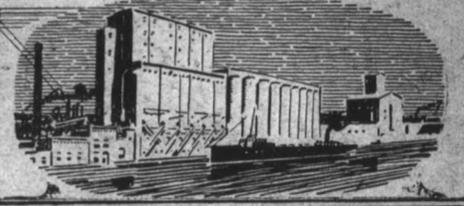


The Michigan BUSINESS FARMER



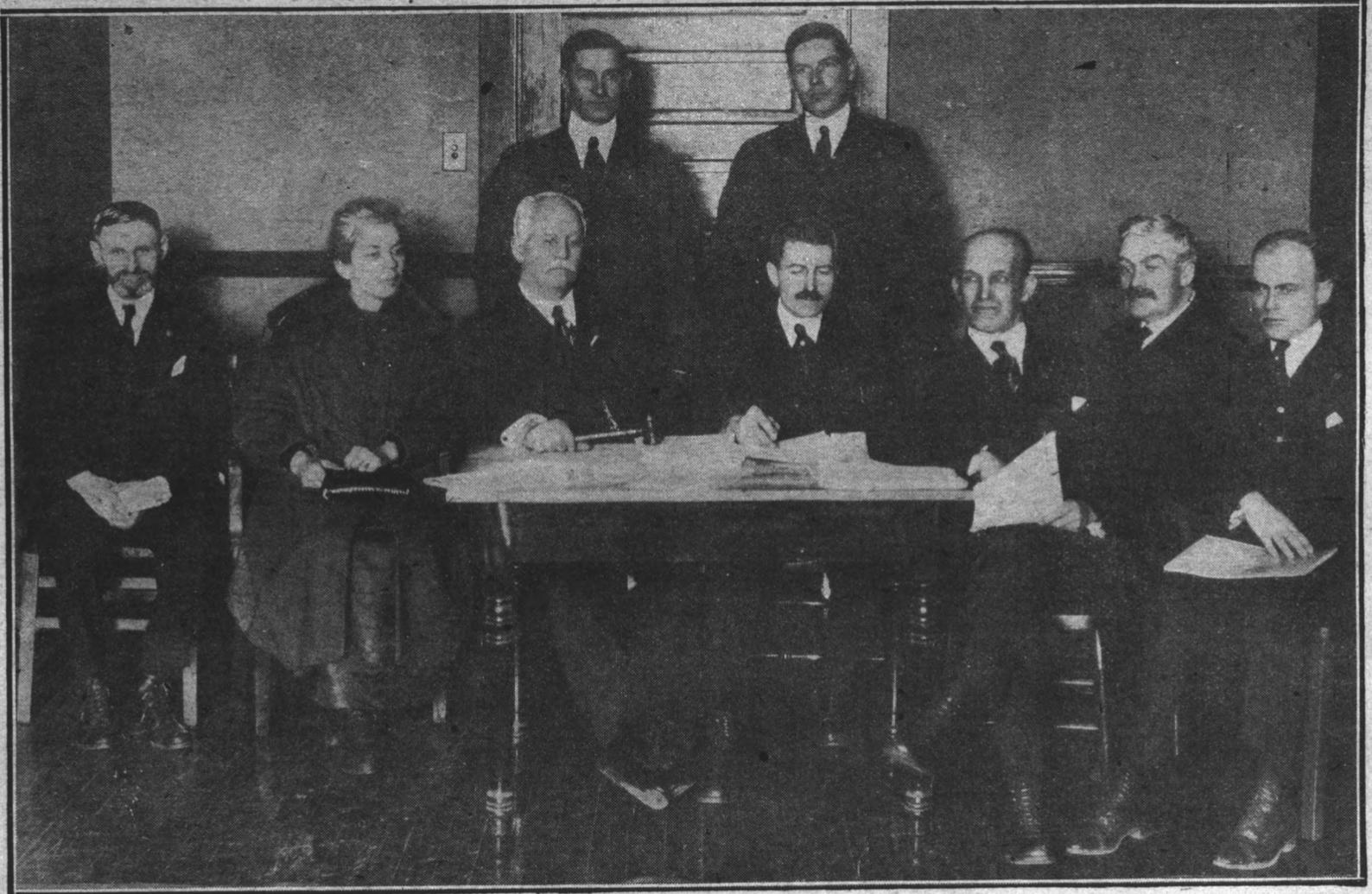
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OFFICERS AND EXECUTIVE COMMITTEE, MICHIGAN STATE FARM BUREAU

(Left to right) Robert Blemhuber, Marquette county; Mrs. Cora E. Ketcham, Barry county; Roland Morrill, President, Berrien county; R. G. Potts (standing) Vice-President Macomb county; A. J. Rogers, (standing) Benzle county; C. S. Bingham, Secretary, Oakland county; A. E. Illenden, Lenawee county; Jas. Nicol, Allegan county; Ashley M. Berridge, Montcalm county.

A Business Organization for Business Farmers

THE FARM BUREAU has well been called "the farmer's business organization." It recognizes that farming is a business and the farmer a business man and proposes to assist the farmer in the solution of his business or economic problems. The responsibilities of the Michigan State Farm Bureau rest for the time being upon the shoulders of the folks shown above. They have got a big job ahead of them, a greater job perhaps than many realize. It is the job of making good. Promises are easily made. Pictures of the future are easily painted, but their realization means hard work, good judgment and courage to blaze the untried trails. The first year or two of the Farm Bureau's life, as a full-fledged farmers' organization will be trying ones to both officers and members. Farmers who expect an immediate return on their investment are going to be disappointed and perhaps be-

come a little impatient. But all should remember that Rome was not built in a day. It takes time to lay the foundation for any great work. A certain amount of experimentation is necessary; there will have to be some cutting and trying, and despite the utmost care mistakes will be made. As we have said before we cannot afford to let the Farm Bureau fail. Too many farmers have pinned their faith to it. Too many farmers are looking to it to direct them to economic freedom. Failure of this great movement would set farm organization back a score or more of years and undo much of the work that has already been done. As long as the Farm Bureau is controlled by farmers for farmers it should have the support of all who have the farmer's interests unselfishly at heart. We hope those of our readers who have joined the Farm Bureau will give it a fair and square chance to make good, and not become too impatient of results.

"The Red Flag Never Flies Over the Farm House."---Wood

This is
**LEONARD
WOOD**



**The Man Who Has Pledged Himself
to Solve the Farmers' Problems!
He Has Always Made Good!**

L EONARD WOOD, the man who won the unqualified endorsement of Theodore Roosevelt, greatest American of his time, is the man who should get your vote in the primaries April 5th.

A vote for Leonard Wood is a vote for Roosevelt's principles, for the very same things that Roosevelt would be advocating if he were alive today.

A vote for Wood is a vote for a candidate whose backers have pledged themselves to see that the voice of the Michigan people is heard in the state and national conventions. Wood is fighting for the nomination, not merely to gather up delegates to be transferred to some other candidate at a "psychological moment," to be decided by the party leaders.

Leonard Wood in his public utterances has shown a thorough understanding of the farmers' problem and a warm sympathy for the farmer. He says:

"Our stability rests largely in the agricultural population. The Red flag never flies over the house of the farmer who owns his farm. If the American farmers had not played the game as they did, we would have lost the war because we would not have been able to feed our allies in the field as well as ourselves. If the American farmer had struck, the Germans would have won the war. The farmers sent their sons to war and in spite of the shortage of labor, they, by tremendously increasing their efforts, gave the world the biggest crop in history. Agriculture is not only the principal source of our wealth, it is the groundwork of our most stable citizenship.

We must have a department of agriculture conducted FOR THE FARMER by men who really know farming from the furrow to the crop. It should be the intention of the national government at Washington to make farming conditions such that there would be fewer tenant farmers and more owned farms."

Theodore Roosevelt said of Leonard Wood: "He has made all good Americans his debtors by what he has done."

Let Us Keep Roosevelt's Spirit Marching Through Michigan!

Paid for by
Leonard Wood League of Michigan
Fred M. Alger, President.
Walter C. Piper, Vice-President.
Chas. A. Weissert, Sec'y-Treas.

Adventures in Economy by the State of Illinois

How Consolidation of 125 Boards and Commissions Into Nine Departments Lowered Illinois Tax Rate

By OMAR H. WRIGHT

Director of Finance, State of Illinois.

THE STATE of Illinois at the end of the biennium, September 30, 1919, returned to the State Treasury unexpended appropriations of over two million dollars. During this same period the tax rate in the state was reduced in 1918, as compared with 1917, 17 per cent and in 1919, as compared with the year previous, 20 per cent. On January 1, 1917, there was in the revenue fund in the State Treasury, a balance of \$528. It is from this account that all of the regular operating expenses of the state are paid. There was in this fund January 1, 1918, \$5,055,752.75. January 1, 1919 this balance had increased to \$13,301,744.04 and on January 1, 1920 it stood at \$15,709,780.45. These results were largely brought about by the elimination of a large number of boards and commissions in the state and to the business administration of state affairs which the new Civil Administrative Code made possible.

In his campaign for governor, Colonel Lowden, in his numerous speeches, laid stress upon the illogical organization of the state government. He insisted that if state governments were to be respected their numerous and overlapping boards must be consolidated and the budget system of appropriations and expenditures must be substituted for the haphazard system then existing.

In his inaugural message Governor Lowden said:

"Administrative agencies have been multiplied in bewildering confusion. They have been created without reference to their ability, economically and effectively, to administer the laws.

"One of the imperative needs of the state is the consolidation of its multiplied agencies into a few principle departments. The governor is held responsible for the conduct of the state government. His executive functions should be discharged through a limited number of agencies over which he exercises actual control. Under the present system of confusing perplexity, the governor cannot exercise the supervision and control which the people have a right to demand."

Administrative Code.

March 1, 1917, the 50th General Assembly of Illinois enacted the law known as "The Civil Administrative Code." It became effective July 1, 1917. Previous to the passage of this law there were in Illinois, something over 125 necessary absolutely independent agencies of government, having nothing to do with one another, not related or coordinated in any manner. There was, of course, much overlapping of functions. There was much needless expense, and, perhaps worst of all, there was of necessity, great inefficiency. The Code Law grouped these 125 boards, commissions and agencies into nine departments. These departments were: Finance, Trade and Public Works and Buildings, Labor, Mines and Minerals, Agriculture, Public Health and Registration and Election.

Instead of putting boards and commissions at the heads of these departments, the law placed individuals. This was upon the theory that it is individuals who do things, and not boards or commissions. A

Should Michigan Copy Illinois?

IN THE announcement of his candidacy for governor, Milo D. Campbell said he believed in the methods adopted by Gov. Lowden of Illinois, and if elected governor would endeavor to emulate them. We were curious to know what Gov. Lowden had done in Illinois to consolidate boards and commissions, reduce the tax rate and give the state an economical and efficient administration. The accompanying article gives us this information, and we present it to our readers, believing that they will heartily support the man for governor who pledges himself to bring about similar reforms in the administration of our state government. —Editor.

board may be desirable for legislative or judicial powers or as an advisory body. In practice, however, it is the individual always who takes the initiative. Hence, an individual was put at the head of these departments, with the title of director.

All the officers, including the directors, under the administrative code, are required to give all their time to the public service. ministrative code, are required to give all their time to the public service.

Individuals Instead of Committees.

The great underlying principle of the Civil Code Act is that it is individuals who do things and not bodies of men. Of late years states have acquired the habit of creating a commission every time something goes wrong. It is the experience of every capable business man that it is the individual who is able to execute satisfactorily and not a board or a commission.

The Civil Administrative Code has been in operation now more than two years. In results it has surpassed all expectations. At the seat of government, nine responsible heads of departments are in daily touch with the governor, who, therefore, can exercise proper supervision over the affairs of the state, for each head of department, in turn, is in constant touch with the activities of his own department. Extravagance and incompetency are easily discovered and corrected.

In Illinois the legislature meets once in two years and therefore, appropriates for two years in advance. In the winter of 1917 appropriations were made for the period com-

mencing July 1, 1917, and ending June 30, 1919. Though these appropriations were based upon pre-war prices and conditions, which, of course, were very much more favorable than those which prevailed during the war, yet, at the end of the two years' period there was an unexpended balance in every department of the government save one. That the government created under the Civil Administrative Code functioned well, is best shown by the fact that Illinois went through the entire period of the war without any extraordinary session of the general assembly.

Among the departments created was the department of finance. The head of that department exercises general supervision over the finances of the State. He provides a uniform system of bookkeeping; approves or disapproves of all vouchers; he is in constant touch with the financial affairs of the State. In addition, it is his duty to prepare a budget of estimated expenditures and receipts, to be submitted to each regular session of the General Assembly. In the exercise of his general supervision over the expenditures of the State, he, in effect, begins the preparation of the budget a biennium in advance. That is, on the 1st of July, 1917, in approving or disapproving vouchers and investigating financial conditions, he was gathering information all the while to enable him intelligently to judge what the appropriations should be for the next biennium. He had, in the first place, the information that he had acquired as to the needs of the various activities of the State in the exercise of his power of general supervision over the finances, and in addition he had been able to investigate, himself, when a request was made by any official charged with the expenditure of money, as to the exact needs of the case. The budget thus submitted went before the appropriations committees of the house and the senate, and with very few changes were enacted into law.

The revenues of the State are derived from indirect sources, such as the fees for various services rendered by the State, a tax upon gross premiums of insurance companies, a tax upon the gross revenues of the Illinois Central Railroad Company, a franchise tax upon corporations, inheritance taxes, etc., and a general property tax. The last named tax is levied at such a rate as to raise revenue sufficient, together with the indirect revenue, to defray the expenses of the State Government.

System Reduces Tax Rate.

The general property tax rate for state purposes in 1917 was 90 cents on the hundred dollars. In 1918, it was reduced from 90 to 75 cents on the hundred dollars. In 1919, the

basis of taxation was changed from one-third to one-half of the actual cash value. The rate for that year was fixed at 40 cents on the hundred dollars, which would be equivalent to 60 cents under the old basis—a reduction of 20 per cent. as compared with the tax rate of the preceding year. These reductions are due partly to an increase in indirect revenues, but largely to greater economy under the Civil Administration Code with the budgetary system.

The March 27th Issue Will Contain—

1. Comparison of Live Stock and Retail Meat Prices.
2. H. H. Halladay, on "The Farmer and his Hired Man."
3. A Socialist's Answer to Mr. George E. Roberts.
4. How to Build a Practical Sheep Barn.
5. How Michigan's State Tax Dollar is Divided—By D. E. Alward, Secretary of the Senate.
6. Corn Production in Michigan.
7. How Berrien County Milk Producers are Marketing Their Own Milk.

Classification of Wool as to Quality and Use

Explanation of Grades That Determine Value of Wool When Placed on Market

By D. WILLIAMS

Extension Specialist in Sheep Husbandry, Michigan Agricultural College.

WOOLS ARE classified according to their origin, value and adaptability for different uses. In this country wools are divided into two classes, Domestic and Territory.

Domestic wools are those wools coming from the flocks east of the Missouri river and usually from sheep of the mutton type and breeding. When compared with territory wools, these wools are usually cleaner and brighter, due to the better protection and care given the sheep. States producing domestic wools are Ohio, Pennsylvania, New York, West Virginia, Kentucky, Indiana, Illinois, Iowa, Michigan, Wisconsin and Minnesota. Territory wools are those produced west of the Missouri river and from sheep which contain a large percentage of fine wool blood. These wools shrink quite heavy when scoured due to the presence of sand, dirt and considerable yolk in the fleeces. States producing territory wools are Montana, Wyoming, Idaho, Utah, Nevada, Colorado and Washington.

Upon reaching the market wools are divided into domestic and territory classes and these in turn into combing and clothing. Combing wool should be at least 3 inches long and is usually sold from 6 to 10 cents more per pound than the short or clothing wool; therefore it should be the aim of all growers to produce combing wool, instead of the shorter or clothing wool.

Each class of wool is again divided into grades by professional graders, the grade depending upon the fineness of fibre, length of fibre, shrinkage and general character.

Following is a classification of domestic wools, and this being the class in which we are directly inter-

I do not understand all about the different grades of wool. I see in the M. B. F. wool quoted fine wool Delaine and 1-2 blood, 3-8 blood, 1-4 clothing, common and braid. What head does the Shropshire come under? I have always received the highest price for this wool.—G. H. S., Penfield.

ested, we will not take up classification of territory wools:

Domestic Wools

Combing: Delaine, half blood, three-eighths blood, quarter blood, low-quarter blood, braid.

Clothing: fine, half blood clothing, three-eighths blood clothing, quarter blood clothing.

In the early days of the wool trade, the half blood, three eighths blood and quarter blood grades referred to wools from sheep of half, three eighths and quarter Merino blood, but today they have no such significance.

As graded by the usual grader each class has the following grades: Fine (Delaine or clothing), half

blood, three-eighths blood, quarter blood, low quarter blood, low, coarse common or braid.

Fine wool is usually shortest in length of staple, has an exceptionally fine crimp and contains a large percentage of yolk or grease. Half blood wool, often spoken of as fine is not so finely crimped, is somewhat longer of staple and usually has a lighter shrink. Three eighths blood wool often spoken of as medium is less crimped, less elastic, and has a lighter shrinkage containing less yolk than either of the above grades. Quarter blood wool ranks next in the scale of fineness and crimp, with less yolk and a lighter shrinkage. The low, coarse, common or braid, as the

term implies is coarser, varies in length from 4 1-2 to 15 inches in length and is particularly suitable for the manufacture of braid.

While it is impossible to assign wool to a particular grade solely upon the basis of the breed of sheep, because of the wide variation within a single breed, yet a fair idea may be conveyed from the following lists from the U. S. Department of Agriculture, Bulletin 206, how wool from the various breeds would be likely to grade:

Merino, eastern states; Merino, range states—Delaine or fine; fine and fine medium, staple or clothing.

Rambouillet—Fine and fine medium, staple or clothing and a small amount of half blood.

Southdown—Half and three-eighths blood (chiefly three-eighths combing or clothing; chiefly clothing.)

Shropshire—Mainly three-eighths blood, combing or clothing. Some quarter blood.

Hampshire—Three eighths and quarter blood, combing or clothing.

Dorset—Three eighths and quarter blood, combing and clothing.

Suffolk—Three-eighths blood, combing and clothing.

Cheviot—Quarter blood combing. Oxford—Quarter and low quarter blood combing.

Corriedale—Three eighths blood combing.

Cotswold, Lincoln, Leicester—Low quarter blood combing or braid.

Crossbred: long wool on Merino or Rambouillet—Half blood, three eighths and quarter blood combing.

Crossbred, Shropshire or Hampshire on Merino, Rambouillet or western ewe—Half blood and three-eighths blood combing or clothing.

HEARINGS ON "TRUTH IN FABRIC BILL"

FARMERS who are interested in the "Truth in Fabric Bill" which would compel clothing manufacturers to sell their goods according to the amount of shoddy and virgin wool they contain should write or wire the Interstate and Foreign Commerce committee before which hearings are now being conducted both for and against the bill. This bill was drafted by the National Sheep and Wool Bureau of America, in behalf of the wool growers. It aims to prevent deception and misbranding of clothing just as other laws prevent deception and misbranding of food. The bill is a very important one, and no farmer who produces sheep should overlook this opportunity of assisting in its passage. Write Congressman French, Washington, D. C., stating briefly why you favor this bill. It may mean dollars in your pockets to do so. No time is to be lost. Write or wire today.—Editor.

Uncle Jasper's Pump That Always Needed Priming--An Object Lesson

By ALBERT B. REAGAN

WHILE ATTENDING high school I worked for my board for an aged man, we will call Uncle Jasper. He was a very good and kind man but from a business point of view he possessed one bad fault. Any old, discarded machinery of his neighbors he could beg or buy cheaply he brought to his farm. He would then spend a great deal of valuable time tinkering with it and doing poor work with same when he got it patched up so he could use it. Old binders, mowers, rakes and other worthless machinery littered the place. His poor crops and high weeds also became a by-word in the community.

When I went to the place, the most conspicuous, worthless thing I had to use was an old leaky, worn-out pump in the only well on the place. Every time one had to get a pail of water or come to the well to water horses or other stock, the pesky old pump had to be primed. Also often the pail of priming water was empty and one had to go to the house for water to prime the pump. Furthermore, in winter on account of the freezing weather the water for priming purposes was kept in the house all the time, the pump being 300 feet distant. Consequently this getting water from the residence to start the pump consumed considerable valuable time and necessitated one's doing considerable extra work each day.

This nuisance finally got on my

nerves and I said to Uncle Jasper: "How long have you been priming pumps as you do this one?"

"Well, Jean," he replied in his droll way of speaking, "I am seventy-six years old and I reckon I've been doing it over forty years of those three score and 16. Why ask?"

"I was just wondering how much time you have lost in your life just fooling with such old things."

"I reckon I haven't lost much."

"You have lost more time than one could convince you, you have. I have been keeping tab on that pump for a month. It has to be primed on an average of twenty times a day. The water to prime it has to be obtained from the house in winter. At this time of the year one must walk 300 feet to get it and then 300 feet back to the well, or a total distance of 600 feet. And the priming of it twenty times a day necessitates one walking 1,200 feet or over two and a third miles. It usually takes one fifteen minutes to walk a mile. So

in just going for the priming water one loses thirty-five minutes per day in the freezing months, which in this climate average over four months. But let us consider it four months of thirty days each, or a total of one hundred twenty days. A loss of thirty-five minutes per day for one hundred twenty days each year amounts to seventy hours or eight and three-fourths working days lost each winter, and the loss in forty years would amount to three hundred fifty days work or forty-eight days over a working year."

"You're making that too big."

"Just wait. I haven't figured the time you lost after you got the water. I have been keeping tab on that also. It takes from twenty to forty strokes to prime that pump, by actual count, and by exact time by my watch it averages two minutes extra time to get the water and pour it down the pump's throat and then get it flowing out the spout. As this has to be done twenty times a day, forty

minutes are therefore lost. As there are three hundred sixty-five and one-fourth days in a year, a year's loss is 30,437.5 eight hour days and in forty years it amounts to 1,217.5 days lost.

"Oh boy," said the aged man as he held up his hands in horror.

"I am not done yet, uncle," I continued. "Your whole loss on pump priming and in getting water to prime it amounts to 350 days plus 1,217.5 days or a total of 1,567.5 working days. Now in your time a day's work on a farm has been valued at \$1 per day. You have therefore lost \$1,567.50. A pump such as you use costs, say, \$30 (the fact is, not one of them cost half that amount) \$1,567.50 would buy you more than fifty such pumps. A team of horses to this time has not been worth over \$300. With that money you could have purchased five teams and had money enough left to have purchased all the pumps you would have ever needed. Also you could buy a high priced automobile with

that money and ride around at your leisure."

"Oh, boy," he exclaimed, "too much education has made you mad. Those pumps have saved me many a dollar," he added as he entered the house to get another pail of water.

Needless to say that tho he had one of the best farms in the middle west he was unlucky enough to live to have it sold from under him.



Courtesy International Harvester Company.

Losses of Plant Food Elements From Soils

Leaching, Erosion, Volatilization and Cropping Held Responsible for Depletion of Fertility

By M. M. McCool

Professor of Soils, Michigan Agricultural College.

THE REMOVAL of elements of plant food from soils in numerous ways is to be reckoned with in permanent systems of agriculture. In some instances it becomes a serious menace to soil productivity in a surprisingly short period of time. The losses may be accounted for in a large measure by leaching, erosion, volatilization, cropping.

Under all systems of soil management in humid regions there are greater or less losses of the elements of plant food from the surface soil downward to an away with the drainage waters. In general, there are three ways of making determinations of such losses. Much available information has been obtained by means of lysimeter studies. Lysimeters are galvanized iron, cement, or wooden receptacles of various capacities usually sunken in the earth and filled with the soils to be studied. These receptacles are so arranged that the drainage water can be collected and analyzed. The oldest and most extensive lysimeter experiments are those conducted by the Rothamsted Experiment Station, England. There are, however, several experiment stations in this country that are carrying on such work.

Another method of determining some of the charges that take place in soils when variously treated are by means of tile or underdrains. It is more difficult to control the conditions by this method, but, on the other hand, the soils are studied in their natural condition and thus the results obtained are of fundamental importance. The composition of the water in streams and rivers may be determined and, to be sure, the results of such determinations are instructive.

There are several conditions that influence the amount of the various elements lost from the soil by leaching. Those that are not important are:

1. The time, amount, and distribution of the rainfall.
2. The texture of the soil.
3. The fixing capacity of the soil.
4. The composition of the soil.
5. The presence of growing crops.
6. The addition of fertilizers.

Other conditions being the same, the higher the rainfall the more plant food is lost from the soil by leaching. It is held by some that a given amount of rainfall during the summer months removes greater quantities from the soil than at other seasons of the year. This is doubtless the case under some conditions, but it seems that such is governed by the kind of crop grown, and nature of the soil, and to other conditions. It is probably true that a given precipitation, when uniformly distributed, removes less material from the soil than if not so distributed, since less water may pass through the soil.

It is generally held that less elements of plant food are lost in the drainage water from sandy soils than from silts, loams or clays. Usually, such is the case, the drainage water from sandy soils is so-called soft water, at least not so hard as it is from other soil classes, but there are exceptions. Some sandy soils are high in total and available mineral matter, and, therefore, the amount lost may be greater than is lost from many of the less fertile fine textured soils. When soluble substances such as nitrate of soda, ammonium sulphate and others are added to sandy soil the amount washed out by rain water may be much larger than it is from heavier soils.

Before discussing the influence of the fixing power of soils on the composition of drainage water from soils a brief explanation of this phenomenon is in order. It has long been known that solids including soils will, to a greater or less extent, retain either on their surface, or within, or both, numerous gases, liquids and fertilizer constituents. In general, the amount as well as the tenacity with which the substances are held, depend upon the fineness of division of the solid, the finer the subdivision the greater the amounts retained; and, in addition, the composition of the soil mass and the sub-

stances with which it comes in contact are important. This power of soil is spoken of as absorption.

The subject of absorption has received a great deal of study and any one can easily determine the power of the soils to remove mineral matter from solution by passing through a volume of sand, loam, or clay, a quantity of salt water. The first portions issuing are devoid of their salty flavor. It is well to note in this connection that there will be a larger amount free from salt coming from the fine textured soils than from the coarser ones. If barnyard liquid is passed through a layer of fine soil it will be colorless, or nearly so, when it appears in case of sands it will be somewhat colored. If ammonia, or other gases, are passed into, or come

ample, the chloride, or sulphate or nitrate of calcium and other bases are more soluble than the carbonates. Again, the greater the amount of organic matter in soils, other conditions being the same, the less the loss in this manner on account of the very high fixing capacity of this material.

It is of prime importance that soils occupied by crops lose less of the valuable elements than those uncropped or bare. Such differences are due in part to the fact that less water passes through soils that are occupied by crops, in part to the presence of small amounts in solution, and still further, to the removal of the solvent effect of certain compounds upon others.

Lyon and Bizzell of Cornell Uni-

the losses of nitrogen and calcium. Cognizance should be taken, however, that rather excessive amounts of fertilizers were added to the soil and it is doubtful if similar results would be obtained from soils of different composition and under different climatic conditions.

There are on record results of experiments which show that the use of fertilizers, due to their stimulation of the root development and, therefore, a greater absorbing system and greater yields, may actually decrease the loss of some elements of plant food from the soil through the drainage waters.

The loss of plant food elements by erosion or so-called "washing" of soils accounts for a greater loss on many sloping lands than leaching. In fact, one needs but to visit a hilly farm after a torrential rain to be convinced that more plant food may be removed from the surface soil within a few hours by this manner than is removed from the soil by several crops. Furthermore, it is the surface or the most valuable portion of the soil that suffers most in this respect. There are many fields that were once productive but are now unprofitable, due largely to erosion. The preventative methods were discussed previously.

Some nitrogen is lost from the soil in the gaseous state, or by volatilization. Under exceptional or abnormal conditions such as water soaked soils, or where excessive amounts of manure are applied to the soil, or where precautions are not taken to incorporate fresh manure with the soil, appreciable amounts of nitrogen may escape into the air and thus be lost. It is probable that appreciable amounts of nitrogen escape into the air from soils that are high in vegetable matter, that is when tilled.

The rate of soil depletion by cropping depends upon several factors, such as the kind of crop, yield of crop and the manner of disposal of the crops grown.

The composition of crops differ, therefore, the rate of depletion of soils varies somewhat with the kind of crops grown. Moreover, some parts of the crop contain more mineral matter than others. If part or all the high ash containing portions are returned to the soil the loss to be sure is less than if all is removed and none returned. We know as a result of a great deal of experimental data that soils long cropped in general contain less of the essential plant food elements than they did in the virgin state.

It is maintained by some writers that the surface soil may receive an appreciable amount of mineral plant food from the subsoils by the upward movement of film water. It is probable that a small amount of several of the elements, such as calcium, magnesium, sodium and potassium passes upward from the lower layers of the soil, that is when the surface soils are in part depleted of their soil moisture, but as stated the upward movement of film water is indeed very slow, and, furthermore, the results of lysimeter and drainage water studies as well as the composition of cropped and uncropped soils show in an uncontroversial manner that undoubtedly the general trend of the various elements is downward rather than upward. It is probable that the deep rooted plants remove a certain amount of their mineral constituents from the lower layers of soil; thus when the upper portions of the plant decays, or are left on the soil, there may be an increase of mineral constituents in the upper layers.

Analyses of rainwater show that there is brought to the surface of the soil approximately six pounds of nitrogen per acre annually. This amount varies undoubtedly with the total rainfall and other conditions. In addition, it has been shown that approximately 15 lbs. of sulphur are added to the soil annually in this manner.



Interior of lysimeter house at East Lansing. The drainage waters from lysimeters sunk in the ground outside the pit are collected in the larger containers, taken to the laboratory and analyzed for various elements of plant food. The effect of different systems of management on the losses of these are being studied at the College.

in contact with a layer of soil, appreciable amounts of these gases are retained by the soil particles.

Soil absorbs or fixes some substances far more firmly than others; for example, nitrogen in the form of vegetable compounds, such as urea, or compounds of ammonia, are readily fixed or held by the soil, but, on the other hand, nitrogen in the form of nitrates is held less firmly by most soils. The loss of phosphorus and potassium from soils by leaching is almost negligible on account of the fact that they are firmly held by the soils. It is probable that applications of soluble phosphates and potash to sandy soils low in vegetable matter results in appreciable losses. It is well to note that calcium, magnesium and sodium are less firmly held by the soil, and therefore, the losses as above stated are quite large.

In most cases where salts, such as sulphate of ammonia, nitrate of potash, or in fact any of the ordinary fertilizer materials, or lime, or common salt, in solution are brought into intimate contact with the soil it gives up to the solution other bases in exchange for those held. This exchange often results in the release of some substances valuable in the formation of plant food, such as phosphorus or potassium. Thus, as previously discussed, the addition of such substances may increase plant growth in part by their indirect action. It should be noted, however, that the released base, or bases, may be taken up and held by the soil lower down. Fixed substances are very gradually released to the soil water and are generally considered to be available for crops. This phenomenon should be looked upon as being of a great deal of importance in the conservation of mineral plant food that are added to the soil.

Some compounds are more readily soluble, and, as above stated, more firmly held by the soil mass than others. It may be cited, for ex-

iversity determined the loss by leaching of different substances from cropped and uncropped soils. Certain of the results obtained are presented below:

Substances removed from one acre of land in one year.

	Bare Soil	Cropped Soil
Total substance	2584	800
Nitrogen	119	11
Potash	11	6
Phosphoric acid	trace	trace
Lime	726	264

At the Michigan Experiment Station it has been found that the amount of water that passes through four foot layers of an uncropped sandy soil is appreciably greater than that passing through the same volume of soil occupied by crops.

There are certain fertilizer constituents when added to soils that react with other compounds in the soil to form, in some cases, more soluble compounds and also those that are less strongly held by the soil, thus in some instances increasing the amount of the various substances in the drainage water. From a practical standpoint the increase in the loss of calcium or lime and nitrogen are of chief concern. It is well known and recognized that any condition or set of conditions that results in the increase of the amount of the chloride, sulphate, or nitrate of calcium, other conditions the same, result in greater losses of calcium or lime from the soil. However, the increased loss in most instances perhaps is due to the formation of the nitrates. In general there is a close correlation between the amount of calcium and nitrogen removed by drainage water in soil, inasmuch as the greater part of the nitrogen passes away as calcium nitrate.

The results of studies by the Rothamsted Experiment Station, England show in an uncontroversial manner that the addition of large amounts of fertilizers and stable manure increase

Standard Partition for Mixed Cars of Live Stock

Live Stock Federations Urge Adoption of Standard Gate by Co-operative Shippers of Stock

By E. J. TROSPER

Secretary, National Federation of Co-operative Live Stock Shippers.

LIVE STOCK shippers have long felt the need of a standard practical partition to be used in shipping mixed cars. The Michigan State Federation of Co-operative Live Stock Shippers have, through their state manager, C. E. Compson, found a solution for the trouble in the form of a standard gate partition.

Old Nailed-in Partitions Expensive and Troublesome

In the past each live stock shipper has been permitted to construct his own partition and as a direct result we have about as many types of partitions as we have shippers. This system has proven very unsatisfactory to both the railroad and the shipper for the following reasons:

1. The average man when permitted to construct a partition according to his ideals fails to construct one that will deliver his stock to market in proper condition. The local railroad agent knows less about partitions than does the shipper.

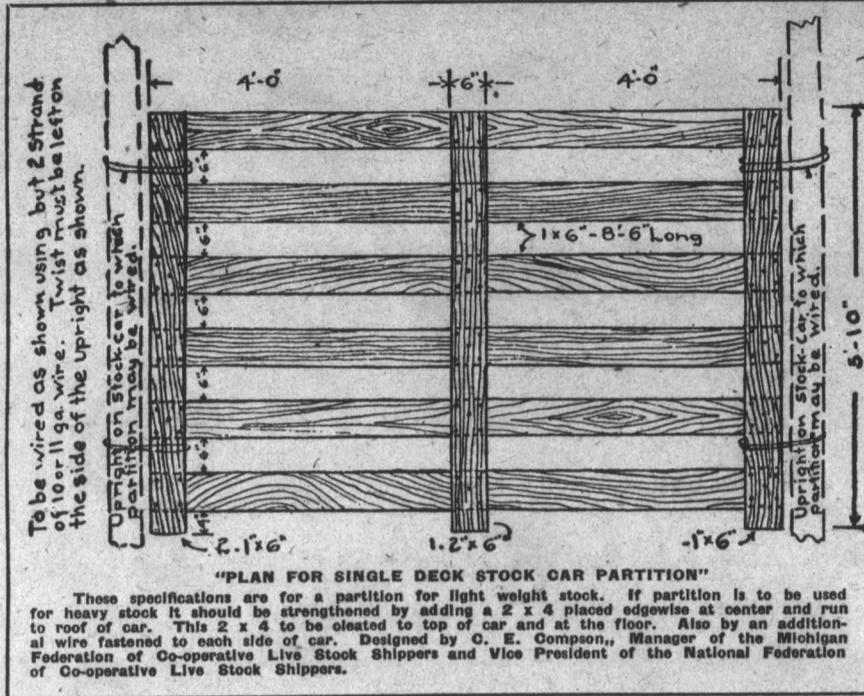
2. The old system of partition is expensive because in each instance it costs from three to four dollars to construct. The partitions are then torn out at the terminal market and smuggled away by the workers of the yards for kindling wood, etc.

3. Improperly constructed partitions have, according to the railroads been responsible for from twenty to forty per cent losses in transit; at any rate, railroads frequently refuse to pay claims using the poorly constructed partitions as their argument. So far the shipper has been the "goat" regardless of the merits of partitions constructed.

4. In the construction and tearing out of railroad partitions the stock cars are badly mutilated.

The Advantages of Standard Gate Partition

1. In standardizing the gate partition and getting the specifications before the local railroad agent and shipper there will be no excuse for the wide variations and disastrous



results which have been so common by construction and use of the "old way" partitions.

2. It costs no more to buy or build a standard gate partition than it does the old kind. By stenciling name and address on the top board of the gates, they may be returned to their owners every few weeks. We plan to make arrangements through the state federations of co-operative shippers to have the gates returned. This plan has been working successfully in Michigan and is endorsed by the Michigan railroads and Detroit Live Stock Exchange.

3. There will be no excuse for

shippers not being able to collect the majority of claims on live stock killed or crippled enroute when the "gate" has been approved of and accepted by both parties. The railroads will not be able to refuse to pay claims on the theory of a faulty partition.

4. Stock cars will not be mutilated because in using the standard gate not a nail is driven into the car except in case of heavy stock it may be desirable to place a 2 x 4 edgewise at center and run to the roof of car. The Michigan shippers have found that by using more wire the 2 x 4 may be eliminated.

5. The gate may be removed for feeding in transit or unloading at the terminal twice as quickly as the nailed-in partitions.

6. The "gate" is simple in construction and may be made or bought in quantities at the shippers leisure.

7. All sections of the U. S. except our big feeder section ship a large amount of mixed car lots. The average co-operative shipping association can save from \$50 to \$100 in lumber alone in a year's time. When we stop to consider the decrease in number of dead animals and the ability of the shipper to get proper action on claims it is easy to understand why the gate is proving so popular.

Specifications for Standard Gate Partitions

The gate should be made of good sound 1 x 6 lumber such as Southern pine planed on both sides. It should be nailed with 10s where there are three thicknesses and with 8s where there are only two. All nails should be well clinched. The gates are to be wired to the stock car upright at the top and bottom with three wrappings of No. 10 or 11 fence wire. The gate may be reinforced by nailing a cleat in the middle of the gate preventing boards from being knocked off. It is desirable to build your gate so that the boards will be closer together at the bottom. The name and address of your association should be stenciled on the top board.

It is the ambition of the National Federation of Co-operative Live Stock Shippers to have the 3,500 local shipping associations adopt the gate partition. Details of supply and return of gates will be worked out through the state federations of live stock shippers. For further information, write C. E. Compson, Remus, Michigan, or E. J. Trospier, Room 906 Royal Insurance Building, Chicago.

Important Live Stock Facts Brought Out at Packers' Legislative Hearing

Statistics Show Huge Waste and High Cost in Packers' Methods of Distribution

(Submitted by Farmers' National Council.)

Urges Legislation

Commissioner William B. Colver of the Federal Trade Commission gave the gist of the Commission's findings and answered the charge of the packers that they had not been permitted to put all the information into the record that they wanted, saying that "over and over again," the packers had been invited to put what they said had been omitted into the record and they had always declined to do so. Commissioner Colver called attention to the fact that the Trade Commission had recommended, to remedy the evils found to exist in the meat packing industry, that the stock yards and refrigerator cars be owned by the railroads, and operated as part of their service. While he was discussing the bearer warrants of Armour & Co., which enabled the holders to draw dividends without having their identity disclosed, Congressman Dainey asked whether this was not a practice which was common among business corporations in European countries, and Commissioner Colver replied, "I think so, I think it was invented in England to beat the income tax law." Asked whether there had been any communications between the Federal Trade Commission and the Attorney General on the latter's decree in regard to the packers, Mr. Colver said, there had been some but chiefly as to commodities, and expressed himself on this situation: "I do not think that government by decree or government by injunction is the orderly American way. I think government by legislation is proper." He also said, "if it is right to divorce wholesale groceries, it is right to divorce butter, eggs, cheese and poultry. If it is not right to divorce wholesale groceries, it is not right to divorce other things."

THE HEARINGS on the Anderson bill to control the meat packers have shown beyond question and with strength enough to convince any doubting members of the committee on agriculture, that the people of America, producers of live stock, and consumers of meat products alike, demand promptly legislation to control the meat packers. There are twenty-one members of the committee on agriculture. Two members, William W. Wilson and John W. Rainey, represent Chicago districts, while Illinois has in all three representatives on the committee, Pennsylvania two, and sixteen states are represented by one member each.

Congressman Anderson, who made the opening statement before the committee, outlined in a masterful way the results of the investigation made by the Federal Trade Commission and added information which he had secured from his own study of the packer situation. He emphasized the wastefulness of the packers' methods of slaughtering such large proportion of the meat supply of the country in twelve central points. He said that in 1918, 69 per cent of the cattle of the United States were produced west of the Mississippi river and 69 per cent of the people lived east of the river. In that year the section of the country east of the Mississippi and south of the Mason and Dixon Line, sent 1,000,000 cattle into the great slaughtering sections of St. Paul, Sioux City, Omaha, St. Joe, Kansas City, East St. Louis, Fort Worth, Oklahoma City, Cincinnati, Buffalo and New York; and about 700,000 of these were moved back into the south in the form of meat. In 1918 about ten million cattle were marketed west of the Mississippi river and about five million, one one-half of the total were consumed west of the river.

The members of the Committee on Agriculture were deeply impressed when Warren S. Stone, Grand Chief of the Railway Locomotive Engineers, appeared in favor of legislation which would adequately control the packers. Mr. Stone commented on the continuous increase in the cost of living, and the burden it is placing on the consumers and urged that the railroads acquire the stock yards and refrigerator cars, in order that there might be an equality of opportunity for distributing live stock and live stock products, and in order that the co-operative associations of producers and consumers might have a better opportunity for direct trading. Mr. Stone said that he appeared, not primarily in his official capacity, although there are 2,100,000 members of the Railway Brotherhoods, but as a citizen concerned with the problem of the high cost of living.

Challenges Packers' Efficiency

Mr. Ed. C. Lasater of Falfurrias, Texas, member of the Farmers' National Council, a large live stock grower and dairymen of Texas, expressed himself without any quibbling on the packer legislation. Mr. Lasater said that we could not get legislation on the packers by "pink tea" hearings and that we must face the facts, that the live stock producers of America are getting discouraged and will not continue to raise live stock unless they have a better chance to market without pocketing a loss. He quoted the charge of the Federal Trade Commission that the joint legislative funds of the packers have been used to pay the un-audited expenses of lobbyists, and help elect friendly Congressmen. He turned over to the Committee the report on the cost of production of cattle on his ranch, compiled by

Price-Waterhouse and Ernst and Ernst, and the figures of the Department of Agriculture on the cost of production. The Garfield Public Accountant's figures covered the years 1913 to 1917, and showed that the cost of production of a twelve month calf on the average was \$46.97. Mr. Lasater sold three crops at a price of \$35 per head, at a net loss of over \$10 per head; figuring interest charges on his equity of about sixty per cent in the business, and he stated he got a little over 2 per cent, while the banker got 8 per cent. The cost of producing two year olds was \$67.04, of three year olds, \$88.88. An audit of his books by Price, Waterhouse, and Ernst and Ernst showed for nine years operation a profit, in round figures of \$644,437, on an average investment of \$2,563,000, which was an average of about 2.3 per cent. He had sold, however, real estate, for \$737,170, so that has net loss on his nine years' work was in round figures, \$98,733. To meet the situation Mr. Lasater urged that the railroads be required to acquire the refrigerator cars, and all stock yards, which had a business in the last calendar year of over 100,000 head of cattle, on which may have in the future calendar year. He also emphasized the need of securing cheaper credit for live stock producers who now pay about 8 per cent, which is often nearly half the cost of production.

Dr. T. C. Atkeson, Washington representative of the National Grange said that "the packers have the power to exploit the people, and if they have that power, whether they exercise it or not, it is the duty of the public to protect itself against the possible exercise of this power of exploitation on the part of the packers or any other monopoly in the country."

Meat Production Drops; 1919 Still Ranks High

Department of Agriculture Records Show Heavy Decline in Beef—More Veal, Mutton, Lamb and Pork Slaughtered

THE UNITED States consumed several pounds less per person of beef in 1919 than in 1918. At the same time, its exports of beef declined 56.8 per cent from the previous year. The United States Department of Agriculture attributes the decline in domestic consumption to high retail prices and the falling off of exports to the fact that the European countries which took so much American beef during the war are returning to the cheaper sources of supply in South America and Australia. The decrease in beef was so large as to bring down the total meat production 4 per cent lower than in 1918, in spite of the fact that production increased greatly in pork and considerably in mutton and lamb and veal.

Exports of pork and lard in 1919 were unparalleled. The exports were equivalent to 18,000,000 hogs weighing 200 pounds each. A million more hogs were slaughtered than in 1918. Domestic consumption of lard declined to the extent of 2 pounds per person.

The slaughter of calves in 1919 was greater than ever before—1,250,000 head more than in 1918. The drought in the west is ascribed as one of the main causes of so many calves being marketed. Veal is not exported and domestic consumption increased about one pound per person.

Twenty per cent more mutton and lamb meat were produced in 1919 than in 1918, but the consumption of mutton and lamb is so small that the increase meant only one pound per person. This source of meat supply, which decreased steadily for many years, has been on the upward trend since 1917.

These facts are given by the Bureau of Animal Industry, United States Department of Agriculture, in its annual analysis of the meat situation recently made public.

The outstanding features of the meat situation during 1919 were a heavy decline in beef slaughter with corresponding loss in beef exports, and a great increase in the exports of pork products, although the swine slaughter was only slightly larger than the previous year.

The slump in beef was to some extent offset by substantial increases in the slaughter of veal and of mutton and lamb, and the increase in pork just mentioned. But on the whole the decrease in beef was so large as to bring down the total meat production to 4 per cent lower than in 1918.

By weight, in terms of dressed meat (without lard) the total slaughter in 1918 yielded a little over 18 billion pounds and in 1919 a little under 17 1-3 billion pounds. The difference was about 715,000,000 pounds.

This seems a large quantity of meat, but nation wide computations in these times are apt to be in colossal terms, and it must be remembered that the unprecedented total for 1918 was wrought under the impetus of a great war effort, when all production records were shattered. Considering that the armistice had been signed before the close of 1918 and that the conditions facing breeders and feeders were full of uncertainty, last year's production must be rated as a great achievement, since it far exceeded that of any other year previous to 1918.

Pork and Lard Exports Unparalleled
Exports of pork and lard in 1919 were unparalleled in the history of our foreign trade. Total shipments amounted to 1,897,198,000 pounds of pork (mostly bacon and hams) and 784,946,000 pounds of lard. The magnitude of this single branch of our export trade is not easy to realize. Stated in terms of live animals averaging 200 pounds in weight, this quantity of products would represent a herd of approximately 18,000,000 hogs, and therefore one such hog would be "deported" every 13-4 seconds throughout the entire year. The two factors previously mentioned—restricted beef supply and heavy shipments of pork products—had some effect on the home meat

PER CAPITA CONSUMPTION OF MEAT

THE FOLLOWING data are quoted from a table prepared by the Bureau of Animal Industry, showing the annual per capita consumption of meat in the United States. They present some interesting contrasts:

Meat	1917, pounds	1918, pounds	1919, pounds
Beef	61.23	66.74	58.95
Veal	6.39	6.90	7.96
Mutton and lamb	4.59	4.95	5.90
Goat meat	0.18	0.14	0.09
Pork (excl. lard)	57.59	71.35	69.08
Total meat	129.98	150.08	141.98
Lard	11.51	14.57	12.48
Total meat and lard	141.49	164.65	154.46

consumption, which in total fell from 150 pounds per capita in 1918 to 142 pounds in 1919, a decline of 5.4 per cent. Last year's figure nevertheless was 12 pounds higher than that of 1917, when the people partly abstained from eating meat.

There was a sharp decrease in lard consumption during 1919, amounting to 2 pounds a person, but there was also a relatively large increase in the consumption of mutton and lamb. As a whole, however, the fundamental reason for the decreased meat consumption in 1919 may likely be found in the high retail prices which prevailed throughout the greater part of the year.

The Bureau of Animal Industry annually issues tables showing the salient facts connected with the meat industry of the nation. The information includes numbers and average weights of animals slaughtered under the Federal inspection and otherwise, quantity of each kind of meat produced and consumed, exports and imports, etc. Tables covering the calendar years 1914 to 1919 are now available and may be had on request.

Cattle Slaughter Fell 14 Per Cent
About 2,000,000 fewer beefs were slaughtered last year than in 1918. It is estimated that the cattle yielded 6,571,226,000 pounds of dressed beef in 1919 as against 7,640,712,000 pounds in 1918, which is a decrease of 14 per cent. The lowest yield in the last six years was 5,638,565,000 pounds in 1914, after which there was a gradual rise each year, culminating in the big record of 1918. Last year's total goes back to slightly below that of 1917. Approximately three fourths of the cattle slaughter is now conducted under government inspection.

Relatively the most striking item of all the meat exports in 1919 was obtainable, by which it is shown that the falling off in beef shipments.

Compared with 1918 the decrease was 56.8 per cent, the respective totals being 728,236,000 pounds in 1918 and 314,381,000 pounds in 1919. Beef exports from the United States, however, have been almost wholly coincident with Europe's war needs. The trade, it is predicted will revert to the sources of cheaper beef from South America and Australia.

Home consumption of beef decreased 11.7 per cent in 1919.

Veal Production Increased
In sharp contrast with cattle the slaughter of calves in 1919 was greater than ever before. The drought in the west is ascribed as one of the main causes of the increased marketings. In round figures 9 million calves are estimated to have been marketed last year, which is a million and a quarter more than 1918 and represents an increase of 17 per cent.

As no exports or imports of veal are recorded, the consumption follows the production, and increased from 7 pounds to 8 pounds a head of the population.

Increase in Mutton and Lamb
Sheep and lamb slaughter reached the low point in 1917. About 1 1-4 million head more were marketed in 1918 and last year there was a further increase of more than 3 million head. The increased yield in meat in 1919 amounted to 103,486,000 pounds and was a gain of 20 per cent, but the consumption of mutton and lamb is so small compared with pork and beef that increase meant only 1 pound a person of the population. The trend, however, is upward.

In this connection an interesting comparison is made with mutton and lamb consumption in certain other countries, according to latest figures

this class of meat is especially popular in Britain and largely consumed also in France. The countries for which such data are available and the proportion consumed of mutton and lamb as compared with all meats consumed are given as follows:

United Kingdom	21.8
France	11.4
Canada	6.6
United States	4.2

Thus the proportion ranges from upwards of one-fifth in England to about one twenty-fifth in the United States.

Our foreign trade in mutton and lamb is very small compared with other meats, and the imports generally exceed the exports.

Pork Still Plentiful

A million more hogs were slaughtered last year than in 1918 and 13 1-2 millions more than in 1917, and although 2 million more hogs were marketed in the record year of 1916 their average weight was almost 13 pounds less a head, so that 1919 stands easily first in pork production. The year's slaughter yielded the enormous total of 9,269,185,000 pounds of pork and 2,119,222,000 pounds of lard.

The record-breaking exports absorbed 20.5 per cent of the pork and 37 per cent of the lard. The large foreign demand helped to reduce the home consumption 3 per cent on pork and 14 per cent on lard, as compared with 1918.

Last year's per capita consumption of pork was, in fact, smaller than in any recent year except 1917.

Horses Slaughtered for Meat

As a sign of the times it is of interest to note the Federal inspection of horse slaughter, which began in September, 1919. Up to the end of the year 433 horses were so slaughtered, and about one-half of the resulting meat was certified for export.

There had been no previous Federal supervision of horse slaughter since 1903. At that time inspection was limited to a single establishment which had been in operation for several years. The inspection was necessary, as in the present case, to permit of consignments being made interstate and for export.

The consumption of horse meat is not uncommon in certain parts of continental Europe, and was in vogue long before the late war. The fact that horses are slaughtered in non-federally inspected establishments in the United States is perhaps not so well known. Inspectors of the Bureau of Animal Industry reported in 1918 that horses were being so slaughtered at six widely separated places situated in the East and Middle West and on the Pacific coast. The output of these places aggregated about 2,000 or more carcasses annually. As to the consumption of this horseflesh, it is known, of course, that zoological gardens, menageries, etc., account for a large part of it for the feeding of flesh-eating animals.

As before stated, consumers in 1917 refrained to some extent from eating meat. Pork products were especially desired for export, and the result for the year was a smaller total consumption than ever before recorded.

Producers came to the rescue in 1918 and provided such an abundance of animals that a large surplus was available for the home consumption after meeting the export requirements. In 1919 the shorter supply of cattle and augmented shipments of pork products brought the total consumption down 8 pounds a person.

The quantities of each kind of meat above given, it is explained, are figured from a "dressed," or butcher's meat basis, which includes the bones and butcher's waste. They include also such parts as are canned and cured—bacon, hams, canned meats, etc. On the other hand, there are considerable quantities of edible meat which are not included in the dressed weights of the animals, such as the liver, pluck, etc. Allowing the one to offset the other the figures used are considered as approximating the actual meat consumption.

Johnson Still in Straw Vote Lead

HIRAM Johnson continues to hold a substantial lead over all other candidates in the M. B. F. straw vote. Henry Ford is second; Herbert Hoover, third; Wood, fourth; Bryan, fifth; Lowden, sixth. Because of the lack of interest in Borah, Clark, Goethals, Poindexter,

Taft, Pershing, and because none of them except Poindexter are avowed candidates we are taking these names from our ballot. We are a little disappointed in the number of returns that have been received, less than 600 votes being recorded so far. Please clip the coupon this week, and mail it in.

CLIP THIS COUPON

My Choice for President

I AM interested in the character of the man who is to be the next president of the United States, and have indicated my choice below:

- | | | | | | |
|--------------------|--------------------------|---------------|--------------------------|--------------------|--------------------------|
| Wm. Jennings Bryan | <input type="checkbox"/> | Leonard Wood | <input type="checkbox"/> | A. Mitchell Palmer | <input type="checkbox"/> |
| Warren G. Harding | <input type="checkbox"/> | Hiram Johnson | <input type="checkbox"/> | Robert LaFollette | <input type="checkbox"/> |
| Herbert F. Hoover | <input type="checkbox"/> | Frank Lowden | <input type="checkbox"/> | Henry Ford | <input type="checkbox"/> |
| Woodrow Wilson | <input type="checkbox"/> | Wm. G. McAdoo | <input type="checkbox"/> | | |

Do you favor the submission of the warehouse amendment?

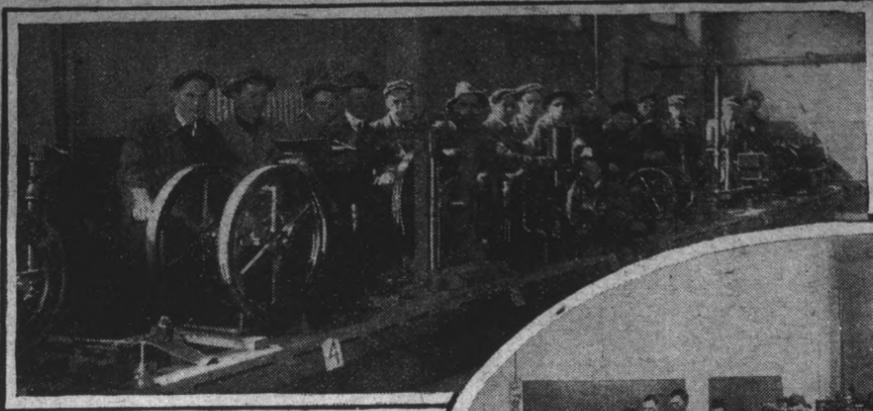
M

If your candidate is not listed above write in name.

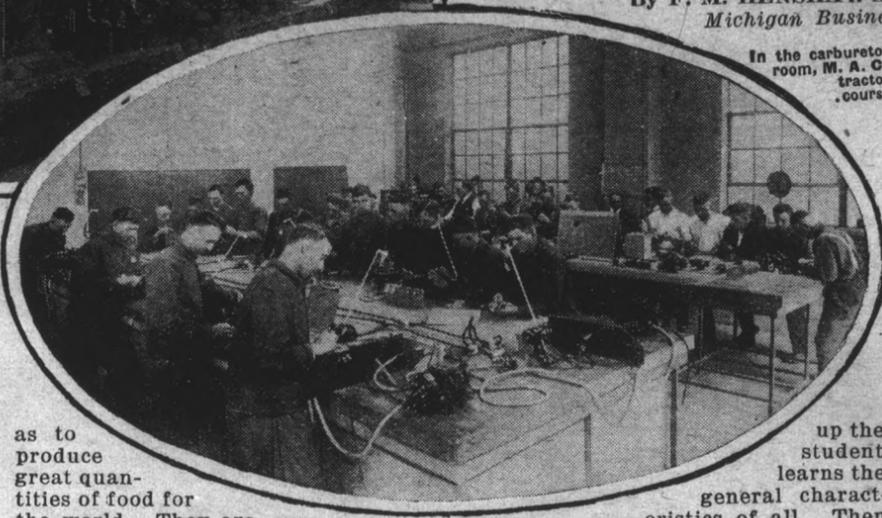
Tractor Study at M.A.C.

Farmer Boys Learn How to Handle the New Hired Man, the Tractor

By F. M. HENSHAW Associate Agricultural Editor
Michigan Business Farmer, M. A. C.



Learning the first principles of the gasoline combustion engine.



In the carburetor room, M. A. C. tractor course

HAS THE tractor come to stay in Michigan? Has it filled the bill sufficiently well where it has been tried to warrant its wholesale use in developing the agriculture of the state and in opening up land hitherto untouched?

If you want to know, just ask the hundred odd Michigan farmer boys enrolled in the winter course in truck and tractor work at the Michigan Agricultural College. The tractor has fired the imaginations of these boys. They believe in it. To them it is the symbol of the day that is coming when the gas engine and power will eliminate much of the present arduous labor on the farm.

If you don't believe the tractor means romance to these boys, just visit the school and watch them at work. You will see them caress their favorites among the big machines at the college just as they fondle that pet driving horse at home. You will see them deeply absorbed while an instructor explains the workings of some type of motor. You will see them rapt in attention while a plow expert explains the adjustments for various kinds of soil-breaking. You will see them working in the blacksmith shop till their shirts are damp with sweat, while they accomplish nearly as much in a couple of days as the regular student does in a whole term.

Interest in the M. A. C. tractor school, as interest in the tractor everywhere, is constantly increasing. Seventy men registered for the first course in February and the number is considerably greater in March. These men are learning all about the tractor not merely in order to start selling them or to obtain jobs at factories where they are made. They want to know how to operate and repair them because they expect to use them on Michigan farms. Replies to questions put to the tractor students show this is true.

But they are not going back with any false ideas about the tractor—not if O. E. Robey and the men who are aiding him with the course can help it. They are being shown the limitations of the tractor as well as its advantages, so that when they go home they will have a clear understanding of its place on the Michigan farm.

But there are others besides Michigan boys who are enthusiastic about the future of the tractor. When the second course opened on March 1 among the registrants were 50 men of Russian extraction from Detroit who expect to return to Russia with tractors which they will introduce among their fellow countrymen. These men foresee a rosy time when the vast area of eastern Europe will be developed by modern methods so

as to produce great quantities of food for the world. They are the pioneers, but among such a people they believe the tractor needs only a strong foothold in order to make rapid headway.

As the course is arranged, one week is spent in the study of gas engines, one week in the study of the tractor itself, three and one-half days on carburetion, three and one-half days on ignition, and three days in the blacksmith shop. When the students register they are divided into groups, one of which begins on gas engines, one on tractors, etc. The groups change off as soon as one section of work is finished. In this way equipment and instructors' time are efficiently used.

By this arrangement it is also possible for a student to register at any time during the first four weeks and continue until he has passed through all departments. If he desires to familiarize himself still further with any particular branch or work he is permitted to remain.

A system of identifying by serial number similar to that prevailing in the army is used. Pins bearing the students' numbers are issued and thereafter Jim Jones becomes No. 86. This method is particularly happy as it affects the Russian students for many of them cannot speak English and some of the names probably would give instructors trouble to pronounce.

The schedule calls for two hours of lecture and six hours of shop work each day. The morning lecture from 8 to 9 o'clock is concerned with technical subjects and maps out the road to be followed during the next six hours. From 9 until 12 and from 1 until 4 students are busy in the shops and with the tractors. At 4 they assemble in one of the big lecture rooms of Agricultural Hall, where experts among the faculty of the college show them the significance and application of the course in its broader aspects.

The week of gas engine instruction in reality is a course in general power farming. On the opening morning students are requested to fill out a questionnaire showing the extent of their previous knowledge, and reference to this questionnaire tells the instructor which men are most in need of individual help. From the nine types of engines set

up the student learns the general characteristics of all. Then he is kept at work upon one or two until thoroughly familiar with them. In the course of the week he experiments with timing, wiring and the Prony brake test to determine horsepower; he completely dismantles one engine and reassembles it; he makes all sorts of repairs; he learns to lace belts, to test batteries, to habbitt. Because ropes often must be used in connection with the use of power on the farm, he is taught how to splice them and how to tie various knots.

Problems which come up in actual operation of the tractor are met in the week spent with the machines themselves. The student is shown the workings of the magneto, clutch and transmission and spends two or three half days at curing troubles likely to occur, after which he takes one of the machines outside and drives it about the M. A. C. farm just as he would at home.

Practically every type common to Michigan users is among the tractors assembled especially for the course. There are little tractors and big tractors, factory tractors and home made tractors, two wheel tractors and four wheel tractors, tractors that steer from a seat directly above and tractors that steer from the seat of the plow or other implement behind. They include the Fordson, Sampson (General Motors) Port Huron and Titan (International Harvester) Case, Rumely Oil Pull, Huber, Heider, Bates, G. O., Universal Moline, International 8-16 and Chippewa Chief.

The Chippewa Chief is a big covered tractor built by E. J. Myers, of Shepherd, Mich., and driven overland 70 miles to East Lansing in January. Its builder spent 14 years perfecting his model. Its chief distinctive feature is a wide caterpillar rear which makes travel over snow drifts and very soft ground possible.

In general the students have shown great aptitude both in operation and repair. The ordinary troubles of the tractor have puzzled them little.

In taking up the study of carburetion the student attacks the subject first from a theoretical angle, in that his first day is wholly occupied with the laws of magnetism. When he is not busy at the blackboard he is busy at the bench, and at the day's close

he writes an examination. On the following days he delves into the mysteries of magnetos, wiring and coils; concentrates upon generators, starting motors and batteries, and finishes with a half day in review.

He next turns his attention to points of ignition such as timing and adjusting, and easily gets at the heart of the matter through working with a chassis set up for the purpose, with the ignition system of a common make of car exposed to view. Here as in the tractor room the students show quick perception of the principles involved and troubles fail to keep them guessing long.

Work at the forge is designed to give the student an idea of the handling of metal, so that in a pinch he may resort to home remedies. By working long periods at a time short course men accomplish much more in proportion than the regular student, but instructors say they show unusual aptitude and contrast their eagerness with the indifferent spirit shown by service men during the S. A. T. C. regime. Practice in making bolts, hooks, rings and staples and in welding and tempering constitute the blacksmith course.

Men proficient in the operation of tractors are in demand and the college fills a number of requests from outside sources. A letter of recommendation is given to each man who satisfactorily performs the required work.

The course is rounded off with instruction as to the manner in which the tractor is related to common agricultural problems. In one lecture on soils the student is given a summary of the conditions which make for good tilth and the part the tractor may play in keeping the soil fit. There are certain times when rain or other conditions are particularly favorable for the working of the soil and it is because the tractor is available at these critical occasions that it is especially useful. In the fall in particular there is usually a period most appropriate to plow for spring planting in this season the tractor may be relied upon to pay for its upkeep. However, there are certain times when the soil will suffer if packed down with such a heavy machine.

In spite of the tremendous advantages of tractor farming, students are not given to understand it will wholly replace the horse. In two lectures by Ralph S. Hudson, superintendent of the M. A. C. farm, they are reminded that, in actual farm usage, when the tractor goes wrong on a rainy day or in the back forty its repair may not be so simple as in the shop at the college.

The horse is necessary to do satisfactory work in fields where there are wet spots, on steep hillsides, in light sand, or among stones, bogs or stumps. The horse still is needed to market grain and livestock conveniently and economically. Horses may be grown on the farm and may be replaced readily and cheaply.

As to the convenience of the horse compared with the tractor, according to Mr. Hudson horse work never



Lining up in "battle formation." Twelve tractors are used in the course. They include the Fordson, Samson (General Motors), Port Huron and Titan (International Harvester), Case, Rumely Oil Pull, Huber, Heider, Bates, G. O., Universal Moline, International 8-16 and Chippewa Chief.

is seriously hindered by weather conditions, work may be planned and carried out with certainty, and substitute teamsters may be more easily obtained than substitute tractor drivers. The horse has an advantage in his reserve strength and the flexibility of his power is invaluable on the farm where the pull required varies with nearly every job.

In several ways the horse is economical as well, Mr. Hudson points out. The initial cost is not great, feed for horses is raised on the farm, horses produce valuable by-products such as manure, hides and colts, the cost of medicine for horses is much less than the cost of repairs for tractors and many farm tools are designed for use with the horse.

Although Mr. Robey as acting head of the farm mechanics department has general supervision over the course, actual details of its administration are in the hands of E. C. Sauve, another member of the same department.

"The interest manifest in the truck and tractor school," said Mr. Sauve, "is an evidence of the growing popularity of the gas tractor. The farm mechanics department is receiving more inquiries than ever regarding its practicability, and if the reports of tractor salesmen are true, a

very prosperous year faces them.

"Men on the staff of the farm mechanics department are not agreed that all farms of reasonably large acreage can profitably support a tractor. We are agreed, however, that the man who attends a tractor school of merit is, in large measure, a determining factor in its success. Of course there are other factors, such as the first cost and the ability or inability to obtain repair parts and expert service when needed.

"It is my contention that it is a mistake for prospective tractor owners of Michigan to consider the purchase of a machine manufactured in a distant state unless such companies have established, or give promise to establish branches so as to meet the farmers' service needs. This is a vital question and these conditions must be met in order to prevent dissatisfaction among tractor users.

"The tractor is with us to stay. It does meet the need of greater production with less help. It supplements the horse during the peak load and in some instances permits of displacing one or more of them.

"Answers to questionnaires pertaining to the minimum acreage which would prove a profitable investment indicate that a large number believe a tractor of an 8-16 rat-



Examining the pulley on an "Oil Pull." The little pulley often gives the farmer his greatest service from the tractor.

ing (that is, eight horsepower on the drawbar and sixteen horsepower on the belt) would be profitable on an eighty acre farm. In most cases such answers were received from first year tractor users and might differ from the facts through the lifetime of the machine.

"Actual figures to prove or dis-

prove this statement are not available. It is quite generally believed that the average tractor should be made to work 50 days a year to prove a profitable investment. This statement is rather general, but as yet no specific instances are available. This year's farm-census may throw some light on the question."

If We Divided All the Money How Much Do You Think You Would Have?

(Concluded from a previous issue)

LET US go back to the idea of not paying anything to invested capital, but of dividing all the profits among the workers. In 1918 the average earnings of all the employees of the United States Steel Corporation were \$1,685 a year. The corporation's net earnings after taxes were deducted were \$209,281,104 for that year. This was the amount before making any interest payments on bonds or dividends on stock.

Now imagine that no interest or dividends would be paid. Suppose that the thousands of men and women who have bought the bonds or the stock, of the Steel Corporation, allowed it to use their savings for nothing and were willing that all the profits be divided among the steel employees. In that case, the average pay of these employees would be \$2,460 a year.

Of course, 1918 was a year of abnormally high profits; and therefore the employees would have received more than in ordinary years. Very many people make a serious mistake by looking only at the fat years, and forgetting all about the lean ones, when they talk of the dividends paid to capital. The only just way of estimating the return received by the capital invested in any business is to take the record of that business over a long period of years.

If you will do that, you find that the average return is moderate—except in cases of extraordinarily good management. It is the brains and energy of the men at the head of a concern which are chiefly to be thanked for the consistent growth and prosperity of its business. On the whole, the other employees are about on a par with those in other organizations.

The great purpose, however, in most of the present discussions of industrial affairs is to find some way of stimulating all workers to have a greater share in promoting the prosperity of the business with which they are connected, and of seeing that they get their reward for this gain in prosperity.

A concern which can produce more goods at a lower cost than its competitors can make them will earn, and deserve to earn, greater profits. And if all the workers combine in the effort to accomplish this, they should benefit accordingly. But it is an incredible fallacy to think that a reduction of effort, with its inevitable corollary of lower production and higher cost, can possibly bring a reward to anybody at all.

The only sane method of trying to increase our reward is to increase our service. "Dividing up the money" won't do it; not perceptibly, at least.

In 1917, the number of persons in this country who paid taxes on incomes of over \$10,000 a year was 161,996. Suppose you confiscated the amount of their incomes above

\$10,000 and distributed the money to the 110,000,000 people in this country. How much do you think your share would be. Just \$32.37 for that year.

If you think \$10,000 too much for any man to receive, cut all incomes to \$5,000 and divide the amount thus saved. You would be able to give each person only \$44.06 more per year. And if you make \$2,000 the limit of any man's income, the distribution would then be \$68.33 a year. These calculations are based on the 1917 report of the Commissioner of Internal Revenue.

But if you kept this up, if you continued to confiscate and parcel out the amount in excess of \$10,000 you would soon have little enough to handle. Nobody would care much about working hard enough to earn

more than \$10,000 a year, just to see someone else get it.

You may think that if all the private wealth of the country could be divided among all the people, you would be a rich man. But Professor King showed that in 1910—the latest year for which he had figures—the active capital in this country, if divided among all the people, would be \$521 to each of us.

Remember that this would not affect merely the people with fortunes. If you had saved a thousand dollars, it would take more than half your savings away from you and give them to someone who had saved nothing. What incentive to ambition, industry, and thrift would there be in such a state of society? It would be a calamity—not only industrially, but morally as well.

Sugar--From Michigan to Montenegro!

FROM THE beetfields of Michigan to the mountains of Montenegro came a precious cargo. One day there could be seen on Lake Scutari, floating down through the Montenegrin mountains, a long, shallow, flat-bottomed boat loaded with yellow brown, heavy sack. A couple of boatmen guided the unwieldy craft while in the center of the boat, standing on one of the canvas sacks, was a tall mountaineer with a loaded rifle over his shoulder and a bandolier of cartridges around his waist.

This mountaineer was the police chief of the district and all the way from Scutari to the little dock at Plavnitz he guarded his precious cargo,—a cargo of American sugar. To the people of this wild little Balkan state this sugar was worth its weight in gold, for it was the first the natives had tasted for five years.

Think of that, Mrs. Housewife, when you are unable to obtain from

your grocer this necessary commodity, or when you have to be content with two measly little pounds. No sugar for five years!

This cargo of sugar was a gift of the American Red Cross and was distributed among some of the remote mountain villages in Montenegro.

The shortage of sugar in the Balkans and also in France and Belgium, is appalling, when we consider what a large part it plays in the planning of our American menus. The children of war-torn Europe have suffered especially because of this lack of sugar and wherever possible, the American Red Cross has supplied this need to anemic little folks.

The Red Cross worker in Northern France obtained two tons of American sugar last Christmas, boiled it down and converted it into bonbons for 10,000 children, the first candy many of them had ever tasted.



This cargo of American sugar, photographed while floating down Lake Scutari through the Montenegrin mountains, came from the beet fields of Michigan. It was distributed by the American Red Cross among some of the remote mountain villages and was the first sugar the people had tasted for five years.

Certain theorists want to do away with leadership in industry. They have only to look at the countries where there is little such leadership, and little employment of capital in industry, to see that these are the very places where the conditions of life for the masses are the most hopeless and degrading.

Compare the Asiatic countries with the United States. In China, for example, there are guilds of laborers; but they do little to improve the lot of the wage earner. The people there live and work under conditions almost incredible to us.

Here in the United States we have the most wonderful development of machinery to be found anywhere. It makes life richer for us all, because it enables us to produce more of the things that elevate living conditions. Every man, woman and child in the United States benefits every single day by this development. And it has been brought about by individual leadership and ambition—and by the use of capital.

The old spinning wheel and loom represented a very small investment of capital and no industrial leadership. The modern textile mill represents a large investment and the work of energetic leaders. You can compare in the same way the village shoemaker and the modern shoe factory, the old time smithy and the modern steel mill, the old stage coach and the modern railroad, the homemade tallow candle and the modern electric light.

You must remember that it was not enough to invent these improvements. An invention is worthless until industry takes it up. Agriculture would be the primitive thing it was a hundred years ago if energetic men and invested capital had not made modern farm machinery available.

The progress in our standards of living has marched side by side with the growth of capital invested in industry. In 1899, the capital employed in manufacturing in the United States amounted to \$1,770 for each person employed in the manufacturing industries. In 1904, it was \$2,117 to each person; and in 1914 it was \$2,848, showing that the increase in capital at work has been greater than the increase in human effort which has accompanied it.

It is absolutely necessary to the welfare of the people that this movement should go on. As our population increases it becomes more difficult to supply them with the necessities and comforts of life. The only way to do this, and to give them still more of these necessities and comforts, is to increase our power of economical production.

To do this, we must have capital. And capital as I said before is nothing but the combined savings of all the people. There are stockholders

(Continued on page 27)



The Organized Farmer

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



CO-OPERATIVE MILK PLANTS

THERE IS a growing interest in the movement to reduce the costs of marketing fluid milk through co-operative city distribution. Increasing sanitary requirements of city milk inspection departments and mounting costs of market distribution have given a considerable impetus to this movement. The number of co-operative city milk plants in actual operation is not large when compared to the number operated for profit under private ownership and management, but such enterprises have been projected in practically every section of the United States, and considerable number of co-operative plants have actually been put into operation during recent years.

Co-operative milk plants are now being operated in cities ranging in size from 15,000 to over 600,000 in population, but generally the co-operative idea applied to city milk distribution has gained adherents more readily in the smaller sized cities where private initiative had failed to develop a satisfactory system of milk marketing. Action has usually been initiated by local dairymen who sought to obviate unnecessary costs by erecting a pasteurizing and bottling plant. These plants furthered more economical city distribution, either through routes operated by the association itself or through sub-dealers to whom it might sell.

Reference to index pages of trade publications would indicate that probably one of the first successful efforts along this line in the United States was that of the Erie County Milk Association of Erie, Pennsylvania. In 1899 approximately fifty local dairymen retailing milk in Erie organized a stock company for the purpose of engaging in the co-operative distribution of the milk produced by its members. At the outset this association consolidated the deliveries made from sixty-five routes into twenty-three. Although the original amount of stock issued (\$30,-

THERE are five separate and distinct general farm organizations in Michigan, in addition to a score or more organizations for the promotion of special branches of husbandry. Every member of these organizations is naturally interested in what both his own organization and all the others are doing for the farmers. We have established this department for the purpose of keeping our readers informed on the activities and progress of farm organization, and we ask the officers of both local and state units to send us brief news items of their meetings, etc. for publication in this department.—Editor.

000) had not been increased up to the year 1917, the current market value of this stock had increased to approximately \$150,000.

Since the organization of that pioneer, co-operative milk distributing company, a considerable number of associations have been organized for a similar purpose in other cities. Not all of these however, have met with equal success. The beginning of many of them was beset with difficulties at the outset, owing to inadequate finances; and at least one, which had been operated profitably for approximately ten years, was forced into bankruptcy on account of an inadequate accounting system and lack of intelligent supervision by the association's board of directors.

NEW PLAN FOR CO-OPERATIVE FARM ELEVATOR

A committee consisting of B. B. Lincoln, Wm. Harwood and Warner Ramsey, appointed at the last meeting of neighboring farmers at the Rose Theatre has conferred with the directors of the Bad Axe Farmers' Elevator, and finds that the proposition as finally decided upon by the directors under which Harbor Beach farmers may purchase stock in the Bad Axe elevator, is in substance as follows:

The directors of the Bad Axe elevator state that they have a property valued at \$70,000 beyond their indebtedness: that at the time the company was organized nine years ago, \$1.00 invested in stock at that time

was worth 100 cents; today a dollar is worth about 50 cents in comparison with 1911 dollars. That the elevator has issued \$16,000 of stock, but is only paying interest on about \$10,000 of stock. That for the above reasons stock in this elevator is worth a great deal more today than it was nine years ago; that the directors could sell their plant and equipment and realize \$7.00 for every dollar originally invested.

The plan submitted by the directors is that Harbor Beach farmers buy \$25,000 of stock in the Bad Axe elevator, which sum will be used to purchase or build an elevator in Harbor Beach, buy equipment and merchandise and have at least \$10,000 for operating expenses. For every \$100 paid in for stock, a share valued at \$50 par will be issued and the interest to be paid on the \$100 is to be \$3.00 annually. To make a decision as to whether or not local farmers will accept this proposition a meeting will be called in the near future, at which the Gleaner plan of elevator co-operation and other plans will be submitted.

EATON COUNTY FARM BUREAU

The membership campaign now being conducted in Eaton county by the Michigan State Farm Bureau has to date resulted in securing 1,357 members in the county. This number will be increased every day as some were missed by the solicitors because of sickness or absence from their home.

CO-OP ASS'N HOLDS ANNUAL

The Grand Ledge Co-operative association held its annual meeting March 6.

The hall was filled to the doors with enthusiastic co-operative farmers. The financial statement was read by the secretary showing the association to be in fine condition, with a membership of 296. Forty-eight shipments of 96 cars or 118 decks, consisting of 9,158 head of stock as follows: 553 cattle, 3,419 hogs, 4,205 calves, 3,981 sheep and lambs; home weight 1,814,261 lbs. net or Detroit weight 1,185,001 lbs. Gross price \$251,610.85.

Actual expense of doing business was \$10,298.30.

Average selling price per car, \$2,654.30. All expense per car \$108.34. The cost per dollar for doing the business was four cents.

Meeting was adjourned

C. H. Barton, J. R. Lowell, Elmer Vigt, A. C. Benjamin were elected directors. Each for a term of 2 years. Meeting was adjourned to same Saturday in Jan. 1921.

E. E. Compson, state manager, gave a talk on taking more pains in preparing stock for market.

WALTON FARM BUREAU ORGANIZED AT OLIVET

The Walton Township Farm Bureau was organized at a meeting of the farmers held at the township hall in Olivet, about 40 men being present. Officers were elected as follows: Robert E. Dixon, president; A. C. Fisher, secretary and treasurer. The board of directors consists of these two officers and Frank Herrick, Austin Bradley, Matthew Shilts, Charles Bugbee and Frank Halsey. The delegates chosen to represent the bureau at the Eaton County Farm Bureau meeting to be held in Charlotte Wednesday are Carl Hitchcock and Earl Corey. Frank Halsey and Frank Etson were chosen delegates to the meeting of the wool growers' association, to be held Friday, in Charlotte.

Is There Need for the Michigan Potato Growers' Association?

Avisability of Continuing This Organization Brought Into Question at Annual Meeting During Farmers' Week

By A. M. SMITH

President Michigan Potato Growers' Exchange.

NOW THAT the Michigan Potato Exchange and the Gleaners' Clearing House Association have become so well organized it has been suggested that these two organizations could take care of the work which the Michigan Potato Association has been doing in the past. On the surface that would appear to be possible, but in reality I believe that our first judgment regarding that is wrong. It is doubtless true, that out of the efforts along the line of co-operative marketing instituted by the Gleaners in Michigan, the enthusiasm put into the potato growers by the stirring articles in M. B. F., and the great meeting held at Lansing Farmers' Week, 1918, by the Potato Growers' Association, then has evolved the Michigan Potato Exchange, and what has become a practically re-organized Gleaners' Clearing House Association for selling potatoes. Marketing privileges for potato growers in Michigan are firstclass as we all know. Competition is keen in the potato markets of the state and with present high prices potato growers are well pleased with the splendid improvement in the whole potato situation. But let us not forget that in part the very gratifying condition has been due to some causes beyond the potato growers' control or rather independent of his efforts.

(1.) Consumption of potatoes the past season has been large, and even when shipments of potatoes were above the average of former years the markets readily absorbed the surplus.

(2.) Car shortage at times has undoubtedly boosted prices rapidly and held them high.

(3.) Doubt in the minds of growers and shippers as to the accuracy of the government report and a determination on the part of growers to hold

their potatoes for a good price have also helped to stiffen the market and make it strong. These last two considerations may very largely account for some of the high prices which have prevailed. And so some potato growers, indeed, I fear too many, think they have things in a satisfactory condition for their interests, and that they do not need to bother their heads for the future. But after due consideration and a survey of all conditions and considerations, I have come to the conclusion that the Michigan Potato Growers' Association is needed today more than ever.

At present potato growers consist of three classes:

(1.) Those who market thru the Gleaners' Clearing House Association.

(2.) Those who market thru the Michigan Potato Exchange.

(3.) Those who market in the large cities direct to consumers.

(4.) The large growers who themselves ship in car lots to commission men and

(5.) The grower who sells his crop on the open market to the highest bidder.

We have no method of knowing what percentage of potatoes are sold outside of the Mich. Potato Exchange and the Gleaners' Clearing House Association but we would be inclined to estimate that more than half the potatoes raised in Michigan are marketed independent of these organizations, and this condition, we believe, will continue.

Therefore, it is evident that the growers of the state need an organization through which they may unitedly speak. And it should be an organization which is thoroughly representa-

tive, and also one which will not only consider the commercial commodity, but also be connected up in an official way with the splendid extension work of M. A. C., so efficiently carried on under Mr. C. W. Ward. There are a few things which the potato growers need right now in the way of legislation to enable them to reach out and profit by new opportunities.

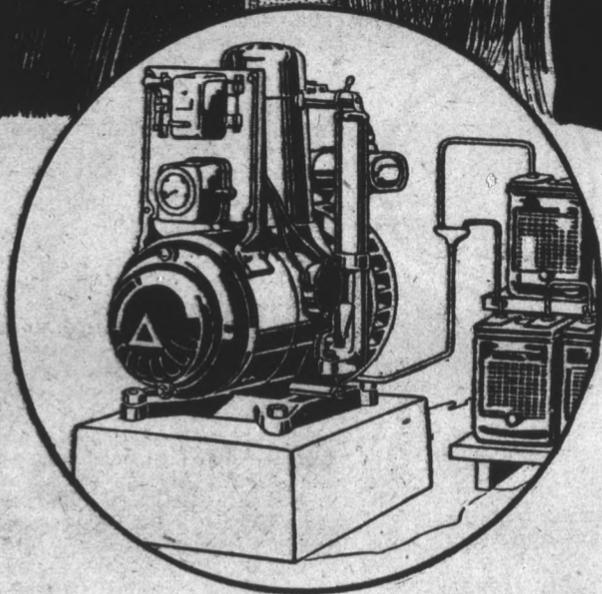
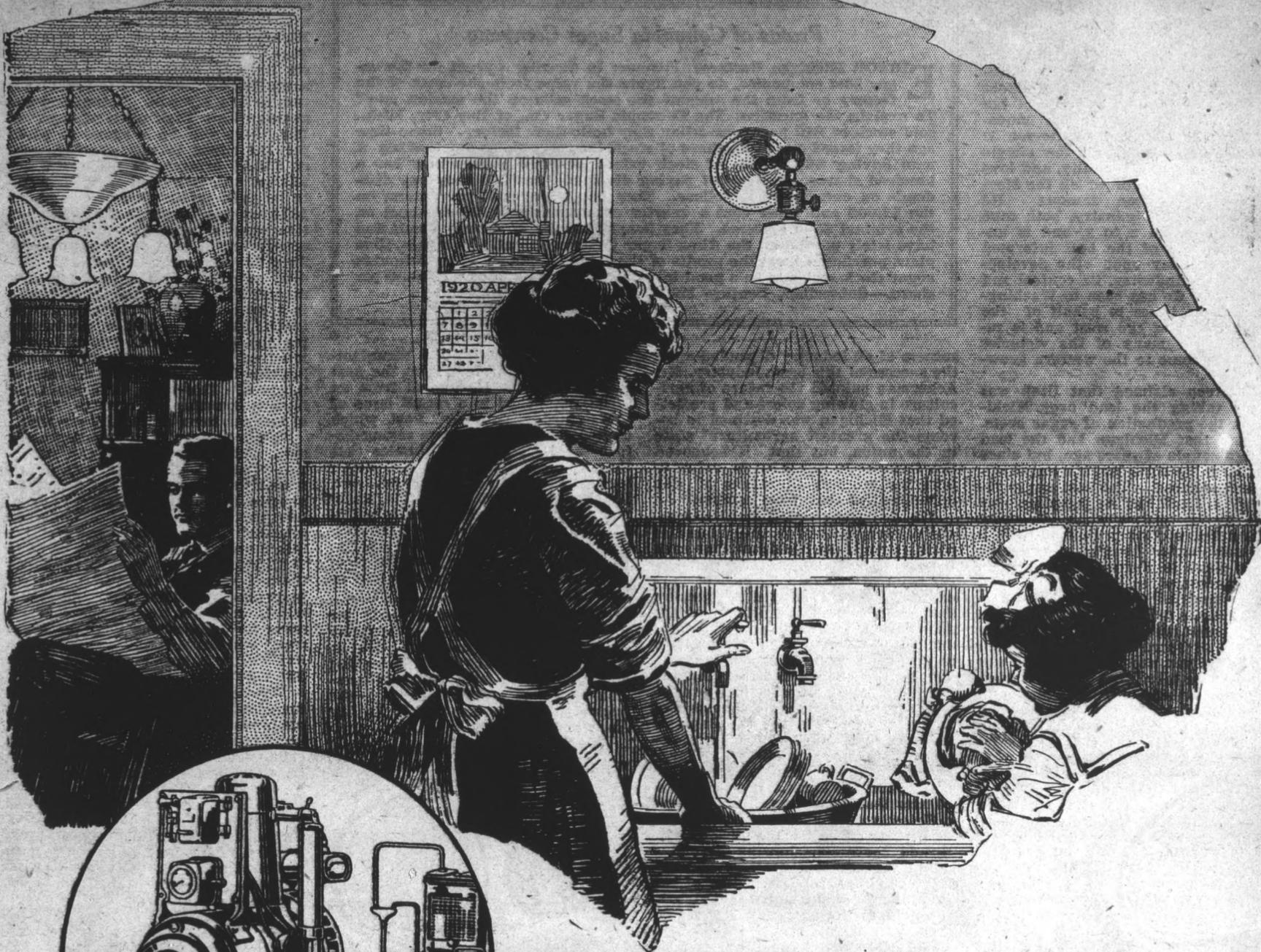
It is a well-known fact that good seed potatoes are about half the crop or perhaps more, and there has been developing in recent years a tremendous demand for good northern grown seed. Such seed is in great demand in the south and in order that some guarantee as to quality might be given, some states have arranged thru legislation to authorize the "Certification" of seed potatoes. Michigan has been slow in moving to obtain the splendid profits obtainable for seed potatoes guaranteed by some responsible authority to be true to name and practically free from disease. It is high time that we got into this game and reap the golden harvest which comes to such progressive growers as have been and are producing a choice potato and for which they should receive a premium price. A selling organization could hardly consistently certify its own product satisfactorily to the purchaser. Neither can we expect that Mr. C. W. Ward alone and single-handed, can handle such an enterprise. But the Michigan Potato Growers' Association when it is given proper powers and authority and also sufficient funds through legislation, working with and properly connected by legislation with the Extension Department of M. A. C., can become an organization to inspect and certify seed potatoes in Michigan

and such an organization will bring millions of dollars in extra profits to the potato growers of our state.

Now, Mr. Potato Grower, what we want of you is membership in the Michigan Potato Growers' Association. If you are a member of a county potato growers' association, we want such association to meet and talk over this whole matter and then if such an association is not already a member of the state association we want you to pass a resolution at once that you will join us. Then we want the Gleaners' local members of the Clearing House Association and the members of local potato marketing associations to connect up with us in some method to be devised so that the Michigan Potato Growers' Association will be a powerful central organization thru which every potato grower in the state can speak, and which will, we believe, be instrumental in bringing about new legislation in the interests of the potato industry, which will be exceedingly profitable not only to potato growers but to the great state of Michigan.

This plan as briefly outlined can be modified and improved upon, but the basis for the enterprise proposed we believe, is sound. The need in Michigan for some concerted well-directed plans and movements in behalf of the great potato industry of our state we are just beginning to realize and also that this great industry, producing one of the most essential food products for man is just in its infancy. Not many states can produce potatoes profitably. Michigan has millions of dollars' worth of potatoes in her great tracts of virgin, cut-over lands as well as in her improved lands and the potato growers of Michigan should intelligently seek to secure these millions which will be the just reward of faithful labors, intelligently directed.

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Hundreds of Sugar Beet Contracts Returned

Some of Biggest Growers in State Withdraw Their Acreage From 1920 Contract

WE WISH every beet grower in Michigan could have attended the mass meeting at Saginaw last week and heard Mr. C. G. Patterson of Salt Lake City, who is secretary of the United States Beet Growers' Federation, and one of the big men in the beet growers' movement for recognition. Patterson is a Mormon, and has all the simple directness, keenness, ability, and love for a square deal for which the Mormons have become famous. He knows the sugar industry, both cane and beet,—from a to z, and is undoubtedly one of the best informed men of the day upon the development of the industry, its control and its future. He has been to Washington a dozen times in behalf of the beet growers of the west and is responsible for many of the victories that have come to the western growers.

Patterson claimed that Utah was slowly taking the lead over Michigan in the production of sugar beets. He said that Michigan had the lead up to a couple of years ago, but since that time his state has been gradually nosing ahead. The beet sugar industry in Utah had its inception way back in the fifties when Brigham Young first settled in that state. The Mormon leader bought a complete sugar plant in France, floated it up the Mississippi to St. Paul, and thence hauled it piecemeal by ox-cart to Salt Lake City. A member of the colony was sent to France to learn the art of sugar making. Although the initial venture failed, and it was many years later that Utah founded its first successful sugar factory with the financial backing of the Mormon church, the early impetus is given considerable credit for the later interest.

Mr. Patterson pointed out that organization in Utah had been severely handicapped because of the position held by the Mormon church, and although the beet growers of Utah have for many years been seeking better prices through organization, they are only just beginning to make appreciable headway.

It is the opinion of Mr. Patterson that both the cane and beet sugar industries of the country are dominated by the American Sugar Refining Company, through its intrepid head, H. O. Havemeyer. His contentions are largely borne out by testimony that was given in the suit of the United States government against the American Sugar Refining Company, et al, seeking the dissolution of the trust, such testimony consisting among other things of letters written by Mr. Havemeyer to Colorado and other western sugar men, and to such Michigan men as Chas. B. Warren, Worthy L. Churchill, Wm. H. Wallace, and others, showing a definite connection between these men and the sugar trust. The transcript of testimony is available and as the beet growers' campaign progresses we shall reproduce portions of it in these columns for the purpose of showing that the sugar managers of Michigan may be but the instruments of Wall street.

Mr. Patterson does not blame the sugar manufacturers for having an association to protect and advance their interests. Nor does he blame them for putting out contracts at the lowest possible basis. "That is business," he said, "good business, in accord with recognized business principles. The fault lies entirely with the farmer. If it is good business for the manufacturer to have his association and to make the contract as he sees fit, it is also good business for the farmer to have his organization and name his own terms of contract." He pleaded with the growers to stick to their association and to refuse to sign contracts this year that did not meet with the approval of their association.

C. E. Ackerman, the live wire manager of the Michigan Beet Growers' Ass'n. who with the aid of his associates has succeeded in organizing seven out of the ten thousand beet growers of the state, gave an enthusiastic talk upon the importance of agriculture, and stated that the

Profits of Columbia Sugar Company

EDITOR Michigan Business Farmer: In figuring a profit for the sugar beet companies, do you figure the value from the costs of the factory or from the amount the stock sells on the market now? To explain the question: The Columbia Sugar Co., of Bay City, Mich., sold stock at \$10 per share when they built their factory. Some time ago they issued one extra share of stock for every share outstanding. A man having fifty shares of stock valued at \$500 dollars now has a hundred shares. Instead of paying dividends on \$500 they pay dividends on one thousand dollars. They pay 8 per cent per annum on the \$1,000 and 1 per cent a quarter extra, making \$120 dividend on the original \$500 invested. They bought heavily of Liberty bonds and have lately purchased the Alma Sugar Company plant. Was this Alma plant purchased from the profits of the Bay City plant? The Columbia sugar stock seems to be a good investment as it is quoted at \$18.50 per share.—Subscriber, Bentley, Mich.

success of all industry depended upon the success of this basic industry. Mr. Ackerman painted the future of agriculture in glowing colors and predicted that Michigan was destined to become the greatest agricultural state in the union, but that it behooved the farmers to organize in order to take the greatest advantage of the opportunities that were coming.

Mr. Ackerman stated that the present organization of farmers was as solid as could be built and that each local unit had ample funds in its local bank to carry on its part of the campaign. He reminded his hearers that even though the officers of the Association failed to perform their duties the farmers were in a position to go ahead with the work. In answer to the charge declared that he had done so at Owosso, in the presence of several farmers some of whom were present at the Saginaw meeting and vouched for his statement. Mr. Ackerman is a large grower of beets, his 1920 contract calling for 120 acres. It was disclosed also that other large growers, one a Shiawassee county farmer growing 200 acres of beets, had recently returned contracts, showing beyond a doubt that the big growers of beets were convinced of the justice of the present movement and would stay in the fight to the finish.

Forrest Lord, editor of Michigan Business Farmer, gave a brief talk, declaring his conviction that the present controversy involved a principle of right and square dealing which must be recognized and defended. He stated his belief that the all-important issue at stake was not merely the terms of the 1920 contract, but the manufacturers' recognition of the farmer as the most important party to the contract and entitled to a voice in the making of its terms. He stated his belief that if the farmers would be loyal to the organization they have perfected henceforth they would be invited into conference with the manufacturers, like one business man to another, and the contract be discussed and disposed of in a friendly spirit of compromise.

John C. Ketcham gave one of his forceful, pungent addresses punctuated with facts and figures which told a graphic story of the difference be-

tween the returns of the manufacturers and the farmers from the beet sugar industry. He quoted from an article published in a recent issue of the Saturday Evening Post which quoted the manufacturers saying before the Department of Justice that they could not afford to sell sugar for less than 10 cents a pound. Mr. Ketcham assumed from this statement that they could afford to sell it for 10 cents a pound and that consequently what they received above that figure was velvet. Other facts brought out by Mr. Ketcham are as follows:

"The high price being paid for granulated sugar and its reported scarcity and the probable higher price yet to be paid for it is leading many people to look into this question which so closely touches the pocketbook of every family in the state and nation.

"The Sugar Beet Growers' Committee representing the thousands of Michigan farmers who grow this important crop, is interested in producing a good supply of sugar and in securing a fair division of the proceeds of this great Michigan industry. Being offered a contract for 1920 which raises the labor cost to the farmer six dollars per acre without a corresponding increase in price for beets, the growers have instructed their committee to fight for an equal division of the net profits of the beet industry.

"That both the growers and the consuming public may know the facts upon the fight that is being waged the growers' Committee presents the case of the farmers based upon government reports and cost of production figures compiled from various sections of the state. Having been refused a conference by the sugar manufacturers and thus denied complete information on this side, the figures submitted in the following study of the manufacturing side are compiled from such 1919 factory reports, and from the government studies and reports of the sugar beet industry. The conclusions will be of interest to every beet grower and every sugar consumer. Who gets the millions?"

"The January crop report for Michigan just issued jointly by the

state and federal government shows a yield of 1,001,000 tons of beets for Michigan in 1919 so far reported. These, the report says, were grown on 110,448 acres. The price paid according to the report is \$11.28 per ton, or \$11,291,000. Estimating the average New York price of sugar at 12c, there will be a bonus of \$1.72 per ton added to the reported price of \$11.28 bringing it to a total of \$13 per ton, or a total of \$13,013,000 to be paid to the farmers for their 1919 crop of sugar beets. Production costs presented at the Saginaw convention of beet growers averaged \$106 per acre, or a total of \$11,707,488. These figures give the farmer no pay for his managerial ability—just brawn labor. The balance is \$1,305,512 above cost of production for the farmers with larger investment of capital, greater risks and heavier labor costs than the manufacturer. This gives \$118 profit per farmer counting an average acreage of ten per farm or \$11.80 per acre.

"Turn now to the manufacturing side. The average of sugar extraction reports which the growers committee has seen for 1919 shows 223 pounds of sugar from each ton of raw beets, or a total of 223,223,000 pounds. At an average price of 12c this represents the tidy sum of \$26,786,760. To this should be added the net value of the two important by-products of dried pulp and syrup, which according to such factory reports for 1919 as the Committee has seen, represents a net value of \$2,038,025 or a grand total of \$28,824,785.

"Owing to the above mentioned refusal of the sugar manufacturers to confer with the growers committee, dependence must be placed on the exhausted reports of the sugar beet industry by the Federal government to determine factory costs. According to government reports Michigan beets represent 75 1-2 per cent of the net factory cost of sugar. Allowing the 5 1-2 per cent for freight and field expenses, the price paid the farmers for beets would equal 70 per cent of the factory cost of sugar. If, therefore, the farmers receive \$13,013,000 for their beets, and this is 70 per cent of the net cost of sugar, the total factory and beet cost for the 1919 beet sugar crop of Michigan would be \$18,592,000. This pays for brain as well as brawn. Adding to this a 4 1-6 per cent selling charge which includes freight, commission, etc., we have a total of beet, factory, field, and selling expenses of \$19,706,115. Deducting this from the receipts, we have the impressive total of \$9,118,617 net to the factories in contrast with \$1,305,512 net to the farmers.

"It is, therefore, evident that the factory profit is seven times the farm profit. The beet growers' committee contends that there should be a fifty-fifty division of the net profits in order to insure a large production of this important crop, and to encourage the growers to have a larger investment, greater risks, heavier labor and equal brain power invested. This is the fight of the sugar consumer as well as the sugar beet grower. If the consumer does not want the price to go still higher, he must join in securing the grower a fair division of the net proceeds so that the growers will be able to continue in the business."

Mr. John Shepherd, of Clinton County, member of the executive committee of the beet growers association adds that the committee estimates that 156,000 tons should be added to the government report to cover the quantity in transit and that not yet reported. Also, that 110,448 acres were harvested, which constituted 78 per cent of the acreage planted. The 31,139 acres that were abandoned because of the poor stands or unfavorable weather conditions, constituted 22 per cent of the entire acreage planted. This caused the growers a loss of \$40 per acre or \$1,245,560, which less just about wipes out the \$1,305,512 which the committee's figures show above cost of production for the farmer.

"Save Money on Meat" Campaign

THE DEPARTMENT of Justice has announced its campaign to educate the consumer on purchasing the cheaper cuts of meat has begun.

It is expected that retailers will stock the less costly cuts in adequate quantities to fill the demand. Only meat of unquestionable quality will be permitted to be sold. Undoubtedly

It is apparent from the tables given below that the saving in one week in the middle western states alone will run into prodigious sums. These tables embody quotations on some high-priced meat cuts and some relatively inexpensive meat cuts. The prices are per pound.

It is apparent from tables given below that the saving in one week in this territory alone will run into prodigious sums. These tables embody quotations on some high-priced

meat cuts and some relatively inexpensive meat cuts in the middle western markets recently. The prices are per pound:

Expensive Beef Cuts	
Steer short loins, No. 1	.69
Beef tenderloins, No. 1	.65
Beef tenderloins, No. 2	.60
Steer ribs, No. 1	.32
Less Costly Beef Cuts	
Chucks No. 1	\$.15
(roasts, chuck steaks, pot roasts)	
Briskets No. 1	.19
Medium plates	.11 1/2
Flank steaks	.24
Expensive Pork Cuts	
Tenderloins	.55
Choice loins	.31
Less Expensive Pork Cuts	
Pigs feet	.7 1/2
Best shoulders	.23

CURRENT AGRICULTURAL NEWS OF THE WORLD

CROPS ON FARMS, MARCH 8TH

The Crop Reporting Board of the Bureau of Crop Estimates makes the following estimates from report of its correspondents and agents:

The amount of corn on farms March 1, 1920, was about 1,092,095,000 bushels or 37.4 per cent of the 1919 crop, against 855,269,000 bushels or 34.2 per cent of the 1918 crop on farms March 1, 1919, and 1,253,290,000 bushels or 40.9 per cent of the 1917 crop on farms March 1, 1918. About 16.3 per cent of the crop will be shipped out of the counties where grown, against 14.5 per cent of the 1918 crop and 22.1 per cent of the 1917 crop so shipped. The proportion of the 1919 crop which he merchantable is about 86.9 per cent (equivalent to 2,535,130,000 bushels) against 82.4 per cent (2,062,041,000 bushels) of the 1918 crop and 60.0 per cent (1,837,728,000 bushels) of the 1917 crop.

The amount of wheat on farms March 1, 1920, was about 165,539,000 bushels or 17.6 per cent of the 1919 crop, against 128,703,000 bushels or 14.0 per cent of the 1918 crop on farms March 1, 1919, and 107,745,000 bushels or 16.9 per cent of the 1917 crop on farms March 1, 1918. About 60.1 per cent of the crop will be shipped out of the counties where grown, against 58.8 per cent of the 1918 crop and 51.1 per cent of the 1917 crop so shipped.

The amount of oats on farms March 1, 1920, was about 422,815,000 bushels or 33.9 per cent of the 1919 crop, against 590,251,000 bushels or 38.4 per cent of the 1918 crop on farms March 1, 1918, and 599,208,000 bushels or 37.6 per cent of the 1917 crop on farms March 1, 1918. About 25.7 per cent of the crop will be shipped out of the counties where grown, against 27.4 per cent of the 1918 crop and 32.3 per cent of the 1917 crop so shipped.

The amount of barley on farms March 1, 1920, was about 38,010,000 bushels or 22.9 per cent of the 1919 crop, against 81,746,000 bushels or 31.9 per cent of the 1918 crop on farms March 1, 1919, and 44,419,000 bushels or 21.0 per cent of the 1917 crop on farms March 1, 1918. About 34.8 per cent of the crop will be shipped out of the counties where grown, against 39.0 per cent of the 1918 crop and 39.7 per cent of the 1917 crop so shipped.

PRICES OF CONTRACT PEAS

Three cents per pound seems to be about the average price paid for peas in Michigan, although a few canners are paying as high as 4 1-2 cents per pound. A number of companies are going to pay 3 1-4 cents this year. Have located one company in Michigan which is paying 2 1-2 cents per pound, but a short time ago this company had no contracts for acreage at all.

No canner in Wisconsin seems to be paying more than three cents per pound, flat basis, and a number are paying less.

There is a shortage of seed this year, especially in Northern Michigan. The average price charged the farmers last year was three dollars per bushel for the seed. A few companies charged only \$2.50 per bushel and a number \$5 per bushel or more.

The canners have to pay from \$6 to \$10 per bushel for the seed, making up this loss on the canned product. Six dollars seems to be about the average price paid. The seed companies are filling their contracts about 75 per cent. The higher prices are paid for about 25 per cent of the seed in order to fill their contracts.

Farmers both in Michigan and New York are not making money growing contract peas, but farmers in Wisconsin are apparently doing a little better. The state of Wisconsin seems to be particularly adapted to the growing of peas, as the climate is cool. One half of the peas packed in the United States are grown in Wisconsin.

It is doubtful if there would be much profit in growing peas, especially in the lower part of Michigan even at four cents per pound, under the present conditions.

The canning industry is a profitable one as a rule. However, all companies claim they are not making money.

Many companies are finding it difficult to secure acreage this year. What is needed in Michigan is a state organization of the growers of contract crops. New York already has such an organization.

Would it be possible for these growers to join with the sugar beet growers? Kindly give us a good article on the need of a state organization.—G. W. R. C., Kent County.

MICHIGAN GETS TWO GREAT ABERDEEN-ANGUS

A cable just received from Scotland contains the news that Michigan is to get two of the greatest young Aberdeen-Angus bulls in the old country. These were bought by President Alex Minty of the Michi-

gan Aberdeen-Angus Breeders' Association to head the Woodcote herd, at Ionia. One of them was reserve champion at Perth, early in February, and the other stood high in his class and is a half brother of the great breeding bull, Edgar of Dalmeny, at the head of the Wildwood herd, at Orion, owned by William E. Scripps, the Detroit publisher. This bull achieved the highest fame in the breeding world during the past year when his son was made grand champion at Perth and his crossbred daughter grand champion fat animal of Great Britain.

If the two bulls are released from the quarantine station in time they will be seen at Saginaw, at the Michigan Aberdeen-Angus Breeders' Association sale, March 26. Some sixteen of Michigan's leading herds including the Wildwood and Woodcote herds, have entered registered cattle, both bulls and female for the show and sale at Saginaw. Never have Michigan farmers and live stockmen been offered such an opportunity to get cattle with which

to found pure bred beef herds. Mr. Scripps has generously offered Michigan an opportunity to get calves sired by his great bull by offering to breed two heifers to Edgar of Dalmeny that are to sell in this sale.

CREAMERY AT GRANT PAYS FARMERS \$80,884

The annual report of the Grant Cooperative Creamery Association shows a large increase in the business conducted during the last year. It manufactured 157,837 pounds of butter, an increase of 8,000 pounds over 1918. It paid the farmers \$80,884.85 for butter fat which was an increase of \$17,300. The officers were re-elected and an accountant was engaged. J. C. Kritzer is president.

Watch Your Clover Seed
Insist on knowing whether the clover seed you buy is home grown or imported.
There is really a reason, just as there is a real reason for clover.

Here Is Still a 1918 Price!

Primrose Cream Separators Are Fighting the H.C.L.

PRIMROSE today presents a red-letter opportunity that no man interested in dairy profits can afford to ignore. Indulge your old habits of economy and buy a Primrose Cream Separator, which in this day of skyrocketing prices still sells as it sold two years ago. Primrose price today is but slightly more than the low price prevailing in 1914, instead of 60 or 100 per cent more, as in most cases where high-grade steel products are concerned. Buy Primrose now at the 1918 price. Why is so low a price possible?

Because:

The growing popularity of Primrose Separators has resulted in greatly increased demands;

The demand has resulted in greatly increased production;

Increased production means buying raw materials in greater quantities and keeping labor and manufacturing equipment operating at full capacity at all times;

Large-quantity raw material orders

with quick turnovers into machine sales, means lower costs; active labor and equipment produce more for each dollar of operating expense than idle labor and equipment;

The increases in the general cost of raw materials and labor have been practically offset, in the case of Primrose Cream Separators, by the reduced costs of unit production and distribution, due to the increased demand.

Therefore the prices of Primrose Cream Separators still stand at the old figure of 1918—considerably less than the present high-priced separators. Make the most of this rare opportunity. See your International dealer.

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USE IT ON ALL LIVESTOCK

To Kill Lice, Mites, Fleas, and Sheep Ticks. To Help Heal Cuts, Scratches and Common Skin Troubles.

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We will send you a booklet on the treatment of mange, eczema or pitch mange, arthritis, sore mouth, etc.

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The implements you use determine whether farming is harder work than necessary. Burch cultivating implements are made to ease the farmers' work through their correct designing, convenience and superior workmanship.

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Represent actual experience, gained in forty-five years of close attention to business, and are built with a conscience. You always get full value for your money from the factory at Crestline.

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A Solid Proposition to send new, well made, easy running, perfect skimming separator for \$19.95. Skims warm or cold milk; heavy or light cream. Different from picture, which shows larger capacity machines. See our plan of MONTHLY PAYMENTS. Bowl is sanitary, marvelously cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan. Western orders filled from western points.
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 Box 92 Owensboro, Ky.

10 Days Free Trial

IT CAME. The window and the wall beneath it became all one aperture. Struck on the head by a flying fragment, Henry sank down dizzily, and, as the dust of the mortar and the powder cleared, with wavering eyes he saw Francis apparently swim through the hole. By the time he had been dragged out through the hole, Henry was himself again. He could see Enrico Solano and Ricardo, his youngest born, rifles in hand, holding back the crowd forming up the street, while the twins, Alvarado and Martinez, similarly held back the crowd forming down the street.

But the populace was merely curious, having its lives to lose and nothing to gain if it attempted to block the way of such masterful men as these who blew up walls and stormed jails in open day. And it gave back respectfully before the compact group as it marched down the street.

"The horses are waiting up the next alley," Francis told Henry, as they gripped hands. "And Leoncia is waiting with them. Fifteen minutes gallop will take us to the beach, where the boat is waiting."

"Say, that was some song I taught you," Henry grinned. "It sounded like the very best little bit of all right when I heard you whistling it. The dogs were so previous they couldn't wait till tomorrow to hang me. They got full of whiskey and decided to finish me off right away. Funny thing that whiskey. An old cabellero turned peddler wrecked a wagon load of it right in front of the jail—"

"For even a noble Narvaez, son of Baltazar de Jesus y Cervillos e Narvaez, son of General Narvaez of martial memory, may be a peddler, and even a peddler must live, eh, senors, is it not so?" Francis mimicked.

Henry looked his gleeful recognition, and added soberly:

"Francis, I'm glad for one thing, most damn glad—"

"Which is?" Francis queried in the pause, just as they swung around the corner to the horses.

"That I didn't cut off your ears that day on the Calf when I had you down and you insisted."

CHAPTER VI.

MARIANO Vercara e Hijos, Jefe Politico of San Antonio, leaned back in his chair in the courtroom and with a quiet smile of satisfaction proceeded to roll a cigarette. The case had gone through as prearranged. He had kept the little old judge away from his mescal all day, and had been rewarded by having the judge try the case and give judgment according to program. He had not made a slip. The six peons, fined heavily, were ordered back to the plantation at Santos. The working out of the fines was added to the time of their contract slavery. And the Jefe was two hundred dollars good American gold richer for the transaction. Those Gringos at Santos, he smiled to himself, were men to tie to. Surely they were developing the country with their heneguen plantation. But, better than that, they possessed money in untold quantity and paid well for such little services as he might be able to render.

His smile was even broader as he greeted Alvarez Torres.

"Listen," said the latter, whispering low in his ear. "We can get these devils of Morgans. The Henry pig hangs tomorrow. There is no reason that the Francis pig should not go out today."

The Jefe remained silent, questioning with a lift of his eyebrows.

"I have advised him to storm the jail. The Solanos have listened to his lies and are with him. They will surely attempt to do it this evening. They could not do it sooner. It is for you to be ready for the event, and to see to it that Francis Morgan is especially shot and killed in the fight."

"For what and for why?" the Jefe temporized. "It is Henry I want to see out of the way. Let the Francis

"Hearts of Three"

By JACK LONDON

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

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

one go back to his beloved New York."

"He must go out today, and for reasons you will appreciate. As you know, from reading my telegrams through the government wireless—"

"Which was our agreement for my getting you your permission to use the government station," the Jefe reminded.

"And of which I do not complain," Torres assured him. "But as I was saying, you know my relations with the New York Regan are confidential and important." He touched his hand to his breast pocket. I have just received another wire. It is imperative that the Francis pig be kept away from New York for a month—if forever, and I do not understand Senor Regan, so much the better. In so far as I succeeded in this, will you fare well."

"But you have not told me how much you have received nor how much you will receive," the Jefe probed.

"It is a private agreement, and it is not so much as you may fancy. He is a hard man, this Senor Regan, a hard man. Yet will I divide fairly with you out of the success of our venture."

The Jefe nodded acquiescence, then said:

"Will it be as much as a thousand gold you will get?"

"I think so. Surely the pig of an Irish stock gambler could pay me no less a sum, and five hundred is yours if pig Francis leaves his bones in San Antonio."

"Will it be as much as a hundred thousand gold?" was the Jefe's next query.

Torres laughed as if at a joke.

"It must be more than a thousand," the other persisted.

"And he may be generous," Torres responded. "He may even give me five hundred over the thousand, half of which, naturally, as I have said, will be yours as well."

"I shall go from here immediately to the jail," the Jefe announced. "You may trust me, Senor Torres, as I trust you. Come. We will go at once, now, you and I, and you may see for yourself the preparation I shall make for this Francis Morgan's reception. I have not yet lost my cunning with a rifle. And, as well, I shall tell off three of the gendarmes to fire only at him. So this Gringo dog would storm our jail, eh? Come. We will depart at once."

He stood up, tossing his cigarette away with a show of determined energy. But, half way across the room a ragged boy, panting and sweating, plucked his sleeve and whined:

"I have information. You will pay me for it, most high, Senor? I have run all the way."

"I'll have you sent to San Juan for the buzzards to peck your carcass for the worthless carrion that you are," was the reply.

The boy quailed at the threat, then summoned courage from the emptiness of belly and meagreness of living and from his desire for the price of a ticket to the next bull fight.

"You will remember I brought you the information, Senor. I ran all the way until I am almost dead, as you can behold, Senor. I will tell you, but you will remember it was I who ran all the way and told you first."

"Yes, yes, animal, I will remember. But woe to you if I remember too well. What is the trifling information? It may not be worth a centavo. And if it isn't I'll make you sorry the sun ever shone on you. And buzzard-picking of you at San Juan will be paradise compared with what I shall visit on you."

"The jail," the boy quavered. "The strange Gringo, the one who was to be hanged yesterday, has blown down the side of the wall. Merciful Saints! The hole is as big as the steeple of the cathedral! And the other Gringo, the one who looks like him, the one who was to hang tomorrow, has escaped with him out of the hole. He dragged him out of the hole himself. This I saw, myself, with my two eyes, and then I ran here to you all the way, and you will remember . . ."

But the Jefe Politico had already tuned on Torres wittingly.

"And if this Senor Regan be princely generous he may give you and me the munificent sum that was mentioned eh? Five times the sum, or ten times, with this Gringo tiger blowing down law and order and our good jail walls, would be nearer the mark."

"At any rate the thing must be a false alarm, merely the straw that shows which way the wind blows of this Francis Morgan's intention," Torres murmured with a sickly smile. "Remember, the suggestion was mine to him to storm the jail."

"In which case you and Senor Regan will pay for the good jail wall?" the Jefe demanded, then, with a pause, added: "Not that I believe it has been accomplished. It is not possible. Even a fool Gringo would not dare."

Rafael, the gendarme, rifle in hand, the blood still oozing down his face from a scalp wound, came through the courtroom door and shouldered aside the curious ones who had begun to cluster around Torres and the Jefe.

"We are devastated," were Rafael's first words. "The jail is 'most destroyed. Dynamite! A hundred pounds of it! A thousand! We came bravely to save the jail. But it exploded—the thousand pounds of dynamite. I fell unconscious, rifle in hand. When sense came back to me, I looked about. All others, the brave Pedro, the brave Ignacio, the brave Augustino—all, all, lay around me dead!" Almost could he have added, "drunk;" but his Latin-American nature so compounded, he sincerely stated the catastrophe as it most valiantly and tragically presented itself to his imagination. "They lay dead. They may not be dead but merely stunned. I crawled. The cell of the Gringo Morgan was empty. There was a huge and monstrous hole in the wall. I crawled through the hole into the street. There was a great crowd. But the Gringo Morgan was gone. I talked with a Moso who had seen and who knew. They had horses waiting. They rode toward the beach. There is a schooner that is not anchored. It sails back and forth waiting for them. The Francis Morgan rides with a sack of gold on his saddle. The moso saw it. It is a large sack."

"And the hole?" the Jefe demanded. "The hole in the wall?"

"Is larger than the sack, much larger," was Rafael's reply. "But the sack is large. So the moso said. And he rides with it on his saddle."

"My jail!" the Jefe cried. He slipped a dagger from inside his coat under the left arm pit and held it aloft by the blade so that the hilt showed as a true cross on which a finely modeled Christ hung crucified. "I swear by all the Saints the ven-

geance I shall have. My jail! Our justice! Our law!—Horses! Horses! Gendarme, horses!" He whirled about upon Torres as if the latter had spoken, shouting: "To hell with Senor Regan I am after my own! I have been defied! My jail is desolated! My law—our law, good friends—has been mocked. Horses! Horses! Commndeef them on the streets. Haste! Haste!"

Captain Trefethen, owner of the Angelique, son of a Maya Indian mother and a Jamaica negro father, paced the narrow after deck of his schooner, stared shoreward, toward San Antonio, where he could make out his crowded long boat returning and meditated flight from this mad American charterer. At the same time he meditated remaining in order to break his charter and give a new one at three times the price; for he was strangely torn by his conflicting bloods. The negro portion counseled prudence and observance of Panamanian law. The Indian portion was urgent to unlawfulness and the promise of conflict.

It was the Indian mother who decided the issue and made him draw his jib, ease his mainsheet, and begin to reach inshore the quicker to pick up the oncoming boat. When he made out the rifles carried by the Solanos and the Morgans, almost he put up his helm to run for it and leave them. When he made out a woman in the boat's stern sheets, romance and thrift whispered in him to hang on and take the boat on board. For he knew wherever woman entered into the transactions of men that peril and pelf as well entered hand in hand.

And aboard came the woman, the peril and the pelf—Leoncia, the rifles and a sack of money—all in a scramble; for, the wind being light the captain had not bothered to stop way on the schooner.

"Glad to welcome you on board, sir," Captain Trefethen greeted Francis with a white slash of teeth between his smiling lips. "But who is this man?" He nodded his head to indicate Henry.

"A friend, captain, a guest of mine, in fact, a kinsman."

"And who, sir, may I make bold to ask, are those gentlemen riding along the beach in fashion so lively?"

Henry looked quickly at the group of horsemen galloping along the sand, unceremoniously took the binoculars from the skipper's hand, and gazed through them.

"It's the Jefe himself in the lead," he reported to Leoncia and her men-folk, "with a bunch of gendarmes." He uttered a sharp exclamation, stared through the glasses intently, then shook his head. "Almost I thought I made out our friend Torres."

"With our enemies!" Leoncia cried incredulously, remembering Torres' proposal of marriage and proffer of service and honor that very day on the hacienda piazza.

"I must have been mistaken," Francis acknowledged. "They are riding so bunched together. But its the Jefe all right, two jumps ahead of the outfit."

"Who is this Torres duck?" Henry asked harshly. "I've never liked him from the first, yet he seems always welcome under your roof, Leoncia."

"I beg your parson, sir, most gratifiedly, and with my humilious respects," Captain Trefethen interrupted suavely. "But I must call your attention to the previous question, sir, which is: who and what is that cavalcade disporting itself with such earnestness along the sand?"

"They tried to hang me yesterday," Francis laughed. "And tomorrow they were going to hang my kinsman there. Only we beat them to it. And here we are. Now, Mr. Skipper, I call your attention to your head sheets flapping in the wind. You are standing still. How much longer do you expect to stick around here?"

"Mr. Morgan, sir," came the answer, "it is with dumbfounded respect that I serve you as the charterer of my vessel. Nevertheless, I must inform you that I am a British subject. King George is my king, sir, and I owe obedience first of all to him and to his laws of maritime between all-nations, sir. It is lucid to my comprehension that you have broken laws ashore, or else the officers ashore would not be so assid-

nously in quest of you, sir. And it is also lucid to clarification that it is now your wish to have me break the laws of maritime by enabling you to escape. So, in honor bound, I must stick around here until this little difficulty that you may have appertained ashore is adjusted to the satisfaction of all parties concerned, sir, and to the satisfaction of my lawful sovereign."

"Fill away and get out of this, skipper!" Henry broke in angrily.

"Sir, assuring you of your gratification of pardon, it is my unpleasant task to inform you of two things. Neither are you my charterer; nor are you the noble King George to whom I give ambitious allegiance."

"Well, I'm your charterer, skipper," Francis said pleasantly, for he had learned to humor the man of mixed words and parentage. "So just kindly put up your helm and sail us out of this Chiriqui Lagoon as fast as God and this falling wind will let you."

"It is not in the charter, sir, that my Angelique shall break the laws of Panama and King George."

"I'll pay you well," Francis retorted, beginning to lose his temper. "Get busy."

"You will then recharter, sir, at three times the present charter?" Francis nodded shortly.

"Then wait, sir, I entreat. I must procure pen and paper from the cabin and make out the document."

"Oh, Lord," Francis groaned. "Square away and get a move on first. We can make out the paper just as easily while we are running as standing still. Look! They are beginning to fire."

The half breed captain heard the report, and, searching his spread canvas, discovered the hole of the bullet high up near the peak of the mainsail.

"Very well, sir," he conceded. "You are a gentleman and an honorable man. I trust you to affix your signature to the document at your early convenience—Hey, you nigger! Put up your wheel! Hard up. Jump, you black rascals, and slack away mainsheet! Take a hand there, you, Percival, on the boom-tackle!"

All obeyed as did Percival, a grinning shambling Kingston negro, who was as black as his name was white and as did another, addressed more respectfully as Juan, who was more Spanish and Indian than negro as his light yellow skin attested, and whose fingers, slacking the foresheet, were as slim and delicate as a girl's.

"Knock the nigger on the head if he keeps up this freshness," Henry

growled in an undertone to Francis. "For two cents I'll do it right now."

But Francis shook his head. "It's all right, but he's a Jamaica nigger, and you know what they are. And he's Indian as well. We might as well humor him, since it's the nature of the beast. He means all right, but he wants the money, he's risking his schooner against confiscation, and he's afflicted with vocabularitis. He just must get those long words out of his system or else bust."

Here Enrico Solano, with quivering nostrils and fingers restless on his rifle as with half an eye he kept track of the wild shots being fired from the beach, approached Henry and held out his hand.

"I have been guilty of a grave mistake, Senor Morgan," he said. "In the first hurt of my affliction at the death of my beloved brother, Alfaro, I was guilty of thinking you guilty of his murder." Here old Enrico's eyes flashed with anger consuming but unconsumable. "For murder it was, dastardly and cowardly, a thrust in the dark in the back. I should have known better. But I was overwhelmed, and the evidence was all against you. I did not take pause or thought to consider that my dearly beloved and only daughter was
(Continued on page 21)



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In every performance asked of a motor Hudson's official records reveal greater ability than any other car has ever shown.

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That is why the Super-Six can go faster, farther and lasts longer.

These are official proofs. All can verify them.

By no possibility will all who want Hudsons be able to get them.

You should place your order now for your Hudson, even though delivery is not desired until summer.

Hudson Motor Car Company, Detroit

The Michigan BUSINESS FARMER



An Independent
Farmer's Weekly Owned and
Edited in Michigan

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Beans, Beets and Mr. Fordney.

IT HAS been suggested that the sugar barons of Michigan may have something to do with Congressman Fordney's sidestepping of the bean tariff proposal. Sounds logical, all right. Both beans and beets grow well in Mr. Fordney's district. The farmer who becomes dissatisfied with his returns from beans grows sugar beets. When he tires of growing sugar beets he turns to beans. The crops are, therefore, in a measure competitive. High priced beans mean less land planted to sugar beets, and high-priced sugar beets mean less land planted to beans.

It is a well known fact that Congressman Fordney is the sugar interests' "handy man" in congress. Indeed, it has been hinted that that the American Sugar Refining trust gave very material assistance in securing for Mr. Fordney the important position which he holds as chairman of the House Ways and Means committee. At least Mr. Fordney's political career has been closely identified with the sugar industry, and it is not to be supposed that he would take any action which would injure that industry.

As early as the first of last December the sugar manufacturers of Michigan were aware that they would encounter some difficulty in securing sufficient acreage for their 1920 operations. Naturally this difficulty would be increased if beans were high and offered the farmer a better inducement than sugar beets. The proposed tariff on bean imports was designed to stabilize the bean market and keep the price at a high enough level to pay the farmer a fair profit. None know better than the high protectionists like Mr. Fordney how a high-protective tariff stimulates the industry which is protected, and it would not be at all strange if the sugar men, fearing that a high bean tariff would add to their difficulties in securing beet acreage, got busy, and called Mr. Fordney off the job. If this is the case, both bean growers and sugar beet growers will suffer. With low priced beans, it means that more farmers will be willing to contract sugar beet acreage, and the more farmers there are bidding for acreage the less the sugar companies will have to pay for their beets.

If the above is not a true explanation of Mr. Fordney's remarkable shift on the proposed bean tariff, these columns are open for him to say so.

The Farmer's Thrift.

THE PEOPLE of the cities find it hard to understand why, if the farming business is poorly remunerated as claimed, so many farmers own automobiles, phonographs, modern homes, etc. You have to patiently explain that only a comparatively few farmers own these things, and that you cannot judge the rule by the exception.

The great secret of farm prosperity is thrift,—constant, unstinting thrift,—three hundred and sixty-five days out of the year. The

average salaried or business man of the city spends enough for his clothes alone in one year to clothe the farmer and his entire family for a similar period. He spends enough in theater tickets to buy that farmer's phonograph. He spends enough for other enjoyments to pay the upkeep on the farmer's automobile. Thousands of farmers are prosperous, to speak comparatively, but few are so prosperous that they can stand the gait which their city cousins set for them. Give a farmer a little prosperity, introduce him to the ways of the city, and in a year or two he will find that the profits of his business will not keep pace with the new demands which he makes upon it in order to ape his city cousin.

Another reason why farmers appear to be prosperous is because every member of the family,—father, mother and all the children, from stalwart John to little Mary, help to perform the work for which they receive little if any pay. Were the prosperous farmer to pay all members of his household for their work at the same rate he would have to pay others, he could not continue in business at the present scale of farm product prices.

These are reasons why some farmers can buy automobiles, phonographs, electric lighting plants, and up-to-date machinery, and are the world's greatest purchaser of the commodities of industry.

The Business Farmer.

WE SURRENDER. We have tried our best to call this paper, "Michigan Business Farming," but our readers simply will not have it that way. We bow to their superior judgment. Henceforth it shall be "The (Michigan) BUSINESS FARMER."

As a matter of fact, the title "Business Farmer," was first adopted by the Rural Publishing Company six years ago when it established and published for one year a market paper called, "The Michigan Business Farmer". For various reasons the venture was not continued, although the first year's experience demonstrated beyond a doubt that there was a need and demand in Michigan for that kind of a paper. This demand became so urgent during the trying days of 1917 that the new Michigan Business Farming was founded, and has succeeded, so our subscribers tell us, in meeting this need and becoming a substantial power for the good of Michigan agriculture.

But folks found it easier to say "The Business Farmer", and this name has become so commonly used that it readily identifies us to any farmer who has ever heard of the paper. It's a great name, too. It is on the tongue of all who speak of the farmer. Writers, speakers and the press have fallen into the habit of referring to the farmer as the "business farmer." They are beginning to recognize that farming is a business and that the farmer is a business man. Moreover, the Farm Bureau, calls itself the farmer's "business organization." Members of the Farm Bureau should bear in mind that the MICHIGAN BUSINESS FARMER is the farmer's business farm paper. With this understanding, let us then get down to business.

Stay on the Farm.

THE MOST apparent result of the unrest on the farm is the stream of farmers that has been moving cityward for the better part of the past five years. We may theorize as we will; we may put our foot upon the soft pedal when we talk of farmer's problems; we may blind ourselves to the inadequacy of farm compensation by the pretty picture of farm environment, but we cannot altogether shut out or ignore this fact—that the farmers are going to the cities.

The high wages and pleasures of the city are like the pot of gold at the rainbow's end. It glitters from the distance but when it is approached it is seen to be but tinsel. When Farmer Fred Cressey wrote in the March 6th issue of the Michigan Business Farmer that perplexing as the problems were upon the farm, they were more complexing in the city, he wrote from experience and knew whereof he

spoke. He had tried both, but looking back over the vicissitudes of his life from the far side of fifty years, his advice to the landowning farmer is, "stay on the farm."

The average farmer cannot make a success of business or life in the city. In the first place, he does not have enough money to invest which will bring him sufficient returns to meet the higher cost of living. In the second place, he is unversed in city ways, and is no match for the folks of the city whose wits have been sharpened by much dealing. Moreover, life in the city becomes very tiresome and lonely to the man or woman who has become accustomed to the silences and the beauties of the country. Once in a while you find a farmer who has perhaps \$50,000 which he is fortunate enough to invest in a sound and well-paying proposition, but he is not by any means the rule. Those who have less than that to invest must find other work to do, and usually that work is in the close confines of a factory where a man born and reared out in the open spaces was never meant to work.

Have you not seen in the smaller towns and villages men well on toward the sunset of life who lead a disconnected, discontented life? They are retired farmers, men who have spent many years of hard work at the plow and have reached the point in life when they think they have earned a rest and can afford to "retire". But the most tired farmer of all is the "retired" farmer, and usually the good wife is as lonely as he for the old farm home and the chickens and the cows and the pigs and the horses. Life in the town is indeed a sore disappointment to the average man of the farm. The novelty soon wears off, and life becomes a mere existence, consisting of a morning and afternoon walk to the postoffice, a bit of gossip at the barber shop or out on the streets on a Saturday when the old neighbors drive into town. But the zest of life, that which comes with the performing of necessary work, the keeping busy of the hands and mind, the getting up in the morning to perform a definite task and finishing it at night,—is all gone.

Experience is a wise teacher and experience has taught us that the best place for the farmer is on the farm. There with the help of unselfish leaders he may be able to work out his problems and raise his profession to the level of dignity and compensation enjoyed by other professions.

Live Stock Losses

THE CATTLE feeder who went into the market last spring and bought high-priced feeders will not soon forget the slump of late 1919. The losses that were sustained by farmers from the totally unexpected decline in the hog and cattle market will run into many millions of dollars.

We are told that the reason for these declines was the stoppage of exports due to the high rate of exchange. This may be true, but we have heard nothing of the losses encountered by other industries of the country from the same cause. Food is not the only commodity we have been exporting to Europe, but it seems that the producers of food were the only ones to suffer when exports began to lag. There must be a reason for this. Either the packers of the country have deliberately lied to the farmers regarding the foreign market, or have manipulated the market in order to depress it and fill up their storage plants with low-priced meats. We think it would be entirely proper for Congress to appoint an agricultural commission to investigate the world's meat and livestock situation, and ascertain in behalf of the farmers the exact reason for the unusual decline in prices.

The losses of the livestock farmers have brought home to them in a forceful way the great need for fuller information regarding the world food supply and demand. At present such facts as are procurable by agencies more or less handicapped by allegiance to interests other than agricultural are fragmentary and therefore of little value. If there is a way to bring light to those who now so blindly produce and market that way must be found, and it is the farmer himself who must find it.



What the Neighbors Say



AN AMERICAN'S REPLY TO MR. BENGAL

In Mr. Bengal's communication of March 6th he takes the stand that this glorious old United States has been fooled and used as a tool by other allied nations. His reasons for coming to this conclusion are that we, as a nation have gained nothing by the late war. In taking this attitude in my opinion Brother Bengal displays a vast ignorance of American ideals. I do not believe that our country ever enters a war for material gross. If Mr. Bengal will cast his mind back over the aims of the United States. In every war, with possibly one exception, in which our country has engaged, he will find that honor and self-respect and not gold or territory were the objects of that war.

In the Revolutionary war our colonies fought against British greed and oppression and won. In the War of 1812 the United States fought against British arrogance as shown by their stopping our ships on the high seas and impressing our seamen into British service. In the Mexican war our soldiers fought for the rights of the small new republic of Texas. In the Civil war we fought for the unification of our country and incidentally the abolishment of slavery. In the Spanish war we took up arms because of the cruelty of the Spanish government to the people of Cuba lying at our very doors and finally, in our last great war we fought against the Huns and their appropriate ally, the "unspeakable Turk." Not to gain gold, not to gain land, not to gain a reputation as a military nation but to protect our citizens in all of their rights and as a protest against the most vile atrocities ever perpetrated by a so-called Christian nation.

In the course of his article Mr. Bengal states that not all people believe the stories of Hunnish cruelty. "There are none so blind as those who won't see." If all of the stories come thru British sources I would doubt them myself, but when our own country has sent reliable men as committees to investigate these reports and they confirm the report I think all reasonable doubts are past. Furthermore if he will look impartially on the conduct of the Hun all through the war from start to finish he will see the same indications of the cowardly bully. On commencing war the Huns were prepared so that for a time they swept everything. During that time what boasting, what conceit in the "supermen" of their army, but when in the end disaster threatened them how they groveled like whipped curs before the very soldiers they professed to hold in contempt so short a time before.

In conclusion I would summarize our gains from this war as follows:

We have upheld our national honor; we have made an effective protest against barbarism; we have shown all people of the world that although we do not believe in militarism we have enough courage to fight to a finish for principles of right and justice.—Patrick L. Gallagher, Clinton County.

A very large number of people in this country were inclined to doubt the authenticity of the stories of German cruelty and torture to prisoners and non-combatants, but investigations conducted by the United States proved that many of them were true. It has never been claimed, to our knowledge, that this kind of "frightfulness" was a settled policy of the German government, although it seems that German governors and military men in authority, were permitted to rule the localities over which they had charge as they pleased. Some German commanders were incredibly cruel; others were more humane and just. When men of naturally cruel natures are given positions of authority it is to be expected that they will rule cruelly. It will be recalled that in our own Civil War the commanders of some confederate prisons were notorious for the atrocities they practiced upon their prisoners, whereas others were kind and as forgiving as military men dare to be. Undoubtedly soldiers and officers in every army engaged in the Great War were guilty of atrocious deeds, many of which have never come to the public's attention. But it is fair to assume, in the light of such information as is available, that some of the German officers persistently preached and practised frightfulness in its most frightful forms. Looking back over the conflict, what did we gain by entering the war? Let us ask rather what we might have lost had we

not entered it? No people ever gain anything by war. They think they do, but it is not until after the dead are counted, the financial loss ledgered and the burden of debt weighed that they realize their terrible mistake. Let us, for the sake of God and humanity, protect ourselves and our posterity from another such war as we have just passed through.—Editor.

A PLEA FOR BRYAN

For fifty-one years I have voted as a Republican, but not always for Republican candidates. And since, at a campaign banquet given at Chicago in honor of the two presidential candidates, Bryan and Taft, seated at the table side by side, and Bryan had the moral courage to turn his wine glass bottom up, that incident, coupled with the other incident in Roosevelt's administration of monetary panic, when Roosevelt called Bryan to Washington in council, requesting his advice as to the best relief measure for that and other monetary panics in this country, Bryan was the first one to advise a federal banking law that would secure disposition against loss by deposits in state and United States banks. And thus the elements of purity and righteousness, first, and a broad far-seeing mind in statesmanship, second, are elements that combine in the person of Wm. Jennings Bryan.

And he is the only living Democrat that can possibly poll enough Republican votes to win the next presidential election. I vote for Bryan for the next president, as a Republican voter, and for Campbell for governor.

A League of Nations? Yes, a league of nations that shall contemplate immediate disarmament of all nations, both on land and sea, and provide an arbitration court that will settle all international disputes and a small international army under the control of this court, with which to enforce its decisions. But no league of nations that will involve a greater expense and equipment in our country than

has ever been known before in times of peace, or that will make us sponsors for other European conflicts such as we have just emerged from. Nor a league of nations for us, such as has been fixed at Paris by our pro-English American autocratic president, who, through blundering statesmanship (or intentionally) brought about a seeming necessity for leading this nation into the world war at the sacrifice of its rights by our neighbor, Mexico, than was experienced by us from the belligerent foe of the English allies.

Had Roosevelt or Bryan been president, this country would have maintained its neutrality. How? First: These men were very American. Second: They were both in policy Democratic and would not have permitted England to have interfered with our commerce with the central powers by her blockade of German waters and, hence, the counter U-boat blockade of English waters by Germany would never have happened.

Furthermore, there is no European power that ought to be permitted to reach the arm across the sea and grasp with its hand American soil, and Canada has lost her last and greatest opportunity of gaining her independence which she or her citizens, undoubtedly, would have done, had it not been for the power of autocratic rule which dominates her from the Imperial appointive rule of England's throne. When shall the world return and abide by divine Theocratic rule that shall imply disarmament of all Christian nations, except for defence.—C. C. Thompson, Kent County.

It's a sign that a new day is dawning in American politics when citizens can lay aside their partisan differences and cast their ballots for men whom they admire on opposite party tickets. We shall have better public officials and better government when all can bring themselves to do this.—Editor.

The Week's Editorial

MILITARY TRAINING

KEEP up the fight against compulsory military training. So writes Mrs. C. V. Simpson of Minneapolis, Kan. I might quote from dozens of similar letters from men and women in Kansas and Oklahoma. The advocates of compulsory military training do not understand the spirit of the American people. They keep reiterating the tiresome claim that military training will develop the young men of the country in a physical way and teach them respect for authority. The best citizen, in fact the only kind of a citizen worth having in a republic like this, is one who has an intelligent respect for proper and lawful authority but at the same time feels himself the equal of any other man no matter what position of authority the other may hold.

For instance, the ideal citizen has a high respect for the office of President of the United States and for the office of governor. He recognizes the right of either the president or the governor under certain conditions to call on him to leave his business and give his time and services to the general government or state, but at the same time he expects to meet either the governor or the president as his social equal. If he were required every time he went into the office of the governor to stand at attention, click his heels together, give a military salute and then wait until given permission to speak, he would have a feeling of hatred toward the governor or the president.

Our military system has been handed down to us from the time of the Prussian Van Steuben. It has all the faults of the Prussian system. It creates a military caste. Some years ago I was visiting Fort Riley. A cavalry officer was riding out over the reservation. Behind him at regulation distance rode his aide. Why did the regulations require the aide to ride so many paces to the rear?

The natural place for the aide would seem to be at the officer's side where he could be addressed easily. The reason of course was to show that the aide was an inferior person. He must not presume to ride in commanding officer. At that the aide had many more privileges than the common soldier, who must hold communications with his commanding officer thru the medium of non-commissioned officers designated by the army regulations. For the soldier to approach his commanding officer as the citizen would approach the governor would subject him to severe punishment. Is it any wonder that the common soldiers came home from France sore on their officers? Is it any wonder that these men who served in the ranks are almost universally opposed to compulsory military training? It is this abominable system which the advocates of compulsory training wish to foist upon this country. As Senator Borah has well said: It is the very tap root of militarism against which the world war was supposed to be waged. There is a systematic propaganda being spread thru the country. The paid agents of the organization back of this propaganda have been traveling over the country for the past three years at least. I have been visited by several of these agents; well groomed and well fed; they have their arguments learned by rote as parrots learn to speak certain sentences. Who pays these men?

Evidently there is money and an abundance of it behind the movement. I confess that when I see one of these traveling distributors of military propaganda or when I read some of their literature it has a tendency to make me see red. I say now, as I have said before, I will not knowingly support any man for either president or congress who favors compulsory military training.—Kansas Farmer, (Topeka.)

SWIFT & CO., TAKE EXCEPTION

We wish to compliment you upon the constructive article by O. M. Kile, "Where Do We Stand Today on Packer Question?" which appeared in the February 7th issue of the BUSINESS FARMER. We are especially interested in the broad and constructive stand taken by Mr. Kile in that section of the article "Objectionable Features in the new K-Bill."

The body of the article hardly supports that part of the headline which reads "Farmers Mistrust Packer's 'Settlement' and Insist on a Finish Fight to Put Packers Forever Beyond Control of Life's Necessities." This is an example of one of our chief difficulties, namely, the broad conclusions and charges, without supporting facts, which are worked into newspaper and magazine headlines.

As a matter of fact, even when the individual businesses of the five larger packers are considered as one lump total it is found that they handle only about 40 per cent of the total meat supply of the country which can hardly be thought of as controlling the entire industry, especially when we consider that they are in keen and active competition with each other in handling even this 40 per cent. And the percentage of other commodities handled by the larger packers is even smaller. Thus although the wholesale grocers claimed that the packers were forcing them out of business evidence was presented at the Congressional hearings to show that the larger packers handle only about three per cent of the total grocery business of the United States.

As to the demand of the cattle growers' associations for legislation to prevent price fluctuations, we can only say that no one would welcome more than the packer some method which might lessen these market changes. But although both packers and producers have given this question a great deal of thought no one has arrived at a satisfactory solution, and no one has attempted to point out how legislation or government regulation could prevent these fluctuations which are the result of economic laws and conditions.

We shall be glad to have you publish this letter so as to bring these thoughts to your readers' attention. Very truly yours—SWIFT & CO., per L. D. H. Weld, Manager, Commercial Research Department.

Sure! We always believe in letting the other fellow tell his side of the story even when he has an iron in the fire. We want our readers to know, however, that when Swift & Company placed their propaganda advertising in nearly all the farm papers of the country, they overlooked the Business Farmer. We suspect their oversight was the result of our demand that the packing industry be licensed and supervised, and they didn't want to encourage a farm paper that took that stand. Perhaps they also knew that any time they wanted to get a hearing in our reading columns they could have it free of charge. Oh, well, such is life.—Editor.

POLITICAL PARTIES

Roosevelt, with all his bigness, represented but a faction of the Republican party. Its reactionary wing was, and is, numerous as well as forceful. A reactionary Republican is just as good a Republican as a progressive Republican. That is why "no definite political policy can command the support of all Republicans." They may agree on a platform of "safe and sane generalities," but when it comes to definite application of concrete principles the party is like the proprietor of Balaam's ass—"Doubleminded, unstable in all its ways." How can such a party "change its policies to meet changing conditions?"

But, "A new party formed today might easily outgrow its usefulness in twenty-five years." Sure, maybe in less time. Whenever the issues which called it into being are settled, and new ones arise on which its members cannot agree, it is time to scrap the old party and make a new one. Political parties are but scaffolding to support statesmen who build our Temple of Liberty.—Stacy Brown, Ionia

That's well said. But if a part of your scaffold broke down would you employ a gang of workmen to repair it, or would you tear the entire structure down and build anew?—Editor.

MARKET FLASHES

WHEAT IS WEAK

WHEAT PRICES PER BU., MAR. 5, 1920			
Grade	Detroit	Chicago	N. Y.
No. 2 Red	2.42		2.60
No. 2 White	2.40	2.40	
No. 2 Mixed	2.40		

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
No. 2 Red	2.35	2.31	2.96 1/2
No. 2 White	2.33	2.29	2.35
No. 2 Mixed	2.33	2.28	2.38

Because of recent reports from the fall wheat sections of the west we shall have to revise our earlier estimate of the wheat situation. Indications as they are at present point to a shortage of this crop. Says the Price Current Grain Reporter: "A crop scare in winter wheat of no mean proportion is getting under way and a week or so of good growing weather will determine whether the crop is alive or not. The southwest continues to suffer from drought and Hessian fly reports from the soft wheat states are increasing rapidly. Reports indicate that the abandoned acreage this year may exceed the average of 3,000,000. Leading seed houses claim that there is very little demand for spring wheat for seed this season, and with a scarcity of labor in both the American and Canadian northwest, no material increase in the acreage is expected."

Despite the bullish crop reports the wheat market continues weak. But contrary to an opinion expressed in these columns a couple weeks ago, there are now good reasons for believing that wheat will be higher following the removal of the government guarantee in June. It will all depend upon the progress of the winter wheat crop the next month or six weeks and the acreage planted to spring wheat. There is a disposition on the part of the farmers of Michigan to plant more spring wheat, and while this is a risky crop and the Agricultural College has repeatedly advised against it for Michigan, we expect to see a record acreage planted in Michigan this spring.

CORN PRICES REACH HIGH POINT

CORN PRICES PER BU., MAR. 14, 1920			
Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	1.60	1.59	1.76
No. 3 Yellow	1.58	1.56	1.73
No. 4 Yellow	1.56	1.55	1.70

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	1.60	1.58	1.75 1/2
No. 3 Yellow	1.58	1.56	1.77
No. 4 Yellow	1.57	1.55	1.75

Corn prices have again reached the high point of the marketing season, and all the efforts of the bears to depress them. Consumption, recent reports show, has been the largest on record. At least some such explanation must be given for the large demand made in the supposed corn supplies back on the farms. "Practically two-thirds of the corn crop," says one grain paper, "was consumed in four months." This journal continues in the following truthful fashion: "Scientific marketing on the part of farmers is now a recognized fact, and while heretofore every effort has been made to stimulate production little has been done until recent years to assist in marketing. The movements of grain this season has been relatively small per day, but the receipts were persistent, reversing conditions of before the war when there were several well-defined gluts at terminals, with consequent depressions. As a matter of fact, all the fluctuations earlier in the year were the direct result of the government propaganda to lower the cost of living. The farmer has simply beaten the government at its own game."

The first effect of the news of the overthrow of the German government was to depress the corn market, but most of the losses of last Thursday and Friday were recovered by the close of the market on Saturday. What we have said concerning the corn market, from the very beginning of the harvesting season, seems to bid fair to come to pass. We have persistently predicted a steadily advancing market, and except for



DETROIT, MARCH 16—Wheat quiet, rye up 1c, beans inactive; firm; live stock steady and dull, potatoes down 10c; receipts of grain large.

CHICAGO, MARCH 16.—Grain market strong; corn up, oats gain 1 3/4c; hogs lower; potatoes weak.

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

Weekly Trade and Market Review

THE OUTSTANDING feature of last week's trade situation was the overthrow of the German government by the military leaders, which had a depressing effect upon marketing conditions. Prior to the announcement of this development the entire industrial situation looked good. In fact, quoting one publication, "developments of the past two weeks have been of a character to stimulate to a greater degree of confidence in the general situation than has obtained at any time since signing the armistice." The Foreign exchange situation improved slightly during the week, and was taken as an indication of greater confidence in Europe's financial condition.

The markets for the first part of the week ruled steady to higher, with one or two exceptions. The German debacle was freely used by the bears as an argument for lower prices which prevailed during the close of the week, but rallied again late Saturday. Argentine news was of a rather mixed character, some traders taking it bearish, others bullish. It is stated that growers have set \$1.50 as the minimum for which they will sell their corn. Supplies of corn have not been coming to market freely, and the time for a strong crop movement is past. It is generally felt that supplies for the ensuing two months will be light, because of poor condition of the roads and the farmer being occupied with other duties.

Generally speaking the grain situation is good, and no immediate downward changes are anticipated.

occasional slumps as above mentioned, that has been the trend of the market all along, and will, we believe continue to be the trend.

grains owing to heavy export buying. Rye is jobbing at \$1.74. Barley is still firm at \$3@3.25 per cwt.

OATS WEAKEN SLIGHTLY

OAT PRICES PER BU., MAR. 14, 1920			
Grade	Detroit	Chicago	N. Y.
No. 2 White	.96 1/2	.92 1/2	1.03 1/2
No. 3 White	.95 1/2	.91	1.03
No. 4 White	.94 1/2	.89 1/2	1.03

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
Standard	.87	.84 1/2	.78 1/2
No. 3 White	.86 1/2	.83	.78
No. 4 White	.85 1/2	.81	.71

Oats have declined slightly in the last week and at present the market is very easy. Attention is being attracted to a group of dealers in Canada who have been selling oats for a long time and are believed to be heavily short which if so will have a tendency to liven the market. Detroit markets report receipts of oats very small.

RYE AND BARLEY

Rye has advanced 1 cent and is the most active and strongest of the

BEANS STILL ASLEEP

BEAN PRICES PER CWT., MAR. 14, 1920			
Grade	Detroit	Chicago	N. Y.
C. H. P.	6.50	7.25	7.75
Red Kidneys		14.00	14.50

PRICES ONE YEAR AGO			
Grade	Detroit	Chicago	N. Y.
C. H. P.	6.75	7.35	7.50
Prime	6.00	6.50	7.00
Red Kidneys	10.25	11.50	11.50

There has been no activity in the bean market for many weeks, and the Detroit price is down to \$6.50. You will remember that we cautioned you two weeks ago to look for a further slump, and so you cannot blame us for congratulating ourselves that for the first time in several months we have hit the nail on the head. There is news of a serious decrease in bean acreage this year which will certainly mean higher prices. California's 1920 crop will be way short of normal, and the acreage in Michigan will be cut at least

THE WEATHER FOR THE WEEK

As Forecasted by W. T. Foster for MICHIGAN BUSINESS FARMER

WASHINGTON, D. C., March 20, 1920.—Wave waves will reach Vancouver about Mar. 24. 30, Apr. 6, 11 and temperatures will rise on all the Pacific slope. They will cross crest of Rockies by close of 25, 31, Apr. 7, 12; plains sections 26, Apr. 1, 8, 13; meridian 90, great lakes, lower Mississippi valleys, Ohio-Tennessee valleys 27, Apr. 2, 9, 14; eastern sections 28, Apr. 3, 10, 15, reaching vicinity of Newfoundland about Mar. 29, Apr. 4, 11, 16. Storm waves will follow one day behind warm waves and cool waves about one day behind storm waves.

Including the storm predicted to reach meridian 90 near March 22 these disturbances will control North American weather from near March 20 to April 16. Severe storms are expected during the weeks centering on April 9 to 22. Last date will be most severe and will be followed by a northern cold wave that will carry

frost further south than usual. The valuable warnings, given thru these bulletins, of the severe storms to occur during the weeks centering on Jan. 19, Feb. 5 and March 8, are sufficient justification for the unusual, general interest being expressed by the thousands from middle Provinces of Canada to the Gulf of Mexico and from the Pacific to the Atlantic coasts.

The long cropweather period is now in full force and will continue to end of April. The general wet and dry spots are now fairly well located for April and the most excessive precipitation is expected around the great lakes and east to the northwestward of central Texas. Most precipitation is expected during the weeks indicated for most severe storms.

W. T. Foster

a third. H. A. Arnold of the Michigan Potato Exchange reports very little demand for seed beans, most of the farmers who grow beans being in the market this year for grain seeds. We think it would be a serious mistake for the farmers of this state to turn entirely to some other crops. This bean market is going to come back before another crop and it's going to come strong. Nothing can prevent it, and if the cut in acreage in other bean states is to be as large as reported, we shall have another year of record-breaking bean prices.

POTATOES CONTINUE IN GOOD DEMAND

SPUDS PER CWT., MAR. 14, 1920		
	Sacked	Bulk
Detroit	5.35	5.30
Chicago		5.50
Pittsburg	5.65	
New York	6.00	5.90

PRICES ONE YEAR AGO		
	Sacked	Bulk
Detroit	1.70	1.60
Chicago	1.75	1.70
Pittsburg	1.80	1.75
New York	2.08	2.00

The potato market still holds to the record it set last week and from the way it appears now will continue to until the cold weather breaks up as receipts of potatoes on all markets are very small and there is brisk buying by the consumers. It is a problem as to whether prices will go higher. If it were a month or so back, with potatoes in such demand as they are at present, the market would certainly go higher, however, with warm weather coming on soon when everyone will rush their surplus on to the market and with new potatoes coming on the market soon at a slightly higher price it does not look as if they would be much higher.

There is a great shortage of cars, especially refrigerators and if it continues into warm weather it will have a bad effect on the market as shippers will not buy at the present price and take chances of their rotting while waiting for cars.

The Chicago Packer reports the Chicago markets continue strong with prices ranging somewhat higher than a week ago. Some of the operators, who last week expected the strength to be short lived, have changed their opinion regarding the immediate future of the market and some have predicted a \$6 market by the middle of next week. All agree, however, that next week's market will be made by the weather.

HAY

No. 1 Tim. Stan. Tim. No. 2 Tim.			
Detroit	33.50 @ 34	32.50 @ 33	31.50 @ 32
Chicago	33.00 @ 34	31.00 @ 32	28.00 @ 29
New York	50.00 @ 53		43.00 @ 51
Pittsburg	38.50 @ 39	37.50 @ 37	35.00 @ 36

No. 1 Light Mix. No. 1 Clover Mix. No. 1 Clover			
Detroit	32.50 @ 33	31.50 @ 32	31.50 @ 32
Chicago	31.00 @ 32	29.00 @ 30	26.00 @ 28
New York	49.00 @ 51	46.00 @ 48	
Pittsburg	37.50 @ 37	38.00 @ 39	39.50 @ 39

HAY PRICES A YEAR AGO			
No. 1 Tim. Stan. Tim. No. 2 Tim.			
Detroit	27.50 @ 28	26.50 @ 27	25.50 @ 26
Chicago	29.00 @ 31	28.00 @ 29	27.00 @ 28
New York	35.00 @ 37	33.00 @ 34	31.00 @ 32
Pittsburg	30.50 @ 30	29.00 @ 30	27.50 @ 28

No. 1 Light Mix. No. 1 Clover Mix. No. 1 Clover			
Detroit	26.50 @ 27	25.50 @ 26	25.50 @ 26
Chicago	29.00 @ 31	25.00 @ 27	23.00 @ 24
New York	31.00 @ 33	27.00 @ 28	24.00 @ 25
Pittsburg	28.00 @ 29	26.50 @ 27	25.50 @ 26

Although the peak of the market is passed and values have begun to decline, there is no great amount of hay moving in the East and markets are in a fairly good condition. Famine prices are over, however, and any further shortage in supplies can be due only to the condition of the country roads. In the West there is little hay loading due to this cause and markets are correspondingly firm. Reports of poor quality hay are almost universal and the best grades, when found, make quick sales. The shortage of hay in New England was very acute during the blizzard and there are many instances where feeders were compelled to slaughter their cattle because of the inability to secure hay or grain. This forced hay in some instances to fabulous prices and it will probably be some

weeks before a normal surplus can be accumulated.—Hay Trade Journal.

HIGHEST MARKET PRICES

The following table shows the highest prices, also the prices for No. 3 timothy in the market the past week:

	High	No.3
New York	\$53.00	\$49.00
Boston	48.00	42.00
Philadelphia	44.00	42.00
Baltimore	46.00	42.00
Pittsburg	38.50	33.50
Chicago	34.00	28.00
Chicago, prairie	24.00	
Detroit	34.00	30.00
Kansas City	31.00	25.50
Kansas City, prairie	23.00	
Minneapolis	27.00	20.00
Minneapolis, prairie	24.50	
St. Louis	35.00	29.00
St. Louis, prairie	24.00	
St. Paul	27.00	21.00
St. Paul, prairie	25.50	
Omaha	21.00	
Cincinnati	37.00	34.50
Richmond	41.00	38.00
San Francisco	41.00	
Jacksonville	42.50	
Montreal	31.00	

—Hay Trade Journal.

BOSTON WOOL MARKET

The Commercial Bulletin says: "Improvement in the wool market has been slow this week although the transportation situation is somewhat cleared. Transactions have been few and medium to low wools are rather easier."

"Conflicting reports are received on the goods situation as regards the distant future, although the mills are well occupied at the moment, so far as they can obtain supplies on the old orders in hand."

Ohio and Pennsylvania fleeces: Delaine unwashed, 97c@1; fine unwashed, 74@76c 1-2 blood, combing, 83@85c; 3-8 blood combing, 69@70c.

Michigan and New York fleeces: Fine unwashed, 70@73c; delaine unwashed, 95c; 1-2 blood, unwashed, 80@82c; 3-8 blood unwashed, 67@68c.

Wisconsin, Missouri and average New England, 1-2 blood, 72@75c; 3-8 blood, 65@67c; 1-4 blood, 64@65c.

Virginia, Kentucky and similar: 1-2 blood unwashed, 85@86c; 1-4 blood unwashed, 67@68c.

Scoured basis: Texas: Fine 12 months, \$1.90@1.95; fine 8 months, \$1.60@1.70. California, northern, \$1.90@1.95; middle country, \$1.70@1.75; southern, \$1.50@1.60. Oregon, eastern No. 1 staple \$2@2.10; eastern clothing, \$1.70@1.80; valley No. 1, \$1.75@1.80. Territory—fine staple, \$2.05@2.15; 1-2 blood combing, \$1.85@1.95; 3-8 blood combing, \$1.30; fine clothing, \$1.75@1.85; fine medium clothing, \$1.65@1.75. Pulled extra, \$1.95@2.05; AA, \$1.80@1.90; A suppers, \$1.65@1.75. Mohairs, best combing, 60@65c; best carding, 55@60c.

DETROIT PRODUCE MARKET

Consumers are taking potatoes freely and there are only moderate receipts. Out of 32 cars shipped from Michigan points Thursday, Detroit got only 5, which is far from enough to meet the ordinary consumption of the city. In other lines the vegetable market is firm and there is a firm tone in the fruit deal, with only moderate trading. Apple movement has been slow for a long time and shows no improvement. Poultry shows a gain in activity. Consumers took all the hens and chicks offered and the demand was not satisfied. In dressed calves and hogs there is a fair supply and moderate trade. Butter is not in heavy supply and the market holds steady. Eggs are coming in freely and the market is easy.

Apples—Steel Red, \$3.50@4; Spy \$3.25@3.50; Baldwin, \$3@3.25; Greenings, \$3.25@3.50; western, \$3.50@4.25 per box.

Butter—Fresh creamery, 66@67c per lb.; fresh creamery in 1-lb. brick 64@68c.

Cabbage—Home grown, \$5@6 per 100 lbs.

Dressed hogs—Choice country dressed, under 150 lbs., 20@21c; over 150 lbs., 17@18c per lb.

Dressed calves—Fancy country

Fancy country dressed, 26@27c; choice, 24@25c per lb.

Dressed poultry—Chickens, 37@38c; geese, 28@30c; ducks, 40@42.

Eggs—Fresh, \$44@44 1-2c per doz.

Live poultry—Spring chickens, large, 36@38c; small, 33@36c; hens 38@40c; small hens, 35@37c; roosters, 23@24c; ducks, 40@45c turkeys, 44@45c per lb.

Onions—Indiana \$5.50@5.75 per 100-lb. sack.

Potatoes—Jobbing, Michigan, \$8 per 150-lb. sack.

Popcorn—Shelled, 10c per lb.

LIVESTOCK MARKETS

Detroit Livestock

Cattle—Receipts, 742. Best heavy steers, \$11.50@12.50; best handy weight butcher steers, \$10@11.25; mixed steers and heifers, \$9.50@10; handy light butchers, \$8.50@9.25; light butchers, \$7@8.25; best cows, \$8.50@9; butcher cows, \$7@8.25; common cows, \$5.50@6; canners, \$4.50@5.25; best heavy bulls, \$8.50@9; bologna bulls, \$7.50@8.25; stock bulls, \$6.50@7.25; feeders, \$8.50@10; stockers, \$7@8; milkers and springers, \$65@150.

Veal calves—Receipts, 210; market active and \$2 higher; best, \$20@21; others, \$9@16.

Sheep and lambs—Receipts, 540. Market 25c higher. Best lambs, \$19.50; fair lambs, \$18@19; light to common lambs, \$18@17.50; yearlings, \$15@17.50; fair to good sheep, \$12@13.50; culls and common, \$6@8.

Hogs—Receipts, 1,898. Market prospects: pigs, \$15.50; mixed hogs, \$15.75.

East Buffalo Livestock

Cattle—Receipts, 175; market steady. Calves—Receipts, 300; market 50c lower; \$6@23. Hogs—Receipts, 2,400; pigs, 50c to 75c higher; others, 10c to 15c higher; heavy \$16@16.25; mixed, yorkers and light yorkers, \$16.75@16.90; pigs, \$16.50@16.75; roughs, \$13.50@13.75; stags, \$8@10.50. Sheep and lambs—Receipts, 600; lambs 50c higher, \$13@20.50; yearlings, \$12@18.50; wethers, \$15.50@16.06; ewes \$6@14.50; mixed sheep, \$14.50@15.00.

Chicago Livestock Market

Fair to good steers, \$11.25@13.25; good to choice fed steers, 13.25@15.00; good to choice yearlings, \$13@15.25; good to prime corn fed steers, \$15.00@15.50; common to fair steers, \$9.75@11.25; cows, common to medium, \$6.50@7.75; medium to good cows, \$7.75@10.25; good to choice cows, \$10.50@12.50; fair to good heifers, \$9.00@11.00; good to choice heifers, \$11@13.50; medium to good canning cows, \$5@5.50; medium to good cutter cows, \$6.00@6.50; common to choice heavy calves, \$8@10.50; fair to choice vealers, \$15@17; good to prime bulls, \$10@10.25; fair to good butcher bulls, \$8.50@9.50; selected bolognas, \$7.75@8.25; canner bulls, \$6.50@7.25; fair to good stockers, \$8.50@9.50; fair to good feeders, \$9.50@10.50; good to choice feeders, \$11@13.25. Hogs: bulk of sales \$14.75@15.50; medium to choice, 250 lbs. and up, \$14.50@15; medium to choice, 200@250 lbs. up, \$15@15.80; good to choice, 150@200 lbs., \$15.75@16; heavy mixed packing, \$13.40@13.65; heavy packing sows, \$12.75@13.25; pigs, 13.50@14.50. Sheep: good to choice native lambs, \$18.50@19; fair to good native lambs, \$18@18.50; inferior to fair native lambs, \$16.50@18; choice to prime fed western lambs, \$19.25@19.50; feeding and shearing lambs, \$17@18.50; yearlings, best grades, \$17@17.75; wethers, best grades, \$14.50@15.50; cull wethers, \$8@10; cull ewes, \$7@9.50; better to grade ewes, \$13.50@14.50; aged to yearling breeding ewes, \$7.50@12.50; buck and stags, 7.50@9.

Supply of Cattle Dwindling Steadily

Packers are concerned about future cattle supply. The long adver-

tised shortage is steadily materializing with a prospect that a year hence it will become acute. Although packers profess to sell much of the beef they handle at actual loss making their money out of the by-products, the fact is indisputable that the cattle industry is the main anchorage of the packer. So far this year a deficiency of about 13 per cent in cattle supply and 20 per cent in beef tonnage has been recorded, compared with the corresponding period of 1919, which was a period of heavy production, but all the signs discernible, both at the market and in feed lots and pastures, herald increasing scarcity.

Cattle were cleaned up at the lowest prices of the week. In the case of plain, heavy bullocks depreciation compared with the high spot of Monday was 75c to \$1 per cwt., while light steers and yearling cattle did not lose to exceed 25c. The week's run carried a large proportion of weighty Illinois and Iowa cattle that had been held back for a favorable spot. The advance of the two previous weeks exerted a magnetic influence filled killers up with heavy beef and congested outlet channels. The recent advance necessitated marking wholesale beef values up \$1 to \$2 per cwt which had the effect of restricting consumption and aggravating the situation.

Light Hogs Strong

Although hog growers are protesting that the process of converting corn into pork is unprofitable they are faring far better than cattle feeders. Under fairly heavy receipts the market has acted well, light hogs reacting last week to the high point of the year. Light hogs have become rarities, as the crop has grown into weight and the country is now cashing the tail end of the winter feeding.

Live mutton trade is less robust than recent. Colorado lambs are moving freely, pelts are slow sale and packers are protesting that a break of \$6 per cwt. in dressed lamb has caused heavy loss. Heavy importations of New Zealand and Canadian frozen lambs have aggravated the situation. Thirty days hence Colorado stuff will be practically all in, insuring a period of scarcity until Southern stuff begins moving in June. The 1920 lambs crop promises to be 25 per cent less than that of last year.

GRADES OF HAY AND STRAW

Established by National Hay Association (Revised July 25, 1917.)

HAY
No. 1 Timothy Hay—Shall be timothy, with not more than one-eighth mixed with clover or other tame grasses, may contain some brown blades, properly cured, good color, sound and well baled.
Standard Timothy Hay—Shall be timothy, with not more than one-eighth clover or other tame grasses, may contain brown heads and blades, otherwise good color, sound and well baled.
No. 2 Timothy Hay—Shall be timothy not good enough for Standard, not over one-fourth mixed with clover or other

tame grasses, fair color, sound and well baled.

No. 3 Timothy Hay—Shall include all timothy not good enough for other grades sound and reasonably well baled.

No. 1 Light Clover Mixed Hay—Shall be timothy mixed with clover. The clover mixture not over one-third, properly cured, sound, good color, and well baled.

No. 2 Light Clover Mixed—Shall be timothy and clover mixed, the clover mixture not over one-third, properly cured, fair color, sound and well baled.

No. 1 Mixed Hay—The same to contain at least fifty per cent timothy, and balance other tame grasses, not to exceed twenty per cent clover, properly cured, bright natural color, sound and well baled.

No. 1 Clover Mixed Hay—Shall be timothy and clover mixed, with at least one-half timothy, good color, sound and well baled.

No. 2 Clover Mixed Hay—Shall be timothy and clover mixed, with at least one-fourth timothy, reasonably sound and well baled.

No. 1 Clover Hay—Shall be medium clover, containing not over fifteen per cent timothy and five per cent other tame grasses, properly cured, sound and well baled.

No. 2 Clover Hay—Shall be clover, sound and reasonably well baled, not good enough for No. 1.

Sample Hay—Shall be sound, reasonably well baled, mixed, grassy, threshed or, hay not covered by other grades.

No Grade Hay—Shall include all hay, musty, or in any way unsound.

ALFALFA

Choice Alfalfa—Shall be reasonably fine leafy alfalfa, of bright green color, properly cured, sound, sweet and well baled.

No. 1 Alfalfa—Shall be reasonably coarse alfalfa, of a bright green color, or reasonably fine leafy alfalfa of a good color and may contain 2 per cent of foreign grasses, 5 per cent of air-bleached hay on outside of bale allowed, but must be sound and well baled.

Standard Alfalfa—May be of green color, or of coarse or medium texture, and may contain 5 per cent foreign matter; or it may be of green color, of coarse or medium texture, 20 per cent bleached and 2 per cent foreign matter; or it may be of greenish cast, of fine stem and clinging foliage, and may contain 5 per cent foreign matter. All to be sound, sweet and well baled.

No. 2 Alfalfa—Shall be any sound, sweet and well baled alfalfa, not good enough for Standard, and may contain 10 per cent of foreign matter.

No. 3 Alfalfa—May contain 25 per cent stack spotted hay, but must be dry and not contain more than 5 per cent of foreign matter; or it may be of green color and may contain 50 per cent of foreign matter; or it may be set alfalfa and may contain 5 per cent foreign matter. All to be reasonably well baled.

No Grade Alfalfa—Shall include all alfalfa not good enough for No. 3.

STRAW

No. 1 Straight Rye Straw—Shall be in large bales, clean, bright, long rye straw pressed in bundles, sound and well baled.

No. 2 Straight Rye Straw—Shall be in large bales, long rye straw, pressed in bundles, sound and well baled, not good enough for No. 1.

No. 1 Tangled Rye Straw—Shall be reasonably clean, may be some stained, but not good enough for No. 1.

No. 1 Wheat Straw—Shall be reasonably clean wheat straw, sound and well baled.

No. 2 Wheat Straw—Shall be reasonably clean; may be some stained, but not good enough for No. 1.

No. 1 Oat Straw—Shall be reasonably clean oat straw, sound and well baled.

No. 2 Oat Straw—Shall be reasonably clean, may be some stained, but not good enough for No. 1.

Grades Adopted by the Government in Addition to N. H. A. Grades.

No. 1 Heavy Clover Mixed—Shall be clover containing 20 to 40 per cent timothy or 10 to 25 per cent tame grasses, bright, natural color, sound and well baled.

No. 1 Mixed Hay—Shall contain at least 50 per cent timothy, the balance other tame grasses, not to exceed 20 per cent clover, properly cured, bright natural color, sound and well baled.

Sow Seeds of Success In Your Garden

Write Today for Isbell's 1920 Catalog

Some vegetable gardens pay their owners \$100.00 in returns for every \$5.00 spent. They are a constant source of big profit. They give pleasure to everybody in the home—old and young alike. They yield the finest vegetables and yield lots of them, because they are planted with—

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Isbell Gardens Pay! For the same reason that pure bred cattle produce thoroughbred offspring. Every ounce of Isbell Seed is tested. Isbell's seeds are produced in the North where earnestness, hardiness and sterling qualities are bred into them. Isbell's 1920 book on seeds and gardening tells what and how to plant and what to expect from the crop. It's one of the most authoritative catalogs in America. Ask for your copy. Mail coupon.

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The Farm Home

A Department for the Women

PICTURES FOR PROFIT AND PLEASURE

By MABEL CLARE LADD

DID YOU ever take a picture with a camera or kodak? If not, then you have missed a real pleasure. I know of no simple pleasure out of which I derive more real excitement than being able to "snap" my little nephew's picture when he is busy with his toys, and, all unaware of my designs, is in a perfectly natural pose. And in the years to come these pictures will prove more interesting to the family than any taken by the commercial photographer.

Then there are the family celebrations when, on some holiday we gather around the family board. You wouldn't think of hiring the local photographer to come and take a picture, but perhaps before another year has rolled around, some one of that group may be missing or too far away to be with you, and then how the value of that little snap shot will increase.

This is not a diversion for children alone—you will be just as interested as they once you take your first picture and then anxiously await its return from the developing tanks and printing frames.

And for those who will take the time and patience to make a study of it, so that your picture will be interesting—will have just the background to bring out the subject snapped; the business can be made profitable. Of course the field is limited, but there isn't a farm paper which won't buy a few snap shots if they are well taken, of good farm buildings, thoroughbred stock, etc., and surely the country, with its woods, hills, lakes and streams furnishes the best background that can be found anywhere. Be sure if you are taking a person clothed in white, for instance, that there is a dark background. This may be accomplished by a group of shrubs, or others in the same picture who have darker clothing.

Never let the sun shine directly into your kodak or you will not get a good picture. Be sure the kodak is level and properly focused as to distance and unless you can hold it perfectly steady, you might better use a tripod or stand, fence or stump—anything to steady it, while you take the "snap shot," while of course no one ever attempts a time exposure without the kodak is on a solid foundation. Inside pictures and pictures taken out of doors after five o'clock should always be "time exposure" pictures.

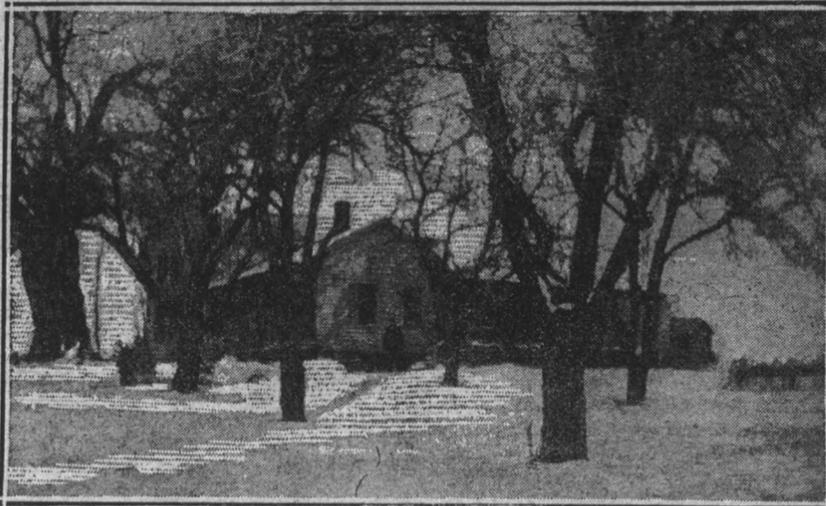
The less expensive kodaks are better for the beginner, as they are not so intricate to operate. After you have mastered this machine, if you find that your interest will warrant it, then it is plenty of time to invest in a more expensive outfit. The small size, box size and shape, can be bought for as little as five dollars and will last for years.

Aside from pictures of special costumes taken at parties, etc., the best idea is to keep away from the unusual garb—the natural subject in its proper environment will last longer and be more interesting to both you and your friends and if you want to market it, you will find that there will be a more ready sale.

THE SECRET'S OUT

WE HAD A suspicion that men had just as big a bump of curiosity as women, but they denied it, and how were we to prove it? Well, the question has been answered at last. And I'll tell you how I know it. They have been curious to know just what it was that interested the women folks so in M. B. F., and so in order to find out they were obliged to read the paper from cover to cover, including the Women's page. How do I know this?

Because they are sending in pictures of their children and their homes to be printed on our page—



These wonderful trees which form a windbreak in winter and cool shade in the summer keep us from getting a real good view of the comfortable farm home of Mrs. Paul Monroe, of Hudson, Mich., but we are glad to give it space in this week's issue. It is one of the pictures which was awarded a prize in the contest for pictures of farm home scenes.

in fact are entering the contest for prizes, but gracious knows what they expect to do with the prizes which we are awarding. For listen! The prize consists of one of those rubberized gingham aprons that are so handy to use when a woman washes either clothes or dishes. However as this is strictly a woman's contest, if they enter they must be content to at least let their wives have the prize, so I am sending to each man who sends in a picture for entry in this contest where the picture is judged good enough to print, one of these useful prizes, knowing that he will have to either give it to friend wife or else wash the dishes.

And now my bump of curiosity leads me to wonder which he will do with it.

And that's not all!—one of our subscribers—yes, a man, wrote me the other day, stating that as his wife had used the Personal Service Shopping Bureau with so much satisfaction, he wondered why our shopper wouldn't buy a special kind of fishing tackle which he wished to use. Of course we bought it. That's what we have the bureau for—the greatest service to the greatest number of people—are you using the Bureau?

WOMEN IN POLITICS

HAVE YOU ever attended a political mass meeting? If not, then you have a surprise in store for you. At least you have if your idea of such a meeting and mine agree—that is the idea I had prior to last night.

Ever since I have been old enough to think I have heard people speak of politics as being "rotten," and so in my mind's eye I had pictured a political mass meeting as being a mob of excited men who sat in a

room filled with smoke and with the air so foul that you could scarcely breathe. Nevertheless, believing this, I felt that now I was going to be able to vote for a president this year for the first time in my life, I wanted to personally hear a certain candidate who was scheduled to speak—I wanted to know what his ideas and ideals of Americanism consisted of—and so feeling that in numbers there was safety, I inquired until I found a few women who were willing to go with me to this mass meeting. We went early to avoid getting in a "howling mob," but as we approached the meeting place, we saw others going just as they might go to church or to a concert, in groups or couples, all quietly discussing their affairs or the coming meeting. But there was strangely different crowd than I had expected. These people who sat on either side were just the kind of people who lived in the flat next to mine. Armed with the evening paper to while away the time until the speaking should commence, they quietly found seats, and read or visited as they preferred.

After a little time a band began to play—national and popular airs followed each other and in the enjoyment of this concert the time quickly passed.

The speaker laid stress upon the statement that the woman's new found right to vote was not only a privilege but an obligation and he cited the fact that in little Belgium there was a penalty imposed upon those who did not take advantage of their opportunity to use the ballot.

Perhaps you did not have enough interest in the last election to register—or perhaps you were unable to do so. If so, be sure that you register for the presidential primary election April 5, 1920. And if you are a mother and since the last election

a daughter has come of voting age, be sure that that daughter registers, or else she will lose the right to vote at the coming election which is undoubtedly the most important presidential election which has come in your life time or may ever occur again.

For the information of those not thoroughly posted on the subject, a few questions are given and answered which may assist you.

1.—Am I registered?

If you have voted in your home town since the Presidential election in November, 1916, you are registered.

2.—Have I invalidated my registration by moving?

If you have moved to a different town since you last voted, your old registration is no longer valid. You must register again in the town nearest your residence.

3.—Who may register?

Any citizen of the United States who is or may be 21 years of age on or before April 5th; and who will have lived in Michigan six months and in the county and township in which you are registered twenty days on or before April 5th.

4.—Who is a citizen?

Any person born in the United States. Any person born abroad of alien parents, whose father became naturalized prior to such person reaching the age of 21 years. Any person who has been fully naturalized.

5.—Under what name shall married women register?

A married woman should register under her own name. That is, the wife of John Doe should register as Mary Doe, not as Mrs. John Doe.

6.—Must a woman state her exact age?

No, she is only required to state that she is 21 years of age or upwards.

OUR READERS OWN COLUMN

THE QUESTIONS relative to the ingredients contained in patent medicines and their value or harmfulness are of such a nature that it takes longer for us to secure the desired information than any others asked. However, we believe that investigation on this subject is well worth while and we are glad to announce in this column, answers to several asked some time ago. The analysis of these so-called medicines was made by a state chemist in the employ of the Food and Drug Department, so we are sure that in giving you his findings and recommendations we are giving to you authoritative information.

Mabel Clare Ladd, Editor Women's Department, M. B. F.

I appreciate your offer to find out if patent medicines are harmful or not. I should like to know if Dr. Miles remedies, Nervine blood medicine and other preparations are injurious or not. Do they act as a stimulant only, or give permanent relief? Thanking you for the favor of finding out for me, I am, Mrs. M. H.

"The Dr. Miles' Nervine is a preparation containing glycerine, sugar and bromides in the form of potassium sodium and ammonium salts. It also contains traces of benzoic acid. This remedy contains bromides in sufficient quantity to be harmful, if too frequent doses are taken."

Dear Miss Ladd: I saw in your paper an offer to find out for us what is contained in certain patent medicines which we might think helpful and I should very much like to know what is in Shoop's Restorative. The label on the bottle states that it contains 12 per cent alcohol but does not mention any of the other ingredients.—D. K.

"In reply to your inquiry relative to 'Shoop's Restorative,' would advise that it contains benzoic acid in quantities insufficient to be of therapeutic or curative value. It contains also berberin hydrastin which are used in small doses as simple bitters. There is also some sugar. We judge that the remedy is of little value and harmful effects might easily be produced if large doses were taken."

More and more people are coming to learn what the medical profession

The Seed Catalogue

By C. Shirley Dillenback

True harbinger of spring it comes about this time of year—Just as we're counting every sun and wishing spring were here. It slips in on the rural mail—with all its splendid hints, Concerning things that you should plant—and um—such florid tints, Each one is best—there's not a flaw in anything that's shown— They're all the earliest by test, of any ever grown. And land, such pumpkins and such squash, they're likes was never seen Such cabbages and 'matoes too—and here's a wonder bean— Why—one's enough to make a meal—I guess it must be so They wouldn't dare to print a lie—for my pa ought to know, Then daddy gets his glasses out and mother gets her pen— The wintertime is put to rout, we plan our garden then. And mother talks of posie beds and father talks of corn— There ain't a thing the whole world out to make me feel forlorn— There's all our favorites on the list, for ma and I and dad And I've my garden spot picked out—the best 'twas ever had. Law, how that stuff comes popping up—enough for all our needs, Those catalogues are just the stuff, they never mentio' weeds.

BAKER'S COCOA

IS GOOD
for Breakfast
Luncheon
Dinner
Supper



Any time that any one wants a delicious drink with a real, satisfying, sustaining food value.

We guarantee its purity and high quality. We have been making chocolate and cocoa for nearly 140 years.

WALTER BAKER & CO. LTD
Established 1780. DORCHESTER, MASS

has known for years and that is that nature has provided a remedy for almost every ill—and that what we most often need is not medicine which is usually so strong if it does any good that our stomachs are all upset through taking it, as it is a corrective treatment. For instance, there is more nervous prostration in cities and villages than in the country—because of the method of living, and the first remedy recommended by the highly paid nerve specialist is plenty of exercise in the open air and complete rest from the usual line of activities and they usually recommend that the patient go to a sanatorium—not because they need medicine but because most clever doctors have found that a patient will not rest from his present worries and work at home. But that rest does not mean inactivity for almost all nerve specialists insist on plenty of exercise—but that exercise must be in the open—when the quantity of fresh air breathed and the work given the muscles will tire the body to the extent that sleep—the best remedy in the world for tired nerves—will come unassisted by sedatives.

There are times when, undoubtedly nature has been abused until she needs assistance in righting herself but when we have reached that stage, we surely are not in a position to prescribe for ourselves through the reading of circulars promising a cure for all ailments and it is the safest course to consult a reliable physician.

"HEARTS OF THREE"
(Continued from page 15)

betrothed to you; to remember that all I had known of you was straightness and man-likeness and courage such as never stabs from behind the shield of the dark. I regret. I am sorry. And I am proud once again to welcome you into my family as the husband-to-be of my Leoncia."

And while this whole hearted restoration of Henry Morgan into the Solano family went on, Leoncia was irritated because her father in Latin-American fashion, must use so many fine words and phrases, when a single phrase, a hand grip, and a square look in the eyes were all that was called for and was certainly all that either Henry or Francis would have vouchsafed had the situation been reversed. Why, why, she asked herself, must her Spanish stock, in such extravagance of diction, seem to emulate the similar extravagance of the Jamaica negro?

While this reiteration of the betrothal of Henry and Leoncia was taking place, Francis, striving to appear uninterested, could not help taking note of the pale-yellow sailor called Juan, conferring forward with others of the crew, shrugging his shoulders significantly, gesticulating passionately with his hands.

(To be continued)

NO PLACE FOR THE DEACON

Unobserved, and unannounced, the president of a church society entered the composing room of a newspaper just in time to hear these words issue from the mouth of the boss printer:

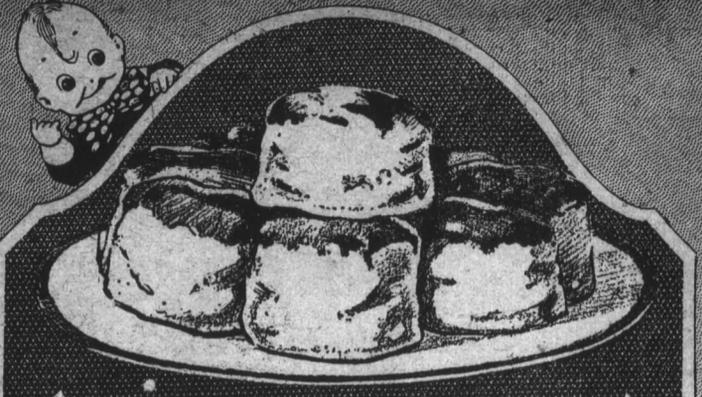
"Billy, go to the devil and tell him to finish that 'murder' he began this morning. Then 'kill' William J. Bryan's youngest grandchild, and dump the 'Sweet Angel of Mercy' into the hell-box. Then make up that 'Naughty Parisian Actress' and lock up 'The Lady in Her Boudoir.'"

Horrified, the good woman fled, and now her children wonder why they are not allowed to play with the printer's youngsters.

For two stems of Clover
Lime the land for clover.
A ton of lim oen wheat in the fall will make two stems of clover grow where one grew before.

Seeds Almost Given Away.
Last Chance. Big "Home Garden Box" 40 varieties earliest and best vegetables and 40 of prettiest flowers. Big packets, over 8,000 choice seeds—enuf to grow \$100 worth of delicious food. ALL mailed with catalog for 25c to introduce. 6 boxes \$1. Order today. Get up a club. Tell your friends. Name this paper and address

A. T. COOK, Seedsman
Hyde Park, N. Y.



CALUMET BISCUITS—light, flaky mounds of goodness—capped with a tender, done-to-a-turn crust. You'll admit that no other biscuits can compare with them—the minute the first batch comes from your oven.

CALUMET Baking Powder

Makes Most Palatable and Sweetest of Foods

—because it is absolutely pure in the can and in the baking. You save when you buy it. You save when you use it. You save materials it is used with.

—because its leavening strength never weakens. It is always the same, and results are always the same. A perfect product of the world's largest, most up-to-date and sanitary Baking Powder Factory.

—always the finest.

Absolute certainty—more than the usual raising force—with the moderate price you pay for CALUMET—make it decidedly the most economical of leaveners.



Contains only such ingredients as have been officially approved by U. S. Food Authorities.

Try it! Drive away bake-day failures. Reduce baking expense. Have most delicious and wholesome bakings.

BEST BY TEST

WAIT! LOOK at MY PRICE

My 1920 offer is the sensation of the incubator industry. Others can't understand how I can sell such a superbly built, scientifically correct hatching machine at such an astonishing price. My answer is that I have smashed all records for big production—built in such huge quantities that I can afford to sell at this almost unbelievable price—and still make an honest profit. Furthermore, there is no "Profit-ting" about the

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Incubators and Brooders

All sold under Unconditional Guarantee of Satisfaction or Your Money Back. You're safe to order direct from this ad.

140-Egg Capacity Sent Complete Ready to Use Prepaid to Your Freight Station

BOTH Incubator and Brooder for \$17.50

This is my record-smashing offer. A complete hatching and chick-raising outfit worth every cent of \$25.00, for a mere \$17.50. Order early, direct from this ad, or Send for Special Descriptive Circular Gives full and interesting facts regarding both machines. Write for Free Copy today.

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

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FOR BETTER CROPS

If Your Dealer Cannot Furnish This Brand WRITE

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MINNEAPOLIS CHICAGO



YELLOW GLOBE DANVER ONION
and **DANISH BALL-HEAD CABBAGE SEED**
Special surplus offer for first quality seed. Send this ad. in to us. Ask for 1920 catalogue.

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Estab. 53 Years Syracuse, N. Y.

GOOD SEEDS

GOOD AS CAN BE GROWN
Prices Below All Others

I will give a lot of new sorts free with every order I fill. Buy and test. Return if not O. K.—money refunded.

Big Catalog FREE

Over 700 illustrations of vegetables and flowers. Send yours and your neighbors' addresses.

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The greatest money maker of all time. Will produce more quarts to the acre of super-quality berries than any variety know. Our stock is limited, so write today for catalog telling all about this wonderful new berry, as well as the standard varieties, and a complete assortment of all Small Fruits. Order from us and you'll not be disappointed.

C. E. WHITTEN & SON,
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GARDEN SEEDS, Tested, Pure, Sure to Grow, at Wholesale Prices. Catalog free. Free pickets with order Allen's Seed House, Geneva, Ohio.

WISE PARENTS

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is a tonic-nutrient—abundant in those elements that confirm the body in growth and strength. Wise parents give *Scott's Emulsion* to their children often—they know it helps them grow and keep strong.

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We want more Direct Shippers of Cream. We guarantee correct weights and Tests. We insure the return of your empty can or a new one. We guarantee the legitimate top market price at all times. Write for shipping instructions and full information. We are absolutely responsible. Ask your banker.

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Our free Catalog describes and illustrates a full line of choice small-fruit plants. SEND FOR IT

J. M. ROKELY R8 Bridgman, Mich.

The Children's Hour

DEAR CHILDREN: "Beauty," the prize horse drawn by Hazel Ball and reproduced in this issue, looks so real and lifelike that we are sure Hazel has great possibilities. Our artist who judged the drawings submitted, stated that the detail work was perfectly splendid. Now let others try—it takes care and pains—but if you have talent we will help you through our paper what we can to develop it.

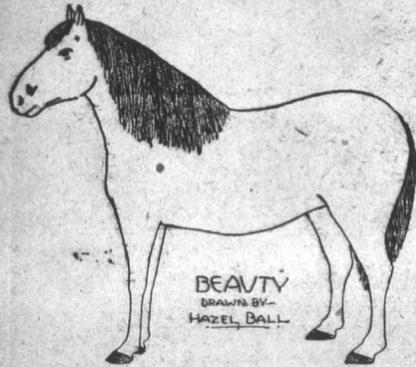
Last week I was attending a meeting in a building in which the Boy Scouts were also holding a meeting and on my way past the door of their room I glanced in and was attracted by a large blackboard on which the word "Service" was written in a very unusual way. On making inquiry I was informed that "Service" was their slogan—their watchword—and that the definition was as follows:

- S—mile
- E—arnestness
- R—eliability
- V—oice
- I—nitiative
- C—ourtesy
- E—nergy.

And it was such a good slogan for both boys and girls, and the Scouts have made it stand for so many excellent things in this definition that I felt sure my boys and girls would all be glad to adopt it as their own and learn the definition.

A prize was awarded this week to Loretta Moore, of Levering, Ro. No. 1, who sent in the first answer to the puzzle, giving the girls' names correctly. Affectionately yours—Laddie.

THIS WEEK'S PRIZE DRAWING



OUR BOYS AND GIRLS

Dear Laddie:—I am a boy 10 years of age. I have three brothers, Donald, Kenneth and Julius. I am sending the girls' name puzzle. I live on an 80-acre farm. Well, I must close.—Ellis E. Bazzett, Bradley, Mich.

Dear Laddie:—This is the first time I have written to you. I am sending the answer to the puzzle. The first name is Harriet; second, Bernice; third, Madeline, and fourth, Kaffe.—Loretta Moore, Levering, Mich.

Dear Laddie:—I am a little girl of 7 years. I have brown hair and brown eyes. I live on a farm. We have five horses, seven cows and some cattle. Our cats are wild and I cannot catch them. I like the stories that are continued best—Margaret Ridley, Capac, Mich.

Dear Laddie:—I have been looking at M. B. F. and like the children's page especially. I am 10 years old. I have two brothers, one 14 and one 15. There are 24 in my school. Our teacher is Mrs. Emma Bennett. I hope to see my letter in the paper.—Agnis Smith, Webberville.

Dear Laddie:—I am a girl 10 years old the 6th day of May. I am in the 7th grade at school and my teacher is Mrs. Hurford. I have never written to you before so thought I'd write now. I send an answer to the puzzle. I will close hoping to see my letter in print.—Dorothy Dean, Millford, Mich.

Dear Laddie:—I am a little boy 7 years old. I began school last fall and have gone through the primer and the first reader. I am nearly halfway thru the second reader now. I live on a farm and like it. I have a little brother. I would like to see my letter in your paper. Mama reads the letters to me.—Leon Nilb, Niles, Mich.

Dear Laddie:—I thought I would write you another letter. I am a boy 11 years old. I will be 12 the last of March. One of my schoolmate's birthday is on the same day only she is a year older. You wanted us to tell which we liked best, a continued story or a complete story every week. I like a complete story every week. I like Walter Wellman's picture

The Windy Month

LONG ago when there were but ten months in the calendar year March had the distinction of being the first month, and it was not until 713 B. C., when the Emperor Numa added January and February to the calendar that March took the position which is now occupies. The month was named in honor of Mars, the god of war, but by the old Anglo-Saxons it was called Lencten month, which means "length month," and was so termed to signify the lengthening of the day at this time of the year.

This month like all others has many superstitions connected with it. It was thought that anyone born between the first and the twenty-first of the month would have a very poetic temperament, would be very thoughtful, studious, faithful to duty and conscientious, kind but stubborn and obstinate in holding to opinions and above all very economical. If your birthday comes after the 21st of the month it is thought that in addition to all these characteristics, you will be very active and magnetic; you will think deeply and all things connected with culture will interest you; you will want to be surrounded by beautiful and costly things and you will have a love for the luxurious things of life. You will fight hard to have things your own way; you will have executive ability and you

will be very fond of good music.

The bloodstone which stands for courage and wisdom is the March stone. The verse which explains its powers reads:

"Who in this world of ours their eyes
In March first open, shall be wise.
In days of peril firm and brave
And wear a bloodstone to their grave."

The flower for March is the violet. The blue violet stands for faithfulness and modesty; the white violet stands for candor and wisdom.

There are also a few superstitions connected with the weather in March. Here are two of them:

"So many frosts in March, so many in May."

"March in Janiveer, Janiveer in March I fear."

March seems to have been a popular month for musicians and painters. Among the many whose birthday falls in March are:

Saint Gaudens, the sculptor; Michael Angelo, the painter; Edwin Landseer, the painter; Dudley Buck, the composer; Albani, the singer; Sarasate, the violinist; Guilman, the composer; Johann Strauss, the composer; John Sebastian Bach, the composer; Malbran, the singer; John MacWhirter, the artist; Raphael, the painter; Tamburni, the singer; Joseph Hayden, the composer; William M. Hunt and John LaFarge, painters.

puzzle very much and hope you will have one in the paper every week. I guess I will close hoping to see my letter in print.—Raymond Solgat, Caro, Mich.

Dear Laddie:—This is the second time I am writing to you as I did not see my other letter in print. I have four brothers older than myself and one sister younger. I am 13 years old and in the 7th grade at school. My teacher is Sister Aehatia. I will close now and hope to see my letter in print.—Verena J. Martin, Westphalia, Mich.

Dear Laddie:—I have just finished reading the "Children's Hour," and I enjoy it so much. I have tried my luck at guessing the puzzle. I think they are, Harriett, Bernice, Drusilla and Katy. My father takes the M. B. F. and has taken it for the past two years and likes it very much. Well I must close hoping to see my letter in print.—Rebecca Hayes Bailey, Mich.

Dear Laddie:—This is my first letter to you. We take the M. B. F. and I like to read the children's page. I am 12 years old and go to school as much as I can. I am in the 6th grade. My teacher is Miss Alice Goodsell. I like her very much. I have two sisters, Pauline, 11 years and Ruth, 8. I will close hoping to see my letter in the paper.—Eleanor Mae Criger, Columbiaville, Mich.

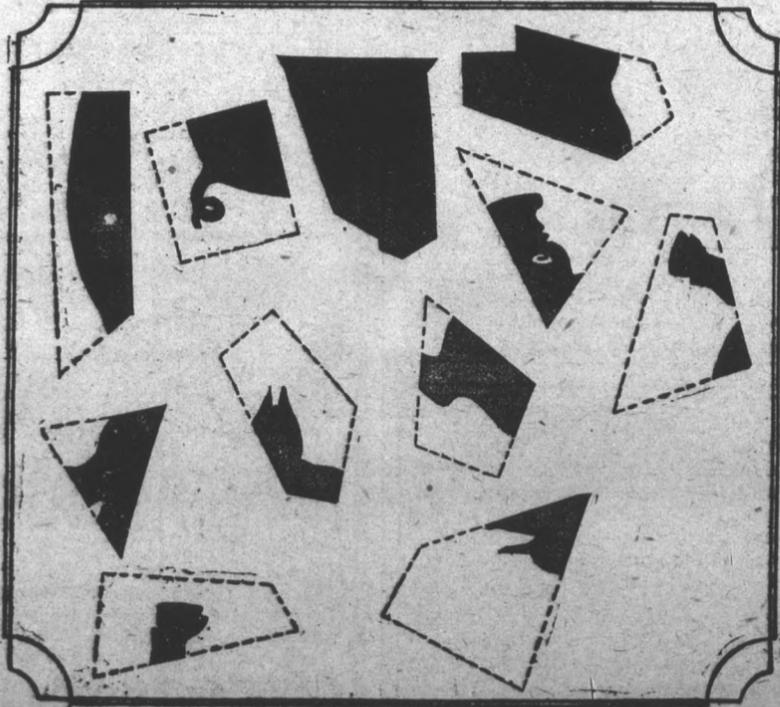
Dear Laddie:—I live on a 96-acre farm. We have 13 head of cattle, four horses, 27 pigs and 13 rabbits. I have three sisters and two brothers. My sisters' names are, Marion, Beatrice and Hilda. My brothers' names are Ronald and Arthur. My letter is getting long so I will close, hoping to see it in print.—Herman A. Motz, St. Johns, Mich.

Dear Laddie:—This is the first time I have written to you but hope it won't be the last. I am 11 years old and am in the 6th grade. My parents have taken the M. B. F. for a long time. I have two sisters and three brothers. My teacher is Miss Alice Goodell. I will close hoping to see my letter in print.—Camilla L. Cody, Columbiaville, Mich.

Dear Laddie:—This is the first time I have written to you. I am a girl 10 years old and in the 6th grade at school. My teacher is Mrs. Foster. My father takes the M. B. F. and likes it very much. I have one sister, 8 years old and a baby brother, five months old. We live on an 109-acre farm. We have two horses, one colt, three cows, two yearlings, a calf a hog and about 55 white Wyandotte chickens, also three white Pekin ducks. For pets I have a dog, Rex, and two cats, Blackie and Tiger. I will close hoping to see my letter in print.—Ruth Gray, Millington, Mich.

A FARM CUT-UP

BY WALTER WELLMAN



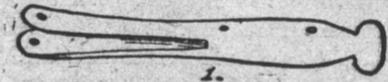
Dear Laddie:—I have written to you before. I hope this letter will escape the wastepaper basket. I am a girl 12 years old and in the 6th grade. My teacher is Miss Ruth Hood. We have three cows, two pigs, four horses, about 45 chickens and four ducks. We live on a small farm. I will close for this time. Below is a small verse.—Merlen Wiley, Adrian.

A Lullaby

When little children say Good Night,
And climb in downy beds,
The baby angels come and sing
Above their drowsy heads,
And sleeping lips curl up in smiles,
And childish hearts are light,
As soother by tender lullabies,
They pass the long dark night.

A NOVEL TOY

LOTS OF fun may be had with two round clothes pins, which mother will give you from her wash day supplies, or which you can buy at any store. Pierce each of the clothes pins with holes as shown in the first figure, making four holes in each pin; the first about three quarters of an inch below the top, the second through the center of the pin directly above the legs and the third and fourth through each leg near the bottom. An awl or screw driver can be used to make these small holes. Then cut off the legs close to the place where they join the pin and have left a piece such as you see in the second figure. The next thing to do is to get two thin pieces of wood, three inches in length and drill



three holes into each; one at each end and one in the middle as in the third figure. Then take some very fine wire and join the slips of wood to the top of the clothes pin, putting one piece on each side for arms. Bend the wire at each end in the form of a loop so the arms will not slip, but give the arms enough freedom to move easily. Cut off the left over wire.

Attach the legs in the same way to the lower holes in the body of the pin. Take a long piece of black thread and tie one end of it to a pin, pass the string through the holes in the center of the arms and tie it about two feet from the pin. Then pin the little performers to the carpet or tie to the lower run of a chair. Take hold of the free end of the thread and hold it so the dolls just touch the floor. Pull the thread and the little men will wrestle with each other.

If you work this novel toy in a semi-darkened room and hold the end of the thread behind you as you jerk it, any on-looker will be much mystified and wonder what is making the queer little clothes pin wrestlers perform so strangely.

BOYS' AND GIRLS'

PIG CLUBS

Pure Bred Registered Pig Clubs offer every one of you kids a chance to start raising pure bred hogs, choice of several breeds, without borrowing a penny of any one, or running any risk. Write for particulars.

Manager Tix Ton Boy Clubs,
Grand Ledge, Michigan.

The Non-Partisan League Refuses to Join The Third Party Movement

Declares Itself Independent of Affiliation With All Political Parties, Preferring to Maintain Non-Partisan Principles

HERE IS A wide-spread belief that the Non-Partisan League is an independent political party, and have been frequently taken to task for our opposition to the formation of a new political party "along the lines of the Non-Partisan League." The facts are that the Non-Partisan League is non-partisan and supports men for office on both the leading tickets. The Non-Partisan League is doing the very thing we have advocated in these columns, namely, supporting men instead of parties. In the absence of a non-partisan organization in Michigan we hope our readers will exercise a non-partisan spirit and vote for the men they believe best qualified for the job, regardless of their party politics.

The following letter and newspaper clipping states the position of the League clearly:

"My attention has been called to an editorial which appeared in your paper under the heading 'Farmer-Labor Fusion on National Politics Continues,' which says:

"Those who thought that the proposed 'hitching up' of the farmers' Non-partisan League with organized labor was nothing more than an idle dream have another guess coming. Last week Gov. Lynn J. Frazier, of North Dakota, met with John Fitzpatrick, president of the Chicago Federation of Labor, and Dun-

can McDonald, president-elect of the Illinois Federation of Labor, and these three worthies laid the foundation of what is fondly hoped to become a national political party that will supersede all the parties."

The rest of the editorial is comment based on the statement made in this opening paragraph. The facts are that Governor Frazier, while invited to participate in the Chicago convention for the organization of a labor party, is not taking part in any third party declined, as the Non-partisan League movement. Conservative labor in Minnesota and in other states, which is co-operating with the Non-partisan League in a nonpartisan way, to get enacted a joint program of reforms wanted by both labor unions and farmer organizations, also refused to participate in the labor party organized by Mr. Fitzpatrick and others.

Enclosed find a copy of the *Non-Partisan Leader*, official paper of the League, which makes the position of the League plain on this point.

I may add that the *Non-Partisan Leader* has approved editorially the suggestion of Samuel Gompers for non-partisan participation of labor in politics. Mr. Gompers opposes the third party idea of the radicals in labor.

While not attempting to influence your editorial policy, I think that you

will not object to my pointing out inaccuracies as to the facts, and I trust you will be willing to correct the matter referred to.—*Oliver S. Morris, Editor the Non-Partisan Leader.*

False reports concerning an alleged amalgamation of the Non-partisan League into a new national labor party formed at Chicago have been spread over the country by the press. While invited to do so, the Non-partisan League did not participate as an organization at the Chicago Labor party convention. The League's views regarding a third party and co-operation with labor in politics were given on the convention floor through friendly labor delegates. Governor Frazier of North Dakota, was not a delegate to the convention and did not attend it, despite various reports in the papers to that effect. The governor was in Chicago to attend the national conference of the National Public Ownership League, which met a few days prior to the labor convention. He was there only a day or so, as he had to hurry back to North Dakota on account of the coal strike.

It was explained to the labor convention that the Non-partisan League is just what its name, "Non-partisan" indicates—that the League will not amalgamate or affiliate with any political party. The League everywhere, except in a few instances where cir-

cumstances have prohibited it, has worked, and will continue to work, through all the parties, and not as a third party. It recommends for nomination, or indorses, after they are nominated, candidates in different parties who are progressive and believe in the League program, and seeks the election of these men on the party tickets with which they are affiliated, whether they are Republicans, Democrats or Labor party men.

Where the Labor party has a candidate filling the League requirements, and when his indorsement seems the proper thing to do to win victory for the farmers, the League would not hesitate to indorse him, just as it would indorse a Republican or Democrat, under similar circumstances. It may be, if the Labor party is successfully organized, that some League candidates in various states will be on that ticket. But there is and can be no amalgamation or affiliation with the Labor party, any more than with any other party, under the principles on which the League is organized. The League has working political agreements with organized labor in several states, under which labor, like the League, exerts its political strength in combination with the League in the non-partisan way above described.

Furnishings for Governor's Office Come High

ALBERT E. SLEEPER had his private office and reception in the reception parlor in the capitol redecorated and furnished last summer, and the bills are beginning to come in. The Board of State Auditors is paying them out of the state emergency fund.

Bills already received total \$13,127. Of these the board has paid \$11,047 out of the emergency fund. There are several bills yet to come, which are expected to run the total to about \$15,000.

The windows in the governor's offices have been dressed up to the tune of \$2,006. There are five of these windows in the two rooms making the drapery bill \$401 a window. There are also two pairs of portieres which cost \$358.

Fan in Art Mounting

A bronze desk lamp at \$27.75 has been provided and an electric fan in an art mounting has been established on an imposing and ornate pillar. The bills of this fan and pillar have not been rendered.

The governor's private washroom cost to paint \$211. A mirror was provided, at the cost of \$85. To shut this from the public view, there is an art leather screen billed at \$75.

As the governor sits at his work when in Lansing, he occupies a \$150 chair, has his feet upon a \$1,300 carpet, leans upon a \$470 desk, takes a letter from a \$14 Gothic tray and dips his pen into a \$25 ink well. His waste basket is a \$10 affair. A little bookcase, two feet wide and five high, costs \$175.

Pillows Cost \$109.50

There is a davenport that cost \$280, and is equipped with half a doz-

en pillows, costing \$109.50. For the governor's stick and hat, there is a \$30 costumer. Four chairs for guests in the inner office cost \$372.

The fireplace, which burns gas, is decorated with a pair of gilt andirons costing \$93 and a fire set billed at \$53. The fireplace, built when the capitol was new and furnaces unreliable, has been furnished with an imported marble facing hearth and curb at a cost of \$40.

Two davenports in the governor's parlor cost \$500; two cathedral chairs \$325; two special tables, \$475; six common chairs, \$730. One of the largest items is \$3,795 for decorating the walls and ceilings of the offices. This, however, includes work on the outer office as well as on the governor's private office and parlor.

Say Expenses are not Unreasonable

Although the expenditures seem large, the state officers contend that they are not unreasonable. O. B. Fuller, auditor-general, points out that the governor's office had not been refurbished in 40 years. The carpets which were worn threadbare in most places and were full of holes, had not been off the floor even for cleaning, during four administrations, it is said.

The Board of Auditors points out that payment of the furniture and decorating bills out of the emergency fund is made necessary by the action of the Legislature in abolishing the general fund. The work on the governor's office was authorized last April, the members say, when the general fund was still in existence. The bills are late in arriving and in the meantime the general fund has ceased to exist.

Plant Beans Among Small Fruits

WE PLANT navy beans between the rows of our small fruit, and find that it not only supplies us with a table necessity bought by many farmers, when they had as well produce it at practically no cost but also it is beneficial to the fruit vines.

We use the lister to lay off the bean-rows, having only one horse hitched to it, on account of the limited room. The lister is set to run rather shallow—only four or five inches deep. It is a good plan to work the soil with a five-shovel cultivator just before listing, to head off weed-growth.

The beans are drilled in somewhat

shallow, as they are down where the soil is moist, and the sub-soiler has been allowed to run deep, to form a well-pulverized seed-bed. An inch of covering should be the limit. One seed in a place, six to eight inches apart, is about the right way to plant.

Cultivation is very simple and easy, the fine, moist soil being drawn from the ridges down into the furrow, around the plants. This is done as soon as the plants come through the ground, and continued till they are laid by. Thus the crop is kept well-cultivated, and the fruit-vines are kept free of weeds.—*M. Coverdell, Worth County, Missouri.*

How To Avoid Delays in Shipments This Spring

Few box cars and few locomotives have been supplied to the railroads during the past two years. Yet American industries want to do an abnormally large amount of shipping in 1920.

The result is railroad congestion—and frequent delays.

Delays in shipments of Solvay Products may have a serious effect on your plans, unless you protect yourself by sending in your order now.

We are doing our best to insure timely deliveries. Your goods will be shipped sooner if your order is placed on our file now.

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Pencil Pod Wax Beans	.10	Southport Wh. Globe Onion	.10
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Ex. Jer. Wakefield Cabbage	.10	Best Extra Early Peas	.10
Oxheart Carrot	.05	English Wonder Peas	.10
Golden Bantam Sweet Corn	.10	Ruby King Pepper	.05
Ex. Evergreen Sweet Corn	.10	Quaker Pie Pumpkin	.05
Early Fortune Cucumber	.05	Imp. Fr. Breakfast Radish	.05
Sel. White Spine Cucumber	.05	Crimson Giant Radish	.05
Earliest Forcing Lettuce	.05	White Icicle Radish	.05
Early Prize Head Lettuce	.05	Bloomdale Spinach	.05
Select Osgood Muskmelon	.05	True Hubbard Squash	.05
Tom Watson Watermelon	.05	Sparks' Sarislan Tomato	.05
Yel. Globe Danvers Onion	.10	Fur. Top Wh. Globe Turnip	.05

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VICE ON POULTRY

My poultry have lice. How can I get rid of them?—Subscriber.

There is no time in the year but that lice and mites may infect poultry. Poultry raisers and poultrymen in general are very familiar with the pest. But many farmers do not know of the presence of these pests in their houses and on their hens till the house seems alive with them and the hens begin to droop and die from them. Mites work at night. They secrete themselves in cracks, nailholes and under the roosts through the day. They are blood suckers. Hens lessen the egg production. To get rid of them, roosts should be taken down and all unnecessary boards and boxes should be removed. Spray thoroughly with crude petroleum 1 part, kerosene 4 parts. Crude oil is about right. Pour kerosene on top of roosts. A few days of this treatment will rid hens of lice. There seems to be more than two dozen kinds of lice that infest poultry. A good dip is made by using from 3-4 to 1 oz. of Sodium Fluoride to 1 gal. water. Dip the hen thoroughly except her head. Dip the fowls in this solution on a bright, warm day in July, August or the fore part of September and on a day that is free from wind. This method is very effectual. During the other months of the year the Sodium Fluoride can be dusted among the feathers of the fowls. A pinch of dust should be distributed about as follows: 1 pinch on the head, one pinch deposited among feathers near the skin on the following parts of the body—neck, breast, thighs, on spread wing (underside) tail and back.

Another good remedy for lice is the Blue Ointment method, as follows: Rub well on to the skin three pieces of ointment, each as large as a small pea. One of these pieces should be rubbed on just under the vent, the other two under the wings. The ointment should never be daubed on and left for it is poison and the bird will get it.—C. H. Burgess, Professor of Poultry Husbandry, M. A. C.

WHO PAYS FOR ABSTRACT

A sells a farm to B on a Land Contract. A later sells the farm to C and gives warranty deed for same and the contract passes on with the deed and terms to C, the new purchaser; but no mention is made in the deed of the existing contract. Afterwards C sells the farm to D and gives a warranty deed the same as A gave to C with no mention of the contract, in the deed. B finally makes his last payment and asks for deed from D, the last owner by deed. It is discovered when the deed is given to B by D that the land contract given by A to B called for an abstract; but it seems no abstract was given by any of the parties; the grantors claiming that they supposed that an abstract came along with the deed; but the attorney who drew up the deeds (the same one drew both deeds) overlooked the abstract. The contractor B did not make claim for abstract at the time the deed was given him by D. The question is, who is legally bound to pay for this abstract, if one must be furnished under the terms. Suppose also that there had been found that a defect—such as mortgage, or any flaw in title, who would be holding to make the title good? If D would be holding, could he go back on A and C who gave warranty deeds?—A Subscriber, Hartford, Mich.

"B" has contract relations only with "A" and will have to look to "A" for the abstract. If "A" did not protect himself in his dealings with "C" and "D" he must stand the loss. Any defect in title would have to be made good by any of the warrantors. The one who makes good may look to any who precede him.—W. E. Brown, legal editor.

CLEARING LAND

We are contemplating the breaking up of a section of second growth timber land in the northeastern part of this state some time in March or April, and would like to inquire what is the most practical way for clearing brush and timber of this nature. The trees consist of poplar brush, none being over five inches in diameter. Have you ever heard of caterpillar tractors being used for breaking down brush and trees of this size?—Hesse Bros., Detroit.

Your inquiries referred to a well-known lumberman in northern Michigan who has cleared thousands of acres of such lands. His reply is as follows: Our way has been to go in and cut down small timber leaving a stump of 3 or 5 feet high. As soon as the brush from the large cut timber is dry enough, burn it over, and then pile the unburnt pieces in piles and burn. Most of the small

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stumps can then be pulled with a team, and by leaving the stump high as we said you can get a good purchase to tip your stump over.—H. Dunden.

BAD ROADS; RURAL CARRIERS

The road is open up to and beyond my place, for one-quarter of a mile from there on there is some drifts. Can the rural carrier stop coming as far as our place? There are six houses on the road. Is he within his right when he turns off this road and goes around? He would have to retrace nearly a mile in making the six miles but most of the time he could get through. He claims it would make him so late getting home if he had to retrace.—L. B. D., Lawrence, Mich.

I would be of the opinion that the carrier would be obliged to make only a reasonable effort to cover the route and that the keeping open of the road is up to the residents of the district. However I think you will find that the acts of the carrier are very largely under the direction and control of the postmaster. You should consult him. I believe they are willing to require a carrier to make his route if the roads are kept in reasonable shape for him to get through.—W. E. Brown, legal editor.

FULL VALUE ON LAND FOR HIGHWAY

One of my neighbors desires to have a road between his land and mine. If they should decide to put a road thru have I the right to charge the full value of the land (that is the price I paid for it three years ago plus tax and interest to date and the cost of clearing) or does the township board decide the price to be paid for it?—As far as I am concerned I do not need the road. I have heard it said that if the land owner signs the petition for the road he loses the right to charge anything for the land. Is this true?—J. M., Falmouth, Mich.

One is entitled to full value for the land taken for a highway regardless of what he paid for it. The payment of taxes upon land does not enhance its value but improvements placed thereon does enhance its value. However, the value should be determined as of the day of the condemnation proceedings. Land may be worth very much more today than it was worth three years ago. Some pieces have increased a very large amount and it should be the price on the day of condemnation. If the owner signs a petition for a highway that waives damages for the opening; then he would not be entitled to any damages, but if there is no such clause in the petition he does not waive his right to damages for the opening.—W. E. Brown, legal editor.

TREATING SEED TO KEEP AWAY CROWS

My attention has been called to Mr. Carl E. Schmidt's use of Diamond Dyes for the purpose of preventing injury by crows to recently planted corn. As you know, dyes are very largely coal tar products and would have the same effect, at greater cost, as the coal tar treatment. By the coal tar method the corn is shelled and moistened with warm water, drained, and about 2 tablespoons of coal tar is mixed thoroughly through a bushel of seed corn.

In experiments along this line we have found this coal tar method as effective as any of the patented preventatives on the market, and found also that this method does not retard germination as several of the commercial products do. We have not tried the mixture of tincture of aloe and waste dye.—J. F. Cox, Professor of Farm Crops, M. A. C.

INSURANCE FOR LOSS OF EYE

A takes a lumbering job from B and I hired out to A. While working a chip flew and destroyed the sight of one eye. Now B had his men in the mill insured but not the men working for A. Would I be able to collect anything from B for my eye, and if so how much? A is a poor man so could not collect from him.—A. J., Tustin, Mich.

From the brief statement I would be of the opinion that "B" would not be liable to you. However, I would suggest that you write the full statement of facts to the INDUSTRIAL ACCIDENT BOARD, Lansing, Mich., for their interpretation.—W. E. Brown, legal editor.

POSITION OF SILO IN BARN

What would be your advice on putting up a silo in the barn? I have a 12-ft. feed alley and my barn is high enough only it would take up part of my room in the feed alley and be a little unhandy in feeding a few of the stock. The barn is 40x60; no basement. One side of the driveway is for the granary and feed; the other I have the horses and cows with heads together and the 12-ft. feed alley between them. My silo is a cement stave 10x30 but have heard so much of silo inside nowadays on account of freezing that I am undecided what to do, whether to use part of my feed alley for silo or put it outside.—M. H. Stanton.

It is hardly necessary to put a silo inside the barn in order to avoid freezing. Barn space is usually too valuable to make use of it in this way. If silage is properly taken out of the silo, there is very little trouble experienced from freezing. I would recommend that the silo be placed on the south or east side of the barn where I think you will have very little trouble from freezing of the ensilage.—O. E. Robey, Acting Head Department of Farm Mechanics, M. A. C.

A LAWFUL FENCE

A rented a piece of land from B with the understanding that B reserve and fence off a small garden spot, and orchard, which they failed to do. A put up a good fence around the garden to protect B's garden from A's stock. B immediately constructed an inside fence, ordering A to remove her fence, which she did. B's fence proved worthless, permitting A's stock to get thru and under into B's garden, and thru it over into A's crop. Now who is compelled to keep up that fence, A or B? Also will you please print Michigan law in regard to the fencing of sheep, as A understands from neighboring farmers that owners of sheep must take care of their own sheep and adjoining land. Are they not responsible for their half of the fence?—A Woman Farmer, Capac, Mich.

If "B" agreed to fence the garden and orchard reserved then "B" would be obliged to construct and maintain a "lawful fence" only and if such fence was constructed and "B's" stock broke it down "B" would be liable. If it was not a lawful fence then "B" would not be liable. One must construct a "lawful" fence between occupied and cultivated or improved farms. If the fence is a lawful fence and any animal breaks through the owner is liable for the damage done by his beasts. One must fence against sheep as much as cattle but he builds a "lawful" fence in either case. If sheep get through or over a "lawful" fence the owner would be as liable for their breach as for any other animal.—W. E. Brown, legal editor.

SHORT WEIGHT

If a grocery dealer sells buckwheat flour that does not hold out with weight on sack can he be made to stand good for it? The sack is marked 10 pounds but only weighs nine pounds. He charges \$1 a sack for it and in trying to crawl out of it he says that he bought it of a farmer and got beat, but sacks are stamped manufactured by Swalter and Stutz, Saranac, Mich.—R. M., Lake Odessa, Mich.

If one sells a sack of flour marked "Ten Pounds" and upon weighing it is found to be nine pounds he is liable for the difference. I would suggest that if the price of articles do not suit you that you buy elsewhere or go without until you teach the seller that only a fair price will be tolerated. Peoples' willingness to pay extortionate prices is the strongest inducement for one to ask such prices.—W. E. Brown, legal editor.

REMOVING IMPROVEMENTS MADE AFTER MORTGAGE

I have 80 acres with a mortgage on it due Dec. 1st, 1920. I have in the past bought and paid for and built a silo. Have I a right to sell silo or move it off the farm; I have a deed of the place.—G. P., Williamsburg, Mich.

You would have a right to remove the silo if it did not endanger the security of the mortgage. If by removing the silo the property would not be worth enough to pay the mortgage, taxes, interest and expenses of foreclosure, then you would not have a right to sell it and you might be prevented by injunction or be liable to an auction for lessening the value of the property.—W. E. Brown, legal editor.

FROZEN ENSILAGE

Is silage as good after being frozen as before?—Subscriber.
"When frozen ensilage is completely thawed before feeding, the freezing has practically no effect on the value of the silage."—A. C. Anderson, Professor of Dairy Husbandry, M. A. C.

Uncle Rube Spinach Says:

PLAIN FACTS

THIS LETTER'S goin' to be short but she's goin' to be snappy an' as near to the truth as I'm capable of writin' it, an' it's in answer to a letter from a friend of M. B. F., who lives near Carson City, Mich. Among other things this friend sez: "I am in favor of a farmer governor (Campbell) but what is the use? I am afraid they will all turn out like Fordney on the bean question."

Now, b'gosh! I want to say right here that I'm tootin' no horn for Fordney—neved did either—an' I ain't doin' any tootin' for no other man 'less I know somethin' to toot about, an' I jest want to say to the aforesaid friend from Carson City an' to any others that may be kinda straddle of the fence an' don't seem to know jest which way to jump, that if we take the time to look up Mr. Campbell's record jes as far back as we care to go, we'll find he's no slacker when it comes to doin' things; yes an' we'll find he has never in all his public career shown the white feather nor taken a back seat when there was a fight on; that he has always stood firm for what he believed to be the right thing.

Milo D. Campbell gets most of his income, his bread an' butter so to speak, from his farmin' interests. He is now an' always has been a good friend to the farmer and the laborin' man. There is nothin' in his past political career for which he nor his friends an' supporters need make any excuses; he has always been on the square, played his cards above the table; (any gambler will tell you what this means; 'course you know Milo don't play cards, that's only a figger of speech as it were); well, anyway he has always been faithful to his duties an' darned if I can think of any kind of reason why he wouldn't be jest as honest an' jest as faithful as governor as he has been in all his past public life.

Now you see when you elect a man to office on a certain platform, have his word that he will work for certain things an' you have confidence in the man an' believe he will do as he says he'll do; then if he fails to do that you have a right to be disappointed in him an' to ball him out good an' proper at various an' divers times an' places an' to let him know you are thoroughly disgusted with 'im.

Now I'd ruther work for a man an' vote for a man who had promised to do certain things; I'd ruther see such a man elected gov'nor, even if I had to meet with disappointment in the end an' lose confidence in 'im, than to see some feller elected who had made no promises, an' would make none till he knew what the political ringston wanted him to do, a man from whom the farmers an' the laborin' men could expect nothin' an' by gosh!! they wouldn't stand no chance to be disappointed 'cause they would git nothin', jest what they expected.

An' so I'm askin' our friend from Carson City an' all other readers of M. B. F., if they ain't ferred to buckle down to business, git together an' work for Milo D. Campbell; an' he will be true—we have no reason to think otherwise—even his political enemies can find nothing to criticize; an' you know if there wuz anything, them birds would find it. Let's git together then an' rush things through with a whoop; don't let the big interests nor the political wire pullers side track us from the main issue; an' remember the crooks an' the sharpers an' the big proteers, that kind of fish don't want Mr. Campbell for governor 'cause they can't pull the wool over his eyes and they know it darn well, an' they'll line up agin' him an' that's jest the reason the farmers of this great but tax-burdened, commission-ruled, old state, need Milo D. Campbell for their next governor. Cordially yours—Uncle Rube.

Sense and Nonsense



THE ETERNAL FEMINE
Miss Butterfly (Just out): Kind sir, can you tell me if I am wearing the season's newest colors?

Mighty Funny

The portly gentlemtn strolled up to one of the seats in the park and having seated himself comfortably, was soon absorbed in his newspaper. After a while he was annoyed by a small boy who persisted in steadily staring at him, and at last he could bear it no longer.

"What are you looking at, little boy?" he inquired. "Is there anything funny about me?"

"Not yet," replied the youngster, "but there's going to be when you get up. Them seats have just been painted."

Uncomfortable Ease

"I don't care much for these 'ere progressive farmers," said the hired man. "I'd lots rather work for one of the old-fashioned kind."

"Why?" asked the hired man from the adjoining farm.

"Aw, a rail fence is a heap more comf'able to set on than barb wire."

Where Did He Go?

She: "I'll never go anywhere again with you as long as I live."

He: "Wh-why?"

She: "You asked Mrs. Smith how her husband was standing the heat, and he's been dead two months."

Not Just the Same

"Do you find married life the grand sweet song you expected?"

"Well, it is at least a grand refrain."

Refrain?"

"Yes; I'm called upon to refrain from smoking, refrain from cards, refrain from going to the lodge, and when there isn't anything in particular to refrain from, just refrain."

He's Sure Shiftless

"Gabe Giggery don't amount to much does he?" asked a citizen of Sandy Mush, Ark.

"Amount to much?" returned the neighbor addressed. "He don't amount to nuth'n. Why, he's so dad-burned shuckless that he won't even keep his wife's ax sharp!"

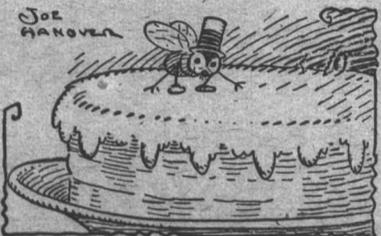
Not a "Close" One

It was at Saturday morning inspection. The commanding officer spotted a private who was unshaven. "Why didn't you shave this morning?" he demanded.

The private became nervous. "You see, sir," he stammered, "there were eight of us shaving by the aid of a single mirror, and I guess I must have shaved somebody else."

"What is the proper length of a girl's dress?"

"A little over two feet."

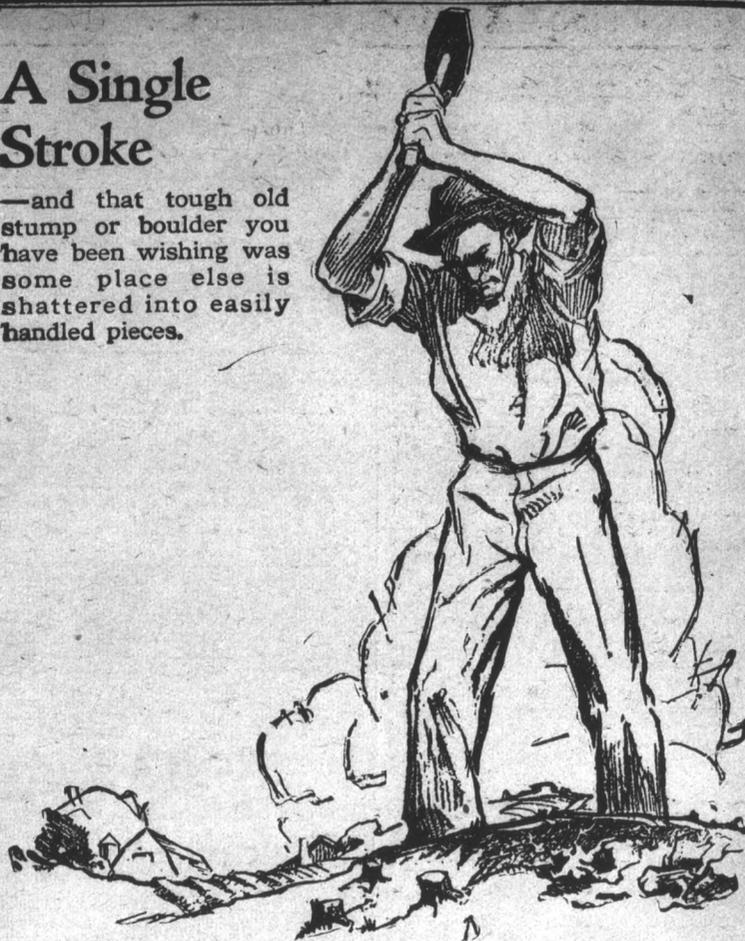


ON THE FROSTED CAKE

Prof. Fly—My this glacier or whatever it is, has a sweet taste.

A Single Stroke

—and that tough old stump or boulder you have been wishing was some place else is shattered into easily handled pieces.



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will clear your land of stumps and boulders for less money and in a shorter-time than any other method known.

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During the past 30 days more than 50 "LIVE WIRE" boys and girls have secured this dandy outfit which consists of 3 pencils, 1 pen holder, 1 combination pen and pencil, 12 pen points and holder, 1 pencil sharpener, 1 ink and pencil eraser and 1 aluminum collapsible drinking cup, all packed in a beautiful box, without it costing a penny.

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They simply called on two of their friends who were not taking Michigan Business Farming, had them look over one or two recent copies and explained just what this weekly has done and is doing for the farmers of Michigan and convinced them that they ought to be taking M. B. F. if they expected to keep abreast of the times and derive the same benefit over 70,000 farmers are now enjoying. Then they explained that they were working for a school outfit. That settled it, their friends subscribed and now the School Outfit is theirs.

HERE'S YOUR CHANCE

All you have to do to win this outfit is to call on two of your friends who are not now taking M. B. F. and ask them to help you win the outfit by giving you their subscription to M. B. F. for one year at \$1.00 each. Send us the \$2.00 with their names and address plainly written and the outfit will be yours.

Get your Father, Mother, Big Brother or Sister to help you.

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FOR SALE—FARM, 120 ACRES WITH ALL the stock and machinery. Four miles from Rogers. Good buildings, good soil, 55 improved, rest timber and out over land, easily cleared. Owner old, easy terms. Price \$5,000. Address JOSEPH RITZLER, Rogers, Mich.

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County Crop Reports

MIDLAND—Prices offered at Midland: Wheat, fall, \$2.25; spring, \$2.30; corn, \$1.45; oats, 80c; rye, \$1.50; buckwheat, \$2.85; beans (C. H. P.) \$5.75; barley, \$3; peas, \$4.25.—O. B. G. C.

VAN BUREN (E)—The roads have been fierce for some time, not good wheeling or sleighing, but both used some. The recent thaw has improved things, but still the roads are heavy. Not much produce being marketed. Help continues to be scarce and work is behind. Lots of road improvement being planned for the season.—V. G. Prices at Mattawan: Corn, \$1.40; oats, \$1; hay, light mixed, \$36; potatoes, \$2.25; onions, \$5; butter, 50c; eggs, 50c; veal calves, 25.

GRAND TRAVERSE—Are having nice weather at present, snow is going fast. Quite a few farmers are selling potatoes and some corn. Roads will soon be in bad shape. Auction sales are coming fast. Do not know what city folks will do for something to eat if the farmers keep on leaving the farms.—C. L. B. Prices at Traverse City: wheat, \$2.35; corn, \$1.50; oats, 90; rye, \$1.45; hay, No. 1 timothy, \$36; beans (C. H. P.) \$5.50; potatoes, \$4.25 cwt; cabbage, 12c; butter, 45; butterfat, 70; eggs, 45.

SANILAC (S. E.)—The farmers of this locality are still busy organizing for the farm bureau. It is a bright outlook for the county around about Crosswell. They went after the beet situation and are now going after the W. R. Roach Canning Co. for better prices in the growing of peas. Not much hay on the move, but some grain. Horses and cattle are on fair prices, but not many on the move on account of the poor road service, also the highways are in poor condition. Had some rain in this locality.—W. J. V. Prices offered at Crosswell: Wheat, red, \$2.30; oats, 86c; rye, \$1.51; hay, No. 1 timothy, \$25; No. 1 light mixed, \$23 @ \$25; beans, \$6; barley, \$2.75; hens, 20 @ 25c; butter, 64c; butterfat, 64c; eggs, 48c; hogs on foot, \$15; dressed beef, \$18; pork, \$17; veal calves, alive, \$16.

MASON—Recent thaws left the roads in bad condition. Typical March weather. Potatoes move to market whenever roads and weather permit. There are a few still in the producers hands. Coal is scarce and hard to get these days. Pure bred cattle are gaining in favor in this county. Shorthorns and Holsteins were accepted as standard types for the county, a few years ago, but lately the Guernseys have become more prominent and bid fair to hustle the other breeds in popularity. There are also many pure-bred hogs thruout the county. Durocs and Berkshires are favorites, though other breeds are also respected.—B. M. Prices offered at Scottville are: Wheat, \$2.15; rye, \$1.40; beans (C. H. P. Pea) \$5.50; red kidney, \$12.00; potatoes, \$4; poultry—hens, 25 @ 28; butter, 55; butterfat, 67; eggs, 50; hogs, 18; veal calves, 18 @ 20.

MANISTEE—There is not much doing in these parts except buying a little hay for spring work, and a few cornstalks, when they can find them. We have had our first thaw this winter. March 3rd it rained all day and then turned cold and snowed and blowed. Today it is coming down. Another farmer sold out and is moving. There is some corn for sale in these parts. There is some sickness in for pork and beef is better; the butchers are looking for it but it is getting scarce in these parts. There is some sickness in this corner of the county, flu is the cause of the most of it.—C. H. S. Prices at the local market: Wheat, \$2; corn, \$1.50; oats, \$1.10; rye, \$1.30; buckwheat, \$2.50 cwt; beans (C. H. P.) \$5.25 cwt; hay, \$32 @ \$35; potatoes, \$3.25 cwt; hens, 25c; butter, 50c; butterfat, 64c; eggs, 45c; beef steers, 8c (alive); beef cows, 50 (alive); veal calves (alive) 10 @ 13c; hogs, (alive) 13 1-2c, dressed, 17 1-2c.

SANILAC (C)—March came in rather winter like. At this writing the weather is rather cold. Had quite a rain on Thursday the 11th, turning to a snow before Friday morning and drifted considerable; it still keeps cold. Have some cases of the flu, but no deaths; some cases of the measles and some cases of the mumps, but as a general thing most are very well. Some farmers are drawing sawlogs and some are still getting up wood. There are a few carloads of cattle brought in for sale to furnish milk for the condensery at Sandusky. Milk in January brought \$3.89 for 4.1 test and \$3.65 for 3.5 test, which is the standard, then 4c a point below or above that test. Coal is rather scarce yet, hardly can get enough for domestic use.—A. B. Prices offered at Sandusky: wheat, red or white, \$2.25; oats, 80c; rye, \$1.55; hay, No. 1 timothy, \$25; No. 1 light mixed, \$20 @ 25; beans (C. H. P.) \$6; butterfat, 64c; eggs, 45c; dressed hogs, 18c; dressed beef, 15 @ 18c.

GENESSEE—Farmers are working up wood, trimming trees, hauling manure and attending auction sales. The weather has been warmer and we have had some rain during the last few days, but it is freezing up again today. The fields are bare and the roads are in bad shape for traveling. Farmers are selling wood, potatoes, hay and livestock and are buying cloverseed, fertilizer and feeds. Auction sales are still as plentiful as ever, but prices received are not averaging as good as earlier in the season, with the exception of good horses, which are working higher. M. P. Cook is selling his herd of registered Shorthorn cattle at public auction at his farm six miles south of Flint. Several farms are being sold this spring. Quite a number of tenant farmers are moving this week. No sugar beets will be put in this year, unless the sugar manufacturers come to the growers' terms.—C. W. S. Prices at Flint: Wheat, \$2.35; corn, \$1.55; oats, 95c; rye, \$1.55; buckwheat, \$3 cwt;

beans (C. H. P.) \$6; red kidney, \$11; hay, \$25 @ \$30; straw, \$10 @ \$15; potatoes, \$2.75 @ \$3; onions, \$6.50; cabbage, \$8 bbl; cucumbers, \$2.50 doz; hens, 32 @ 34; springers, 32 @ 34; ducks, 32 @ 35; geese, 30 @ 35; turkeys, 40 @ 42; creamery butter, 60 @ 63; butterfat, 72; eggs, 48 @ 50; apples, \$2.50 @ \$3; beef steers, \$10.50 @ \$11; beef cows, \$7.50 @ \$8.50; veal calves, \$18 @ \$20; sheep, \$11 @ \$12; lambs, \$17 @ \$18.50; hogs, \$14.50 @ \$15.

WEXFORD (S. E.)—The weather prophet hit it very close yesterday and today; rained yesterday and a cold wave today. Snow has drifted bad and trains will be hung up now. Of course you can't expect it different after they have gone back into the owners' hands.—S. H. S. Prices offered at Cadillac: Wheat, \$2.09 @ \$2.15; corn, shelled, \$1.40, ear, 72 lbs, \$1.20; oats, 90; rye, \$1.30; buckwheat, \$2.50; beans, (C. H. P.) \$5.50; red kidney, \$8; hay, \$32; potatoes, \$3.60 cwt; hens, 23 @ 25; springers, 23 @ 25; ducks, 22 @ 25; geese, 20 @ 23; butterfat, 66; eggs, 45; veal calves, 16 @ 22; hogs, 16 @ 18.

SAGINAW (S. W.)—We are having good winter weather yet. It rained the 4th, the first rain or thaw to make any water since last November. The farmers are hauling some oats and hay to market. Stock of all kinds are looking good, with plenty of rough feed and hay until grass comes. The flu is leaving a number of homes badly broken up throughout this section. Prices offered at St. Charles: Wheat, \$2.25; corn, ear, 70c; oats, 85c; hay, No. 1 timothy, \$26; No. 1 light mixed, \$22; beans (C. H. P.) \$6 cwt; potatoes, \$2.50; hens, 25c; butter, 55c; butterfat, 60c; eggs, 47c; hogs, \$14; beef steers, 8 @ 10c; beef cows, 5 @ 7c; veal calves, 18 @ 20.

MANISTEE (N.E.)—The farmers are cutting wood, hauling hay and feeds and other jobs around farm. The weather has been cold and snowy, but today changed for a short time and rained quite hard, but soon changed again to snow. Begins to look like spring coming for another time (1920). Soil is mostly covered with snow, but it was lowered considerably today by the rain. You could see bare ground. The farmers are now beginning to sell potatoes around the country, as beans are mostly sold here. Most of farmers' crops are not sold, I am confident, possibly some potatoes. I do not know as farmers are building or buying much hay and fencing.—H. A. Prices offered at Bear Lake: Potatoes, \$3.70 cwt; white beans, \$5.25 cwt; rye, \$1.30 bu; wheat \$2 bu; butter, 50c; eggs, 45c; butterfat, 64c; hogs, 13 @ 13 1-2 on foot, 16 1-2 @ 17 1-2 dressed; beef 5 @ 8c alive, 8 @ 13c dressed; veal, 10 @ 13c alive, 13 @ 22c dressed; live chickens, 25c; hides, 18c.

PRESQUE ISLE (W)—March 4th we had our first rain of the season. It rained all day from the E. S. E. and in the evening the wind shifted into the N. W. and Thursday night and Friday we were handed out one of the wildest and severest snow storms of the season. Farmers are all through harvesting ice. Some hay for sale, but not moving yet. Holding for higher prices. The hay that is being sold goes mostly through the elevators who are having it shipped in from other parts of Michigan where stock raising isn't quite so extensive as it is here. More snow. The main highways are in pretty bad shape with drifts, but the log roads are good as they are used most. There are but few cases of flu around here although in Onaway there is reported 12 hundred cases of sickness, mostly the flu and scarlet fever. In the individual case the flu don't seem to attack the patient as severely this winter as it did last, as there don't seem to be so many deaths, although it may be that people are taking better care of themselves now than formerly.—J. S. Prices offered at Millersburg: Butter, 60c; butterfat, 64c; eggs, 60c.

INGHAM (C)—Looks like spring will be here soon for three days it has thawed very fast. Some are tapping sugar bushes getting ready to make sugar. Snow all gone, freezes nights. Quite a call for hay and fodder which is scarce and high priced. Not much going to market. Stock coming through winter looking quite good as a rule. The auctions are still in full swing, farmers are quitting, tired of the hard work and short help at five to seven dollars a day.—C. J. M. The following prices were offered at Dansville: Wheat \$2.20 @ 2.30; corn, \$1.45; oats, 78c; rye, \$1.50; No. 1 timothy, \$25 baled; No. 1 light mixed, \$23; straw, rye, \$9; wheat-oat, \$10; beans (C. H. P. Pea) \$5.50; potatoes, \$2.60; hens, 24c; springers, 24c; ducks, 20c; butterfat, 65c; eggs, 40c; sheep 8c; lambs, 15c; hogs 15c; beef steers, 10 @ 13c; veal calves 19c.

ST. CLAIR (S)—Farmers all getting ready for spring work. The weather is quite changeable but that is usual at this time of the year. The snow is nearly all gone, and the surplus water has drained off nicely, leaving the wheat and rye looking nicely at this writing. Lots of sales every week and a great many people leaving their farms. The help question is getting more serious all the time. Farmers not selling much at present, not much hay left in farmers' hands. A few tractors are being sold around here. The Farm Bureau has organized at this place with 90 members.—I. J. The following prices were offered at Smiths Creek on March 15: Wheat \$1.25 @ 1.30; corn, \$1.50; oats, 90c; rye, \$1.50; No. 1 timothy, \$30 @ 31; No. 1 light mixed, \$30; Rye straw, \$14; wheat-oat, \$14; beans, (C. H. P. Pea) \$6.50; potatoes, \$3; hens, 25 @ 30c; springers, 30c; butter, 50 @ 55c; butterfat, 58c; eggs, 45 @ 50; lambs, 14 @ 16c; hogs, 13; beef steers, 9 @ 10; beef cows, 6 @ 8; veal calves, 20 @ 24.

If All the Money Were Divided

(Continued from page 9)

In the United States Steel Corporation. There are stockholders in the Pennsylvania railroad. These men and women have put their savings in these industries to form its capital. And their savings are at work for all of us, not merely for those who accumulated them.

People seem inclined to blame the big corporations, "big business," the "trusts," or somebody in that category for the rising costs of living. But the price tables show that the prices of manufactured goods increased by lower percentages than the cost of the labor and the raw materials that entered into them.

Raw materials, foodstuffs, and labor, are the factors making for higher prices. Machinery, new capital, improved methods and management are the influences tending to hold prices down.

But it is said that some of the great corporations make too much money. Their profits are cited as proof that they either charge too much for their product or do not pay labor enough. If any business makes exceptional profits in ordinary times it must be because it is able, by superior methods, or advantages of some kind, to produce its goods below the ordinary level of costs. In other words, its large profits are due to improved methods which it introduces before its competitors do.

Any man, or any organization, that uses improved methods before other people, or firms, introduce them, is going to benefit by his foresight, and energy. But we share in the benefit. For the improved methods, which they devise, soon become public property.

A striking example of this fact is to be found in Andrew Carnegie's career. He had a genius for business, particularly in the selection of aids, and drew about him a very enterprising and capable organization. The profits which Mr. Carnegie made in the steel business he put back into the development of the industry, and by reducing costs and prices he greatly increased the use of steel. He made his fortune by reducing prices instead of by increasing them, and in so doing cheapened machinery, implements, and industrial equipment of every kind, to the great benefit of the public.

The most advantageous position the wage earner can occupy is that where he has only to hold wages steady while their purchasing power remain the same, but will buy twice as much, is better off than one whose wages have doubled but will buy even less. To increase wages, and at the same time to lower production and increase costs, accomplishes nothing.

Employers are constantly seeking to increase production by the use of additional capital, by improving machinery, methods and management. If individual workers, whether brain workers or hand workers co-operate in this effort, we shall be on the only road to a genuine improvement in conditions.

It may be said that if the wage earners had higher pay they would be able to save and thus contribute capital to the advancement of industry. This is true; although it is evident that if costs are going up constantly, higher wages will not enable them to save more than in the past. But as improvements are made in industry, cheapening production, relieving workmen of the exhausting kinds of labor, and increasing real wages, the workers naturally will have a growing desire and ability to participate in ownership and management, and the employers always welcome such an inclination. Such a development is a matter of growth, and the way to hasten it is by increasing production.

The history of industry shows that every branch of it has been developed chiefly by means of the profits made in it. The fortunes so made will be found as a rule to be in the form of buildings, equipment, and facilities for supplying some public service; and year after year the profits go back for enlarging them. This conversion of profits into capital creates a direct and permanent demand for more labor. The workingman is an indispensable element in the employment of capital. The lat-

ter cannot dig a ditch, or lay a walk, or turn a furrow, without labor; they must be used together; and when two factors must be used together and are mutually dependent, the one of which the supply increases more slowly comes inevitably into a stronger position.

This is eminently the position of labor in the United States. In the ten years, 1899-1909, the last ten years for which we have census figures, the population of this country has increased 21 per cent, the amount of capital employed in manufacturing increased 105 per cent, and the amount of power used in manufacturing establishments increased 85 per cent. Under these conditions it is evident that the demand for labor is increasing faster than the supply, and that the natural tendency of wages must be steadily upward.

Moreover, the products of industry must be distributed, which means that they must be sold back for the most part to the very people who produced them. Unless consumption keeps up with production, industry will choke down. With all this new capital in the form of new and improved equipment going into use, there is bound to be a constant increase in the production of goods per head of the population, and there must be such a continual readjustment of wages as will enable the people to buy them.

These are the natural laws which distribution, just as the vital processes of life go on unnoticed. By means of these, all of the progress of the past has been accomplished and the position of the workingman in this country made what it is, in comparison with that of the worker in China. If these laws were understood, this turmoil in industry would largely disappear and the production and distribution of all the comforts of life would rise to a proportion above our most sanguine hopes.

If all the forces that are making for discontent, disorganizing and embarrassing production and retarding industrial progress, could be turned into constructive influences, informing the population upon the gains to be had by increasing the output, and by the practice of personal thrift, not only would living conditions rapidly improve but the wage earners would soon have a large share in the ownership and control of the country's industries.

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—H. L. Laycock, Gratiot County.

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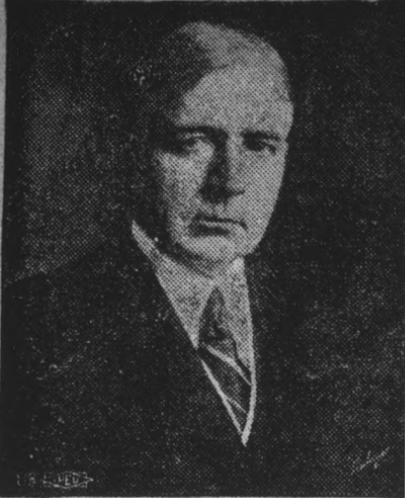
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**DO YOU WANT TO SELL
YOUR FARM THIS SPRING?**

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

(POLITICAL ADVERTISEMENT)

(POLITICAL ADVERTISEMENT)



FRANK O. LOWDEN

A Business Farmer

—for—

PRESIDENT

Born and reared on a farm. Educated himself through his own efforts. Sent to Congress for three terms. Elected Governor of Illinois. Reduced taxes in Illinois from 90c to 60c in two years on each \$100.00 valuation, and saved the state \$8,000,000.00. Passed the finest legislation for Agriculture of any state in the Nation.

Lowden is the Farmer's Great Opportunity

Primary April 5, 1920.

Soy Beans and Corn for Hogging Down

TO PUT soy beans and corn in for hogging off at a profit is a question with some. However, I am convinced that the fellow that does so for a period of five or 10 years will be ahead in fertility of the one that cuts his corn and feeds dry thru the barn and possibly leave the manure in piles around the barn yard till they are quite materially wasted, before he hauls them out. Of course, that is for anyone to decide himself.

In putting out corn and beans you should plow good depth but not turn up more than one-fourth in. of new clay or subsoil. Then get your ground in the very best of condition, as that is one-half or nearly so of the battle of tending them. We use a combination corn, soy bean and fertilizer planter (C. B. & Q put out by International Harvester Co.) one you can set to plant from 28 in. to 44 in. or 48 in. wide I am not certain which. The soy bean box is just inside the corn box. It is small, about four or five inches in diameter and the corn is put just outside of it and in corn box. Each has separate plates so you can adjust it most anyway you want to. For planting to hog off we plant 40 inches wide (or in fact all our corn we put that width) and want corn 10 to 14 inches in row and about two or three beans between each stalk. A bushel of beans at that rate will plant from six to eight acres owing to size of beans.

We use disc furrow openers and when crop has been planed three or four days I go in with three section spike tooth harrow and give a little slope to the teeth and give it the once-over. I cannot estimate how much good is being done, as it stops the very small weeds. When corn and beans have leafed out go in again with same harrow and do the same thing over. It looks like you were ruining the crop but if you cannot stand to do it get the hired man to drive the team and you do something else. The tending of the crop closely when small is the essential thing. This has the furrows neatly filled up and a couple or three good plowings and you are ahead of weeds. After beans get in blossom don't cultivate when dew

is on or when wet fro mrain as it cuts their production by getting dirt into the blossoms. If you use the same as I do, the Ito San Soys, they will be ripe and you can turn hogs in a week or two before corn is fit and they will eat the beans. If they don't get on to riding corn down turn in an old sow or two for few days and they soon learn it. That is the way we want to do it and generally do. A few beans should be pulled and fed in the pen before being turned in as some hogs wouldn't eat them till accustomed to them.

If you do not have a combination planter just plant your beans first using a rather small plate and then take you mortar off and go over again in same tracks with corn in hoppers. This doubles up the work but can be done on a small scale. However if you were putting out 40 acres of corn and beans as we will this year, you would not like that way. You cannot get the crop tended as well as generally there are a few variations of planters. Don't be too afraid of covering up the soys but plow closely the first and second plowings. If the weeds and grass get a start you cannot get rid of them very well.

For seed put in 28 in. rows and harrow a couple of times and plow each row once and maybe twice and you have the crop tended. Beans for seed should take about one-half bu. to acre of seed. The Ito San can be planted in June and be ripe before first as it about last week in May or first week takes about 90 days to ripen.

Be sure to inoculate as it is essential to the gathering of nitrogen by the beans. You can get the inoculation at the M. A. C. at a small price per bu. Just follow instructions on wrapper and you will have it all O. K.

Some time during the summer I will give an article on the best ways and means of handling the crop at harvest time.

I am sold out of seed beans for this spring, and have been returning checks all this week, so your paper brings results. However, we are going to put out ten acres for seed this year. —G. P. Phillips Bellevue, Mich.

Don't Wear a Truss



C. E. BROOKS, 463D State Street, Marshall, Mich.

BROOKS' APPLIANCE, the modern scientific invention, the wonderful new discovery that relieves rupture will be sent on trial. No obnoxious springs or pads. Has automatic Air Cushions. Binds and draws the broken parts together as you would a broken limb. No salves. No lies. Durable, cheap. Sent on trial to prove it. Protected by U. S. patents. Catalogue and measure blanks mailed free. Send name and address today.

For best results on your Poultry, Veal, Hogs, etc., ship to
CULOTTA & JULL
DETROIT

Not connected with any other house on this market.

A GUARANTEED REMEDY FOR Contagious Abortion

Easily administered by hypodermic syringe. Kills abortion germs quickly without injuring cow. Write for free booklet with letters from users and full details of moneyback guarantee. Aborno Laboratory section F Lancaster, Wis.

Millet's

Get big yields of great hay and forage crop by planting Adams' Tested and Guaranteed Seeds. Golden Millet \$3.50; Siberian \$3.25 per 50 lb. bu., Common \$3.00; Japanese \$5.00. Get free samples and money-saving catalog of field and garden seeds. THE ADAMS SEED CO., Box 16 DECORAH, IA.

SICK ANIMALS

BOOK about Sick Horses, Cattle, Sheep, Dogs and Poultry, mailed free. Address Dr. Humphreys' Veterinary Medicines, 156 William St., New York

AGENTS WANTED,

We want several Live Wire Representatives to take subscriptions, whole or spare time. Hundreds of our friends are netting a nice sum each week by doing a little extra work. A trial will convince you. For particulars write

MICHIGAN BUSINESS FARMING
MT. CLEMENS, MICH.

Boys' and Girls' Poultry Clubs

Pure Bred Poultry Clubs afford an easy way for boys and girls to get a setting of eggs of trio (3) of chickens, several breeds, without paying a cent or borrowing of anyone. Write today for particulars.

Manager Tix Ton Boy Clubs,
Grand Ledge, Michigan.

MICHIGAN BUSINESS FARMING

—and—
YOUR FAVORITE DAILY

—at a—
GREATLY REDUCED PRICE

(Good on R. F. D. Only)

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

Mail your orders to Michigan Business Farming, Mt. Clemens, Mich.

How to Prevent Garlic Flavor in Milk

DAIRYMEN and creamerymen in many states are troubled every spring by garlic or onion flavor in the milk. This is due to the cows feeding on garlic or wild onion, one of the first plants to start in the pasture in the spring. The trouble from garlic is not likely to last very long, as this weed is soon cropped off and the grass becomes plentiful enough for the cattle to feed on it in preference to the onion.

Garlic flavor in milk can be removed by heating the milk to 145 degrees F. and forcing air through it at this temperature for 30 to 60 minutes, according to Farmers' Bulletin 608 of the United States Department of Agriculture. As this method requires a certain amount of equipment, it is much more satisfactory for the average dairyman to keep this odor out of milk by a few simple precautions in herd management.

There are two ways of protecting the milk from garlic flavor. First, prevent the cows from obtaining garlic; and second, manage the herd on garlic pasture, so that there will be the least possible chance of getting the flavor in the milk.

Often the garlic is found only in one patch in the pasture, and this can be temporarily fenced off and pastured with other animals not producing milk.

Where garlic is scattered all over the field it will be impossible to keep the cows away from it, but by removing them to some other field three or four hours before each milking the flavor will be reduced to a minimum. The odor in milk is strongest from cows which have just eaten garlic, and the odor is reduced as the time between the eating of garlic and milking is increased.

In case no garlic-free pasture is available, it would be advisable to drive the cattle to the barnyard three or four hours before milking and feed them on hay and silage. As

the season for garlic trouble is short, this should not cause much inconvenience.

The best plan for avoiding trouble from this weed on the dairy farm is to kill it out completely. This can be done with little trouble, and those interested can obtain information on the subject by writing to the United States Department of Agriculture for Farmers' Bulletin 610, "Wild Onion Method of Eradication."

DIVIDED ON PRESIDENT

I am a non-voter at present, but am so intensely interested in politics that I had my voting brother and mother make out these coupons. There is a house divided against itself here. My brother says either Hoover or Goethals suits him, while mother and I think Bryan is the man for the job and I guess we are all right. But I don't see what you put Borah and Johnson on the list for (unless for ridicule.) There is not a farmer in this part of the country who had not had the advanced symptoms of softening of the chanium who would want to give a vote to either polecat. Henry Ford is a wonderful man we all admire greatly, but he would not be a successful president. Wish you successful endeavor for a farmer candidate for governor. Milo Campbell suits us.—H. H. F., Fife Lake, Mich.

In the Cow Barn

The fact that Holsteins are such prolific milk-producing cows and that Jerseys are producers of rich milk, causes considerable argument among the fanciers of these respective breeds. At a recent county fair two men were arguing. The Jersey breeder said: "I wouldn't give a Holstein stable room. I had one once and her milk was so thin that after you milked a pailful, you could put a silver dollar in the pail and see it on the bottom." "Huh," sniffed the Holstein fancier. "You couldn't make that test with your Jerseys, because you couldn't get enough milk out of one of them critters to cover the dollar."



BREEDERS DIRECTORY



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

BREEDERS' DIRECTORY, MICHIGAN BUSINESS FARMING, Mt. Clemens, Michigan.

CLAIM YOUR SALE DATE

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

Mar. 26, Angus, Michigan Aberdeen-Angus Breeders, Saginaw, Mich.
April 1, Holstein, Dwight G. Rapp, Lansing, Mich.
April 7, Holstein, Angus and Poland Chinas, Vernon Clough, Parma, Mich.
April 12, Holsteins, J. P. Oleott, Perry, Michigan.

CATTLE

HOLSTEIN-FRIESIAN

FOR SALE

20 Head Pure-Bred Holsteins

four months to 9 years. Good breeding. Some A. R. O. Some have A. R. O. dams up to 32 pounds.

L. L. ROCHE & SON

PINCKNEY, Livingston Co., MICH.

MR MILK PRODUCER

Your problem is more MILK, more BUTTER, more PROFIT, per cow.

A son of Maplecrest Application Pontiac-182652—from our heavy-yearly-milking-good-but-ter-record dam will solve it.

Maplecrest Application Pontiac's dam made 35,103 lbs. butter in 7 days; 1344.3 lbs. butter and 23421.2 lbs. milk in 865 days.

He is one of the greatest long distance sires. His daughters and sons will prove it.

Write us for pedigrees and prices on his sons. Prices right and not too high for the average dairy farmer.

Pedigrees and prices on application.
R. Bruce McPherson, Howell, Mich.

FOR SALE THOROUGHbred HOLSTEIN COWS

combining blood of Traverse City and Maple Crest stock, granddaughters of Friend Hengerveld De Kol Butter Boy.

Prices \$300 and up
WILLIAMS & WHITACRE
R. F. D. No. 4 Allegan, Mich.

WOLVERINE STOCK FARM REPORTS GOOD

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

For Sale: Registered Holsteins, 7 young cows, A. R. O. bred to 31 lb. bull. Herd on State Federal accredited list. Wm. Griffin, Howell, Mich.

REGISTERED HOLSTEINS FOR SALE. FOUR bull calves sired by a son of King Segis Champion Mabel. He is a double grandson of King Segis De Kol Korndyke. Dams are heavy producing young cows. Prices reasonable, breeding considered.
G. & P. DeHOOP, Zeeland, Mich., R 4

LONG DISTANCE

HOLSTEIN CALVES OF EITHER SEX
Can spare a nicely marked heifer backed by seven dams that average above 1200 lbs. butter and 24,000 lbs. milk in one year. Choice Duroc Sows.
A. FLEMING, Lake, Mich.

HERE'S A BULL GOOD ENOUGH TO HEAD A REGISTERED HERD

A grandson of the \$50,000 bull. His dam a 20 lb. jr. 4 year old. Next dam a A. R. O. cow. Come and see his dam and his sisters and his fine heifer calves. This bull is coming 2 yrs. old. 90 per cent white. You will not be disappointed if you come to see him. Pedigree on request. Price \$350. Herd free from abortion.
H. E. BROWN
Breeder of Reg. Stock Only. Breedsville, Mich.

MUSLOFF BROS.' HOLSTEIN

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

BULL CALF LAST ADVERTISED SOLD.

Nicely marked, straight back line. A fine individual large growthy fellow with the making of a large bull. Would do someone a lot of good. Dam has a 27 lb. record, a large cow and a great milk producer. Sire a son of Friend Hengerveld DeKol Butter Boy, one of the great bulls.
JAMES HOPSON, JR.
Owosso R2 Michigan

I WILL HOLD A COMBINATION SALE of registered and grade Holsteins, registered and grade Angus, horses and Poland China Hogs, on April 7th, at my farm, 11 miles N. W. of Jackson, on Jackson-Springport state road.
VERNON CLOUGH, R2, Parma, Mich.

BROOKSTON FARMS REGISTERED HOLSTEIN BULL

Calves for sale, sired by MARYLAND BELLE CLOTHILDE No. 154358, born Dec. 14, 1914. A grandson of Colantha Johanna Lad, one of the greatest living sires and of a 3124 lb. daughter of Sir Korndyke Manor De Kol. His two nearest dams average 25.80 lbs. butter in seven days.
BROOKSTON FARMS
H. WIDDICOMBS, Prop. Bg rapids, Mich.

TWO BULL CALVES

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

Four Choice Bull Calves

Dams have records from 20 lbs. to 26 lbs. Sired by our 32 lb. son of the \$50,000 bull.
LAKE SIDE DAIRY, Lake Odessa, Mich.

MY HERDSMAN SAYS

"You must get rid of these young bulls, we have 10 more calves coming this month and no room for them."
SO HERE GOES

Nice straight bull calf born March 6th, 1920 from young heifer sired by Stronghurst King Ona. I paid \$25 for this service fee. Price \$75.

Young calf born Jan. 26th out of my sire and a promising young heifer, \$75.

Calf born Feb. 27 out of my sire and 24 lb. dam. \$150. And so on up to bulls of serviceable age.

Remember this herd now has several 30 lb. cows and we are testing cows as they freshen giving our young stock a real chance.

Herd under Federal supervision.
-HILLOREST FARM, Ortonville, Mich.

or write
JOHN P. HEHL, 181 Griswold St., Detroit

HATCH HERD

(State and Federal Tested)
YPSILANTI, MICHIGAN

Offers young sires out of choice advanced registry dams and King Korndyke Art-Is Vale. Own dam 34.16 lbs. butter in 7 days; average 2 nearest dams 37.61, 6 nearest, 33.93, 20 nearest 27.83.

"Breeding-- Individuality-- Production"

That's our motto. We make it possible through our two herd bulls—one a 38 lb. son of the \$30,000 sire, King Korndyke Pontiac Lass, the other a 36 lb. son of King Korndyke Sadie Vale, "the greatest sire of his generation." Our matrons are strong in King of the Pontiacs, King Segis, Hengerveld DeKol and Ormsby blood. We've been at it since 1906. Usually something to sell. Write us.
BOARDMAN FARMS
Jackson, Mich.

A NICE STRAIGHT LIGHT COLORED BULL

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

BULL LAST ADVERTISED SOLD TO

Mr. F. W. Alexander, Vassar, Mich. Now offer a bull two years old about 1-2 white and straight as a line (sired by MAPLE CREST KORNDYKE HENGERVELD and from FLINT ULTRA NUDINE a 23.22 pound daughter of FLINT PRINCE. Bull carries 75 per cent same blood as KING FLINT. If you want a direct descendant of BUTTER BOY ROSINA now is your chance.
Price \$200.
ROY F. FICKIES, Chesaning, Mich.

OUR HERD SIRE MODEL KING SEGIS GLISTA

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

HOLSTEINS FOR SALE

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

For Sale, 30lb Bull Born Jan., 1918

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

LIVE STOCK FIELD MEN

E. N. Ball Cattle and Sheep
Felix Witt Horses and Swine
One or the other of the above well-known experts will visit all live-stock sales of importance in Michigan, northern Ohio and Indiana, as the exclusive Field Men of Michigan Business Farming.
They are both honest and competent men of standing in their lines in Michigan and they will represent any reader of this weekly at any sale, making bids and purchases. Write them in care of this paper. Their service is free to you. They will also help you arrange your sale, etc. They work exclusively in the interests of Michigan's OWN live-stock weekly.

BULLS NICELY MARKED, GOOD BONED

bull calves out of A. R. O. and untested dams, at reasonable prices.
TRACY F. CRANDALL, Howell, Mich.

SHORTHORN

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

SHORTHORNS AND POLAND CHINAS FOR

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

SHORTHORNS I offer bulls 4 mo. to 16 mos.

1 cow, 1 heifer calf.
O. M. YORK, Millington, Mich.

FOR SALE SCOTCH SHORTHORN BULL

calves ready for service.
JOHN LESSITER'S SONS', Clarkston, Mich.
Phone, Pontiac 7115-F-3 or Orion Exchange

THE VAN BUREN CO Shorthorn

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

THE BARRY COUNTY SHORTHORN BREED-

ers Association announce their fall catalog ready for distribution. Scotch, Scotch Pop and Milking Shorthorns listed. Address
W. L. Thorpe, Sec., Mio, Mich.

SPECIAL OFFER SHORTHORNS—

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

HURONA STOCK FARM

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

FOR SALE—SHORTHORN BULL CALVES

ready for service. Also young Oxford Down Ewes. Prices to sell.
JOE MURRAY & SON, R2, Brown City, Mich.

SHORTHORNS FOR SALE AT REA-

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

FOR SALE Clay Bred Shorthorn bull calf

from a heavy producing dam.
W. S. HUBER, Gladwin, Mich.

Milking Shorthorns. Registered females \$200

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

HEREFORDS

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

Hardy Northern Bred Herefords

BERNARD FAIRFAX 624919 HEAD OF HERD 20 this year's calves for sale, 10 bulls and 10 heifers.
JOHN MacGREGOR, Harriaville, Mich.

REGISTERED HEREFORD CATTLE

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

ANGUS

The Most Profitable Kind

of farming, a car load of grade dairy heifers from LENAWEE COUNTY'S heaviest milk producers to include a pure bred ANGUS bull of the most extreme beef type for combination beef and dairy farming.
Car lot shipments assembled at GLENWOOD FARM for prompt shipment.
Methods explained in SMITH'S PROFITABLE STOCK FEEDING. 400 pages illustrated.
GEO. B. SMITH, Addison, Mich.

BARTLETT'S PURE BRED ABERDEEN-

ANGUS CATTLE AND O.I.C. Swine are right and are priced right. Correspondence solicited and inspection invited.
CARL BARTLETT, Lawton, Mich.

HIGHEST DRESSING ABERDEEN-ANGUS



The world's record for dressing per cent for beef animals is held by an Aberdeen-Angus at 76 1/2 per cent. Other Aberdeen-Angus cattle have dressed over 73 per cent and several over 70 per cent, both market and show cattle. Carlots have dressed over 65 per cent several times. They (Aberdeen-Angus) usually dress out the highest per cent of edible meat. Write for "What's Under the Hide," the story of dressing percentages.
AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION
817 M. B. Exchange Ave., Chicago

GUERNSEYS

GUERNSEYS WE ARE OFFERING FOR

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

THREE BULL CALVES

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

Registered Guernseys For Sale

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

FOR SALE: GUERNSEY BULL, GRANDSON

of Gov. of the Chene from A. R. O. dam, 10 mos. old. Also other bulls from 2 to 7 mos. old. Write for particulars.
C. A. HENSENEY, Watervliet, Mich.

JERSEYS

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

BROWN SWISS

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

FOR SALE

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

RED POLLED

Choice Red Polls. Northern Pioneer Herd 1906. Bulls serviceable age. Descendants Five Crosses. Best herds 2 states. Papers.
J. A. BATTENFIELD SONS, Fife Lake, Mich.

SWINE

POLAND CHINA

(his name) Big Bob Mastodon

MR P C BREEDER IF YOU WANT TO GET

in the King row buy a Gilt, bred to BIG BOB MASTODON. He has more Grand Champions. Blood in his veins than any other boar in Michigan. I have 15 choice Gilts bred to him for March and April farrow. Fall pigs of either sex.
C. E. GARNANT, Eaton Rapids, Mich.

BIG TYPE POLAND CHINA GILTS, Sired

by BIG BONE 4th. Bred to BIG LONG BOB for May farrow.
MOSE BROS., St. Charles Mich.

BIG TYPE POLAND CHINAS. CLOSING OUT

our boars and bred gilts at a bargain. Gilts with quality and size bred to a large growthy herd boar for March and April farrow.
L. W. BARNES & SON, Byron, Mich.

6 TH ANNUAL P. C. BRED SOW SALE,

March 13, 1920. For particulars write
W. J. HAGELSHAW, Augusta, Mich.

WALNUT ALLEY BIG TYPE

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

BIG TYPE POLAND CHINAS WITH QUALITY

BRED SOWS FOR SALE BOARS ALL GONE
J. E. MYGRANTS, St. Johns, Mich.

BIG TYPE P. C. BRED GILTS AND FALL

yearlings including prize winners. Out of 1,100 lb. sire and mammoth sows from Iowa's greatest herds.
E. J. MATHEWSON, Burr Oak, Mich.

L T P C AM OFFERING SPRING

boars, summer and fall pigs.
F. T. HART, St. Louis, Mich.

Am Offering Large Type Poland China Sows,

bred to P's Orange at reasonable prices. Also fall pigs. Write or call.
CLYDE FISHER, R3, St. Louis, Mich.

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

T. P. C. ALL SOLD OUT, EXCEPT SOME Fall gilts. Thanking my customers. JOHN D. WILEY, Schoolcraft, Mich.

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

NOTICE MENTION OF MY MICHIGAN Buster in Williams & Sons' Giant Buster catalog of their Mar. 10th sale, page 9. Four fall gilts by him priced right. S. C. Brown, Lehigh and Buff Rock eggs. O. L. WRIGHT, Jonesville, Mich.

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

HERE'S SOMETHING GOOD

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

WONDERLAND HERD

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

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

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

BIG TYPE P. C. SOWS FOR MARCH AND April Thirty farrow. Fall pigs, some better, call or write. E. R. LEONARD, St. Louis, Mich.

FOR SALE Large Type P. C. Hogs

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

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

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

DUROC JERSEY BRED SOWS-SERVICE BOARS \$25 EITHER SEX

We deliver the hogs before you pass IRA BLANK, Fotterville, Mich.

A FEW BRED DUROC GILTS. BRED TO A son of Principal 6th. These gilts are long-bodied with good hams and shoulders and will weigh 250 lbs. Bred to farrow in April. Pedigree on request. Price crated, \$100 each. H. E. BROWN, Breedsville, Mich.

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

Duroc sows and gilts bred to Walt's King \$2949 who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroc board. Newton Barnhart, St. Johns, Mich.

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

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

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

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

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

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

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WE OFFER A FEW WELL-BRED SELECTED spring Duroc Boars, also bred sows and Gilts in season. Call or write. MCNAUGHTON & FORDYCE, St. Louis, Mich.

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

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Place orders for bred gilts for June farrow. Also boars and spring pigs. 1 2-year old sow due to farrow Apr 26th. RUSSELL BROS., F 3, Merrill, Mich.

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

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

HAMPSHIRE

HAMPSHIRE

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

HAMPSHIRE A FEW BRED GILTS LEFT and fall boar pigs from new blood lines. JOHN W. SNYDER, St. Johns, Mich., R 4

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

O. I. C.

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

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

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FOR SALE

100 TWO YEAR OLD WESTERN EWES due to commence lambing April 10th. Price \$18.00 each, if sold at once. H. M. REYNOLDS, Marlon, Mich. R. F. D. No. 5

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

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FOR SALE ONE IRON GRAY 5 YEAR OLD Percheron stallion, Prince No. 148423. Sired by Brilliant IV No. 47531, a black horse, and sold once for \$3,000. The dam of Prince a large gray mare No. 143423. Price \$300. D. E. DEAN, Milford, Mich.

Percherons for Sale—21 Head Sevier 130757 at head of herd. A horse carrying the blood of Imposant, his sire and Hartley's Samson, two 2,400 lb. horses. He is 42 months old, weighs 2,150 lbs. carries 14 inch bone (six weeks.) CHAS. OSGOOD & SONS, Mendon, Mich.

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With Size and Quality

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

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Michigan Business Farming, Mt. Clemens, Mich.

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Yours truly, H. D. BOARDMAN.

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

J. CARL JEWETT, R. 5, Mason, Michigan

First Annual Show and Sale
of the
Michigan Aberdeen-Angus
Breeders' Association



to be held at the Fair Grounds
AT SAGINAW, MARCH 26, 1920

55 Head-14 Bulls-55 Head
-41 Females-

Blackbirds—4th and 2nd branch; Trojan Ericas; Prides of Aberdeen and K-Prides, Queen Mothers, Drumin Lucys, Georginas, Jilts and other popular families.

SHOW OF SALE CATTLE: The American Aberdeen-Angus Breeders' Association is co-operating with the Michigan Association in holding a show before the sale at which \$50 in cash prizes will be awarded. A Detroit packing firm will also give \$25 for the champion bull of the show.

The Cream of Michigan's Leading Herds, every animal carefully inspected to give buyers an opportunity to get foundation herds and show and steer bulls. The following herds contribute:

M. C. Baker, Flint	1 bull, 2 cows
Thomas Barnett, Pontiac	2 cows
David Coupar, Marlette	2 bulls, 4 cows
James Curry, Marlette	2 cows
Elvendale Farm, Niles	2 cows
Ward Hathaway, Ovid	5 cows
Lang Brothers, Davison	1 bull, 2 cows
Dr. G. R. Martin & Son, Crosswell	1 bull, 3 cows
Murray McCollum, Unionville	2 bulls, 4 cows
F. Perry & Son, Davison	1 bull, 3 cows
Russell Bros., Merrill	1 bull
Richard Shier, Marlette	1 bull, 2 cows
Sommer Bros., Eau Claire	1 bull, 3 cows
F. J. Wilber & Son, Olio	1 bull, 2 cows
Wildwood Farms, Orion	1 bull, 3 cows
Woodcote Farm, Ionia	1 bull, 2 cows

Every animal will be tested for tuberculosis.

Auctioneer, Col. W. H. Cooper. Frank D. Faust will represent the Aberdeen-Angus Journal. Dr. K. J. Seulke, Eastern Fieldman and Secretary Chas. Gray, of the American Aberdeen-Angus Breeders' Association, will be present.

Write for catalog immediately to Ward Hathaway, Secretary, Ovid, Mich.

Michigan Aberdeen-Angus Breeders' Association
ALEX. MINTY, President

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Complete Dispersion
Maplecrest Farm
Holstein Herd

DWIGHT G. RAPP, Owner

Lansing, Mich.,

Thursday, April 1, 1920

Twenty-eight females, including a 24.8 lb. cow and two daughters by a 31-lb. bull, a 22 lb. cow and a 19 lb. cow, a 21 lb. jr. 3 year old and two daughters. Most of the heifers are by a 31 lb. son of Maplecrest Korndyke Hengerveld. Most of the cows are bred to a 29.8 lb. grandson of King of the Pontiacs.

A good working herd in fine condition, under federal supervision, having passed the first test with no reactors. A safe herd to buy from. Sold under 60 day guarantee with retest privilege. Guaranteed breeders. Investigate the herd sire by a 30 lb. son of King of the Pontiacs from a 29.8 lb. cow. Free conveyance leaves Kern's Hotel, Lansing, Mich., for farm hourly from 9:00 A. M. to 1:00 P. M.

Send for catalog.

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ALBERT E. JENKINS, Sec'y. Sale Managers.
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The Day Old Chick business is on. Thirteen Heavy Breeds. Three Especial Egg Breeds. You will be particularly interested in the extra heavy laying breeds: White Leghorns inspected and certified as heavy producers by the Poultry Extension Specialist of the Agricultural College. Cockerels—We still have Barrel Rocks, White Wyandottes, R. C. Brown Leghorns. Turkeys—One White Holland Tom. We solicit your interest in the Homestead Farms plan of Pure Bred Poultry raising. **STATE FARMS ASSOCIATION** Desk B, Kalamazoo, Michigan

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Two great breeds for profit. Write today for free catalogue of hatching eggs, baby chicks and breeding stock. **CYCLE HATCHER COMPANY, 149 Philo Bldg. Elmira, N. Y.**

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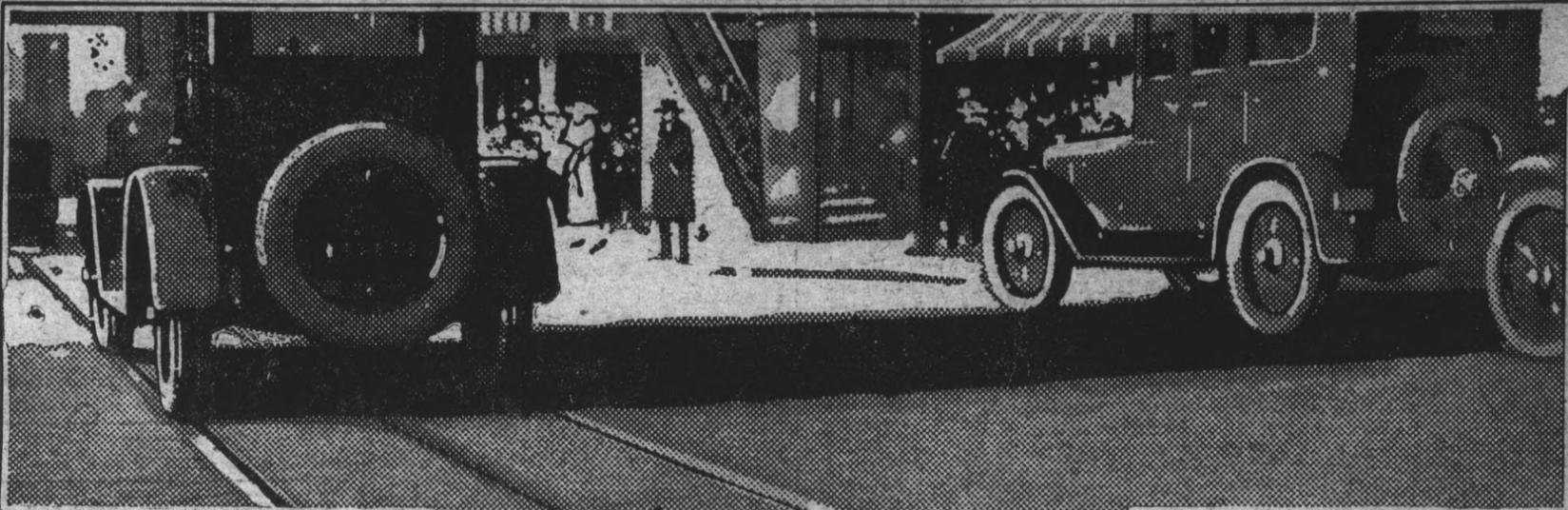
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