn comes—Oh Boy—she's a lovely time too. Leaves all turned to gold, walnuts an' hickory nuts fallin'—the season's comin' to an end when autumn comes. Spring, summer, fall an' winter—somehow you know I like 'em all. Sometimes I think spring best—young life jest startin' out—so it is with humanity. Springtime—time of love an' everything. Summer—gittin' together an' life is all lovely, green like the grass, flowers kinda growin' every place—nothin' quite like love in the summer time. An' then comes Autumn—leaves are turnin' yeller—golden they are an' in our lives we see life in a more serious form. Many of our young folks have decided to marry, now—good luck go with them, and may God help them. Well, alright—I like the season's jest as they come. I watch men as they go through the different stages—spring, fall, winter—an' all I see—men that have entered into the—well, we'll call it the winter of life—hair gray, mebbe white, no matter, they give up—the gray hair makes 'em old an' then they become just grouchy ol' cusses—you know what I mean? When a man begins to think winter has come into his life he's just 'bout all alone. An' I'm talkin' of women jest as much as I am of men. Women git old—they feel, talk, an' act old.

Yes, even in our life time, winter is not so bad. Look with me if you will, at the man or woman, silver-white hair that shames the snow-drifts but with a smile that matches the flowers of spring. Yes, they are in the winter of life, and could make it somber an' very disagreeable but they don't. God bless the man or woman with silver-white hair that still sees the sunshine of life—that sees the beauty of it all—those who have sympathy for, an' mingles with the young. To them there can be no real winter—there is no winter to any of us unless we look through gray an' wintry eyes. Oh yes, my friends, I love the springtime 'cause everything speaks of new life; but I also love the summer fall an' winter—not only of the seasons but of life itself, an' of all the seasons I think the winter jest the best—specially if we try to make the winter season—whether of life of natur' the best season. Are you livin' in spring, summer, fall or winter? An' are you makin' the most of your seasons?—Cordially yours, Uncle Rube.

THE TRUTH ABOUT HENRY FORD

(Continued from page 9.)

Mrs. Edison and Mrs. Ford are to be the only two women on this executive memorial board.

At the beginning of the European war Mrs. Ford leased Oughttrington Hall, in Chestshire Township, England, a short distance from Warwick, where her mother was born. She equipped it as a home for Belgian refugees; one hundred at a time were clothed, fed and sheltered there. As they found friends, relatives or work was secured from the London clearing house. Teachers were employed for the children; a school room was furnished; outdoor tennis courts were covered and heated for a supervised playground. Tailoring and other trades were taught the refugees. Among them was a Catholic priest, and a chapel was equipped in which he said mass and held other services. Wonderful results were accomplished, as is attested by letters and documents from the Lord Mayor and others. After the armistice the furniture and equipment were sold and the proceeds placed with the Manchester Belgian Relief Fund to be used by that organization. When Elizabeth, Queen of the Belgians, visited this country, Mrs. Ford was one of the few women on whom she bestowed

her medal which is inscribed: "Pro patria Honore et Cartate."

Mrs. Ford's most intimate friends are those she knew in girlhood or before the advent of automobiles. Her poise and culture, her innate goodness, makes her immensely popular. Her judgement and clear intellect have been of untold value to her gifted husband. Their ideal home life is a happy demonstration that love does not dwell only in a cottage. The following incidents somewhat indicates her tastes.

Shortly before the holidays in 1920, while she was shopping in New York, the clerk of a Fifth Avenue shop asked her to inspect the Duke of Hamilton's silver service. It weighed seventeen hundred pounds, and was heavily crested. It had been sold to a young mid-western manufacturer to match his dining-room set, also purchased from the Duke's estate. "Would Mrs. Ford care to place an order for similar silver?"

She has a vivacious and cordial smile. "I have no ambition to collect heirlooms of royalty," she replied. "My resources are needed elsewhere."

The undaunted clerk produced a short string of pearls, each as large as a hazel nut. "Only a half million dollars," he urged suavely, as he laid them on the black velvet square to accent their creamy sheen and luster.

Mrs. Ford shook her head. "At home I have the finest jewels in the world," she remarked, as she concluded her purchases. "Nothing you have on sale can equal them."

The Fords have a son; his home is ten miles east of Detroit, in Grosse Pointe on Lake Sainte Claire, near the point where it joins the Detroit River. The Henry Ford estate is ten miles west of the city on the Rouge, which also flows into the Detroit River. A private telephone wire connects Mr. Ford's study with his son's; a private wire connects Mrs. Ford's bedroom with the sleeping porch of her grandchildren, Henry II and Edsel junior, chubby, golden-haired, blue-eyed cherubs. Like the Athenian mother, Mrs. Ford says: "These are my jewels."

THE FARMERS' TROUBLE—OVER-PRODUCTION

(Continued from Page 16.)

of farmers and increases the number and buying power of farmers' customers. Any substantial reduction of freight rates can be made (until we have government ownership) only by bankrupting the roads of begging their employees. Lending money or giving credit to nations whose credit is exhausted to enable them to buy our surplus is practically making them a present of it. If our lawmakers really want to get our farmers more money for their crops, several nations have lately shown them a sure way to do so. The Japanese government, by taking control of the milk crop, has nearly doubled the price of raw silk in two years. Brazil has done the same thing with coffee. England is now doing likewise with rubber and tea. As this country takes 75 per cent of silk, coffee, and rubber that these nations export, and they in turn take most of our surplus wheat, cotton, etc., it wouldn't seem unfair if our government, by taking control, made them pay enough for our wheat and cotton, at least, to give our farmers a slight margin of profit.—J. Tierney, Illinois

FARMERS' EXCHANGE SHOWS REMARKABLE RECORD

BEGINNING with a borrowed working capital of \$5,000 in 1900 the Eastern Shore of Virginia Produce Exchange at Onley, Va., which is composed of farmers on the narrow strip of land separating Chesapeake Bay from the Atlantic Ocean, has built up a business that is a conspicuous example of successful farmer cooperations in the opinion of the United States Department of Agriculture. In 1922, total sales aggregated more than \$9,000,000. A profit of \$57,000 was made, of which \$39,000 was distributed as patronage dividend and the remainder carried as surplus. At the close of business December 31 the exchange had an outstanding capital of \$31,000 and a surplus of \$265,000.

The principal products sold are white potatoes, sweet potatoes, strawberries, cabbage, and onions.

Balanced Fertilizer advertisement featuring an illustration of corn cobs and a farm scene. Text includes: 'FERTILIZERS are used to increase crops and profits. The right kinds and amounts of plant food make profits by reducing the cost of production of a unit of crop, by improving the quality, and by increasing the yield. One-sided fertilizers may be unprofitable. Today Potash is the cheapest ingredient used in fertilizers, even cheaper than before the war. If one wishes to increase the number of units of plant food in a fertilizer, German Potash will do it for the least money, and at the same time balance the other ingredients so that the value of them may be more fully secured. For GRAIN and CORN use a fertilizer with 6 to 8 per cent of Potash; for root crops and truck use 10 per cent. It is always safe to use at least as much Potash as Phosphoric Acid. SOIL & CROP SERVICE, POTASH SYNDICATE H. A. HUSTON, Manager 42 Broadway New York POTASH PAYS'

DEMAND POLAR BEAR FLOUR advertisement featuring a polar bear logo. Text includes: 'Positively Best Flour Money Can Buy. A Trial Bag will prove it! Manufactured by The New Era Milling Co., Arkansas City, Kans. J. W. HARVEY & SON, Central States Managers, MARION, IND.'

Make the First Cost the Only Cost advertisement for Kalamazoo Tile and Wood Silos. Text includes: 'The value of a good silo reaches its greatest height in a Kalamazoo Glazed Tile Silo because the superior quality of Kalamazoo Tile means perfect ensilage. Stock raising and dairying are by far the most profitable types of farming, and silage is unquestionably the most economical feed for livestock and dairy cattle. Kalamazoo Tile and Wood Silos Our Glazed Tile silos are everlasting—decay-proof, storm-proof, vermin-proof; will not burn or blow down; save repair and paint bills. Three dead air spaces make perfect insulation against cold, heat, dampness. Kalamazoo Tile is made from selected quality clay in our own plant located in the center of the finest tile clay district. Our Wood Stave Silos have stood the test of 30 years. We are America's pioneer silo builders. All Kalamazoo Silos are fitted with continuous door frames of galvanized angle steel. Send for our free book of silo information. The Kalamazoo Plan Get the facts about Kalamazoo Tile and our building service—drawings and blueprints to fit requirements. Write for beautifully colored illustration of the Modern Kalamazoo Plan. Address Building Plans Department, KALAMAZOO TANK & SILO CO., Dept. 244 Kalamazoo, Mich.'

KENTUCKY NATURAL LEAF TOBACCO. Chewing 5 pounds \$1.75; 10 pounds \$3.00; smoking 5 pounds \$1.25; 10 pounds \$2.00; 20 pounds \$3.50. Send no money; pay when received. FARMERS CO-OPERATIVE TOBACCO UNION Paducah, Ky. HOMESPUN TOBACCO. CHEWING 5 pounds \$1.75; 10 pounds \$3.00; 20 pounds \$5.25. Smoking 5 pounds \$1.25; 10 pounds \$2.00; 20 pounds \$3.50. Send no money; pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

FROM THE BALLAD OF READING GAOL

By Oscar Wilde.

IN Debtor's Yard the stones are hard,
And the dripping wall is high,
So it was there he took the air
Beneath the leaden sky,
And by each side a Warder walked,
For fear the man might die.

Or else he sat with those who watched
His anguish night and day;
Who watched him when he rose to weep,
And when he crouched to pray;
Who watched him, lest himself should rob
Their scaffold of its prey:

For oak and elm have pleasant leaves
That in the spring-time shoot;
But grim to see is gallows-tree,
With its adder-bitten root,
And, green, or dry a man must die
Before it bears its fruit.

It is sweet to dance to violins
When Love and Life are fair;
To dance to flutes, to dance to lutes
Is delicate and rare;
But it is not sweet with nimble feet
To dance upon the air.

I know not whether Laws be right,
Or whether Laws be wrong;
All that we know who lie in gaol
Is that each day is like a year,
A year whose days are long.

The vilest deeds like poison weeds
Bloom well in prison air;
It is only what is good in man
That wastes and withers there;
Pale Anguish keeps the heavy gate,
And the Warder is Dispair.

WOMEN HAVE MUCH TO LEARN

THE editor of this page recently had an interview with former Senator Eva M. Hamilton of Grand Rapids. She says that women have much to learn in politics, that, "In the first place they do not back each other as they should, that they allow personal feelings to come in and befog the issue, that women are much inclined to be jealous of each other in politics and it being a new game in the hand of amateurs an unseemly scramble for honors is the result."

This desire to be the standard bearer among the women active in politics and the quite general indifference of the majority of women does leave much to be desired and yet a review of the bills that have been passed thru womens efforts and the constructive legislation that is under consideration gives the student of these matters much hope.

From its organization, the National League of Women Voters has believed in and worked for the removal of all unfair discriminations against women, under the law. In less than three years, sixty-three laws in twenty-six states have been secured to this end, largely through League effort. The greatest single federal disability left after women were given the franchise, has been removed and the citizenship of married women made as independent of marriage as is the citizenship of men.

The League believes in, and works for, also, protective legislation which the experience of the world has shown to be needed for the good, not of women only, but of the race. Because we believe that women need a kind of protection which men do not need, we have worked for minimum wage laws, mothers' pensions, the 8-hour day for women in industry, the Sheppard-Towner law, and other measures necessary to safe-guard the future physical well-being of the race through proper consideration for potential mothers.

If you are interested in the work that the National League of Women Voters is doing write to the headquarters, 25 Traction Building, Peru, Indiana, for pamphlets telling of it's work. Write for Specific Bills for Specific Ills and enclose 10c. It is interesting reading.

GLAD OR SORRY?

THE Ballad of Reading Gaol came to my mind this morning when I picked up the paper and read that once more Michigan had voted against capitol punishment. The prison walls have given us



The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

two very wonderful expressions of the English language. Pilgrim's Progress written by John Bunyan a saintly man and the above mentioned ballad written by a man in which the low and the high struggled for mastery, Oscar Wilde, of unquestionable literary ability but who was convicted of a moral crime and served two years in a penitentiary.

When one remembers that in 1921 there were committed in the city of Detroit alone 100 murders one's sense of justice cries out for the supreme penalty but when one reads clear thru, The Ballad of Reading Gaol a horror of legalized murder grips the soul, and one is inclined to be glad that the record of our State has been against it since 1847.

TEACH INDEPENDENCE

I WONDER if I dare to call myself a thotful mother, so as to take part in the discussion of your question. Anyway, I have three children, and it seems to me that I think several times a day. Will that do?

It is my firm conviction that children ought always to be told the reason for rules, or helped to find the reason.

I figure it out like this: If I have not a good sound reason for any rule or request, then that rule or request is unreasonable. If I try to enforce it I am an unreasonable mother.

On the other hand, if I have a good sound reason for any rule or request, I can develop the child's reasoning power by helping him to find the reason. And well developed reasoning power results in a reasonable child.

All too soon our children must leave us to begin manifesting what

we have taught them. If they are not taught to reason while in our care, they must learn by bitter experience later on. If children were horses and parents could always hold the lines we might say "Whoa, back, gee, haw, giddap." They would have to obey "Because I say so." But children are not horses, and parents cannot always hold the lines.

I am acquainted with three families who grew up under that sort of discipline. After a while the guiding hand dropped the lines. * * * The ones who were gifted with horse sense knew they could only pull, while someone else drove. They are self-supporting.

The ones who lacked horse sense believed that after a lifetime of pulling, they could now drive, and tell someone else just how to pull: They will end their days in the poor house. —Mrs. J. C.

OUR LEAD

THE Detroit Saturday Night followed our lead this week and came out with an article on how and how not to take cold. I print the following remedy which we overlooked:

"I can gib you sobething for your cold," says a kind friend between sneezes. "Take a raw odior and cud it into slices. Thed put some viddegar on it and ead id before you go to bed. Id always cured be."

CORRESPONDENCE COLUMN

There are two pattern orders on my desk which I cannot fill for the reason that no post-office address is given. One asks for No. 2696, 30 waist measure, the other for the same No., size 26. I will gladly fill

the orders as soon as I receive the necessary information. A number came thru this week with no change or stamps enclosed and no sizes mentioned. Please look your orders over well before mailing, it will save you disap-ointment d delay.

I have just bought a second-hand Majestic range. It is in good shape with the exception of a little rust. Now can any of our readers tell me the best way of cleaning that rust. Is there any kind of enamel paint that will not burn off? Thanking you for an early reply.—Mrs. M. E. R.

—To clean steel oven doors, rub briskly when the door is warm with a cloth dippe! in vinegar.

To clean the iron parts saturate a woolen cloth with linseed oil and rub until the rust disappears, next rub with a dry clean cloth. Now use a Rust-proof paint and the range should be in very good condition. I am mailing you a card giving the name of a firm that makes a rust-proof paint. If any of our readers have suggestions to make along this line I will publish them.

J. D. O.—Tarnished copper may be cleaned with vinegar and salt. Care must be take to remove all traces of it or the preparation will corrode the copper. Wash off carefully and rub dry with a clean soft cloth.

Claude R.—Write to some music store in a large city, they will furnish you with what you want if it is obtainable.

I saw in the M. B. F. a request for the Sec. of the Treasury under Lincoln. I have a picture of Lincoln and his cabinet, as follows: President, Abraham Lincoln; Sec. of War, Frederick Stanton; Sec. of Int. Caleb B. Smith; Sec. of Navy, Gideon Welles; Sec. of State, William H. Seward; Sec. of Treas., Salmon B. Chase; Postmaster General, Montgomery Blair; Attorney General, Edward Bates.

Have all the songs as I for been received? I had some of them but was too busy in the fall to send them in.

This is my first letter to the paper. We have always taken it and would be lost without it if it did not come, we helped to get it started.—Fraternally yours, R. A. Kinney.

—The Dead Man's Hand was one poem asked for and not received. The Brier Rose another.

We would like very much to get the full name of a Mrs. McAllister whose husband and brother kept a staple and fancy grocery store at Otsego over ten years ago. I will very much appreciate any information.—Mrs. Perry Haven, 530 Pine St., Mt. Pleasant, Mich.

Some time ago I saw a recipe for curing rancid lard, in your department. I intended to cut it out, but was taken sick and did not. The paper is now gone and I ask you to print it again. Will appreciate it very much.—A Reader.

—Re-heat the lard being careful not to fill the kettle more than three fourths full. When hot put in a large handful of salt, stir well for a few minutes, remove from the fire and strain. The salt will settle to the bottom of the kettle, the lard will not taste at all salt and will be much improved.—From issue of March 4, 1922.

I am asking you to thank the good woman who gave the cure for eczema. I saw it in your helpful corner eight months ago and have been helped greatly by it. I wish to thank her and you also. Your corner is my choice of this paper. May the good work go on.—Mrs. Bert Tidey.

J. M. B.—Shingles is not a contagious disease. It is sometimes produced by sudden exposure to cold after violent exercise and sometimes follows acute affections of the respiratory organs.

The treatment consists in gentle laxatives, and in rectifying any derangement of the system. It sometimes has an obscurely nervous character, occurs in the course of a nerve and is preceded by stinging neuralgic pains. It must be allowed

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

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

SPRING FASHIONS FOR THE LITTLE FOLKS

Catalogs 12 cents

Patterns 12 cents

FASHION BOOK NOTICE

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

ALSO SOME POINTS FOR THE NEEDLE (illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.



A Popular Style

4269. Chambray and gingham, or serge and checked or plaid suiting could be combined for this model. It portrays a style becoming to slender and mature figures. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2 3/4 yards of 36 inch material for the waist, and 2 3/4 yards for the skirt. The width at the foot is 2 3/4 yards. Pattern mailed to any address on receipt of 12c in silver or stamps.



One of Fashion's Favorites

4272. Blue broad cloth, braided with soutache would be good for this model. The style is also attractive for velvet, Canton crepe and taffeta. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size will require 3 3/4 yards of 54 inch material. The width at the foot is 3 yards. Pattern mailed to any address on receipt of 12c in silver or stamps.



A Practical Apron Model

4268. Gingham was selected for this design, with white bias banding for a finish. Satin, cretonne, chintz or crepe could be used with stitching or braid for trimming. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 3 3/4 yards of 36 inch material. Pattern mailed to any address on receipt of 12c in silver or stamps.



A Simple Frock for the Growing Girl

4288. Blue wool jersey embroidered in colors, or green taffeta with piping and vest of pongee in a natural shade will be pretty for this model. This pattern is cut in 3 Sizes: 12, 14 and 16 years. A 14 size requires 3 3/4 yards of 36 inch material. Pattern mailed to any address on receipt of 12c in silver or stamps.

to run its course. Languor, loss of appetite, shiverings nausea and headache often follow after which the eruption appears in irregular patches. The eruption recedes by the fifth or sixth day. Gentle laxatives, rest and quiet for a few days accompanied by a light diet is about all one can do to overcome the disease.

My husband is a cripple and we have three children two boys, one four and one five and also one little girl of two. We are very much in need of clothes for the children and in need of quilts, if some readers had pieces of percale and gingham I could make them into quilts. We are trying to raise our children the best we know how but I do need help and come to the readers of Our Page asking for it.—Mrs. Mansel Cone, Rosecommon, Mich.

—I believe this lady is entirely worthy and that she needs and deserves help so do what you can. I am mailing her a bundle to-day and hope it will be of use to her and her little family.—Mrs. Jenney.

One of our subscribers will make sweaters, bonnets, crocheted hats, booties, door-panels and table-runners.

If you wish her address write to me for it.—Mrs. Jenney.

Who can send the words to the song, "The Maine?" I think it was called "Remember the Maine."

SOMETHING FRESH

From a youthful writer of very tender years, comes an article published in the London Morning Post, called, "The Advantages and Disadvantages of Novel-Reading." Read it and smile once more.

SOME person's opinion differ greatly with regard to the reading of novels there are a good many different kinds of novels, such as 1d., 2d., 4d., 6d. I do not think there is much harm in reading novels if you read them at the right time, and do not spend too much money on them, which is sometimes the case. The Waverly novels, for instance, are not at all bad books if read at the proper time. The great fault of some people are that they are always reading novels, and of course the more they read the more they want. I think it is not right to read a novel on Sundays; it is just as much harm as playing, because it generally gives great pleasure to the mind. The great harm of reading novels are to be careful not to follow them. Novels do not increase your learning much, but does sometimes decrease it. I think it is about the worst thing any schoolboy could have in the way of books and 4d. novel it generally does a lot of harm. Tom Jones was a very good novel and was written by a very good novelist. George was also a great novelist who died but a short time ago.

BOUGHT A COMMUNITY CANNER

FIVE farm women in Bates county have provided full shelves of canned fruit and vegetables for their families at a minimum outlay of time and labor according to extension specialists at the Missouri College of Agriculture. At the beginning of the canning season last summer these women, following the suggestion of their home economics agent, bought a s'am pressure canner, a supply of tin cans and a can sealer. Through the co-operative ownership and operation of this equipment all kinds of food have been preserved in the safest and easiest way and the cost to any one family has been comparatively small.

POINTS OF INTEREST

We still have the unsightly billboard with us, however.

Buyers of poultry, say the Nook-sack, (Wash.) Sentinel, have discovered that healthy birds can not be found on farms where the poultry and cattle are allowed to run together except when the herd has been tested and found free from tubercular taint.

Up in the vicinity of Traverse City, Michigan large numbers of robins are reported, which the native declare, forgot to go south last fall. But the question is, how do the nat-

ives tell whether a robin's coming or going?

Apples having neither seed nor core are being developed in Abbotsford, Canada. The fruit is a variety of Farmeuse and has only a slight marking of the flesh where the core is ordinarily found.

The windowless room is a menace to health and is unfit for occupation by either man or beast.

HEALTH HINTS

OR HOW TO CURE YOURSELF BY DR. T. N. ROGERS

CANCER

CANCER is not a local disease or a blood disease but a constitutional one. Coming on very slowly and insidiously. Diet has very much to do with it, and diet has more to do with its cure than anything else. Cancer and rheumatism are very often associates. Most cancer gives history or rheumatism. The one big factor is diet. The blood in rheumatism and cancer show almost the same conditions.

Preventative Measures

Eat very little meat. However, I consider starchy foods more harmful than meat as they produce an acid condition or an acidosis. The ordinary breakfast foods are indigestible and so ferment in the stomach especially when boiled. Baking or roasting is much better for any starchy food. White bread as baker's bread should not be eaten with meat. The meat takes three hours to get out of the stomach and by this time the starch in the bread is fermented and throws out or forms acids which are poison. We call this Toxemic poisoning. This irritates the stomach causing catarrh, then ulcers, or cancer. The poison may be carried to other parts of the body and produces a condition of the tissues which lowers the vitality and favors the formation of cancer.

Increase of Cancer

Cancer has increased 30% in 20 years. Cold storage foods, meat and vegetables create too much acid in the body and so breed germs which cause cancer. The public taste for such food is increasing every where, also the habit of eating meat in large quantities.

CONSTIPATION

CERTAIN foods improperly cooked cause constipation and the colon becomes clogged and a seed bed of disease. The safeguard is a reformed diet of nutritious and natural foods, fruit, cereals and vegetables well cooked.

Test the saliva with blue litmus paper yourself and if the paper turns red you are on the road to trouble. Better stop and make a fresh start, cut down the starch, sugar and meat and cut out coffee, drink plenty of water, eat only two meals a day for a while and fast one day each week.

CURE FOR EAR-ACHE

Having received so much help from your paper I want to do my share. I enjoy every page of the M. B. F. and am anxious for it to come. I will send my remedy for ear-ache.

My little girl of nine was bothered with gatherings in her ears and suffered very much. After using this remedy she was entirely cured. Take a cotton cloth, double it and wet it put it in on onion cut fine and one-half as much tobacco. I used Peerless. Tie cloth in a sack shape and lay in hot ashes until the onions are cooked, squeeze out juice and put in ear. It acts at once. I press out all the juice I can and keep it for another time. Just warm it a little. —A Reader.

LAUGH IT OFF

Are you worsted in a fight? Are you cheated of your right? Laugh it off. Don't make tragedies of trifles; Don't shoot butterflies with rifles; Laugh it off. Does your work get into kinks? Are you near all sorts of brinks? Laugh it off. If it's sanity you're after, Laugh it off.

—Modern Methods

There's no recipe like laughter—

There is no "Just As Good"

Don't accept substitutes—don't buy baking powder that is supposed to be just as good as Calumet—don't think that a big can at a low price means a real saving. Use

CALUMET The Economy BAKING POWDER



BEST BY TEST

Avoid disappointments. Millions of housewives are using Calumet because of its dependability. They know that the bakings will always turn out just right. Pies, cakes, biscuits, muffins, will always be perfectly raised, light and wholesome if you use Calumet, the real economical leavener.

Calumet sales are 2 1/2 times as much as that of any other brand—always call for it.

THE WORLD'S GREATEST BAKING POWDER

Advertisement for 82¢ Wall Paper. Includes illustration of a woman painting a wall and text: "82¢ Buys All the Wall Paper for An Entire Room. Here is a big Montgomery Ward offer! A DOUBLE LENGTH roll of wall paper for only 6c. Enough to paper an entire room 10x12 for as little as 82c! This includes side wall, border and ceiling paper."

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

This Wall Paper Book FREE

Contains over 100 Actual Samples. Be sure to get a copy of this book before planning your Spring decorating. It is made up of actual large-sized samples. With each side wall is shown a sample of the border to match. Easy and pleasant to select your wall paper this way. Send for this interesting and valuable book today. Ask for Wall Paper Sample Book, No. 1923. Address our House nearest you.

Montgomery Ward & Co. CHICAGO, PORT WORTH, KANSAS CITY, PORTLAND ORE, SAINT PAUL

Book of Factory Prices



Sent FREE

Right now we are quoting the most wonderful bargains ever offered in the history of our company. Send for our new book—learn what you can save on a beautiful new range—direct to you from manufacturers. Cast iron, steel, porcelain enamel, etc.

A Kalamazoo Direct to You

KALAMAZOO STOVE CO. 673 Rochester Ave. KALAMAZOO, MICH. STRAWBERRY AND ASPARAGUS PLANTS. 5000 given away free with orders. \$1000 plants \$2.75. Catalogue free, get facts about plants. C. D. THAYER, Three Rivers, Michigan.

3 CONCORD 1-Yr.-OLD, Heavily Rooted GRAPE VINES Only 25c

Selected small-size vines from the Michigan Grape Belt where the finest Concord in the world are grown. Hardy, healthy, luscious vines, bred up to yield A BUSHEL of the finest grapes from EVERY Vine! Three vines planted in your garden will make a vigorous start. Of rapid growth, they will soon amply supply your table. They will grow and fruit in very cold locations with a little simple winter covering. Our Big Fruit and Garden Magazine Sent Four Months to Help You Start RIGHT! Filled with illustrated, interesting practical stories of success with "Money Crops." To encourage a more general planting of Grapes we make this liberal offer, and a silver Quarter takes it all. Send name and address today to:

THE FRUIT BELT 15 Market St., Grand Rapids, Mich.

SENATOR DUNLAP STRAWBERRY

We have most improved strain of this variety ever introduced. The foundation of our plant business was our success with this strain. Our customers average 400 crates per acre. You too, can make big profits growing our strain of Senator Dunlap. Catalog Free. White. J. E. HAMPTON & SON, Box 14, Bangor, Mich.

Saved Big Veterinary Bills — Cows Gave More Milk the Year Through

Mr. C. E. Dodge of Dewittville, N. Y., is one of the many cow owners who have discovered that it pays best to PREVENT cow diseases. He knows that it is a fine thing to have on hand such a valuable medicine as Kow-Kare in the event of actual diseases, such as Abortion, Retained Afterbirth, Barrenness, Milk Fever, Scours, Bunches, etc. But he also knows that a moderate use of Kow-Kare in the feed not only PREVENTS these diseases, but greatly increases the winter milk flow. He writes us his experience, as follows:

"Since I have been on the County Farm, I have been using Kow-Kare in the dairy for the last ten years. I have 52 cows. My experience is that a few dollars' worth of Kow-Kare saves us a great many dollars' worth of veterinary bills, and also every cow in the dairy that I feed it to produces more all the year thru because of the Kow-Kare. I have no sick cows or trouble, when I begin feeding Kow-Kare, from the first of January until I turn them out in the Spring."

Winter feeds are so much harder on the digestive and milk making organs of the cow that the vitality of these functions is sure to become impaired unless nature is assisted. Kow-Kare is designed primarily to strengthen these very organs so that they may throw off disease and keep up the normal milk production.

The best of it is, this valuable Kow-Kare treatment costs so little. Just a tablespoonful of the remedy morning and evening about one week in each month will keep a cow in best of health and heaviest milking. Your troubles from sick and backward cows are over when you have learned to depend on Kow-Kare.

Feed stores, general stores and druggists sell Kow-Kare; large size, \$1.25, medium, 65c. If dealer is not supplied we will mail, postpaid, on receipt of price. Write now for valuable book, "The Home Cow Doctor."

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.
Manufacturers of KOW-KARE and BAG BALM



FREE BOOK

DAIRY and LIVESTOCK

10 MICHIGAN HOLSTEIN BREEDERS JOIN NATIONAL ASS'N.

TEN Michigan Dairymen were recently admitted to membership in The Holstein-Friesian Association of America, according to an announcement just issued by Secretary F. L. Houghton. They are Lyman E. Beach of Groswell; F. B. Breeks of Corunna; C. E. Chappell of Charlotte; Robert J. Crouse of Howell; A. B. George of Garland; Francis D. Guncer of Riga; Edward B. Henne of Rockwood; O. B. Merriman of Deckerville and Marion R. Wilkinson of Dowagiac.

The Michigan membership in this association now numbers 1,443. According to the 1920 government census, there were 46,533 purebred dairy cattle in this state, of which 32,702 were Holsteins. With a total membership of over 22,000 living animals registered in its Herd Books, this livestock breeders' association is the largest in the world.

customed to eating grain before it was weaned. Had this calf been thoroughly accustomed to grain before weaning, this trouble would not have been experienced. I would advise giving it plenty of good clover hay and as grain, would offer it a mixture of equal parts whole corn, oats and bran and endeavor to have it eat about one pound of grain daily for each hundred pounds that it weighs.—Prof. Geo. A. Brown, Department of Animal Husbandry, M. A. C.

VALUE OF CULL BEANS AS FOOD FOR CATTLE

Can you tell me how much food value cull beans ground fine contain for dairy cattle? How many pounds of grain to every pound of milk? Which is the best for ensilage, corn fodder or sun flowers?—M. D., Marion, Michigan.

The analysis of cull beans, as is shown by Henry's Feeds and Feeding, is as follows:

Total dry matter in 100 lbs. 37.2; Digestible nutrients in 100 pounds, Crude protein 18.3; Carbo Hydrates 54.3; Fat 0.8.

This analysis shows that two pounds of cull beans have about the same protein composition as one pound of cottonseed meal.

Your second question is not quite clear. You ask how many pounds of grain to every pound of milk. I am assuming that you mean how much grain to feed for each pound of milk produced per day. This varies somewhat with the test of milk. With a low testing cow a pound of grain to each three and a half or four pounds of milk produced per day is sufficient. For Jerseys or Guernseys, that have high testing milk, we feed a pound of grain to each three or three and a half pounds of milk produced per day.

The best ensilage crop we know of is corn. Corn fodder, as mentioned in your inquiry, does not make a very satisfactory silage. It is only in times when corn is very high in price that it pays to shuck the corn off the stalk and put the stalks into the silo. I would never advise the use of sunflowers for silage in a section or locality where it is possible to obtain a good yield of corn, but in the northern part of the state, where corn is a gamble one year with another, sunflowers will make an excellent substitute for corn in silage. O. E. Reed, Professor of Dairy Husbandry, M. A. C.

PUTTING PIGS ON SELF-FEEDER

I have forty fall pigs that weigh about eighty pounds each. I want to put them on a self-feeder. They get twenty gallons of skim milk a day. What would be the best feed to put in the self-feeder to make the best gain? Where one has that much skim milk, is tankage necessary?—P. M., Farwell, Michigan.

—Twenty gallons of skim milk will not be sufficient to provide enough protein or growth producing food for forty pigs weighing eighty pounds each. I would, therefore, advise putting tankage as well as corn in the self-feeder for them, using a separate compartment for each. If barley could be obtained any cheaper than corn, I would advise the use of barley.—Prof. Geo. A. Brown, Dept., of Animal Husbandry, M. A. C.

VETERINARY DEPARTMENT

OPERATION PROBABLY NECESSARY

I am writing to your veterinary column for a little advice. I have a mare seven years old and is in the best of health. In October, 1922, a swelling came on the left side of her bag, it kept swelling until it broke and about one quart of slate colored matter came out of it. I took her to a veterinary and he cut it, cleaned it all out and gave me some disinfectant to syringe it out with and said she would be all right, that it was an abscess, but it did not get all right. It swelled and filled up again and she got so ugly I could not do anything with her. In one month from the first time I had to call the doctor he opened it up and cleaned it again

NEW MICHIGAN HOLSTEIN IN JUNIOR CLASS

Burke Pontiac Clare is new State Holstein champion in the yearly test period division junior three year class, according to official announcement by The Holstein-Friesian Association of America. She is owned by W. C. Cornwell of Saginaw. In one year she produced 23,218 pounds of milk and 747 pounds of fat.

MIXTURE OF BEANS AND OATS UNPALATABLE

Would like to feed cull beans and oats to milk cows. Would like to know how many pounds of oats to a hundred pounds of beans, to make a good ration for milk cows, to be ground together.—C. Q., Marion, Mich.

—We are feeding the following ration to some of the cows in the college herd at the present time: 500 pounds of oats and beans ground together, 300 pounds of hominy, 100 pounds of ground corn and 100 pounds of gluten feed.

This ration as you will notice, contains 25 per cent ground beans. Beans and oats are ground together in equal amounts. This ration seems to be a fairly satisfactory one for dairy cows. If only beans and oats are going to be fed, I would recommend that equal parts of beans and oats be ground together for feeding. The percentage of beans in a ration of this kind, would, of course, be affected by the kind of roughage fed to the cows. I do not like your grain ration, consisting of just beans and oats, as there is danger of feeding too many beans to the cow. I think you will find that a mixture of just beans and oats in this proportion rather unpalatable as the cows have a dislike for the ground beans.—J. E. Burnett, Asso. Prof. of Dairy Husbandry, M. A. C.

MAKING ALFALFA MEAL

Can you please tell me how alfalfa meal is made?—A. Z., Grand Rapids, Mich.

—The grinding of alfalfa into meal was practiced quite extensively in Kansas for several years but has been more or less discontinued and has moved further west into the irrigated sections of Colorado and Wyoming. It is quite an expensive practice costing from \$3.00 to \$6.00 a ton to make the meal, and after the meal is secured the feeding value is not materially increased. Stock will consume practically all the alfalfa hay without grinding; consequently, there is little advantage in grinding alfalfa.—C. R. Megee, Associate in Farm Crops, M. A. C.

CALF WEANED TOO YOUNG

Could you tell me what to do for a calf six months old. The calf was on the cow until it was three months old and did remarkably well. It came in July and in October last we weaned it. It has not done well since. Can't see anything particularly wrong only it has a small appetite. We have tried it on all kinds of feed but it seems the same. Doesn't drink over a half pail of milk or water.—J. H., Akron, Mich.

—I judge that you weaned the calf too young and did not have it ac-

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or \$4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many times it will fill. Address all letters, BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

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

Mar. 21—Aberdeen-Angus, Russell Bros. Merrill, Mich.
Mar. 22—Poland Chinas, Sonley Bros., St. Louis.
Oct. 18—Holsteins, Howell Sales Company, Livingston County Wm. Griggs, Sec'y, Howell, Mich.

CATTLE HOLSTEINS



Every man who milks cows for a living knows that prepotency, ability to "breed on," is one of the best reasons for Holsteins.

HOLSTEIN PREPOTENCY MEANS:

Influence of 2,000 years of Breeding for Great Size and Ruggedness combined with highest yield - Strong Healthy Calves - Assured improvement in grading up common cows with Holstein bulls.

Let Us Tell You the Story of the Holstein Cow.

EXTENSION SERVICE, The Holstein-Friesian Association of America, 230 East Ohio Street, Chicago, Ill.

HOLSTEINS

YEARLING BULL BARGAIN—DAM A 25 LB. Junior 4-year-old Pontiac Kornyske-King Segis breeding. Sire 32 lb. grandson of 35 lb. Michigan Champion. Calf well built, nicely marked. Federally tested. Pedigree, photo and bargain price on request.
RUSSELL JONES, White Pigeon, Michigan.

SHORTHORNS

RICHLAND SHORTHORNS
We offer one red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows with calves at foot.

C. H. Prescott & Sons
Office at Herc at Tawas City, Mich. Prescott, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write, L. O. KELLY & SON, Plymouth, Michigan.

CENTRAL MICH. SHORTHORN BREEDERS' Assn. offer for sale both milk and beef breeding, all ages. Write M. E. MILLER, Sec'y, Greenville, Mich.

ANGUS

Bellevue Stock Farm

Public Sale of Aberdeen-Angus Cattle
To be Held on the Farm at Merrill, Mich.,
Wed., Mar. 21st, 1923, at 1:00 O'clock P. M.

22 Head 15 Females—7 Bulls—8 Cows with calves by side, 7 Heifers

An opportunity to buy real quality cattle at your own price. These cattle are right in pedigree and individuality. Teeming in the blood of such fashionable families as Blackbirds, Aricas and Prides. In this offering will be found real show prospects. This sale should appeal to beginners. Nine months time will be given on bankable notes. Write for catalog.

Auctioneers: Col. J. P. Hutton and Col. D. J. McInnes.

RUSSELL BROS., Prop.
MERRILL, (Saginaw Co.), MICH.

Will meet trains on sale day. Good auto roads.

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

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May issue breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

GUERNSEYS—Registered Bull Calves, Cheep, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

MISSAUKEE GUERNSEYS. A NEW CROP of calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

JERSEYS

Jersey Breeders Attention!

DO YOU WANT A COW OUT OF A SILVER Medal Sire and R. O. M. Dam? Good looking individuals, priced to sell. Photos and prices on application.
Samuel Odell, HIGHLAND FARM, Adolph Heeg, Farm Supt., Shelby, Mich.

REG. JERSEYS, POGIS 98th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, SELDING, Mich.

HEREFORDS

PRODUCE YOUR OWN FEEDERS UNDER EARLRIPE HEREFORD BEEF PLAN

which guarantees maximum prices. Investigate personally the success of other Michigan Farmers. For further information write
T. F. B. SOTHAM & SONS
(Herefords since 1839) St. Clair, Mich.

HEREFORDS FOR SALE. SEVEN CHOICE yearlings and heifer calves and seven yearling bulls sired by Wyoming 9th International Prize winner. Farmers prices. Herd established in 1860 by Gov. H. H. Crapo. Write for information.
CRAPO FARMS, Swartz Creek, Michigan.

FOR SALE CHEAP—REG. HEREFORD BULL, 2 years old. CALVIN BARKER, Olio, Ohio.

RIVERVIEW HEREFORDS—FOR SALE Bulls, also few females. WM. C. DICKEN, Smyrna, Mich.



This Self-Feed Saves You Money

The 1923 improvements on the Papec's powerful compression Self-Feed make it a better-than-ever Ensilage Cutter. This Self-feed saves you money—does the work of the men at the feeding table and does it better.

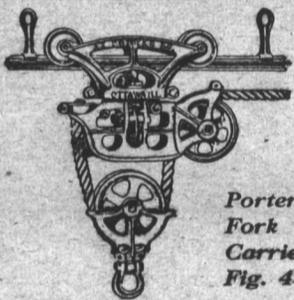
You can buy this new and improved Cutter, backed by the Papec Guarantee, at a new low price. The simple design, tremendous production and specialized machinery make this possible.



Farm Account Book FREE

Our Farmers' Record and Account Book will help you find and stop the money leaks. It contains 50 pages arranged for farm and household inventories, crops and breeding records, cash account, etc. Write us, telling the size of silo you own, or intend to buy, and mention your dealer's name and address. We will mail you this Account Book free, also the 1923 Papec Catalog.

PAPEC MACHINE COMPANY
187 Main Street Shortsville, N. Y.
88 Distributing Houses enable Papec dealers to give prompt service.



Porter Fork Carrier Fig. 43

Now is the Time to Overhaul Your Hay Tool Outfit and Place Your Order for

Porter Hay Tools

YOU know the quality and dependability of Porter Hay Tools—sold by reliable dealers for 55 years. Get your crop under cover in record time this year with Porter Equipment. Check the items in which you are interested, tear out this page, write your name and address in the margin and mail it back to us. We will give the name of a dealer near you who can supply you.

-Fork Carriers
-Sling Carriers
-Grapple Forks
-Power Hoists
-Harpoon Forks
-Stings
-Pulleys

J. E. PORTER CORPORATION
585 Guion Street Ottawa, Illinois



BROWN SWISS

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

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale. **ROYSTAN STOCK FARM**, Will Cottle, R. R. 1, West Branch, Michigan

FOR SALE—OUR RED POLLED HERD BULL Cozy Ella Laddie, and a few heifer calves. **PIERCE BROS.**, Eaton Rapids, Mich. R. 1.

AYRSHIRES

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

and said as long as it stayed open and drained she would get along. I was not satisfied so I saw another veterinarian and he told me about the same. If I would bring her to him he would keep her and chloroform her and take care of her every day. But it was too much expense. I could not stand it and to have him come to my place would cost me twenty dollars a trip, so I thought you could give me advise.—G. H. Nessen, Mich.

—This is a case that in all probability will require an operation before a cure can be wrought about. There may be a foreign body at the bottom of the fistula tract or it may be a diseased lymph gland that will have to be removed.—John P. Hutton, Assoc. Prof. of Surg. & Med., M. A. C.

REMOVING WARTS

I have a yearling steer which has large white warts about the size of a quarter in clusters on the sides of his neck and about his back. Have been on him for some time. He seems healthy and is in good shape. Would consider it a great favor in giving some remedy for it.—F. H. B., Cheboygan.

—We do not know the cause of these warts. Where there is only a very few warts present on the surface of the skin about the best treatment is to remove them by cutting them off after the surface of the skin has been well disinfected. The application of a little glacial acetic acid to the surface of the wart will sometimes cause it to disappear. Where you have a large number of them on the body and they are in clusters little can be done. Better send the steer to the butcher as soon as he can be gotten in good condition to kill.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

COW POX

I have a cow which has some kind of a breaking out on the bag which are small pimples which scab over. She is due to freshen in about eight weeks. Would like to know the cause and a remedy.—V. B., Dryden, Mich.

—From the history given of the case I am of the opinion that the trouble is cow pox. Try washing the udder after each milking with a 1 per cent solution of sodium hyposulphite. No internal treatment is required.—John P. Hutton, Assoc. Prof. of Surg. & Med., M. A. C.

FEED SOW SCORCHED CORN

What should I do with my Poland-China sow, as I have her in a large pen and she doesn't come in heat nor hasn't been in heat for the last six months. Have raised two litters with her already. She is two years old, and I feed her tankage and corn. Have given her oats at times and also charcoal.—Reader.

—A method that often proves effective in getting sows to come in season is to feed them entirely on scorched corn for a few days.

If this fails, drugs may be resorted to. We have used a preparation known as Vetol, put out by Lehn & Fink, 124 Williams Street, New York City, with very satisfactory results.

If this sow is fat, it would be a good idea to limit her feed allowance to reduce the condition of flesh.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

NO LAW ON DISTANCE HOGS MUST BE FROM ROAD

I would like to know how far from the public highway do I have to keep my hogs that are being fattened in a building? And how far from the highway must the other ones, brood sows and such, be if confined? They are in a small part of less than one half acre.—J. B. B., St. Charles, Mich.

—There is no State law fixing the distance that hogs must be removed from a public highway. It is simply a question of whether or not they are allowed to become a nuisance. The matter is under the control and within the jurisdiction of township officials.—M. J. Smith, State Department of Agriculture.

PORK EXPORTS DECREASE IN 1922

Exports of pork and pork products from the United States were less in 1922 than in 1921, according to reports of the United States Department of Agriculture. This decrease was due to smaller shipments of bacon and lard.

Write for free booklets on Farm Sanitation

They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

Kreso Dip No. 1

(STANDARDIZED)

Parasiticide and Disinfectant For all Livestock and Poultry

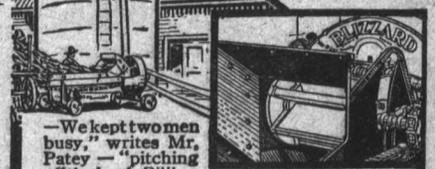
FREE BOOKLETS ON FARM SANITATION:

- No. 151—**FARM SANITATION.** Describes and tells how to prevent diseases common to livestock.
- No. 157—**DOG BOOKLET.** Tells how to rid the dog of fleas and to help prevent disease.
- No. 160—**HOG BOOKLET.** Covers the common hog diseases.
- No. 185—**HOG WALLOWS.** Gives complete directions for the construction of a concrete hog wallow.
- No. 163—**POULTRY.** How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF Parke, Davis & Co. DETROIT, MICHIGAN

Small Tractor gave Plenty Power



—We kept women busy," writes Mr. Patey — "pitching off the load. Filling silo would sure be a short job if we could keep our Blizzard busy from morning 'till night."

New! The Blizzard Paddle Roll Self-Feed. Write for circular describing it.

Better Blizzards for Less Money

New models have self-feeding, feed regulating features. Blizzards do most work per h.p.—they fill world's highest silos—they are running after 20 years of work—they run very low for upkeep; all parts of wear being replaceable.

THE JOS. DICK MFG. CO.
Box 521 Canton, O.



Blizzard Ensilage Cutter
WRITE for circular describing the new Blizzard improvements. Also describes Dick's "Famous" Feed Cutters. Leaders for 49 years. For power or hand operation.

HORSES

FOR SALE AT A BARGAIN: A BLACK Percheron Mare and her coming 3 year-old filly. Will make a well matched pair. Both registered. **A. L. SCHMIDT & SON, R. 5, Reed City, Mich.**

SHEEP

ALL SOLD OUT FOR THIS WINTER. Booking orders for next August. **DAN BOOHER, Ewart, Michigan.**

(Continued on page 31.)

AUCTION SALE Registered Stock

Thursday, March 22nd

LAPHAM FARMS Pinckney, Mich.

Sale of Implements at 9:00 a. m.
Sale of Live Stock at 1:00 p. m.

CATTLE

White Butterfly No. 686-420, Short Horn Cow, coming fresh. Duke of Pickney, roan Bull, son of White Butterfly.

SWINE

12 Registered Duroc Jersey Hogs. Boar, Livingston's Pride No. 438751, coming three years old, a son of Cherry King of Maple Row 2nd, a credit to any breeders yard. Orion Defender 2nd., No. 444321, one and a half years old, good all around hog. 3 Boars, seven months old, sons of Livingston's Pride, any one of them you would like to own. Sow, Nell No. 896716, coming four years, a daughter of Red Nell, sired Brookdale Prince, a large, long sow, due to farrow April 10th, one of the best sows in Michigan, her average, 15 pigs to a litter. Sow, Some Girl 2nd., bred to Livingston's Pride, a very choice sow, weight about 400 pounds. 3 Open Gilts, seven months old, sired by Livingston's Pride. Dam: Nell, good as the best. 1 Open Gilt, four months old, sired by Orion Defender 2nd. 1 Grade sow and six pigs, three weeks old. 2 Grade Sows, bred.

POULTRY

500 Thoroughbred Single Comb Buff Leghorn Cocks and Cockerels. 50 Thoroughbred Single Comb Black Minorca Pullets. 40 Thoroughbred Single

HORSES

2 Good Work Teams. 1 Mare and Colt. 2 Colts, age two and three years.

LAPHAM FARMS are located 1 mile south of Pinckney, 18 miles north west of Ann Arbor. Bus passes farms four times daily.

We will meet all trains at Pinckney and Dexter on day of sale.

S. D. LAPHAM, Proprietor.
Col. John W. Fawcett, Auctioneer.
A. R. Roach—A. R. Little, Clerks.



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

Certified Seed Oats and Barley

These varieties are certified after field and bin inspection on the basis of freedom from mixtures, fowl seeds and diseases.

Through years of constant selection and elimination of weaker strains, they are the highest yielding in the state.

Even those who purchased seed of these varieties two or more years ago can afford to purchase new seed stock at the reasonable prices quoted this year.

If you are growing "Just Oats" or "Barley" you cannot afford to miss this opportunity to make money on the increased yields these varieties will return.

Wolverine, Worthy Oats

6 to 25 bushel lots, \$1.00 per bushel, f. o. b. Lansing, Michigan.

Wisconsin Pedigree and Black Barbless Barley

6 to 25 bushel lots, \$1.40 per bushel, f. o. b. Lansing, Michigan 2½ bu. jute sacks extra 16c each; 16 oz. grain bags 47c each. Seed Corn, Beans, Soy Beans, etc., should also be ordered now.

If your Local Co-Op. cannot supply you with these high yielding, disease free, certified varieties,

Write at once to

Seed Department

MICHIGAN STATE FARM BUREAU
LANSING, MICHIGAN



Contagious Abortion

Can be Stopped in Cows and Sows



Erick Bowman
Discoverer of the Bowman Abortion Remedy

That statement applies to *Your* herd. It's no use to worry about past losses which this dread disease may have caused. The important thing to do is to save yourself from future losses by stamping out every trace of Contagious Abortion Now.

The Bowman Abortion Remedy has behind it a record of positive results in the thousands of cases where it has been used. These should recommend it to anyone facing the problem of how to eradicate Contagious Abortion. The experience of satisfied users is your best guide. The Bowman Abortion Remedy will positively rid your herd of Contagious Abortion. Any farmer can administer it with ease. Cattle and hogs like it and take it readily when it is given to them.

Write Today for Bowman's Bulletin

It is FREE. Gives full information about Contagious Abortion and how to eradicate it, as well as the experience of many farmers who have used Bowman's Remedy. A postal sent today will bring you a copy by return mail.

ERICK BOWMAN
Remedy Company
730 Bridge Street
Owatonna, Minnesota

"It did all you claim for it." writes Mr. Weiner

Columbus, Wisconsin, December 3rd, 1922.

Erick Bowman Remedy Co., Owatonna, Minn.

Gentlemen: In reply to using your abortion remedy, I can say that it did all you claim for it. We had lost six calves but after using your remedy, we have not lost any more. We have seventeen live calves now. Cows cleaned nice with cleanings nice and fresh.

Yours respectfully,
HENRY WEINER.

MICHIGAN CROPS

CULTIVATION—FROM 53 YEARS' EXPERIENCE

CULTIVATION of land begins with plowing and the first question will be when and how deep. When to plow will vary according to the crop and land conditions. Plowing long enough before the crop is planted to get the weeds killed on the surface is a big gain whenever practical.

As oats, barley and spring wheat need sowing very early in the spring, the only way to plow long before planting in this state is to fall plow and while this is fine under some conditions it is bad under others. Soils that are heavy and wet or hill-sides that are bad should not be fall plowed so they will have to be sowed as soon as the ground can be fitter for them and in case of heavy wet soils don't plow them too wet as you will injure the soil if you do.

As to depth, oats will do well on shallow plowing if a sod has been turned down the year before sowing the oats. When plowing sod for corn I get best results by going by the depth that the grass roots go as soil that is much below where the grass roots grow is generally poor or in a poor condition to feed the corn roots.

Plowing as early as the ground is fit to work and harrowing smooth to get the surface weeds to sprout so they can be killed give the best results with corn as this warms the soil and kills the weeds at one time.

Potato ground needs to be plowed a little deeper than for corn and can be worked longer before planting and harrowed deeper if it needs to be, but it can be made too loose. In a dry time the ground should be just loose enough for the roots to penetrate easily and yet to press some against the roots and then air must get into the ground enough for chemical action on the soil, but not enough to dry it up too much.

Watch and see what condition the soil is in when the crops grow the best and then aim at keeping it in that condition. Cultivate shallow if the ground is loose and dry and deeper if the soil is heavy and wet or caked. Cultivate with fine teeth and nearly level in a dry time; use larger teeth hilling up when the soil or weather is wet.

Potatoes should be hilled enough to prevent them from sunburning or freezing too easy and this means more hilling if they set shallow than when they set deep. Cultivate beans level and smooth.—Francis G. Smith,

VALUE OF TIMOTHY OR CLOVER FOR FERTILIZER

I would be pleased to received your estimation as to what hay (each all clover & all timothy) in the barn ought to be worth to be of the same value to me, to leave in the barn and leave the new crop on the ground as fertilizer.—F. H., Scotts, Mich.

—It is rather difficult to arrive at a satisfactory estimate of the value of timothy and clover hay for fertilizer purposes. The feeding value is usually much greater than the fertilizing values especially when we consider the fact that when the hay is fed and the manure well taken care of from fifty to sixty-five percent of the nitrogen, sixty to eighty percent of the phosphorus and sixty to eighty percent of the potash of the original feed may be returned to the land in the manure. Of the organic matter from twenty to thirty-five percent is returned. Consequently, the greater profit is usually secured by feeding the hay and carefully returning the manure to the land.

Also, the value of hay as a fertilizer depends greatly upon the need of that particular soil for organic matter and whether or not the succeed-

ing crop can make use of fertility in this condition.

The following table from Henry's "Feeds & Feeding" shows the fertilizing constituents in 1,000 pounds of hay and the fertilizing and fanurial value estimating nitrogen at 18c per pound, phosphoric acid at 4½c and potash at 5c per pound and assuming that on the average a farm animal will return 80 per cent of the fertilizing value of the feed in the manure. The manure will have to be very carefully handled to prevent additional losses:

Fertilizing Constituents in 1,000 lbs. Timothy Hay, Nitrogen 9.9, Phosphoric acid 3.1, Potash 13.5, Fertility Value per ton \$5.20, Manurial Value per ton \$4.16.

Fertilizing Constituents in 1,000 pounds Red Clover Hay, Nitrogen 20.5, Phosphoric acid 3.9, Potash 16.3, Fertility Value per ton \$9.36 Manurial Value per ton \$7.49.

Timothy hay then is worth approximately \$5.20 per ton and red clover hay \$9.36 per ton for fertilizing purposes according to the above estimate.—Prof. C. R. Megee, Farm Crops Dept., M. A. C.

CROPS DRAW ALL ELEMENTS OF FERTILITY IN SOIL

"Will you please inform me what substance corn takes from the ground and what it gives back to the soil? Also wheat, oats and potatoes.—T. L., Onaway, Mich.

—The crops, corn, wheat, oats and potatoes draw all elements of fertility in the soil. The following gives the amount of nitrogen phosphorus and potassium in pounds in the above crops:

Corn 100 bu. including stover, Nitrogen 148 pounds, Phosphorus 23 pounds, Potassium 71 pounds.

Wheat 50 bu. including straw, Nitrogen 96 pounds, Phosphorus 16 pounds, Potassium 58 pounds.

Oats, 100 bu. including straw, Nitrogen 97 pounds, Phosphorus 16 pounds, Potassium 68 pounds.

Potatoes, 300 bu., Nitrogen 63 pounds, Phosphorus 13 pounds, Potassium 90 pounds.

Inasmuch as these crops are non-legumes they return to the soil, when the entire crop is returned, only the amount of nitrogen, phosphorus and potassium removed by the crop. In addition to the elements of fertility organic matter is returned which is a great benefit to most of Michigan soils.—G. M. Grantham, Soils Dept., M. A. C.

CHEROKEE CLOVER

I would like some information regarding Cherokee clover. Is it adapted to Michigan conditions? What kind of land does it require and what is its feeding value?—D. G., Alanson, Mich.

—Cherokee clover is an early maturing variety of beggarweed. This is an annual legume with large bean-like leaves and with stems and roots somewhat like sweet clover. There are approximately twenty-six varieties of beggarweed, only two of which are of value commercially; namely the Florida beggarweed and the Cherokee. The Cherokee is the earlier variety and probably the best adapted to northern conditions.

Beggarweed has become quite popular in the south where it is used for hay, pasture and green manuring purposes. Some authorities claim that it does quite well on acid soils. It has not been tried very extensively in Michigan and should you care to try it would suggest that you do so in a small way. Soybeans, on the other hand, have been tried quite extensively and for the southern half of the lower Peninsula have been found quite satisfactory for hay and green manuring purposes.—Prof. C. R. Megee, Farm Crops Dept., M. A. C.



Save 60 Percent **MAKE YOUR OWN ROPE**
All sizes including hay fork ropes. Wonderful saving. Send for free booklet, "Rope Making On The Farm." New Era Rope Machine Company, Minneapolis, Minn.

GET IT FROM THE FACTORY DIRECT **KITSELMAN FENCE**
"I Saved One-Third," says Wm. B. Lee, Stanton, Mich. You, too, can save. We Pay the Freight. Write for Free Catalog of Farm, Poultry, Lawn Fence. **KITSELMAN BROS. Dept. 193 MUNCIE, IND.**

DETROIT CREAMERY FARM COMPLETE DISPERSION SALE

— OF — ENTIRE HAMPSHIRE HERD

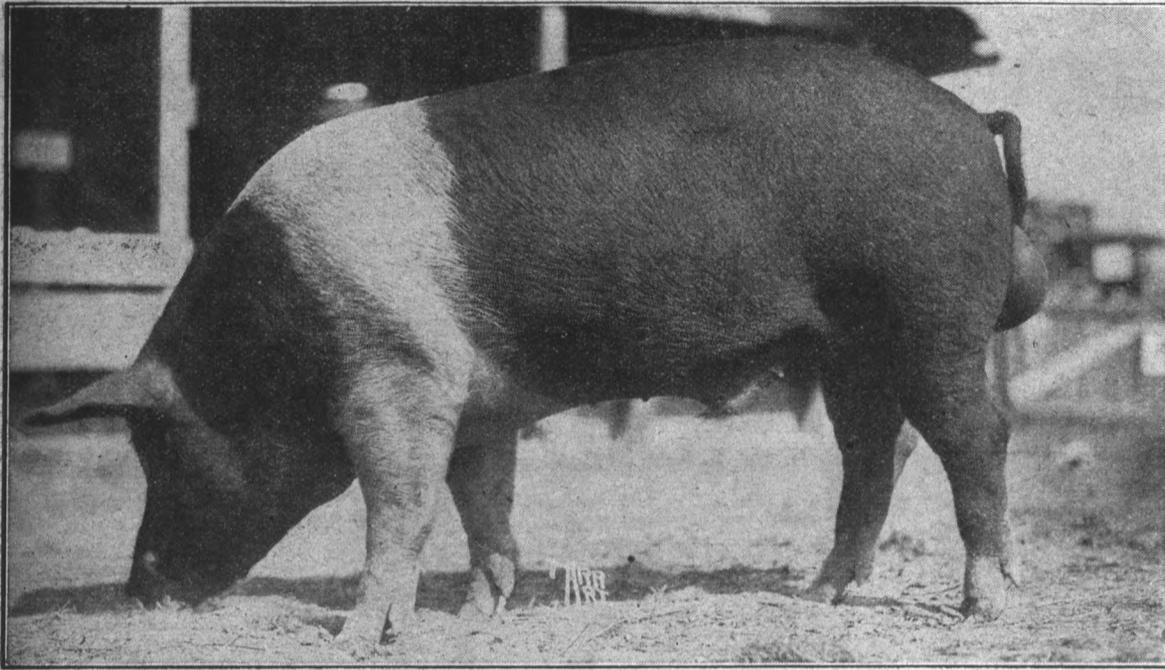
on Monday, March 19th, 1923

CONSISTING OF

27 Tried Sows Bred

13 Gilts Bred

5 Boars



INTRUDER NO. 103987

IINTRUDER is considered by expert judges to be the greatest son of the National Swine Show Grand Champion, Messenger All Over, who in turn was the greatest son of that great pillar of the breed, Messenger Boy. As a show boar he was defeated only by the great General Perishing, Grand Champion of the National Swine Show in 1921. Intruder was Junior Champion at the Ohio State Fair, Grand Champion at Erie, Pa., Dayton, Ohio, Sidney, Ohio, and Troy, Ohio. At Sidney, Ohio, he was placed Royal Grand Champion over all breeds, an honor never before won by an under year Hampshire. He stands a leader of his kind and unapproached. He is a great boar with a great pedigree.

LOCATION—This dispersion sale will be held in Fred Smith's Sale Barn at Utica, Mich.

TERMS—Cash.

GUARANTEE—Every animal is guaranteed a breeder. Every bred sow Guaranteed safe to date of service given should any prove not to be with pig, we will refund 30 per cent of purchase price. Complaint must be made within 30 days.

IMMUNE—The entire offering has received the double treatment for hog cholera and should be immune.

ENTERTAINMENT—Parties from out of town can put up at the Utica Hotel as our guests. Lunch will be served at 11:30 A. M. by the Ladies Aid.

MAIL BIDS—Although we wish all who can to attend this sale, your bids mailed to C. R. Bowers, care of Detroit Creamery Farm, Mt. Clemens, Mich., will be treated honorably.

Every animal purchased by mail will be shipped on approval and if found unsatisfactory, may be returned at our expense and purchaser will be cheerfully reimbursed for full purchase price.

AUCTIONEER—Col. F. H. Hulick, Atlanta, Ind.

FIELDMAN—C. R. Bowers of the Hampshire Advocate. For mail bids address him in our care.

PEDIGREES—Certificate of registry duly transferred will be supplied purchaser, as soon after sale as transfers can be reasonably and correctly made.

ANNOUNCEMENT

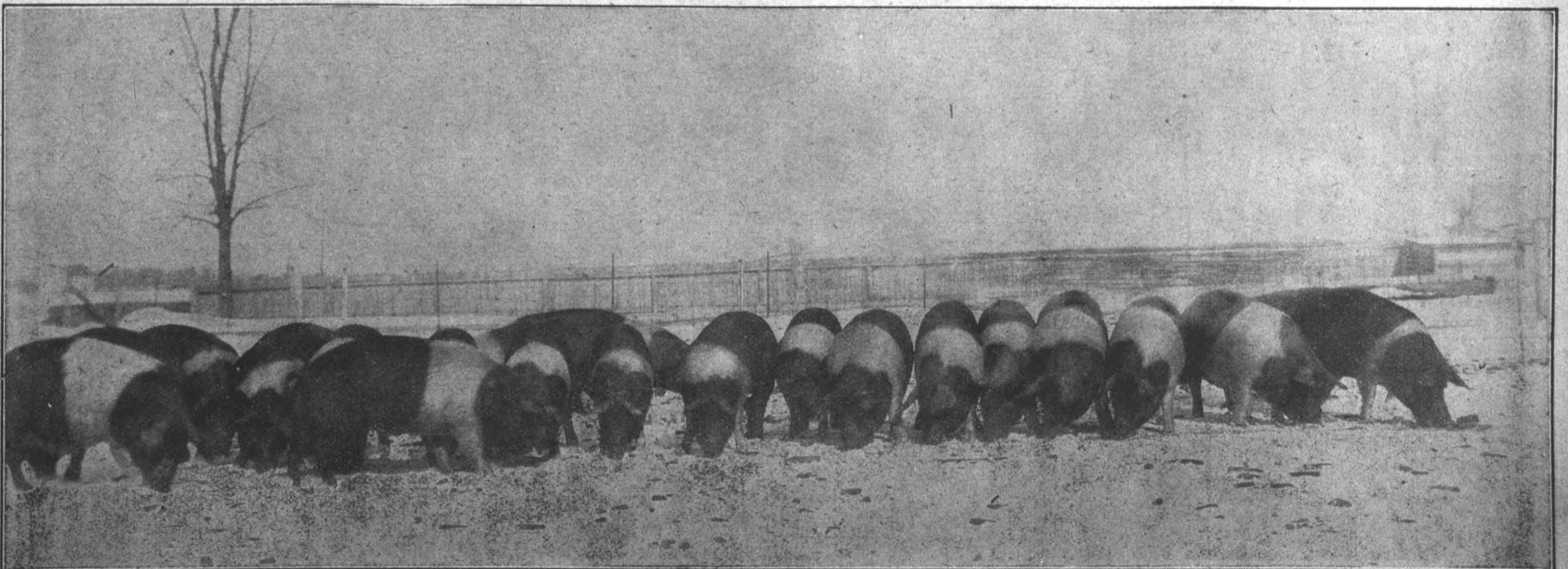
It is with the greatest regrets that we announce the dispersion of our entire Hampshire herd.

In our short Hampshire career we have collected some of the finest breeding material that could be found in Ohio, Illinois and Iowa. From the very first it has been our aim to develop one of the best herds of Hampshires. We have always endeavored to keep in mind, the true Hampshire type and all our purchases were made with this in view. One of the important additions to our herd, is the recent purchase of the great boar "Intruder" from C. G. Bitzer and Son at Washington C. H., Ohio, a boar that has one of the greatest show records of the breed. A large percentage of sows and gilts in this sale are bred to him.

We realize that this is the wrong time of the year to dispose of our high class boars, still there is no other course open to us, our loss will be the gain of the Hampshire breeders who attend this sale.

In addition to breeding Hampshires, we have some of the world's finest breeding stock in Poland China's, Duroc Jersey's and Chester White's. The extra labor and expense involved in maintaining four separate breeds is proving to be too much to carry on the business profitably and rather than let any one breed suffer from lack of attention, we are dispersing our most recent addition, namely the Hampshire Breed. We do not wish anyone to infer from this that we think the Hampshire are inferior to any of the other breeds. Even to this day it hurts to sell out all our Hampshire sows and boars that we have become very much attached to. Since we have a larger and more established herd in these other breeds, our loss would be far greater should we dispose of any of the other breeds at one sale.

We want every one who possibly can to be present, if it is impossible to honor us with your presence, we would appreciate your mail bid. Any cooperation you can give us will be greatly appreciated.

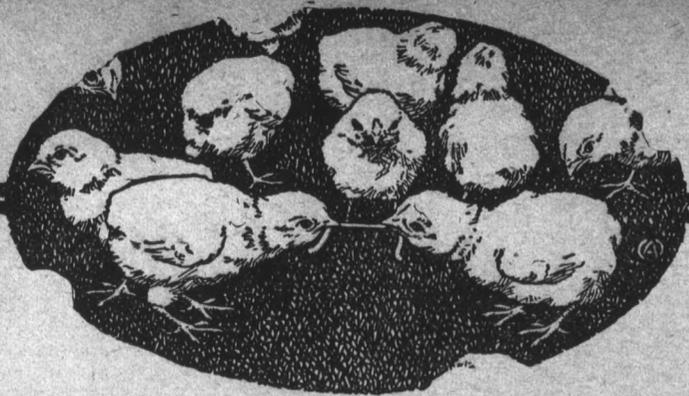


SOME OF THE BRED SOWS IN THIS SALE

DETROIT CREAMERY FARM

R. D. SCHECK, Asst. Supt.

A. A. SCHULTZ, Supt.



Raise all the Chicks You Hatch

Raise them the PAN-A-CE-A way.

Start them right—keep them growing right along without any backset.

PAN-A-CE-A gives chicks good appetite and good digestion—helps them develop rapidly—gives them vigor to resist disease.

PAN-A-CE-A prevents fermentation of the food; fermentation is where most of the bowel troubles start.

PAN-A-CE-A is a gentle tonic to all the little-chick organs—keeps the system in order.

PAN-A-CE-A contains the Salts of Iron, so essential to early chick life, and during the rapid growth of feathers.

PAN-A-CE-A prevents and cures gapes, indigestion, diarrhea and leg weakness.

PAN-A-CE-A your chicks and then watch them feather! A Pan-a-ce-a chick will out-feather a non-Pan-a-ce-a chick every time.

Tell your dealer how many hens you have. There's a right-size package for every flock. 100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail 500 hens, the 100-lb. drum. For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.



I spent 30 years in perfecting Pan-a-ce-a. GILBERT HESS M.D., D.V.S.

Dr. Hess Instant Louse Killer Kills Lice

POULTRY

KEEP UP THE GREEN FOOD

THE constant supply of succulent green food must be maintained if you expect the best egg production throughout the summer, and the best growth from the young stock. Hens that have range over the farm do not necessarily secure the right kind of green food. In fact, it has been demonstrated that hens do not eat readily of grass or other range green food later in the summer months when it has lost much of its succulence.

The commercial poultrymen have long since learned that it is just as important to supply green food in succulent form during the summer months as it is during cold weather and they continue to feed sprouted oats. Several articles have been published in these columns in recent issues giving various methods of oat sprouting on large and small scale. For the small flock raiser the best method is to use oat sprouters such as are to be obtained on the market. For large commercial flock use, other methods may be used.

Lettuce from the garden, especially where a succession is planted, can well be used. Lawn clippings, especially clover, are valuable during the summer. Cabbage is not ordinarily to be recommended, although there is no harm in it if not fed to excess.

An abundance of green food is especially valuable for the growing chicks. Too often it is overlooked and the beneficial effects lost. It tends to supply deficient elements in the ordinary ration which, at this season, contains an excess of animal proteins, and it tends also to act as a digestive corrective and purifier.

Green food, on the other hand, is not recommended for use where fowls are to be fattened for market. Most commercial feeders contend that fowls do not put on weight as readily when green food is given.

CURING HENS OF EATING EGGS

We have been troubled with our hens eating eggs. Have you any remedy for this?—J. H., Clare, Mich.

—The egg eating habit is more prevalent where hens are in heavy production and are receiving limited quantities of mineral matter such as is supplied in oyster shell. Close confinement and insufficient straw in the nests also help the spread of this undesirable habit. Poor quality of shell causes the heavy breakage that occurs during production. The eggs are naturally extremely palatable and are greatly relished by the hens. This trouble however, may be continued to such a degree that the hens will actually break the shell in order to get at the contents of the egg.

There is no very satisfactory remedy other than eliminating the ring leaders, darkening the nests and placing plenty of straw in the nests to reduce the breakage as much as possible, and encourage the hens to exercise which keeps them in better physical condition. Oyster shells should be available in liberal quantities which contains mineral matter necessary in shell production. Some people practice dopping the eggs with some condiment such as mustard, pepper, etc. to make them unpalatable.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

POND NOT NECESSARY

Will you please tell me thru the columns of your paper if a swimming hole is necessary to geese to insure fertility to their eggs?—M. J., Turner, Mich.

—It is not absolutely necessary to have a pond available for swimming purposes in order to maintain or to secure good fertility and hatchability of geese eggs. However, if such a pond is available, the breeding pen should be located near by because of the beneficial results in the increase of fertility and hatchability of the eggs. If a pond is not available, eggs can be produced that are of good fertility although this is less liable than where water is available.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

Better than Whitewash



CARBOLA

The Disinfecting White Paint

It takes less than five minutes to mix the Carbola powder with water and have it ready to use as a white paint and powerful disinfectant. No waiting or straining; no clogging of sprayer. Does not spoil. Does not peel or flake. Disinfectant is right in the paint powder—one operation instead of two. Gives better results, costs less. Used for years by leading farms.

Your hardware, paint, seed or drug dealer has Carbola, or can get it. If not, order direct. Satisfaction, or money back. 10 lbs. (10 gals.) \$1.25 and postage; 20 lbs. (20 gals.) \$2.50 delivered; 50 lbs. (50 gals.) \$6.00 delivered; 200 lbs. (200 gals.) \$18.00 delivered; trial package and booklet 50c.

Add 25% for Texas and Rocky Mt. States. 210 CARBOLA CHEMICAL CO., Inc. Ely Ave., Long Island City, N. Y.



Big Sale Now

30 Days' Trial

OTTAWA \$9.15

Price slashed on this better, faster cutting machine. Saws logs, limbs, falls trees. 10-year guarantee. Cash or Easy Terms.

Free Book and Special Offer With Each Machine. Write for it.

OTTAWA MFG. COMPANY
14810 Wood St. Room 14810 Magee Bldg. OTTAWA, KANS. From Pittsburgh, Pa. \$97.25

HEAVES Is your own horse afflicted? Use 2 large cans. Cost \$2.50. Money back if not satisfactory.

ONE can at \$1.25 often sufficient. In powder form. Most for cost.

NEWTON'S A veterinary compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion, Worm expeller, Conditioner. At dealers' or by parcel post.

30 years' sale

THE NEWTON REMEDY CO., Toledo, Ohio

Karsten's Farm --Quality Chicks--

that will lay and pay. The famous BARRON STRAIN ENGLISH WHITE LEGHORNS, ANCONAS AND BROWN LEGHORNS QUALITY BABY CHICKS CAN NOW BE PURCHASED AT PRICES UNHEARD OF BEFORE. SEND FOR CATALOG IT TELLS HOW AND WHAT TO FEED YOUR POULTRY FOR PROFIT. REMEMBER WE SHIP DIRECT FROM THE KARSTEN'S FARM, Zeeland, Michigan, Box 102.

CHICKS
YPSIFIELD POULTRY FARM
CHICKS
are from stock carefully selected for those qualities essential to good egg production, broiler production, roaster production, or caponizing. Write for free price list.

LEONARD F. FIELD, Ypsilanti, Michigan.

Pure Bred Chicks Buy 'em Home

Breeder Chicks.....\$10	Wh Wyandottes
W. or B. Leghorns.....12c	Buff Orpingtons.....17c
B. Rocks or Reds 15 1/2 c	Light Brahmats.....22c
W. or Buff Rocks.....17c	Black Minorcas.....16c

Add 55c if less than 100 lots wanted. Circular.

LAWRENCE POULTRY FARM
Dept. 8 Good Reference R. 7, Grand Rapids, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmats.

TYRONE POULTRY FARM, Fenton, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 908 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

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

BABY CHICKS

Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks, Strong Healthy Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

Mr. Frank Fulerson, Niles, Mich., writes as follows: "From the 66 pellets we raised from your stock last year along with the thirty which we had, we got 1,610 eggs in December. Can you beat it?"

We are the first and oldest importers of White Leghorns in this state.

Watch our pen number 17 in the Michigan Egg Laying Contest. It's coming strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try some real chicks this year. Order now at low prices. Instructive catalogue free.

BRUMMER-FREDERICKSON POULTRY FARM
Box 20 Holland, Mich.

QUALITY CHICKS
AT LIVE AND LET LIVE PRICES
\$10 per 100 and Up

FROM EXCELLENT PAYING, HEAVY LAYING flocks on unlimited supply. "Spams" poultrymen "66" eggs.

CHICKS in following varieties: TOM BARRON ENGLISH WHITE LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50. PARK'S BARRED ROCKS and RHODE ISLAND REDS, 50, \$8; 100, \$10; 500, \$72.50. From EXTRA SELECT flocks headed by Michigan Agricultural College cockerels. (Dams records from 230 to 270.)

WHITE LEGHORNS, 50, \$8; 100, \$15; 500, \$72.50. ROCKS AND REDS, 50, \$8; 100, \$17; 500, \$82.50. DELIVERED RIGHT TO YOUR DOOR BY INSURED PARCEL POST. 100% delivery guaranteed. Order NOW and from this ad a penny were disappointed last year. Profitable Catalog FREE. Bank Reference.

LAKEVIEW POULTRY FARM
Route 8, Box 8, Holland, Michigan.

QUALITY CHICKS
AT LIVE AND LET LIVE PRICES
\$10 per 100 and Up

FROM EXCELLENT PAYING, HEAVY LAYING flocks on unlimited supply. "Spams" poultrymen "66" eggs.

CHICKS in following varieties: TOM BARRON ENGLISH WHITE LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50. PARK'S BARRED ROCKS and RHODE ISLAND REDS, 50, \$8; 100, \$10; 500, \$72.50. From EXTRA SELECT flocks headed by Michigan Agricultural College cockerels. (Dams records from 230 to 270.)

WHITE LEGHORNS, 50, \$8; 100, \$15; 500, \$72.50. ROCKS AND REDS, 50, \$8; 100, \$17; 500, \$82.50. DELIVERED RIGHT TO YOUR DOOR BY INSURED PARCEL POST. 100% delivery guaranteed. Order NOW and from this ad a penny were disappointed last year. Profitable Catalog FREE. Bank Reference.

LAKEVIEW POULTRY FARM
Route 8, Box 8, Holland, Michigan.

BABY CHICKS White English Leghorns, Tom Barron English White, White and Barred Plymouth Rocks, B. O. R. L. Reds, Buff Orpingtons. All pure bred from selected stock. Live arrival guaranteed. Postage paid. We do custom hatching. Durand Hatchery, Fenton, Mich.

HIGHEST QUALITY CHICKS
Michigan's Old Reliable Hatchery
(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested bioanized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

WOLVERINE BABY CHICKS are Chicks That Satisfy

Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. ENGLISH TYPE WHITE AND BROWN LEGHORNS.

100% safe arrival guaranteed. Write for catalogue. It's free.

WOLVERINE HATCHERY, R. 2, Zeeland, Mich.

Chicks

From select vigorous, heavy laying breeding stock. White, Brown Leghorns, Anconas, Barred Rocks. Our price is 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now. We will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for illustrated Catalog. It's free. Reference: State Commercial Savings Bank, Member M. B. C. A. Queen Hatchery & Poultry Farm, Zeeland, Michigan.

Pedigreed State Approved **S. C. W. LEGHORNS CHIX** AMERICAN-ENGLISH STRAIN

Are you going to buy them from a hatchery or from a BREEDER. Buy from Michigan's Largest Leghorn Flock and insure success. We hatch our own eggs only. Supply limited. Prices reasonable. Satisfaction guaranteed.

Descriptive Circular tells all about them. It's free.

SIMON HARKEMA & SON, R. 1, Holland, Mich.



Attractive Chick Investments

FROM SELECT PURE-BRED FLOCKS

WHITE and BROWN LEGHORNS, ANCONAS, 50, \$7.50; 100, \$14; 500, \$65. BARRED ROCKS, REDS and MINORCAS, 50, \$8.50; 100, \$16.50; 500, \$75. Discount on orders of 1,000 or more. From extra select flocks \$2 per 100 higher. Postpaid to your door. Full live count guaranteed. Bank reference. Free Catalog. We know it will be to your advantage to get our catalog and full price list before making a final decision regarding your investment in Chicks this season. Send for it TODAY.
COLONIAL POULTRY FARM, Box B, Zeeland, Michigan

BABY CHICKS Postpaid to \$11 per 100 and Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYING FLOCKS. ALL VARIETIES.
WHITE, BROWN and BUFF LEGHORNS and ANCONAS.....\$14.00
BARRED ROCKS and R. I. REDS.....\$17.50
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS.....\$17.50
BLACK MINORCAS, BUFF ORPINGTONS.....\$18.00
All lots of 500, \$1.00 per 100 discount.
EXTRA SELECTED FLOCKS.....\$2.00 per 100 higher.
Large Price List for return mail.
Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning. Address BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.

STOP! LOOK! READ!

GUARANTEED BABY CHICKS

From WORLD'S GREATEST LAYERS and LAYING CONTEST WINNERS. TOM BARRON ENGLISH S. C. WHITE LEGHORNS. Imported stock. SHEPPARD'S FAMOUS ANCONAS. Direct. If we could show you our Flocks and have you talk with our CUSTOMERS you would order IMMEDIATELY. Our FLOCKS are all CULLED BY EXPERTS and headed with VIGOROUS PEDIGREED MALES of from 250 to 280 EGG STRAIN. Our CHICKS become wonderful LAYERS. You want EGGS? GET OUR CHICKS. Write to-day for our free illustrated CATALOG.
SILVER WARD HATCHERY, Box 420, Zeeland, Michigan.



Egg-Bred Baby Chicks

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100 chicks \$12.50; 500, \$60.00. From extra selected matings \$2.00 per 100 higher. Postpaid. 100% delivery guaranteed. Order now. Bank reference. Catalog free.
ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

CHICKS, \$10 per 100 and up Postpaid to your door and full live count guaranteed

Varities	Prices on 50	100	300	500	1,000
WHITE, BROWN and BUFF LEGHORNS	\$7.00	\$13.00	\$38.00	\$62.00	\$120.00
BARRED ROCKS, BLACK MINORCAS and ANCONAS	8.00	15.00	44.00	72.00	140.00
WHITE ROCKS, WHITE WYANDOTTES and REDS	8.50	16.00	46.00	75.00	145.00

BUFF MINORCAS, 50, \$13; 100, \$25. MIXED CHICKS FOR BROILERS, 50, \$6; 100, \$11; 500, \$50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free range. Carefully selected and packed to go safely. No catalogue. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.
THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio
Only 7 hours from Grand Rapids. Can reach any point in Michigan in 24 hours.

GOOD CHICKS-LOW PRICES

Pedigreed and Utility Grades of Barron Type White Leghorns, Barred Rocks, S. C. R. I. Reds. Customers report pullets laying at 4 months and 20 days. Pedigreed chicks from flocks headed by males bred by Michigan Agricultural College, from trapezoid hens of 200 to 300 egg records. LEGHORNS, 25, \$5.50; 50, \$10; 100, \$20. ROCKS and REDS, 25, \$6.75; 50, \$12.50; 100, \$25. Utility chicks from selected free-range flocks; pure bred, heavy egg-strain hens. Great Value in Medium Priced Chicks. W. LEGHORNS, 25, \$4.50; 50, \$7.50; 100, \$15; 500, \$70; 1000, \$135. BARRED ROCKS and REDS, 25, \$5.50; 50, \$9.50; 100, \$18; 500, \$85; 1000, \$165. Special Discount of 2c per chick on all orders with remittance in full sent in before April 1st. Prepaid. 97% live delivery guaranteed. Instructive catalog free. Bank Reference.

MICHIGAN HATCHERY & POULTRY FARMS, Box C, Holland, Mich.

HILLVIEW HATCHERY

GUARANTEED TO ARRIVE



Strong and Healthy. Chicks from selected heavy laying, Hogan tested flocks. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and MAKE A PROFIT. Give us a trial and you will come again.
HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

BABY CHICKS \$10 per 100 and UP



From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, \$6.75; 100, \$13; 500, \$62.50. Barred Rocks, 50, \$8.50; 100, \$16; 500, \$75. Extra Select, \$2 per 100 higher. Mixed Chicks, 50, \$5.50; 100, \$10; 500, \$50. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.
WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan

GUARANTEED RURAL CHICKS

EXCEPTIONAL VALUES IN HIGHEST QUALITY, PROVEN LAYERS.

PURE BRED S. C. Barron White Leghorns, Heavy Laying Brown Leghorns, Select Anconas, Heavy Winter Layers. Result of constant breeding for high chick averages. Buy direct from large modern hatching and breeding institution. All stock scientifically culled and approved and headed by large vigorous males. NEW LOW PRICES. Sent Postpaid, 100% live delivery guaranteed. Write for fine 1923 catalogue. Its free. Reference: Two Banks.
RURAL POULTRY FARM, Department B, R. 1, Zeeland, Michigan



GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.
BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS, 50, \$8; 100, \$15; 500, \$74
WHITE WYANDOTTES, BUFF ROCKS.....50, \$8.50; 100, \$16; 500, \$78
WHITE, BROWN and BUFF LEGHORNS.....50, \$7.50; 100, \$14; 500, \$65
Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.
MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.



CHICKS

THAT GROW, LAY AND PAY
Barron English White Leghorns, Brown Leghorns and Anconas.

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

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

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

MEADOW BROOK FARM

CHICKS—ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain), 50, \$7; 100, \$13; 500, \$62.50; 1,000, \$120. BARRED ROCKS, REDS, BUFF LEGHORNS, 50, \$8; 100, \$15; 500, \$72.50; 1,000, \$140. WHITE WYANDOTTES (Heavy Laying Flocks), 50, \$9; 100, \$17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good Chicks successfully for the past 20 years and KNOW HOW I want your business and will try hard to please you. Free Catalog, Bank Reference. MEADOW BROOK FARM, Henry De Pree, Proprietor, Route 1 H, Holland, Mich. Member Michigan B. C. A.

HARDY, HEALTHY CHICKS

From northern bred, heavy laying, closely selected parent stock in ENGLISH WHITE LEGHORNS, BROWN LEGHORNS and SHEPPARD ANCONAS. Our breeding birds are well-fed and housed to insure vigorous breeding condition and vigorous chicks for our customers. POSTPAID, FULL DELIVERY GUARANTEED. LOWEST PRICES. CATALOG FREE. Write your exact wants and let us quote you prices before you buy chicks elsewhere. YOU NEED THESE vigorous, northern bred chicks to make profits.
CITY LIMITS HATCHERY, Box M, Holland, Mich.
Reference, Holland City State Bank.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50. BARRED & WHITE ROCKS, S. C. & R. I. REDS, ANCONAS, 50, \$8; 100, \$15; 500, \$72.50. WHITE WYANDOTTES, 50, \$8.50; 100, \$16; 500, \$77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, \$9.50; 100, \$18; 500, \$87.50. POSTPAID.
We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.
MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

Star Hatchery

BABY CHICKS

From Select, Vigorous, Heavy Laying Breeding Stock

WHITE and BROWN LEGHORNS and ANCONAS 50—\$7.10—\$14.50—\$65
SINGLES COMB REDS 50—\$8.10—\$16.50—\$75
Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them.
STAR HATCHERY, Box X, Holland, Michigan

QUALITY CHICKS

GUARANTEED. From Hogan tested, free range stock. Our plant is modern 65 acre poultry farm. Big, strong, vigorous, well-hatched chicks at following prices: WHITE and BROWN LEGHORNS, SELECT, 50, \$8.50; 100, \$16; 500, \$77.50. ANCONAS, SELECT, 50, \$9; 100, \$17; 500, \$82.50. WHITE and BROWN LEGHORNS, SELECT, 50, \$7; 100, \$13.50; 500, \$65. ANCONAS, SELECT, 50, \$7.50; 100, \$14.50; 500, \$70. Postpaid to your door and 100% live delivery guaranteed. Order direct from this ad. early and get them when you want them. Also breeding stock and special mating Chicks. Get Our Catalog. Reference 2 Banks.
TOWNLINE POULTRY FARM, Box 27, Zeeland, Michigan

Rosewood Farm

Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying WHITE LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50; 1,000, \$120. Select ANCONAS, 50, \$7.50; 100, \$14; 500, \$67.50. Select BARRED ROCKS, 50, \$8.50; 100, \$16.50; 500, \$85. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Circular, free. ROSEWOOD FARM, R 12 A, Holland, Mich.

ARISTOCRAT

STRAIN BARRED ROCKS. THE WORLD FAMOUS PRIZE WINNING AND HEAVY LAYING STRAIN

Barron White Leghorns
Splendid, big, heavy weight, heavy laying hens.

Everlay Brown Leghorns
Beautiful business hen. Wonderful winter layers. Second to none. Sheppard's Famous Strain

ANCONAS 331 egg strain.
From all these great strains. Postpaid and full live delivery guaranteed. Also EGGS FOR HATCHING and Breeding Stock. Reference 2 Banks. Member M. B. C. A.
Fairview Poultry Farm, Route 2 K, Zeeland, Mich.

STRONG PURE BRED CHICKS

S. C. English White Leghorns, Barred Rocks, Anconas Direct from our free range farms, by Prepaid Parcel Post to you. Bred for egg production because it means most money to you. Returns on your investment in 4 1/2 to 5 months. A Post Card will bring our free Catalog and details of our contest offer. Highest quality—Bargain prices—Satisfaction guaranteed. Most modern equipped Hatchery in Michigan.
Riverview Hatchery and Poultry Farm
10 Years in Poultry
R. No. 2 Zeeland Michigan

BABY CHICKS

You can now order Chicks in 11 breeds of the Pure Breed Practical Poultry that is making egg records on our customer's own White Rocks farms. If you want stock that Rhode I. Reds will make real money, send for our description and price list. Wyandottes All stock guaranteed 100% post Orpingtons paid. We want you to try our Wh. Br., Buff stock this year. It is the best Anconas practical stock you can buy. Minorcas

STATE FARM ASSOCIATION
202 Chase Block Kalamazoo, Michigan.

300,000 Chicks

Guaranteed Michigan Bred and Hatched

ENGLISH WHITE and BROWN LEGHORNS, SHEPPARD'S Famous Strain ANCONAS, 50, \$7; 100, \$13; 500, \$60. BARRED ROCKS, R. and S. C. REDS, 50, \$8.50; 100, \$16; 500, \$75. 1,000 orders at 500 rate. RHODE ISLAND WHITES, 100, \$18; 200, \$35. Postpaid, full live delivery guaranteed. Strong vigorous Chicks from heavy laying flocks. Order right from this ad. WE SATISFY OUR CUSTOMERS. Catalog free. Reference, Holland City State Bank.
KNOLL'S HATCHERY, Box L, Holland, Michigan

BABY CHICKS

FROM SPECIAL MATINGS

A specialist breeder can furnish better baby chicks. Our ANCONAS are Michigan's leading strain today—both in exhibition and in egg production. WHITE LEGHORNS from a select special egg flock having blood lines of world's greatest layers. We specialize in quality—not quantity. Lowest prices. Write for illustrated catalogue.
PROGRESSIVE POULTRY FARM
Box 1, Holland, Mich.

CHICKS \$12.00 per 100 and Up

100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, \$7; 100, \$13; 500, \$60. BARRED ROCKS, S. C. and R. I. REDS, ANCONAS, 50, \$8; 100, \$15; 500, \$70. WHITE WYANDOTTES, WHITE ROCKS and BUFF ORPINGTONS, SHEPPARD'S 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, \$8.50; 100, \$16; 500, \$75. MIXED, 50, \$6; 100, \$11; 500, \$50.
Hatched from selected heavy laying flocks that are well fed and cared for insuring strong, viable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank.
THE GENEVA HATCHERY, Box 505, Geneva, Ind.

BABY CHICKS

Our Baby Chicks are the kind that live and grow. White Leghorns, Brown Leghorns, Buff Leghorns, Barred Rocks, White Rocks, Buff Rocks, Rhode Island Reds, White Wyandottes, Anconas, Minorcas, and Orpingtons, Silver Spangled Hamburg stock and eggs for sale. Catalog free.

Rosedale Farms

Route 1, Box 74, Port Huron, Michigan.

BABY CHICKS

SELECTED CHICKS FROM the heart of the baby-chick industry. Leading pure breeds from heavy egg-producing strains. Alive delivery guaranteed. Send for catalogue and prices.
L. VAN HOVEN & BRO., Zeeland, Mich.

QUALITY BABY CHICKS

S. C. Brown and English strain White Leghorn Baby Chicks. Write for catalogue. Cooks Poultry Farm, Holland, Mich.

BABY CHICKS—FROM SELECTED FLOCKS

Six leading varieties. Popular prices and guaranteed delivery. Write for catalogue and price list.
H. H. PIERCE, Jerome, Mich.

CHICKS

Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, \$8.50; 100, \$12.50; 500, \$60. Get your order in early. Elgin Hatchery, Box 37A, Zeeland, Mich.

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy chicks which will mean PROFIT to my customers. PRICES: WHITE BROWN AND BUFF LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50; 1,000, \$120. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, \$8; 100, \$15; 500, \$72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, \$8.50; 100, \$16; 500, \$77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, \$9; 100, \$18; 500, \$87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.



CHICKS THAT MAKE PROFIT



\$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well-cared for. Low prices considering exceptional quality. WHITE BROWN AND BUFF LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50; 1,000, \$120. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, \$8; 100, \$15; 500, \$72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, \$8.50; 100, \$16; 500, \$77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, \$9; 100, \$18; 500, \$87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

BABY CHICKS

\$10.50 PER 100 AND UP



From Hogan tested, well-kept and housed heavy laying flocks. BARRED AND WHITE ROCKS, REDS, ANCONAS, MINORCAS, 50, \$8.50; 100, \$16; 500, \$77.50. BUFF ORPINGTONS, WHITE WYANDOTTES, 50, \$9; 100, \$17.50; 500, \$85. WHITE, BROWN AND BUFF LEGHORNS, 50, \$7.50; 100, \$14; 500, \$67.50. Mixed, all varieties for broilers, \$10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks. TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

CHICKS WITH PEP, \$11 per 100 and up



Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, \$9.25; 100, \$18; BARRED AND WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, \$8.25; 100, \$16. ANCONAS and HEAVY BROILERS, 50, \$7.25; 100, \$14. WH., BR. and BUFF LEGHORNS, 50, \$7; 100, \$13. MIXED, ALL VARIETIES, \$11 per 100 straight. On 500, 5% off; 1,000 10% off. Ready February 26th. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

OVIE'S BABY CHICKS

HEAVY LAYING
breeding stock or real quality helps producers Ovie's strong healthy and husky chicks.
25,000 Thrifty Chicks Weekly
Write for catalog. 11c and up. prepaid. 12 leading breeds. Delivery guaranteed.
Ovie's Poultry Farm and Hatchery
132 Boots Street, Marion, Indiana

QUALITY CHICKS

GET THE PROFITABLE AND LAYING KIND
They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & SIL. Wyandottes, 50, \$9.25; 100, \$18. Rocks, REDS, MINORCAS, 50, \$8.25; 100, \$16. ANCONAS, heavy broilers, 50, \$7.25; 100, \$14. Leghorns, 50, \$7; 100, \$13. Mixed, all varieties, \$11 per 100 straight. Postpaid, full live delivery. Circular free. Bank reference. Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

Day Old Chicks

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. BARRED ROCKS and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.
Hillcrest Poultry Farms and Hatchery
R. R. 2, Holland, Michigan

Selected Baby Chicks and Breeding Stock

Tom Barron strain White Leghorns. Also BARRED ROCKS. Guarantee 100 per cent live delivery on chicks, Cockerels and pullets in season. All stock carefully selected. Write for catalog and prices. Reference Zealand State Bank.
BRANDT'S POULTRY FARM AND HATCHERY
R. R. 3 M, ZEELAND, MICHIGAN

White Leghorn CHICKS

Write Quick. Free feed—liberal discount on early orders: World-Famous 255-270 and 280-285 egg strain trap-nested, pedigreed English-American S. C. W. Leghorns, Heavy Layers. Best Payers. Strong healthy chicks, 100% live delivery guaranteed. Postpaid. Big suitable catalog Free.
SELBY'S GRAND VIEW POULTRY FARM, Box 43, Coaster Hill, Pa.

White Leghorn CHICKS

Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong, healthy chicks, 100 per cent live delivery guaranteed. Postage paid. Catalog, low price list free. Write quick.
Catalpa Grove Hatchery, Box 4 R. 2, Holland, Mich.

BABY CHICKS

White and Brown Leghorns, Single and Rose Comb Reds, Buff Orpingtons, BARRED and White Plymouth Rocks, ANCONAS, and White Wyandottes, \$15 per 100 and up. P. W. STONE HATCHERY, Lock Box 44, Fenton, Mich. F. M. Milliken, Prop.

BABY CHICKS and HATCHING EGGS

Direct from our farm at greatly reduced prices, only 9c up. BARRED ROCKS, White Leghorns and ANCONAS. Write quick for particulars and special introductory offer. MODEL POULTRY FARM & HATCHERY, Zeeland, R. 4, Michigan.

WHITTAKER'S R. I. REDS

Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. Interlakes Farm, Box 4, Lawrence, Mich.

CHICKS—WE HAVE SHIPPED THOUSANDS

each season since 1904. Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

BABY CHICKS—PUREBRED BARRED ROCKS,

Buff Wyandottes, Black Minorcas, R. I. Reds, Brown and White Leghorns. 12c and up shipped postpaid. THOS. G. CALLAGHAN, Fenton, Mich.

KNIGHT STRAIN WHITE PLYMOUTH ROCK

cockerels \$5.00 each. Baby chicks \$20.00 per 100. ROBERT E. KNIGHT, New Baltimore, Mich.

289 EGGS



289 Eggs in one year, actual trap-nest record. "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars in regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.
Chicks and Eggs for Hatching that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. STRICK POULTRY FARM, Route 4 M, Hudsonville, Mich.

Day Old Chicks



From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks.
Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, \$7.50; 100, \$14; 500, \$65. BARRED ROCKS, 50, \$8.50; 100, \$16; 500, \$75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Circular free.
BORST & ROEK, Box P, Zeeland, Mich.

WASHTENAW



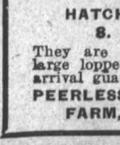
HATCHERY CHICK PRICES: March 26th and following hatches: BARRED ROCKS and REDS, 50, \$8.50; 100, \$16; 500, \$75. WHITE ROCKS, WHITE WYANDOTTES, 50, \$8.50; 100, \$16; 500, \$85. WHITE, BROWN and BUFF LEGHORNS, 50, \$7.50; 100, \$14; 500, \$65. From hatches due March 12th and 19th add \$2 per 100 to these prices. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.
WASHTENAW HATCHERY, Ann Arbor, Mich.

DeKoster's Hatchery



Strong, vigorous Chicks from selected heavy laying ENGLISH STRAIN WHITE LEGHORNS and BROWN LEGHORNS, 100, \$12.50; 500, \$60. THOMPSON & HOLTSMAN STRAIN BARRED ROCKS and ANCONAS, 100, \$18; 500, \$87.50. Postpaid, full live delivery guaranteed. Catalog free. Bank Reference.
DEKOSTER'S HATCHERY, Box X, Zeeland, Mich.

Peerless Chicks



HATCHED FROM BRED-TO-LAY S. C. WHITE LEGHORNS
They are selected long deep-bodied, with large lopped combs. Liberal discount. Live arrival guaranteed. Catalog free.
PEERLESS HATCHERY & POULTRY FARM, Box 10, Zeeland, Mich.

BABY CHICKS



Hatched from strong and vigorous flocks of ENGLISH WHITE LEGHORNS and ANCONAS. BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

DAY OLD CHICKS SINGLE and ROSE ISLAND WHITES.

Write for Catalogue. Fischer's Hatchery and Poultry Farm, R. 1, Holland, Mich.

POULTRY MANURE A VALUABLE BY-PRODUCT

THE average poultry raiser attaches little or no value to the manure produced by his flock. Its gradual accumulation beneath the perches of his fowls receives only occasional attention, in many instances, and even when cleaned out more frequently is thrown away. When its removal becomes necessary he considers it one of the unavoidable and unpleasant evils that go with the business.

But poultry manure has a very real value, and may become a profitable by-product of the plant. It has been determined by the Maine Experiment Station, working in co-operation with the United States Department of Agriculture, that the average night droppings of the medium breeds amounts to 30 pounds a year for one fowl. On this basis 100 fowls would produce 3,000 pounds, or one and one-half tons. The analyses of this manure show it to be especially high in two of the three principal fertilizing elements. If the plant food contained in a ton of average fresh poultry manure were bought at the price paid, usually, for it in the form of commercial fertilizers, the outlay would be about \$10.

Taking into account the fact that the quantity of manure produced in the daytime is at least equal to that produced at night, the specialists find that one average hen produces about 60 pounds of manure in a year. However, only the night droppings are available for use, as the day droppings are widely scattered over the yards and ranges. The night droppings from 1,000 hens would be worth about \$150 a year. As hen manure, as it usually is cared for, contains only about one-half its original value, the loss thru this form of neglect must be very large for the entire country.

If immediate use is resorted to, the manure should be applied somewhat sparingly. It is from two to three times richer in nitrogen and three to eight times richer in phosphoric acid than the ordinary farm manures. This, of course, is due to the kinds of feeds used, and also to the fact that the liquid and solid matter are together.

It can be handled most satisfactorily if mixed with loam to remove stickiness in the summer. In the winter it should be mixed with a fair proportion of loam, sawdust, or coal ashes, sifted dried earth, land plaster or gypsum. Wood ashes and lime should never be used, as they set free the nitrogen, which must be avoided.

Keep it in a Dry Place
To put the manure on the ground in the winter should mean to lose one-half or more of its value. The better plan is to store it in barrels or boxes until time to use on a growing crop. When stored this way the container should have several large holes bored in it to admit air. Some plants having several thousand fowls have large bins of concrete for saving this manure. Untreated, a large part of the nitrogen escapes into the air as ammonia.

The Maine Experiment Station recommends using with every 30 pounds of poultry manure 10 pounds of sawdust, 16 pounds of acid phosphate and the kaint. The acid phosphates and the kaint prevent the loss of nitrogen, and the sawdust absorbs the excess moisture. If sawdust is not obtainable, dried earth in about the same proportion may be substituted. After being treated in this way the manure should be put in a sheltered place until used. If the materials are kept handy the business of mixing soon becomes a routine task.

FERTILIZERS FOR CORN

FROM 300 to 400 pounds per acre of a 3-12-4 fertilizer is recommended for corn by Director C. G. Williams, Ohio Experiment Station, when neither a clover sod nor manure is at hand to help make the crop. If there is good clover, 300 pounds per acre of an 0-14-4 will answer, while if there is plenty of manure from 200 to 300 pounds of acid phosphate only is advised.

Keep the Business Farmer coming—See page 13.

The Cause of White Diarrhea

White Diarrhea is caused by the bacillus Bacterium Pullorum transmitted through the yolk. There is scarcely a hatch without some infected chicks. The germs multiply very rapidly and one infected chick may infect the entire brood. The germs can be killed by the use of preventives. Intestinal Antiseptics to kill the germs should be given as soon as the chicks are out of the shell. It is much easier to prevent than it is to cure.

How to Prevent White Diarrhea

Dear Sir: Last spring my first incubator chicks when but a few days old began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged. Finally, I sent 50c to the Walker Remedy Co., Dept. 683, Waterloo, Ia. for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We never lost a single chick after the first dose. We raised 700 thrifty, healthy chicks, where before we never raised more than 100 a year. I'd be glad indeed to have others know of this wonderful remedy. Ethel Rhoades, Shenandoah, Ia.

Don't Wait

Don't wait until White Diarrhea gets half or two-thirds your chicks. Don't let it get started. Be prepared. Write today. Let us prove to you that Walko will prevent White Diarrhea. Send 50c for box on our guarantee—money back if not satisfied.
Walker Remedy Co., Dept. 683, Waterloo, Ia. (Adv.)

BABY CHICKS

The most Progressive Hatchery in the country

SEX GUARANTEED

By years of experimenting we have evolved a system of sex determination. We guarantee 60% of the sex ordered. Our average is considerably higher. We guarantee 100% live delivery; bred from males whose dams have egg records of 250 to 287. Specialize S. C. White Leghorns but fill orders for any breed. Further information if asked

UTILITY HATCHERIES AND FARMS

Dept. 61
ZEELAND, MICH.

ORDER FROM THESE PRICES

Grade A chicks at 14 cents
Grade AA chicks at 15 cents
Grade AAA chicks at 16 cents
Specify pullets or cockerels. Terms cash, except on advance orders, 25% down, remainder one week before shipped.

TIMMER'S HATCHERY

Hardy, healthy Chicks from selected heavy laying flocks. WH. and BR. LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50. ANCONAS, 50, \$7.50; 100, \$14; 500, \$67.50. BARRED ROCKS and REDS, 50, \$8.50; 100, \$16.50; 500, \$80. Postpaid, full live delivery. Bank reference. Free Catalog.
Timmer's Hatchery, Route 3 A, Holland, Mich.

Hardy Northern Bred Chicks

Barron S. C. W. LEGHORNS Parks Strain BARRED ROCKS The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get quality chicks at reasonable prices from Holland's pioneer poultry farm. Catalogue free.
Pine Bay Poultry Farm, Box 56, Holland, Mich.

CHICKS

BARRON'S S. C. W. LEGHORNS, SHEPPARD ANCONAS, and BARRED ROCKS, EGGS and CHICKS FROM SELECTED STOCK
Our Leghorn flocks are headed by large vigorous males from M. A. C.; ANCONAS from Sheppard's 285 hens. Buy from an old reliable poultry farm and you will be proud to own a flock of high producing hens that will bring you a big profit. We guarantee safe delivery and prepaid shipments. Write for catalogue.
BYRON CENTER POULTRY FARM AND HATCHERY, Box R, Byron Center, Mich.

QUALITY CHICKS

White Leghorns, BARRED ROCKS, ANCONAS, 5,000 culled breeders, 12 years experience. New Smith 40,000 egg hatcher. Member Baby Chick Assoc. Send for Folder B and prices. BIG BEAVER, BIRMINGHAM, MICH.

DEAN EGG FARM & HATCHERY

Rhode Island Reds, Tompkins strain, hatching eggs and baby chicks. Eggs per hundred \$12.00; chicks per hundred \$25.00. On all orders for either stock, eggs or chicks of \$15.00 or more, I will give the Rhode Island Journal free for one year. A few good cockerels left. Quality Breeder of Rhode Island Reds, both combs.
WM. H. FROHM, New Baltimore, Mich., R. 1.

CHICKS—Exhibition and Utility

strains from America's best. W. and BARRED ROCKS, REDS, W. and BROWN LEGHORNS, WYANDOTTES, ANCONAS. Surprising prices, quality considered. 13 years hatchery experience. Catalog.
HAIGHT HATCHERY, Cedar Springs, Mich.

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

SUMMARY:

Foreign demand is the most uncertain element in the agricultural situation. Purchases by Europe have a determining influence upon the prosperity of the producers of wheat, cotton, pork and tobacco, and affect—to a lesser extent—other agricultural groups. What is the condition and outlook in regard to European purchasing power?

The principal ways in which our exports of commodities, the last two years, have been paid for, are as follows: (1) by imports of commodities; (2) by imports of gold; (3) by extending credit, particularly long-time credit through the purchase of foreign bonds. During these two years exports of goods have totaled 8,144 million dollars. Import figures for 1922 are not yet complete but, for the two years, will be close to 5,509 million dollars. This makes an excess of exports over imports of 2,635 million dollars, which was paid mainly by net imports of gold, for the two years, of 906 million dollars and the purchase of new foreign bonds of 1,463 million dollars. The situation for each of the two years was as follows:

	1922	1921
Exports of goods	3,765	4,378
Imports of goods	3,000*	2,509
Net imports of gold	238	667
New foreign loans	769	694

*Partly estimated.

Note that exports in 1922 are less than in previous year; imports are higher; net imports of gold are less; new foreign loans are slightly more. If exports of commodities are to be maintained or expanded as is desired, one or all of the other three items must be maintained or expanded. The last item in the list, namely, new foreign loans, has declined sharply in recent months, only 23 per cent of the loans for 1922 being made in the second half of the year. Net gold imports cannot be expected to continue indefinitely and there is no reason to think that they will increase in 1923. Europe is probably in a position to send

as many goods in 1923 as last year but much of an increase would be surprising. These factors, combined, point to a diminution of export demand in 1923. At least it will be conservative for farmers to lay their plans on the basis of a strong possibility that foreign demand for cotton, wheat and pork will be less than last year. This need not be true if improvement in European conditions increases production abroad and brings a return of confidence among American investors.

Cotton will start the new crop year with practically no carryover. With the price of cotton around thirty cents per pound the incentive will be strong to plant a large acreage. Also with the price high, fertilizers and poisons will be applied more generously. The weather and boll weevil may restrict output in spite of the factors tending to increase it. A crop of 12 million bales, the average for 1916-1920, would probably not prove excessive even with lower exports.

The proportion of wheat exports to production was 27 per cent in 1922 compared with 43 per cent in 1921 and 23 per cent for the twenty year average. With Russia and the Danube countries still out of the European market, the small volume going out of the United States in 1922 was disappointing. This was partly due to an excess supply in Canada and Argentina and the substitution of corn and other cheaper grains. Europe has had two short grain years in succession and will need our grain badly in 1923. With purchasing power low, Europe can be expected to continue to give preference to our cheaper grains. With wheat prices unsatisfactory, winter wheat acreage was cut three per cent and it is anticipated that the spring wheat area may be reduced.

From reports of the United States Department of Agriculture, we may conclude that the number of hogs raised for market in 1923 will be about 15 per cent larger than last year. Pork and lard exports are now making up about 15 per cent of production compared with an average around 11 per cent before the war. Exports in 1922 show a slight decline from previous year. With an indication of a large supply of pork products in 1923, larger exports than last year would seem necessary to sustain the market.

I. Production and Trade

1. Agriculture:

U. S. Production—000,000 omitted.		Average		Per cent	
Dec. 1st 1922 Estimate	1921	1916-1920	1922	1921	1920
Corn, bu.	2891	3069	2831	102	102
Wheat, bu.	856	815	799	101	101
Oats, bu.	1215	1078	1413	85	85
Barley, bu.	186	155	197	94	94
Rye, bu.	95	62	68	139	139
Buckwheat, bu.	15	14	14	107	107
Potatoes, bu.	451	362	373	128	128
Sweet Potatoes, bu.	110	99	89	123	123
Hay, all, tons.	113	98	102	111	111
Cotton, bales	10	8	12	83	83
Tobacco, lbs.	1325	1070	1378	96	96
Flaxseed, bu.	12	8	11	109	109
Rice, bu.	42	38	42	100	100
Peaches, bu.	57	33	44	129	129
Pears, bu.	19	11	14	136	136
Apples, total, bu.	204	99	179	114	114
Apples, com'l, bbls.	31	22	27	115	115
Sugar Beets, tons.	5	8	7	71	71
Cranberries, bbls.	6	4	7	150	150
Beans, bu.	12	9	13	90	90
Onions, bu.	18	14	17	105	105
Cabbage, tons	1	6	7	143	143
Sorghum Sirup, gal.	37	46	40	93	93
Cloverseed, bu.	1.9	1.5	1.5	127	127
Peanuts, lb.	624	829	1043	59	59
Hops, lb.	26	29	32	81	81

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu (1)	3,053	3,069	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	785	773	773
Oats, bu. (4)	3,003	2,759	3,008
Barley, bu. (5)	833	818	882
Potatoes, bu. (6)	3,123	2,445	3,066
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded. (2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining:

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Dec., 1922	Nov., 1922	Dec., 1921
Anthracite coal	96	99	74
Bituminous coal	85	81	59
Copper	84	87	15
Petroleum	121	119	112

3. Manufacturing:

	Dec., 1922	Nov., 1922	Dec., 1921
Wheat flour	93	102	74
Meat	98	98	77
Sugar	136	147	144
Cotton	95	106	94
Pig iron	105	92	58
Steel ingot	89	88	48
Lumber	129	79	92
Wood pulp	91	92	92
Gasoline	111	103	103
Cement	127	127	98
Wool	140	140	113

†Preliminary. *Not available.

4. Building:

Contracts awarded in 27 States:	December		Twelve Months	
	1922	1921	1922	1921
(F. W. Dodge Co.)				
Number	7,080	6,181	107,637	78,222
Value (000,000 omitted)	\$ 215	\$ 199	\$ 3,346	\$ 2,359

5. Transportation:

Freight car loadings:	Week Ending	Same Week	Same Week	Week
	Feb. 3, 1923	Month Ago	Year Ago	Ending Feb. 3, 1922*
Total	865,675	770,303	753,886	115
Grain and grain products	41,736	45,498	48,969	85
Livestock	33,675	31,686	27,998	120
Coal	189,773	187,746	185,151	102
Coke	14,199	13,028	7,844	181
Forest products	69,762	57,530	50,204	139
Ore	11,239	9,718	4,015	280
Merch. and Miscel.	505,286	425,097	429,705	118

*As percentage of week year ago.

7. Bank Clearings:

	Units of \$1,000,000,000			
	Jan., 1923	Dec., 1922	Jan., 1922	Jan., 1921
New York City	\$19.78	\$18.90	\$17.30	\$17.30
Outside New York City	17.52	16.51	13.39	13.39

8. Mail Order Sales:

	January		Seven Months Ending	
	1923	1922	January	1922
Montgomery Ward & Co.	\$ 8,477,239	\$ 5,594,153	\$ 56,261,864	\$ 47,263,497
Sears Roebuck	18,930,082	14,188,422	118,592,681	101,788,110

II. Foreign Trade

Commodity.	000 omitted		Twelve Months	
	1922	1921	1922	1921
Grand total, all exports	\$339,352	\$291,175	\$8,765,192	\$4,378,923
Beef and veal, lb.	1,942	1,702	32,686	41,009
Pork, lb.	74,955	40,394	699,618	737,756
Lard, lb.	78,596	64,542	766,950	863,942
Neutral lard, lb.	2,516	1,513	20,497	23,951
Butter, lb.	362	439	10,938	8,015
Cheese, lb.	307	439	5,007	11,772
Hides and skins	\$ 428	\$ 428	\$ 4,019	\$ 4,067
Corn, bu.	4,758	10,243	163,609	128,975
Meal and flour, bbls.	46	61	630	803
Wheat, bu.	9,676	10,451	164,692	280,058
Flour, bbls.	1,500	1,014	15,025	16,801
Oats, bu.	332	98	30,011	3,224
Meal and rolled oats, lb.	11,188	9,127	144,123	98,839
Fruits and nuts	\$8,434	5,669	75,864	70,157
Vegetable oils and fats	\$1,464	1,204	14,162	27,668
Sugar, lbs.	5,974	71,270	1,836,722	933,792
Leaf tobacco, lb.	\$6,954	\$8,772	\$30,907	\$15,353
Cotton, bales	608	640	6,114	6,474
Wool, lbs.	3	82	453	1,927

2. Imports:

Commodity.	—October—		Ten Months	
	1922	1921	1922	1921
Grand total, all imports	\$345,083	\$188,008	\$2,527,132	\$2,060,704
Beef and veal, lb.	4,504	3,562	31,502	25,595
Pork, lb.	54	226	637	661
Butter, lb.	232	1,858	2,967	14,031
Cheese, lb.	6,776	3,953	33,019	19,487
Hides and skins	\$13,487	\$5,252	\$1,915	\$6,670
Corn, bu.	3	65	100	157
Oats, bu.	8	8	1,279	3,146
Wheat, bu.	2,566	878	16,887	2,685
Fruits and nuts	\$ 8,724	\$ 9,114	\$ 57,703	\$ 52,577
Vegetable oils, fats	\$ 5,166	\$ 3,140	\$ 50,987	\$ 31,297
Sugar, lb.	432,456	362,079	3,866,467	5,109,581
Leaf tobacco, lb.	6,285	908	57,841	42,052
Cotton, bales	28	33	386	473
Wool, lb.	25,261	9,086	303,894	297,200

3. Prices of Foreign Drafts:

Nominal Gold Value	Price of Demand Drafts			
	Feb. 19, 1923	Jan. 22, 1923	Feb. 20, 1922	Feb. 20, 1921
England	\$4.87 to 1 £ Sterling	\$4.70	\$4.66	\$4.39
France	19.83c to 1 franc	6.06c	6.34c	9.15c
Germany	23.8c to 1 mark	0.05c	0.05c	0.45c
Belgium	19.3c to 1 franc	5.33c	5.67c	8.68c
Italy	19.3c to 1 lire	4.80c	4.72c	5.03c
Spain	19.3c to 1 peseta	15.65c	15.62c	15.94c
Austria	20.3c to 1 crown	0.014c	0.014c	0.275c
Denmark	26.8c to 1 crown	19.18c	18.68c	20.73c
Norway	26.8c to 1 crown	18.56c	18.64c	17.0c
Sweden	26.8c to 1 crown	26.62c	26.86c	26.55c
Holland	40.2c to 1 florin	39.56c	39.50c	38.05c
Argentina	42.5c to 1 peso	37.2c	39.25c	36.56c
Brazil	32.4c to 1 mileris	11.55c	11.45c	13.66c
India	48.7c to 1 rupee	31.75c	32.25c	28.75c
Japan	49.9c to 1 yen	48.45c	48.85c	47.37c
Canada	100c to 1 dollar	98.81c	99.13c	97.0c

4. Discount Rate of the Bank of England:

	Feb. 14, 1923	Month Ago	Year Ago
3%	3%	3%	5%

III. Money and Credit

1. Gold, Currency and Bank Deposits:

000,000 omitted	Jan. 1, 1923			Dec. 1, 1922			Jan. 1, 1922		
	1923	1922	1921	1922	1921	1920	1921	1920	1919
Stocks of monetary gold in the United States	\$ 3,943	\$ 3,909	\$ 3,657						
Total supply of currency in the United States	4,733	4,617	5,775						
Total deposits in National Banks	\$16,599	\$16,321	\$14,561						
Deposits in New York City banks	\$ 4,000	\$ 3,850	\$ 3,910						

2. Gold Movement:

000 omitted	December		Twelve Months	
	1922	1921	1922	1921
Exports of gold	\$ 2,710	\$ 2,162	\$ 36,875	\$ 23,891
Imports of gold	26,440	31,666	275,170	691,248

3. Federal Reserve Ratio:

	Feb. 14, 1923	Jan. 17, 1923	Feb. 15, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities combined	75.3%	76.1%	76.4%

4. Interest Rates:

	Jan., 1923	Dec., 1922	Jan., 1922
4-6 mos. commercial paper	4.72%	4.88%	5.15%
60-90 days commercial paper	4.40%	4.62%	4.90%



MARKET FLASHES



FOOTE'S MARKET LETTER

By W. W. Foote

THE cost of living is increasing and is much higher than a year ago, and farmers are complaining of their great increase in taxes above pre-war years, while their farm profits have been far lower. A matter of interest to dairy farmers is the recent arrival in New York of a cargo of 5,320,000 pounds of butter from New Zealand, and the arrival the same day of 2,500,000 pounds of poultry in the same city from California, both by way of the Panama Canal. It was stated at the same time that a fleet of butter carrying ships was on the sea carrying nearly 10,000,000 pounds of New Zealand butter destined for consumption in this country, and predictions were made that it would force prices for domestic butter lower. According to an agreement between the Chicago milk distributors and the milk producers association, composed of dairy farmers in Illinois, Wisconsin and Indiana, the wholesale price fell ten cents per hundredweight a few days ago, the new rate to be in force until the first of May. The new price of milk for twelve gallons of milk fell from \$2.50 to \$2.40. No reduction was made in prices to consumers.

Grain on Farms

Reserves of grains on farms in the United States on March 1 aggregated 1,706,000 bushels of wheat, corn, oats, rye and barley, as given by the government report, being 187,000,000 bushels less than last year and 822,000,000 bushels under two years ago. It is estimated that reserves are ample for domestic and normal export requirements until the next crops. An increased percentage of the wheat crop was moved from the farms this season, this amounting to 67.1 per cent, comparing with 61.7 per cent last year and a ten years average of 57.7 per cent. One-third of the wheat reserves are held in the four northwestern states, amounting to 51,706,000 bushels, of 24,700,000 bushels more than last year. Corn supplies on the farms of 1,087,000,000 bushels were 210,000,000 bushels less than last year and 477,000,000 bushels less than two years ago. A heavy consumption of oats is shown by reserves of 421,514,000 bushels.

Prices for wheat hold up remarkably, although sales are made far below the prices paid one and two years ago. Sales are made of May delivery wheat in the Chicago market around \$1.20, comparing with \$1.37 a year ago. May corn sells at 74 1-2 cents, comparing with 62 1-2 cents a year ago; May oats at 45 cents comparing with 39 1-2 cents last year; and May rye at 83 3-4 cents, comparing with \$1.06 1-2 a year ago.

Cattle in Moderate Demand

The only way that will keep prices for cattle from declining is for stockmen to market their holdings moderately, avoiding large shipments at one time. Many more cattle are reported as feeding in the corn belt than a year ago, and because of the comparative cheapness of hog products, they are largely substituted for beef. The present tendency of cattle prices is to narrow, very few prime beefs being needed to meet the demand, and late sales of beef steers offered on the Chicago market were largely at a range of \$7.75 to \$9.50, with the best lots at \$9.50 to \$10, a few head of 1135-pound long yearlings fetching \$10.40. Steers grading as good are salable at \$9 and over, medium grade lots going at \$8 and over, and sales down to \$6.40 to \$7.75 for common to fair lots of light weights, a few inferior little steers fetching \$4.25 to \$6.25. The packers compete with country buyers for fleshy feeders, a moderate business being carried on in stockers and feeders at \$5.25 to \$8.40, sales being principally at \$6 to \$7.75. Most stockmen hesitate about loading up with thin cattle at high prices, as they are afraid of the future market for finished cattle. Spring calves have been marketed liberally, causing bad breaks in prices, with recent sales at \$5 to \$11.50. Prime heavy steers and fair yearlings sell at

MARKET SUMMARY

Wheat steady. Corn and oats unchanged. Beans quiet after small decline on opening day of week. Supply of butter moderate and demand good. Receipts of eggs exceed demand. Potatoes firm. Poultry steady. All live stock steady to active and higher.

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

\$10. Most cows and heifers sell at \$4.50 to \$6.50, prime heifers going at \$8 to \$8.75. A year ago the best steers sold at \$9.40 and eight years ago at \$8.75.

Excessive Hog Supplies

Stockmen owning hogs and cattle are marketing rapidly, being opposed to a long feed, and hog receipts are especially large, causing frequent declines in prices. Eastern shippers are purchasing a much smaller proportion of the swine offered on the Chicago market than several weeks ago, and lack of competition between buyers has favored the decline in prices. Comparisons with prices pair a year ago show a big decline, the top at that time having been \$11.50, the high point for 1922, but last November the best hogs sold down to \$7.85. There has been a marked increase in the marketing of pigs and underweights, and the spread in prices has narrowed materially, the bulk of the hogs selling within a range of 35 cents. Prime light bacon hogs still top the market, selling 25 cents above the best heavy butchers. Recent Chicago receipts of hogs averaged 229 pounds. The principal bullish factor in the hog trade is the extremely large consumption of lard and fresh and cured meats at home and abroad, exports continuing much heavier than a year ago. During last week Chicago received 215,650 hogs, comparing with 194,865 a week earlier and 150,798 a year ago. And yet the good demand put prices higher, closing sales being made at \$7.25 to \$8.65, comparing with \$6.90 to \$8.45 a week earlier and \$9.50 to \$11.30 a year ago.

Early Spring Lamb Supply

The early spring lamb supply available for the markets of the country promises to be materially larger than to start to market earlier than last year, according to the Bureau of Agricultural Economics. This applies to lambs which go to market before the first of June. California lambs are expected to arrive in the markets in large volume in April, while marketing from the southwest will not be well under way until May. Marketings from Tennessee and Kentucky for April and May promise to be larger than last year and about the same as in 1921. Last fall the number of breeding ewes in those two states was estimated as 7 per cent larger than a year earlier, and earlier breeding than usual was the rule. Lambs from Virginia will move later than the Tennessee and Kentucky flocks. Such states as Iowa, Illinois, and southern Ohio begin marketing lambs in June. These lambs are dropped mostly in February and March. Ewes generally wintered well, and are in good condition all over the corn belt, feed being plentiful. Shed lambs dropped in February and March in Idaho begin to go to market in June. Woolled lambs are selling in Chicago at \$12.75 to \$15.25. The University of Wisconsin had a car load of superior fed western lambs that averaged 87 pounds on the Chicago market recently that sold at \$15.25, the top price. Sheep are making much more money on the Wisconsin farms than either cattle or hogs, both lambs and wool selling extremely high. Shropshires lead other breeds, but Cheviots are becoming more popular in parts of Wisconsin.

WHEAT

Prices in the wheat market fluctuated considerably during the past two weeks. The forepart of this period the trend was downward and during the last week prices have advanced until at Detroit they closed last Saturday within 1-2c of the closing

price on the same market two weeks previous. During the entire time the news circulated about the market was very bearish, but it appears that bearish news has been used so long to bear the market that it is losing influence on prices. The wheat outlook, as far as present wheat is concerned, could not be much more bearish, but that has been the case for a long time and no attention is paid to it. Strength is coming from the new crop outlook, which is far from favorable. The southwest needs rain and any precipitation in recent days has not been over the dry districts. This is the most important point in the grain situation and will be for some weeks or until spring weather has definitely developed the strength of the plant.

Foreign news is more favorable to the constructive side of wheat, but export buying has not yet given much evidence of returning life. Some bullish dealers believe they see an early end of the Ruhr trouble. The invasion of Germany by France is held as the reason why Europe is not buying American wheat and it is believed the buying would be resumed should the French settle up and go home. Foreigners took about half a million bushels of durum wheat last week, buying it at Minneapolis. James A. Patten says: "I believe that the whole question of a continued movement back to general prosperity rests upon a return to the former relation between the price of farm products and such commodities as the farmers need to buy. I regard corn as the keystone of the agricultural arch and fortunately every condition appears present for a price range for the rest of the year that will do much toward restoring the farmer to his position of the greatest element of purchasing power in our population."

Prices

Detroit—Cash No. 2 red, \$1.35½; No. 2 white, \$1.35½; No. 2 mixed, \$1.35½.
Chicago—Cash No. 2 hard, \$1.19½ @ 1.20½; No. 3 hard, \$1.19.
New York—Cash No. 2 hard, \$1.34; No. 2 mixed, \$1.25.
Prices one year ago—Detroit, No. 2 red, \$1.37; No. 2 white, \$1.34; No. 2 mixed, \$1.34.

CORN

Corn showed more strength on the closing day of last week than probably at any time during the past two weeks and considerable grain changed hands as demand was active and selling of good volume. Bearish news has dominated the market recently but a bullish statement was given out that offsets the bearish influence. Mr. James A. Patten, in discussing the domestic needs after March 1 to the new crop, stated that our present corn reserve of 1,089,000,000 bushels is short by 119,000,000 bushels of our actual consumption during the last two years. Receipts are smaller than expected.

Prices

Detroit—Cash No. 2 yellow, 79c; No. 3, 77c; No. 4, 75c; No. 5, 73c.
Chicago—No. 2 mixed, 74 @ 74½c; No. 2 yellow, 74½ @ 75½c.
New York—No. 2 yellow & No. 2 white, 93c; No. 2 mixed, 92½c.
Prices one year ago—Detroit, No. 2 yellow, 64½s; No. 3, 63c.

OATS

Oats are quiet and steady with the Detroit price at the same level as two weeks ago. Cash oats are reported in good demand.

Prices

Detroit—Cash No. 2 white, 49½c; No. 3, 48c; No. 4, 46½c.

Chicago—Cash No. 2 white, 46 @ 46½c; No. 3, 44 @ 45½c.
New York—Cash No. 2 white, 56c.
Prices one year ago—Detroit, Cash No. 2 white, 42c; No. 3, 40c.

RYE

Demand in the rye market is light. Export business is at a standstill and indications are that it will remain that way until some kind of a settlement is arrived at in the sections where war threatens. Domestic demand is very light and has been for some time. The future trend of rye will depend much on what the other grains do.

Prices

Detroit—Cash No. 2, 84½c.
Chicago—Cash No. 2, 83½c.
New York—Cash No. 2, 96c.
Prices one year ago—Detroit, Cash No. 2, \$1.02.

BEANS

The bean market continues steady in tone with prices unchanged. Trading is rather quiet at present but it is expected to show more activity soon.

Prices

Detroit—C. H. P., \$7.75.
Chicago—C. H. P., \$8.00 @ 8.25.
Prices one year ago—Detroit, C. H. P., \$6.65.

POTATOES

Potatoes are firm in spite of the fact that receipts are in excess of the demand. Prices are higher at many points than they were two weeks ago. Receipts on western markets are small while markets in the east are plentifully supplied. Dealers are inclined to be backward about buying more than for immediate needs as they feel that prices should go lower.

Prices

Detroit—Michigan, \$1.17 @ 1.33 per cwt.
Chicago—Wisconsin round white, 90c @ 1.00 per cwt; Idaho russets, \$1.15 @ 1.35.
Prices one year ago—Detroit, Michigan, \$2.06.

HAY

Markets have been steady with a decidedly stronger feeling in the central western section. The stormy weather had a strengthening effect on most markets as the demand picked up and arrivals delayed. The eastern terminals report slightly larger receipts and prices have softened a trifle from a week ago.

Prices

Detroit—No. 1 timothy, \$16 @ 16.50; standard, \$15.50 @ 16; light mixed, \$15.50 @ 16; No. 2 timothy, \$14 @ 15; No. 1 clover mixed, \$13 @ 14; No. 1 clover, \$13 @ 14.
Chicago—No. 1 timothy, \$21 @ 23; light mixed, \$18 @ 19; No. 2 timothy, \$17 @ 19; No. 1 clover, \$13 @ 15.
New York—No. 1 timothy, \$27 @ 28; No. 2 light mixed, \$24 @ 26; No. 2 timothy, \$25 @ 26.
Prices one year ago—Detroit, No. 1 timothy, \$19 @ 20; standard, \$18 @ 19; No. 2 timothy, \$17 @ 18; No. 1 light mixed, \$18 @ 19.
Alfalfa—Chicago, No. 1 and choice, \$23 @ 25; No. 2 standard, \$15 @ 19.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Mar. 13th

APPLES—Greenings, \$1.60; Baldwins, \$1.65 @ 1.90; Spy, \$2 @ 2.50; other varieties, \$1.50 @ 1.75 per bu; western boxes, \$2 @ 3; in barrels, Greenings, \$5.25 @ 5.50; Baldwins, \$5.50 @ 6.
HONEY—Comb, 23 @ 25c per lb.
POPCORN—4 @ 4½c; Little Bustler, 7½ @ 8c per lb.
DRESSED CALVES—Best, 15 @ 16c; medium, 13 @ 14c per lb.
DRESSED HOGS—90 to 130 lbs., 11 @ 12c; 130 to 169 lbs., 9 @ 10c; heavy, 5 @ 8c per lb.
LIVE POULTRY—Best chickens, 26 @ 27c; leghorns, 22 @ 24c; stags, 24c; medium and large hens, 26 @ 27c; small hens, 24c; roosters, 17c; geese, 20c; ducks, 30c for large and 27 @ 28c for small per lb.
BUTTER—Best creamery, in tubs, 47 @ 47½c per lb.
EGGS—Fresh, 26 @ 26½c per doz.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay. LAPHAM FARMS, Pinckney, Mich.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets \$2.50 each; cockerels \$3.00 to \$5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

YOUNG AND WYCKOFF WHITE LEGHORNS Selected hatching eggs \$2.00 a setting. Prepaid circular. F. Arthur Martin, Indian River, Mich.

PEDIGREED S. C. ENGLISH W. L. COCKERELS. Egg record 275 to 300 each \$2.00. JOHN W. MORGAN, Yale, Mich.

WYANDOTTES

FOR SALE—HEIMBACH'S WHITE WYANDOTTES. Few A1 cock birds and cockerels. Hatching eggs in season. Write for prices. C. W. HEIMBACH, Big Rapids, Mich., R. 5.

FOR SALE—PURE BRED PARTRIDGE WYANDOTTES cockerels and hatching eggs. For immediate delivery, send for prices. FRED RIERSON, R. 5, Bronson, Michigan.

WHITE ROCKS—HEAVY LAYERS—CHOICE Quality. Guaranteed eggs, 15, \$1.50; 50, \$3.50; 100, \$6.50. Prepaid. MRS. FLORENCE HOWARD, Petersburg, Mich.

WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching. WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs \$2.50 per 15. C. W. BROWNING, Portland, Michigan.

PLYMOUTH ROCK

BUFF ROCK EGGS BY 10 LB. MALES O., winners. Hogan tested hens, heavy layers. J. C. CLIPP & SONS, Box M, Sault Ste. Marie, Ind.

BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices. TOLLES BROS., R. 10, St. Johns, Mich.

BARRED ROCKS, EGGS AND BABY CHICKS from Silver Cup winners and Champion Winter Layers. Eggs \$2 per 15 and Chicks from 18c up delivered. Circular free. FRED ASTLING, Constantine, Michigan.

JOHN'S BIG BEAUTIFUL BARRED ROCK COCKERELS, light and dark color. Sold on approval. \$3.00 to \$6.00 each. Circulars. JOHN NORTON, Clare, Michigan.

THOMPSON HEAVY LAYING BARRED ROCK EGGS. \$1.75-15, \$3-30. Dark matings. MRS. FRED KLUMP, St. Charles, Michigan.

BARRED ROCK COCKERELS, NORMAN Strain, shipped on approval, express paid. MRS. JESSIE C. DEAN, R. 1, Mason, Mich.

BARRED AND WHITE ROCK HATCHING eggs for sale from exhibition utility stock. Farmers' prices. Dawson's Farm, R. 4, Muskegon, Mich.

FOR SALE—FINE COCKEREL \$2.50 FROM Shoemakers. Also 7 months old Belgian Hares, \$5.00 a pair. C. STRONG, Essexville, Michigan.

ORPINGTONS

BUFF ORPINGTON COCKERELS. Cooks strain. A. J. BREWBAKER, Elsie, Mich.

PURE BRED BUFF ORPINGTON EGGS AT \$2-15; \$5.50-50. Prepaid. MRS. ANNA LA NOUE, Fostoria, Michigan.

RHODE ISLAND REDS

FOR SALE—S. C. RHODE ISLAND RED COCKERELS. Pure bred, Mankood strain. Vigorous, dark, large red birds. Price \$3 apiece or 2 for \$5.00. ALFRED DEICHMANN, R. 3, Pigeon, Michigan.

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, \$6.00 per 100. Limited number of chicks, \$19.00 per 100. EDWARD CRYDER, Alamo, Mich.

TURKEYS—DUCKS—GEESE

BOURBON RED TURKEYS UNRELATED STOCK. Eggs in season. THOS. G. CALLAGHAN, Fenton, Mich.

BIG BRONZE TOMS BY 45 LB. YEARLING 1st Cincinnati, O. Winner. J. C. CLIPP & SONS, Box M, Sault Ste. Marie, Ind.

FINE VIGOROUS BOURBON RED TOM 2 years old. Evans' strain. MARY BEACOM, Marquette, Michigan.

MAMMOTH BRONZE TURKEYS. TOMS 13 lbs. \$20, hens 10 lbs. \$15. Eggs \$8 for 10. Ralph Wise Nurseries, Box 181, Plainwell, Mich.

FOR SALE: ONE PURE BRED DARK MAMMOTH Bronze Gobbler at \$12. Also six turkey hens at \$7 each. MRS. BERTHA HALLADAY, Ashton, Michigan.

FOR SALE—GIANT BRONZE TURKEYS FROM Michigan's best strains. Large healthy birds. MRS. LAVERNE BROWNELL, R. 1, Belmont, Mich.

FOR SALE—WHITE HOLLAND TURKEYS. Write for prices. MRS. DON ROSS, R. 3, Marquette, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING \$2.00 or two settings \$3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. Cedar Bend Farm, Okemos, Mich.

WOOL

Wool prices in the middle west remain on a steady to firm basis, with trading of good character, though not of very large volume, on account of the shortage of stocks. Reports from the west indicate that growers are inclined to hold for good prices, better financing arrangements and the general feeling of optimism being factors in this tendency. Throughout the country the trade seems to feel confident that wool prices will be steady to firm this spring season.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C.—For the week ending March 10, 1923.

FEED—Demand quiet. Deliveries of wheat feeds by flour mills heavier and track stuff is available in Minneapolis. Cottonseed meal market weak; transactions small. Exporters bid \$46.50 for slab cake delivered Gulf Ports. Fair feeding demand from west. Hominy feed offerings exceed demand and prices are easier. Gluten feed unchanged, demand fair, production heavy. Linseed meal in liberal supply at lower prices. Interior demand fair. Storage stocks of wheat feeds good. Movement light. Quoted March 9—bran, \$28.25, middlings \$28.50, flour middlings \$30, Minneapolis; 36 per cent cottonseed meal \$40.50, Memphis, \$41.50 Atlanta; 34 per cent linseed meal \$47.75, Minneapolis; \$48.75 Buffalo; gluten feed \$42.65 Chicago; white hominy feed \$29 St. Louis, \$29.50 Chicago.

Why are we buying western apples by the pound, when our own Michigan apples rotted on the trees last fall?



Week of March 13

MILD weather coming at the end of last week or beginning of this will be followed by a cold wave, temperatures falling to between 10 and 15 degrees above zero on or before Tuesday the 20th. Heavy local rains will change to sleet and snow which is liable to cause local hinderances to traffic or communication. The winds at this time will also be high.

About Wednesday temperatures will begin to moderate rapidly in this state and during Thursday or Friday one may expect showers or snow flurries.

At the end of this week there will be another change to colder but we do not believe it will be as severe as the previous low temperature period.

Week of March 25

Cold, fair days and nights will be the rule during early part of this week but by Tuesday or Wednesday light rain or snow will be in evidence in Michigan. Unsettled conditions will continue for the balance of the week but we believe there will be about or a little above the average amount of clear sky, notwithstanding.

Beet Sugar Outlook

The outlook for the Michigan sugar beet sugar content is fairly promising judging by what we believe the weather will be during the coming summer and fall. It will not be however, the best kind of a sugar beet year for all parts of the state.

While the rainfall will be heavier during some of the summer months than others, we believe June, July, August and September as a whole will average about normal.

We estimate that a very late planting of sugar beets in Michigan will produce a greater tonnage than the early seeded crop and that the sugar content will be equally as good.

FOUR TOULOUSE GEESE FOR SALE. ONE year old this Spring. MRS. JOHN BLOCHER R. 3, Woodland Mich.

HATCHING EGGS

S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs \$1.50 per 15; \$4.00 per 50; \$7.00 per 100. Prepaid. Limited supply. Order from this ad now. MAPLEWOOD POULTRY FARMS C. W. BESS, Prop. North Star, Michigan.

ARMY GOODS SALE

SEND NO MONEY. Examine goods and if you are not convinced that you have more than your money's worth we will gladly return your money. Don't delay. Order now before the article you want is sold out. PAY ON ARRIVAL

CAMPAIGN HATS

99c PLUS POSTAGE. Order by No. 9X GIVE SIZE



U. S. Army Campaign Hats made of pure wool felt. A very serviceable and practical hat for farmers, campers and Boy Scouts. The best grade of wool felt was used in making these hats. Sizes 8 1/2 to 7 1/4. Easily worth twice our price of 99c plus postage.

ARMY KHAKI COATS

39c Plus Postage. Order by No. 17X

ONLY SIZES 32 to 37 \$2.00 would not duplicate this value. U. S. Army Khaki blouses, slightly used but in perfect condition, in fact practically as good as new. Made of fine material, with four pockets. Sizes 32 to 37. Order yours at the low price of 39c Plus Postage.

100% PURE WOOL JERSEY

\$1.39 Plus Postage

Men's pure wool worsted yarn jersey sweaters at a price below manufacturing cost. Elastic knit wrists, slipover style with y neck in maroon, khaki, gray, old gold, black or orange. Sizes 34 to 44. At this price they will all be sold in a hurry, and we advise you to mail your order at once.

All Wool O. D. Trousers

\$2.49 Plus Postage. Order by No. 13X

U. S. Army O. D. wool serge, Yankee pants well tailored. Made of excellent quality 14 oz. wool serge and melton without cuffs. Have four pockets made of extra heavy drill as the trousers are a bit stitched throughout. They are worth at least \$6.00. Sizes 30 to 36. While they last only \$2.49 plus postage.

U. S. SALVAGE CO., Wabash St., B, Cor. 10th, St. Paul, Minn.

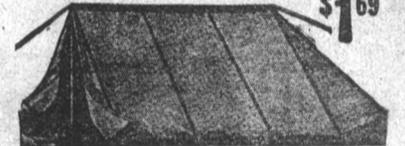
GUARANTEED TO WEAR \$289 ONE YEAR

Plus Postage



U. S. Army Field shoes, at less than one-half the price originally paid by the government. Made of the best leather obtainable, soft toe, bellows tongue; glove finish inside; solid leather counter, steel heel plates, hub nails in sole and heel. Three full super quality soles, all most impossible to wear them out. Sizes 8 to 11 1/2. Special Price \$2.89 plus postage.

ARMY PUP TENTS



Regular United States Army issue Pup Tent consisting of two shelter halves. Everyone knows the quality of regular army issue tents, waterproof and of best, longest wearing material. Tent is large enough to hold two people. At \$1.69 they are a wonderful bargain.

Genuine Army Wool Shirts

\$2.39 Plus Postage. Order by No. 7X

This is the most wonderful shirt value that has been offered on the market. They are neatly tailored, cut full. Made of the finest gray wool material; with reinforced elbows; lined chest; large breast pockets with flaps. If this shirt were to be manufactured today it would cost at least \$4. Sizes 15 to 17 1/2.

KHAKI SHIRTS

89c Plus Postage. Order by No. 14X

U. S. Army style khaki cotton shirts. Think of it—only 89c for this splendid khaki shirt, full cut, perfect fitting; has large breast pocket. Sizes 14 1/2 to 17. Our price—89c

BREEDERS DIRECTORY (Continued on page 23.)

SWINE DUROCS

SENSATION MARS! Our new herd boar. Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar. SCHAFER BROS., Route 4, Oxford, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us. INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

DUROC JERSEY BOARS READY FOR SERVICE. Sired by Fannie's Joe Orion \$25 each. Will ship C. O. D. Write us now. H. E. LIVERMORE & SON, Romeo, Mich.

O. I. C.

O. I. C. BIG TYPE GILTS FALLOWED MAY 15th. 22 weighing 300 lbs. Bred to Leighty Monster, an outstanding boar. We have been breeding and shipping O. I. C.'s for 20 years. NEWMAN'S STOCK FARM, Marquette, Michigan.

REGISTERED O. I. C. BRED GILTS FOR sale. Weighing 250 lbs. A few fall sows. J. R. VAN ETEN, Gifford, Mich.

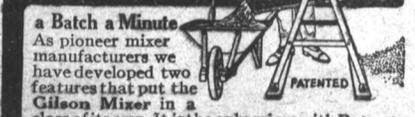
CHESTER WHITES

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

HAMPSHIRE

HAMPSHIRE—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be too late. 1923 year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

No Other Mixer Like It



a Batch a Minute. As pioneer mixer manufacturers we have developed two features that put the Gilson Mixer in a class of its own. It is the only mixer with Patented Reverse Unloading Gear and Curved Mixing Blades, insuring thorough mixing in shortest time. Loads on one side, dumps on the other side.

Gilson 30 Days FREE Easy Terms

Due to the special Curved Mixing Blades the Gilson thoroughly mixes in 1/4 the time required by the ordinary type of mixer. Handles 2 1/2 to 3 cubic feet of concrete at one time at the rate of one batch per minute. Turns out 34 cubic yards in ten hours. Mixes perfectly concrete, mortar or plaster. Any I. H. P. Engine turns it easily.

Only \$43.50 DIRECT TO YOU. The lowest priced, practical, improved mixer made. Built of iron and steel—lasts a lifetime. Ideal for farmer or contractor. Mixes concrete that requires no replacements, no repairs. Use this mixer 30 days at our risk. We guarantee it exactly as represented. Send your name today and get full description of this, the only Reverse Unloading Gear Mixer, and easy payment plan.

FREE Circular Explains Two Greatest Mixer Improvements of the Age. Gilson Mixer Co. 735 7th Avenue West Bend, Wisconsin

CHOICE MAMMOTH PEKIN DUCK EGGS, \$1.50 per setting. MRS. HAROLD SIMMS, Holly, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always. C. E. McNEILL & CO., 825 W. So. Water St., Chicago, Ill.

Sharood First Spring Styles Sharood

At Lowest Prices in America

Women's "Stylish Stout" Voile Dresses \$2.98

A very beautiful tunic model in "stout" voile dress of graceful, slenderizing lines, for stout women. Made of good quality polka dot voile with tunic overskirt attractively trimmed with pretty organdy collar and cuffs. You will pay much more for a dress of equal value elsewhere. Better get your order in early. Sizes 39 to 53. State size wanted. Choice of colors. No. 96E681, Black; No. 96E6812, Navy; No. 96E6813, Brown. Send no money. Pay only \$2.98 and postage on arrival.



All Wool Polo Coat For Women and Misses \$4.98

Made of genuine all wool polo with beautiful large collar with two rows of stitching and novelty buttons. Has inverted pleat in the back like the best made coats and two novelty pockets, button trimmed. 34 inches in length. Comes in colors of beautiful Reindeer tan and open. Misses' sizes, 14 to 20. Women's sizes 34 to 44. Order Tan by style No. 96E690. Order Open by style No. 96E6901. Send no money. Pay only \$4.98 and postage on arrival.



GUARANTEED SIX MONTHS' WEAR U.S. Army Shoes For Men and Boys \$2.98

Men: Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth \$5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent slipping. Sizes 7 to 11, wide widths. Order by No. 96A699. Send no money. Pay \$2.98 and postage on arrival.

Boy's Guaranteed Shoes—Six months guarantee. Barnyard acid-proof. Two green chrome leather soles, same feature quality points as shoe above. Made on Munson type army last. Barnyard acid-proof. Sizes 1 to 5½. Wide widths. Send no money. Order by No. 96A550. Pay \$2.69 and postage on arrival.



Send No Money Pay On Arrival

Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain return the goods and your money will be cheerfully refunded. ORDER NOW.

Women's Patent Leather or Brown Calf Finish Pumps \$1.98

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. Order patent leather by No. 96A72. Order brown calf finish by No. 96A73. Send no money. Pay \$1.98 and postage on arrival.



Fleur de Lis Colonial Slipper \$1.98

The newest style patent leather slipper. The popular Colonial model. Has shiny metal buckle and graceful Fleur de Lis Colonial tongue. Tongue, toe and slipper top are perforated; live rubber heels. Slippers like this are selling in cities for twice what we are asking. We guarantee they will please you. Sizes 2½ to 8. Wide widths. State size wanted. Send no money. Order by No. 96A106. Pay \$1.98 and postage on arrival.



Women's Patent Leather Gun Metal or Brown Calf Finish Oxfords \$1.98

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. Order Patent by No. 96A64. Order gunmetal by No. 96A69. Order brown by No. 96A70. Send no money. Pay \$1.98 and postage on arrival.



Men's Boots—Bargains \$2.98

Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually sells at \$5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to 12. Wide widths. No half sizes. Order by No. 96A949. Send no money. Pay \$2.98 and postage on arrival.



Here is good fortune for Sharood customers. Positively the season's newest merchandise, the latest fashions—all priced far below what you would pay anywhere else in the U. S. A. Now, folks, you can dress right up in the newest creations—be proud of yourself—and still save real money by ordering from Sharood. These are rare bargains and we advise your early buying. Every item a money-saver.

Women's Soft Kid Strap Slipper \$1.49

Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. In Black or Brown. Sizes 2½ to 8. Wide widths. Black by No. 96A228. Brown by No. 96A229. Send no money. Pay \$1.49 and postage on arrival. State size.



Women's Stitchdown Oxfords Brown Calf Finish \$1.98 UP

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark mahogany leather. Smooth leather insoles. Flexible stitched-down oak out-soles. Low rubber heels. Sizes 2½ to 8. Wide widths.



Men's, Boys' and Little Boys' Scout Shoes \$1.59 UP

Reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. wide widths.



\$1.98 and postage on arrival. Order little boys' sizes 9 to 13½ by No. 96A566. Price \$1.59. Order big boys' sizes 1 to 6 by No. 96A564. Price \$1.79. Pay bargain price and postage on arrival. State size.

Men's Four-Buckle All Rubber Arctic \$2.49

Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow-excluding tongue. Furnished in men's sizes 6 to 15. Wide widths. Sensational value. Send quick. Order by No. 96A990. Send no money. Pay \$2.49 and postage on arrival.



2 Pretty Aprons for the Price of One 2 for only 79c

Favorite Polly Prim Apron. One apron is of rich checked material and the other of a very pretty striped pattern. Both have long flowing sashes, two pockets. Trimmed throughout with rickrack. A wonderful bargain that you could not duplicate if you tried to make these aprons yourself. Order the combination, two aprons as illustrated by No. 96E6009. Send no money. Pay only 79c and postage on arrival.



Misses' Khaki Outfit \$1.98

This is beyond a doubt the greatest offer of this type that you have ever had the good fortune to see. Never have we been able to make such radical reductions in face of a rising market. This Khaki outfit will give good service. It is made for rough wear. The suit consists of tailored middie with long sleeves and sailor collar. Has tie loop in front. Knickers are made with fitted waistband, side openings trimmed with buttons and two front slash pockets. Fitted knee bands. This popular sport garment was designed for the up-to-date Miss. Don't fail to profit by this amazing offer. Ages 14 to 20 years. No. 96E6800. Send no money. Pay \$1.98 and postage on arrival. State size.



Brand new Standard Tires GUARANTEED 6,000 Miles 30x3 \$6.35

Fresh stock of heavy, non-skid tires of liverubber. Generously oversized, 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or rib tread in 30x3 size. Others are non-skid. Pay only bargain price listed below and postage on arrival.

Bargain Price List

No. 96D4040—30x3	\$6.35
No. 96D4041—30x3 ½	7.35
No. 96D4042—32x3 ½	9.35
No. 96D4043—31x4	8.95
No. 96D4044—32x4	11.95
No. 96D4045—33x4	12.25
No. 96D4046—34x4	12.95

5,000 Mile Guarantee

Sharood's Junior Cord, 30x3 ½ Same sturdy construction as regular cord but not oversized. A wonder-service tire for Fords. Order by No. 96D4090. Send no money. Pay only \$8.98 and postage on arrival.

Guaranteed Inner Tubes

Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices to go up. How many shall we send?

Bargain Price List

No. 96D4020—30x3	\$4.09
No. 96D4021—30x3 ½	4.25
No. 96D4022—32x3 ½	4.39
No. 96D4023—31x4	4.75
No. 96D4024—32x4	4.99
No. 96D4025—33x4	5.19
No. 96D4026—34x4	5.79