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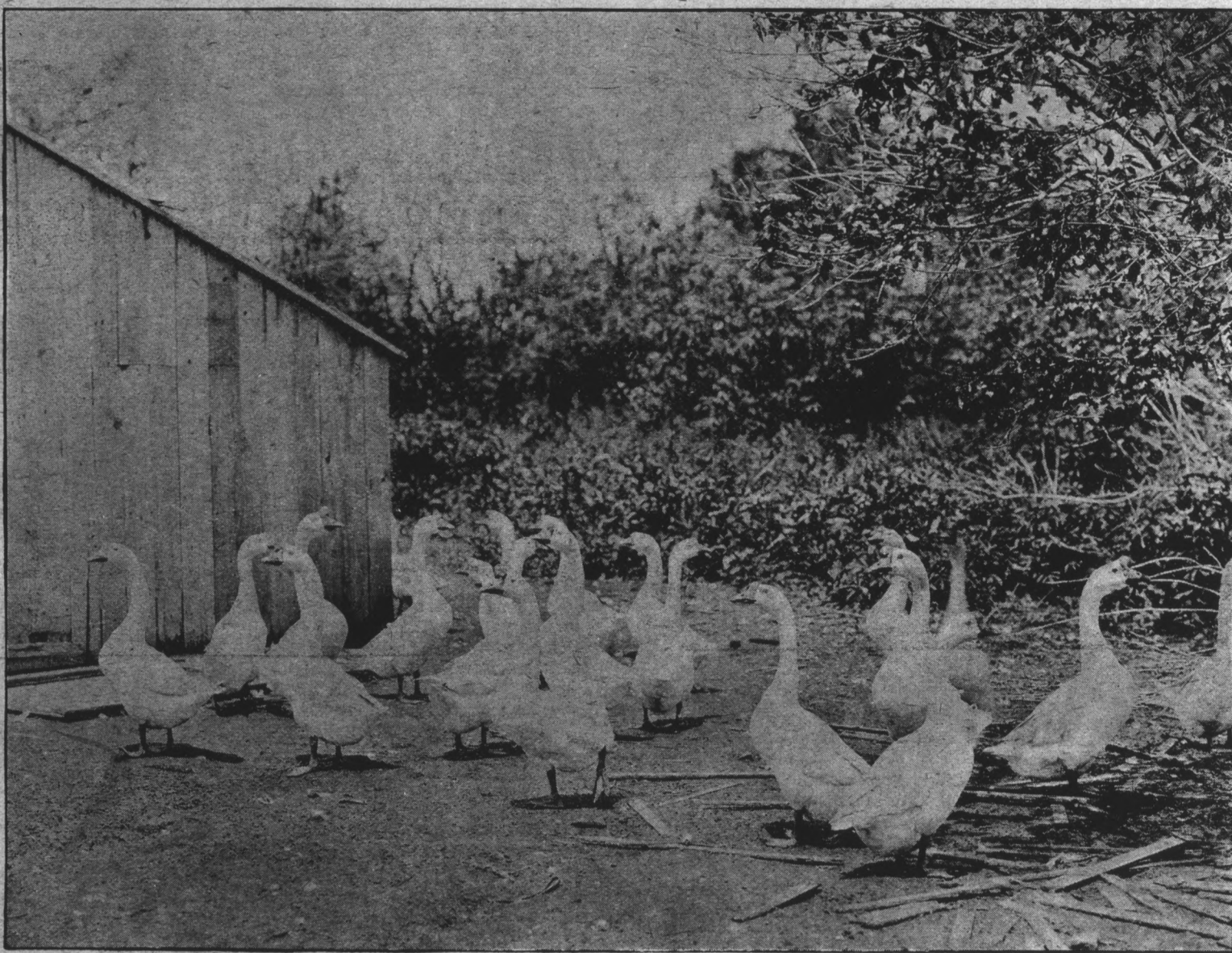
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MAKING FRIENDS OF YOUR NEIGHBORS

I LIKE to know that my neighbors are my friends. So do you. I heard a man say recently, "I don't care what the people of this neighborhood think about me. I am going to do just as I have a mind to do, and it is nobody's business."

But he did not mean it. He did not know what it would mean for himself and his family to cut loose from everybody in his neighborhood in that way. He could not do it, if he tried ever so hard. We need and must have loyal friends. Real, true friends are our greatest joy.

And the only way to get loyal friends is for us to do things that will make us worthy of them. Every man will have something to do for his friend, and something to bear with him.

This does not mean that we shall be all the while fishing for the good will of others. That sort of a man we despise. No man can expect to find a friend without faults; nor can he propose himself to be so to another. Without reciprocal action there can be no continuance of real friendship. We like good, square bus-

iness in the matter of winning friends. That is what we must be willing to do in our efforts to be well thought of.

Friends are discovered rather than made; there are people who are in their own nature friends, only they don't know each other. For instance, our farm work may be getting behind. We are not feeling well. It looks like rain. Over comes our good neighbor and lends a hand. He puts the very best there is in him into helping us out of our pinch. If need be, he brings his team over and stays till things are cleared up. Now, you know that man is your friend. He may be rough, a man with the bark on, but his heart is in the right place.

Do you do the same thing when he is in deep water? If you do, then he is warranted in saying, "Sam's one of the best neighbors I ever had, a true friend of us all."

Winning friends costs something. Everything worth having costs. But do you want anything you do not pay for? Of course you don't. No real man does.

The Michigan Farmer

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DETROIT, SEPTEMBER 6, 1919

CURRENT COMMENT

Necessities Versus Luxuries

THERE is no doubt that one of the chief causes of the general complaint regarding the high cost of living is the present tendency among wage earners to spend their money freely for luxuries for which they pay exorbitant prices, while they attribute their inability to save to the increased cost of the primary necessities of life. A few examples will serve to illustrate this fact:

One of the most striking of these examples will appeal with peculiar force to the dairymen who contribute to the Detroit market milk supply, and who have heard strong echoes of the consumers' protests at the advance in the price of milk which was necessary to give producers a small margin over the cost of production and insure an adequate future milk supply. Yet these same consumers who complain so bitterly regarding the increased cost of this necessity pay a much greater increase for the same product in the form of a luxury, apparently without even a murmur of discontent. With the price of ice cream sodas at seventeen cents, including the two-cent war tax, there is no apparent lack of patronage of the very numerous stands where this luxury is dispensed in almost infinitesimal units of food value as compared with a quart of milk, yet at a higher cost to the consumer than a quart of milk delivered at his door.

This natural tendency on the part of the consuming public to be indulgent as to the price of luxuries, but critical as to the price of necessary foodstuffs has contributed greatly to the prosperity of a multitude of "soft drink" vendors and a few large manufacturers. The latter fact is attested by the published auditors' statement of the Detroit Creamery Company, the city's largest ice cream manufacturers, showing a profit of eighteen per cent on their capital in 1918. But it is a tendency which contributes largely to the present situation, and which must be a factor in the ultimate solution of the economic adjustment of living costs.

Another example of this tendency which we believe to be typical came to our attention during the past week. A workman entered a store in a prosperous southern Michigan county seat and asked for dress shirts. The proprietor of the store, who waited on him, showed him a standard line of \$3.50 shirts, such as he himself wore, but the customer was not satisfied and asked to be shown a better grade. He was then shown a line of shirts selling at \$6.00,

but again was not satisfied, and asked for the best shirt in the window display. The merchant said he had them but they sold for \$12.00. "All right," replied the workman, "why shouldn't I wear a good shirt? I get \$3.00 per day in the shop."

This attitude is, of course, not universal, but it is undoubtedly typical of the attitude of a large element of wage earners at the present time. It is an attitude which contributes to the present prosperity of the merchant, but which bodes ill for the future, so far as the reduction of living costs are concerned, since high wages dissipated in extravagant luxuries are incompatible with cheap foodstuffs.

Just a few years ago when the "movies" were rapidly developing they were a cheap source of popular diversion and entertainment at an admission cost of five or ten cents. Now, with the movie habit firmly established in the lives of so many people, the picture houses have long waiting lines at greatly advanced prices, made up of patrons who formerly spent little in attending theaters. Moving pictures are of great value from an educational as well as an entertainment standpoint, but the thrilling serial or the startling feature play is in most cases the more powerful magnet to draw profitable houses, and their appeal to the imagination may easily become so strong as to eclipse the more practical needs of the hour, thus being typical of a habit of thought, or lack of it, which has contributed to the present economic problem and which complicates its solution.

The farmers of Michigan and the country have not acquired this habit of indulgence in transient luxuries. Rather are their savings invested in substantial comforts which will make life better worth the living. They will be satisfied with a labor income which will afford them a reasonable return on their investment and a fair measure of the comforts of life. Under the present labor and economic conditions this program is not compatible with cheap foodstuffs. It is thus a logical conclusion, that both consumers and economists must realize this fact before our reconstruction crisis is past, lest foodstuffs become scarce as well as high in price.

Stock Shipping Associations

ONE of the most important problems confronting the many Cooperative Live Stock Shipping Associations in Michigan is that of improving the quality of the animals offered to the trade and making more intelligent grading of the shipments.

Of course, the upgrading of the live stock of a community so that every animal shall be a good one of its class is a slow process, as it is going to require considerable time to induce farmers to discard scrub sires and retain better females for breeding purposes, and unfortunately conditions for financing live stock improvement in many communities are not the most favorable. In many instances the need for immediate cash prompts many farmers to part with animals, the keeping of which for a longer time would prove profitable. It seems to us, however, that members of Cooperative Live Stock Shipping Associations could, by working together, do considerable to influence local bankers to help finance stock feeding, and in this way improve the finish and quality of the animals shipped from the community.

Another feature which militates against the complete success of the Cooperative Shipping Association, as it exists today, is the large number of individual animals, two or three head, from a farm made necessary by the wide distribution from where shipments are made. This feature can be

greatly improved as soon as the number of farmers supporting cooperative associations increases to a point where large shipments can be made from one station, or where it is possible for several smaller associations to ship carloads on any particular railroad or branch by including shipments from several stations, and then reloading and grading them so as to have them come up to the grades or standards demanded in the big markets where they are consigned.

Live stock so bunched could then be graded at the yards and sold in carloads of equal quality to better advantage than individually. With hogs of like quality and finish at, say two hundred and forty pounds, gathered in a carload, good quality steers and other grades of stock similarly grouped, quick sales at top prices for the various grades could be made.

Such practice would mean the cooperation of the several associations interested, also considerable business management, but the methods would provide opening for suggestions for still greater activities so that the time of at least one good man could be fully employed in looking after the management. Among other possibilities that suggest themselves in this regard is that of disposing of stockers, feeders and possibly breeding stock to the best advantage of the community where they are raised.

A good stockman employed during certain times of the year could be of great value to the farmers of the several communities by buying and selling carloads of the kinds of stock needed for feeding by the farmers. Similar action with regard to the selection and distribution of improved breeding stock could be conducted with a reasonable degree of success.

In regard to marketing hogs, which branch of the live stock industry is of particular interest to the farmers of southern and central Michigan, some more intelligent method of grading the animals than that now in effect is necessary if top prices are secured at the big market centers. By properly grading all shipments of hogs at the shipping point, or the shipments from several points, each hog of prime quality and desirable weight for the best purpose would bring the top market price greater competition among the buyers would be encouraged, and the producer would be encouraged to improve the quality of his hogs and finish them properly for market. As grading is now practiced many farmers who finish large droves of hogs for market hesitate about joining cooperative associations and sending their well-conditioned animals to market along with those from farmers who ship mixed carloads of poorly conditioned hogs. By properly grading and shipping better lots of more uniform hogs the associations would not only secure better prices for their shipments, but it would tend to induce more progressive feeders to support the movement.

The Cooperative Live Stock Shipping Associations in Michigan have met with remarkable success and the extension of the work to include the linking up of the different associations along these lines is a matter that should receive attention in the immediate future. Such cooperative effort would ultimately result in the improvement of the live stock of the state as well as eliminating producers' losses through the saving of the middlemen's toll.

The State Fair

THE seventieth annual fair of the Michigan State Agricultural Society will be entered in the records of this important agricultural institution of the state as the greatest fair ever held in Michigan and maybe the best state fair of which the nation can boast. In exhibits, en-

tertainment features and attendance from country and town, the 1919 show outclasses all its predecessors. So comprehensive has the scope of the fair grown to be that space here is not available to even list the various classes of exhibits. The casual observer had convincing evidence of the bigness of the fair and its universal appeal last Monday, when the 160,000 persons on the grounds were completely absorbed in the hundreds and thousands of attractions and in learning the things that one can learn from intelligently displayed exhibits. In following issues of this journal our readers will get comprehensive reports on the various departments of the fair, with special attention given to the educational features.

News of the Week

Wednesday, August 27.

RAILWAY shopmen throughout the United States start balloting on the question of accepting proposals made by President Wilson and director-general of railroads.—The War Department orders the resumption of recruiting men for overseas duty.—Each high school in Detroit will be provided with a military officers' training corps.—Packer representatives testify before Judge Weist at Lansing.—Five million Germans have filed applications for permission to emigrate to American.—The afternoon markets at the Detroit city marketing places are meeting with generous patronage.

Thursday, August 28.

WORKERS' representatives in session at New York decide to make another appeal to the United States Steel Corporation before ordering a general strike.—Polish insurgents in upper Silesia surround the German garrison in Myslowitz.—The Ohio Supreme Court upholds public officials in seizing and selling at public auction food products that were being hoarded.—Attorney-General Palmer makes the announcement that the enforcement of the prohibition law through the country will be prosecuted with vigor.—State Geologist R. C. Allen resigns after ten years of service in the above capacity.

Friday, August 29.

THE Railroad Administration announces that it will undertake to restore full railroad service on Saturday and that all striking employees who do not return to work will find their places filled.—The proposed strike of street railway men in Pittsburgh is called off.—President Wilson will leave Washington September 3 to tour the country to give the people an account of the treaty of Versailles.—The United States Grain Corporation purchases nearly a half million barrels of flour at from \$9.90 to \$10.30 per barrel.—France pays \$400,000,000 for all American Expeditionary Force's property in that country, except that withheld for return to the United States.—Cossack forces capture 13,000 Bolshevik troops and disperse 20,000 more near Koslov, while General Denikine moves rapidly forward and threatens Trotsky's army.

Saturday, August 30.

RAILMEN heed the warning of the United States Railroad Administration, and return to their work.—Hearings before the Interstate Commerce Commission on grain rates from northern to eastern points will be held September 8.—Field Marshal Foch allows Germany to increase the number of troops in Rhineland for three months after the peace treaty comes into effect.—Canada establishes the license system for all middlemen who handle wheat.—Michigan State Fair opens under unusually favorable conditions.

Sunday, August 31.

THE Council of National Defense charges that woolen, cotton and shoe industries curtail production to advance prices.—General Pershing refuses to testify before house committee investigating affairs in connection with the American Expedition forces.—Following a three-day meeting, including a conference with President Wilson, labor leaders announce that there is yet hope of averting a strike of steel workers.—A bill providing for the marking of good on sale is introduced into congress.—United States plans for a troopship reserve with a capacity of 50,000 men.—It is predicted that the actors' strike will be ended within ten days.—Detroit labor unions observed no parades on Labor Day.

(Continued on page 294)



The Better Country School

THE factors which will determine the quality of the rural school are the ability of the farmer adequately to support the school and to spare his children from work in the field, while they complete the course of study.

The working man is asking for shorter hours, higher wages and lower cost of living. The farmer is demanding higher prices and lessened cost of production so that his income may be raised and his hours of toil shortened. Obviously, both of these things cannot happen at the same time. Which will have to yield, or where the line of compromise will finally fall, no one can say; but to keep in delicate adjustment these vital forces will call for all the wisdom and courage we possess.

No one can yet say how far we may go in one direction without bringing our industries into chaos, or in the other without bringing our agriculture into decay. Both the working man and the farmer must have sufficient wage to support his family fairly, and in any reasonable view both must be considered. I shall speak for the farmer.

To place him where he is merely producing a meager subsistence for himself and his family with scant surplus to sell as a result of employing all the daylight of all the members of his family in hard physical labor, does not meet the terms of a permanent social justice.

At present all the child labor laws on the statute books in this country, I am told, specifically exempt farm children from their protecting influences. Are farm children of less importance than city children? Are farm tasks which children perform, such as milking cows and picking cotton, less hurtful to the growing child than tasks performed in a sanitary and well supervised city factory? Is cheap food so fundamental to the welfare of society that we are justified in sacrificing the children of the open country that it may be had? If justice demands that the child in the city be free to attend school without the retarding influence of physical labor, should it not also demand the same protection for country children? I shall not attempt to answer these questions except by raising a more fundamental one: Is it not best for all children, both rich and poor, that they be taught to work and given an opportunity to combine reasonable but productive labor with study and recreation, all under conditions which will not rob them of their childhood, nor injure their bodies or their morals? Whichever way the last question is answered, the truth is self-evident that young people on the farm have the same rights as do those in town. General and unrestrained child labor ought not to be any more necessary on the farm than in the factory. If the head of the family in the city claims it as a right, while working alone and without capital, to be able to support his family decently, the head of the family on the farm while working a reasonable number of hours with an average capital of more than \$10,000, ought to be able to accomplish the same result.

The rural school, the great laggard in our educational procession, lacks organization, properly prepared teachers, supervision and support.

The farming population is yet too sparse and wealth of the country too thinly spread out to make it possible to duplicate in the country, by taxing

From an address made by Dr. H. J. Waters at the recent meeting of the National Educational Association at Milwaukee, where labor, industry and agriculture presented their views on the subject. Dr. Waters spoke for the American Farmer.

the farmer alone, our city school system. If we collected the country folks into villages to live and had them go out to the farms each morning to work the school, church and social problems would be enormously simplified. But by this act we would sacrifice the individual farm home, an institution which has reached its highest development in America and doubtless has contributed more to American independence of thought and action than any other single factor. In this move, also, we would be taking the final step toward the establishment of an American farm peasantry and be confessing failure in our attempts to maintain in this country a permanent rural civilization.

A recognition by society of the principle that the adequate and proper education of the children on the farm is a part of the responsibility of the state and nation as well as of the local community, and entering upon a policy of taxing all the people to supplement the meager funds now available for the rural schools, would meet the problem of adequate support. But this has its own dangers. It would be making of the country people objects of charity and would in the end impoverish rather than enrich their lives. Also entering upon such a policy would be a confession that opportunity in the country does not enable those who live there to provide a decent education for their children, and young men and

women of discernment would quickly run away from such conditions. The ultimate result of such a policy would be to accentuate the drift from the country to the city.

We ought to try to meet the issue by a system under which the farmer can help himself by giving his children, out of his own earnings, the same advantage that children in the city have.

Agriculture has always been a basic industry, but never was society so dependent upon this industry as now. Never would it have made so much difference in the welfare of everybody as to how its fields are tilled as at this time.

All the good land located where men want to live and raise families has already been occupied. Within the next half century, we shall have to double the food production of the United States to meet the needs of our increasing population, to say nothing of the material required to meet the increased standards of living. This doubling of food output cannot come as a corresponding increase came, a little more than a quarter of a century ago, by doubling the land under the plow, but it must come from the land now in cultivation, land which is no longer of virgin fertility, but is washed and worn and in need of rest and repair. Increased food production henceforth must come through greater intelligence and skill in farming, or from longer hours of toil and fewer oppor-

tunities for those who live on the land. The only remedy for this fundamental situation, therefore, is to give the children who soon will farm, every advantage that education can afford and the stimulus that opportunity brings. Fully nine-tenths of the American farmers go directly to their occupations from the rural school. To teach these pupils with instruction which will make them more successful husbandmen and business men and better citizens is to attempt to do in the ungraded, one-room school, with an inexperienced, immature teacher, more than we hope to accomplish in the city grades and high school.

In considering the importance of the rural school, especially in the light of this fact, we naturally think of making it an instrument for teaching the farm children how to farm and partly by means of that which we teach them, and partly by means of what we will withhold from them, to keep them on the farm. We are always interested in keeping farmers' children on the farm and view with alarm their coming to town to live. It does not occur to us that, if the farm possesses so many advantages over the city as a place in which to live and to make a career, our first duty is to our own children and that we should be bringing them up with a desire to live in the country and till the soil.

In a democracy, the utmost freedom in the choice of an occupation is the fundamental right of every child and must not be abridged. If the public schools of the city sought to make blacksmiths of the sons of the blacksmith and to train the sons of bank directors to follow in the footsteps of their fathers, the country would be shaken with protest because the public school, the most powerful agency left us with which to promote democracy, was being employed to break down democracy.

The boy and the girl born in the country are entitled to as much freedom of choice of occupation as are those brought up in town and are entitled to as substantial help from the public schools in making an intelligent choice. Besides, if we attempt to use the rural schools as a means of forcing country children to stay on the farm, we shall fail. Every other effort along this line which has ignored the fundamental principle of equality of opportunity has been futile.

I think it may be accepted as axiomatic that the intelligence of the people on the farm in any country finally is directly related to the income derived from the farming business, as compared with that from similar enterprises in the same community. People will stay on the farm if the opportunities are as good in agriculture as in other industries. If the opportunities are not as good, the intelligent and ambitious will leave the farm. If farming is allowed to become unprofitable, as compared with other occupations, it will be given over to a less efficient class than that which now tills our soil.

While the rural school curriculum may need to be somewhat reorganized we must keep clearly in mind that when country and city children meet in high school or college there must be no inequality in opportunity or choice of course, and no difference in the thoroughness with which they have been prepared to carry higher work. And if the larger group which will never go beyond the elementary grades, when they meet from the country and

(Continued on page 262).

Children of the Farm Must Have Equal Opportunities with City Children to Get an Education and Choose a Career.



News of the Agricultural World

PROMOTING RURAL TRUCK LINES.

TO promote rural motor truck lines for quick delivery of perishable goods from farms to markets, Governor Smith, of New York state, has appointed a highway transport committee, the duties of which will be to formulate a program for the development of rural motor truck express routes where they will aid most in giving the farmer a more direct outlet for his produce; to give publicity to the public utility of the rural motor express, and to recommend legislation necessary to protect the interests of the public in the operation of motor truck lines.

Buffalo is the center of an extensive system of rural motor truck express lines radiating out along the state roads in every direction for a distance of fifty miles.

The trucks are operated on schedule time. One farmer delivers a few bushels of apples or pears along the roadside; another farmer a crate of eggs or poultry. Still other farmers have for market a few bushels of carrots, or potatoes or other vegetables.

The truck comes along, gathers up these small consignments, delivers them to the city market, makes the sales, and delivers the returns to the farmers on the return trip. They also bring back groceries, and other supplies ordered by the farmers.

This plan encourages the growing of a variety of products, and helps the small farmer who formerly was handicapped by not having for sale at any one time enough garden truck, fruit or other products to pay him to make a trip to the city.

Many small lots of apples or other fruit that formerly went to waste on the farm for want of a market, are now made to yield profitable returns through the medium of the motor express.

Some of the truck lines are owned by commission merchants in Buffalo, others by individuals and transportation companies. It will be one of the functions of the state committee to regulate these lines to prevent overlapping and wasteful competition, and develop a more efficient system of transportation and distribution.—E. R.

WOULD CONTROL PACKERS' CARS.

DECLARING that the step is necessary to control the business of the five largest packing companies, the Federal Trade Commission in a special report to President Wilson, recommends that the operation of refrigerator cars, and of cars used for transportation of meat animals, be declared a government monopoly. It recommends further that the property concerned, including icing stations and other facilities as well as the cars, be acquired by the government and railroads thereafter be licensed to own and operate them. The big packers, the report says, now own ninety per cent of all the refrigerator equipment in the country suitable for the transport of fresh meat.

"The present country-wide system of distribution by the five big packers has grown up from their control of refrigerator car lines in conjunction with various pools," the report says in part.

"In turn the volume of traffic of the five packers has enabled them to secure from the railroads advantages over competing shippers. Formerly in the shape of direct rebates, these advantages are now usually in expedited service to the big packer cars; in favorable mixing rules which include all their diversified products and even many articles not related to the pack-

ing industry; by allowances paid to some of the big packers by carriers for a part of the transportation service; by favorable arrangements and lease of stock yards by the railroads to some of the big packers; and by the sale to the railroads of bumping posts manufactured by a subsidiary of one of the big five.

"The small independent packers' cars are misused and diverted, frequently being out of his service for extended periods, in several instances as long as six months. In 1917 the cars of the 'big five' and their subsidiary companies maintained an average of 80.8 miles per car day, while the average for cars of their competitors, the independent packing companies, was only 54.5 miles."

The commission's investigation, the report says, of the private car ownership has developed the fact that while packers claim losses, "a proper revision of their car accounts" shows car operation has netted some profit. This amounted to 6.8 per cent in 1912, 3.4 per cent in 1914, and 4.3 per cent in 1917.

GRAPE CROP OUTLOOK GOOD.

PROSPECTS continue good for a successful season for the grape growers of Michigan as the yield will be a big one and the quality is very fine. Grape juice manufacturers have contracted for heavy supplies, but no price has been set in the contracts as the current market price will be paid. The contracts call for the entire crop of the grower at the market. Contracts will move beginning about September 5 to 10, while some of the ear-

lier varieties will be in sooner. Growers are talking in figures of \$100 per ton as they say that the cost of production has increased and they would have to have that figure to net as much as they did last year.

GOOD TRADE IN FURS.

THE fur business in the leading countries of Europe at the present time is just about as prosperous as it is in the United States, according to Norman H. Bacon, who returned recently from an extended business trip abroad. Mr. Bacon was for fifteen years Fur Trade Commissioner of the Hudson's Bay Company of Canada, with headquarters at Montreal, but about four months ago became president of the New York Fur Auction Sales Corporation.

"While on the other side," he said, "I visited England, France, Belgium and the neutral countries in an endeavor to get a first-hand view of reconstruction in Europe as it affected the fur trade in general, and especially New York as the fur market of the world. In all of the countries I visited I found the fur business in a prosperous condition. Apparently the sudden signing of the armistice brought about a slump in Europe, just as it did in this country, but if anything Europe was quicker than we were in realizing the great opportunities open to trade as soon as the peoples of the world returned to their peace-time occupations. The early spring showed a general revival of the fur business over there, with prices increasing daily and with a steady demand from both dealers and manufacturers."

"Fine furs are now in good demand in France, Holland, and England while staple American furs are selling briskly in Belgium, France and the neutral countries. Apparently high prices have not proved a deterrent to the fur manufacturers throughout Europe."

"I found it interesting to note that a syndicate of large French buyers, who had heretofore dealt in Leipsic, has been formed, with a view to purchasing their furs direct in America. I have found the same tendency in other European countries, so that, if transportation facilities permit, it is very likely that the fall and winter auction sales will be attended by a very large number of European buyers. In any event, there are certain to be numerous and large purchases made here for European account."

"There can be no doubt that the world's stock of raw furs of practically all kinds is very short. As goods came to market in Europe they were quickly snapped up with an advance in prices. Unless the exchange situation militates too strongly against Europe, the late belligerent and neutral countries on the other side of the Atlantic will be prepared to pay even more than the present high prices, as the manufacturers are anxious to obtain raw materials with which to bring their factories to capacity production."

THE BETTER COUNTRY SCHOOL.

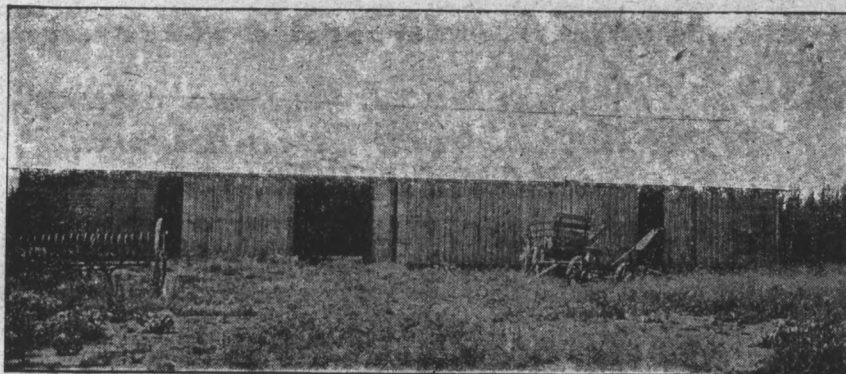
(Concluded from preceding page.) town to transact business or discharge their duties, as members of a great democracy, there must be no advantage which one group has over the other by reason of a better education obtained in the public schools.

With this conception of our school system in mind, I cannot see how the rural school should be essentially different from the town school in its object, its scope and its excellence. It all seems to me to be summed up in about these statements:

Children of the farm must have equal opportunities with city children to get an education and choose a career. Everyone familiar with the facts knows that at present they do not have such opportunities. To make this possible there must be larger school units in the country and there must be a good high school within easy reach of every country boy and girl. But important as we recognize the consolidation of schools to be, we should not make the mistake of relying upon this movement as the sole remedy. For a long time to come, perhaps always, we shall have many one-room, one-teacher schools and for years yet the majority of our country children will be educated in such schools. It is here, therefore, that attention should be centered. The primary need is a better paid teacher. So long as the farmer is willing to pay his farm hand higher wages to plow his fields and feed his stock than to the teacher employed to teach his children, there is little hope. While all that has already been said regarding the inability of the farmer unaided to build and support a school system in the country comparable with that of the city is true, yet the farmer is able to support a better school than he now has. When his property pays as much school tax in proportion to its value and earning power as town property does, he will have a vastly better school than now.

There are two ways of getting a better cow. One is to put one's hand into his pocket—deep, in these days—and pay for her; the other is to grow her. The last way is the best, the first the quickest. Raise a cow and you understand her and she knows you. You make a better team, and team work in the dairy is what counts.

Housing Farm Tools



AT the present price of farm tools farmers who have not given them good care have greatly increased their cost of producing farm crops. If a certain implement lasts ten years, its cost can be divided up among ten crops. If it only lasts five years, the charge against each crop for the use of that tool must be twice as great. Nothing saves tools more than a dry storage place. The fence corners of the state undoubtedly harbor many thousands of dollars' worth of tools that are rusting out and rapidly becoming fit subjects for the junk dealer.

According to the Wisconsin College of Agriculture the farmers of that state are losing a million dollars per year on machines that are left out in the winter. They say that ten per cent of the farm machinery of the state is left out in the snow and rain while \$400 invested in an implement shed would yield twenty-nine per cent on \$1,000 worth of machinery. Surely the condition is not much better in Michigan where many farmers can find valuable machines without protection in a very short drive from their homes.

A suitable shed for farm tools is both a machine saver and a time-saver. It is worth money to always know where the tools are located. It is worth

money to have them in a protected shed so that they can be oiled and repaired in bad weather when other work may be impossible.

A place in the tool shed for the scythe and the garden tools comes in handy. Then they can always be found when needed. The power sprayer which is only used a few days each year can be protected from the weather and it is an expensive outfit which needs the best of care.

On the modern farm there is a good chance to invest a large amount of money in equipment and it is dangerous business not to protect that investment so that it will yield the maximum of service. City consumers who think of modern farming as easily done with up-to-date tools do not realize the large amount of capital that is necessary to properly equip a large farm with the modern machinery. Farmers do know what it costs and how much money can be tied up in implements which are only needed a few days each year. It pays to have a tool shed whenever it is possible. It surely pays a wonderful rate of interest on the investment and not only saves the tools but helps to keep them in condition so that they will always be ready for use with a minimum amount of repairing.

R. G. K.



The Fair with a Mission

THE West Michigan Fair, under the efficient management of Secretary Lyman A. Lilly, is making every effort possible to retain all of the live features of an agricultural and live stock exhibition, and at the same time provide clean and healthy



amusements for its patrons. In discussing the problem he has faced in improving the character and educational features of the big fair, Mr. Lilly said: "My experience as secretary of two county fairs proved to my satisfaction that the fairs which are best filling their mission as an uplifting factor in agricultural life are those which are forcing the midway features into the background, replacing them with free amusements appropriate for presentation in front of the grandstand, and which may be secured at an outlay proportionate to the amount of money set aside by the board for such features."

Mr. Lilly is a man capable of evolving plans and successfully putting them into action, rather than one who looks after routine work. By prevailing upon his board of directors to adopt his ideas of making the West Michigan Fair one of greater agricultural and educational value and providing cleaner and more interesting amusements he set about the problem of securing such features and innovations as will annually afford something out of the ordinary; something not to be seen except at some similar big exposition.

West Michigan people, most of them at least, saw their first aeroplane at the West Michigan Fair, and also saw their first female aviator. At this fair a host of them saw their first automobile races and learned, through actual timing, that the gasoline car could travel at the rate of more than a mile

a minute on a regulation track. Trashy stuff, labeled instructive amusement has never found a welcome there and unless there is a radical change, never will find one. But the discoverer of something new in automobile speed; something different in dirigible and something faster than 1.58 in trotting will always find a welcome. People who visit this fair will always find new and startling things that are worth while.

Many people have an idea that a big fair can be conducted successfully along strictly agricultural and educational lines, but the secretary who neglects to provide interesting innovations soon finds to his sorrow a decided falling off in his box office receipts. No great fair can draw large crowds or prosper financially without depending upon some kind of modern innovations to draw out the people to the territory it is serving. If there is anything that a big fair needs more than anything else it is innovations, especially when practical men are entrusted with their introduction.

Another matter in which Mr. Lilly has shown a progressive spirit is that of increasing the interest and support

the work is being promoted than it will be in the years to come. From the results of last year's efforts along these lines the future holds great promise for this kind of work at the West Michigan Fair.

One of the most impressive agricultural features of this fair is the magnificent horticultural exhibit. West Michigan is famous for its good vineyards and orchards, and it is only natural that these interests be given proper consideration at the fair. The fact that this phase of the fair has become famous for the excellence of its exhibits merely goes to show that the management is alive to the importance of making it really representative of the agriculture of the territory it serves.

While the horticultural features of the territory have been given due prominence the live stock departments of the fair have never been neglected. During the past eighteen years the beef and dairy cattle interests have been encouraged and the competition among the various breeds and classes has been so keen that few breeders have found it easy to capture the blue. Competition has at all times been open to the world, and that fact has made

Manufacturers of agricultural implements and modern farm equipment from all parts of the country have always made it a point to make strong exhibits at the West Michigan Fair. The many requirements of the rich diversified farmers of this section



making it especially profitable for them to cultivate this field thoroughly. Inventive genius has blessed in rare fashion the farmers of America and it is only natural that these blessings should find expression at such places as the big fairs. It is the constant aim of the management to foster and encourage the exhibition of all labor-saving implements that will lighten the burdens of the farmers of Michigan.

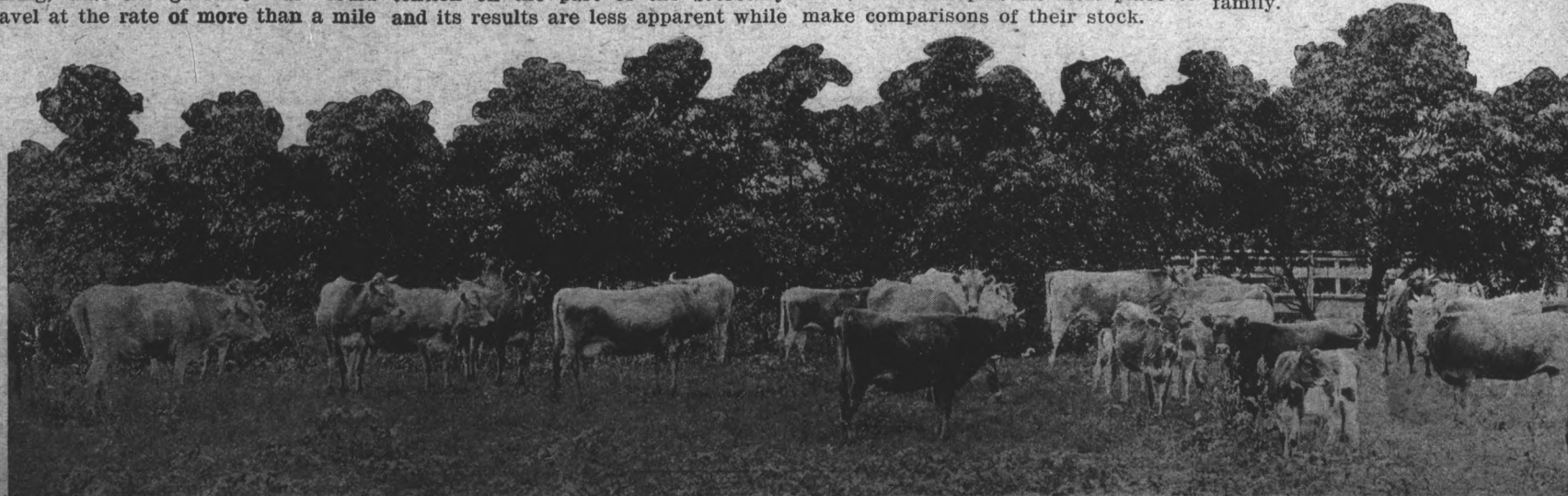
Much of Mr. Lilly's success as secretary is due to the efforts of Dr. S. E. Dodson, one of Michigan's progressive men whose fancy runs to horses of all kinds. While Dr. Dodson is not from the soil he is an enthusiastic admirer of the pure-bred horse and his work in promoting Memorial Day work-horse parades has made him a national figure in exhibitions where good horses are a prominent feature.

In short, the West Michigan fair has always been an excellent place for the farmers of Michigan to meet and visualize the improvement in the live stock and agriculture of the state and nation. What has been done to build up these features has not been neglected in the poultry and pet stock departments. These exhibits always affording interest to visitors who find them more interesting than horticulture and general live stock husbandry. Horse racing and other features that go to make up a first-class big fair are all given proper consideration, making it of interest to every member of the family.



of the young people of West Michigan. The increasing interest in the exhibits of the boys' and girls' clubs is growing rapidly. Such work is sure to give the future fairs a lot of good material to build upon and create a greater interest in the breeding and exhibiting of pure-bred live stock. This kind of work requires a lot of painstaking attention on the part of the secretary and its results are less apparent while

it a battleground for some of the best herds of the country. Sheep and swine have been given liberal premiums and despite the encroachments of power vehicles and implements the horse department has been fostered and premiums have been kept at the very highest level, making it worth while for the breeders of the state to make Grand Rapids an ideal place to make comparisons of their stock.



The Big Idea In Farm Bureau Work

J. C. Sailor, State Farm Bureau Organizer of Illinois Tells Michigan Farmers How Their Brothers in the Middle West are Getting Real Service Out of the Farm Bureau.

IN Illinois we organized the State Agricultural Association three years ago. The association was made up of two representatives from every county having a farm bureau. From these representatives we selected a chairman, a secretary, a vice-president and a treasurer to do business for the farm folks of Illinois. These officials were to represent the farmers wherever they needed to be represented. They were supposed to champion the farmer's cause in the legislature, in congress or wherever problems of vital importance to the farmer were being considered. About twenty-five counties in Illinois had affiliated with the state organization up to January of this year. The membership fee was one dollar but this small fee made it impossible for the association to do the things the farm folks needed to have done. It is important to have money enough back of an organization to promote anything that is right, equitable and fair to all.

We do not, as farm folks, wish to control everything, but we ought to be in a position to stand up and correct an evil when we come in contact with it. The business of the state association in Illinois is not to destroy other interests, but to understand the other interests' problems and to help them to understand ours; to let them know that we have an investment as well as they, that we have overhead expenses and are entitled to a fair margin of profit, that if we work sixteen hours a day we should be paid for sixteen hours, and if we work eight hours we should be paid for the eight hours. In other words, we should have a profit in our business; we should make it so attractive that the farm boys and girls will desire to stay on the farm because the business is worth while. We want to make our homes better, our roads, our schools and our community better. We can do these things and more if we will get behind an organization with purpose and money, and select the proper men to carry out common-sense plans that aim to improve conditions and work justice.

I want to tell you of some of the things that we were forced to do in Illinois. We organized cooperative elevators in 1903, but could not find a single commission house in the city of Chicago that would handle our produce. Why? Because the organized grain men served notice on commission folks who handled the farmers' grain that such commission men could not do business with the old-line houses. They simply boycotted us. Our grain stood on the tracks five to ten days without a single man bidding for it, and when we sold we were obliged to take from three to five cents under the market. The result was that we were forced to extend our organizations to handle these problems for our farmers. As a result our state, Iowa, Nebraska and other grain growing states were organized to take up the problems connected with the handling of our grain crops.

At that time transportation companies gave the line-house shipper ten dollars' rebate on every carload of grain that they handled for him. This gave the line shipper an advantage of practically one cent a bushel. We also found it almost impossible to secure sites for elevators. The prices offered for grains varied in different communities to make it as difficult as possible for the cooperative elevators to succeed. In fact, every device that the old-line dealers could use was employed to our disadvantage.

During the past fifteen years, especially the last four or five years, we have developed organizations in twelve states and through them have corrected many abuses. For instance, corporations have been active in advancing freight rates upon farm products. Three times during the past five years we have had hearings before the interstate commerce commission and the utilities commission of our state on the rate question. Through our organized effort and the employment of capable men, we were able to prevent the advancement of freight rates. Last February the government proposed to advance rates again but we made our protest, and when the government saw we had an organization extending through twelve states, the proposal was withdrawn.

Not many years ago the system of grading grains was deplorable. At one time a saloon keeper of Chicago who did not know wheat from rye or corn from oats, was selected as grain inspector through his political influence. This situation has since been improved and we now have better grading rules, and inspectors who have passed difficult civil service examinations. We have also insisted on and secured a moisture test that is giving quite satisfactory results. Many other things of direct financial interest to our farmers have been favorably adjusted through the power of this organization.

Let us return now to farm bureau problems. In Illinois we had practically the same difficulties you have had here in Michigan in starting these farm bureaus. One of the big problems has been the method of finance. In the past the fee required to become a member of the bureau has varied. Some thought that a fee of \$2.50 to the county farm bureau would take care of all expenses; others thought \$5.00 would be necessary, and the extremists held that \$10 was none too much. The tendency among those best acquainted with the work is to increase their estimates of the amount of money required to take care of the farmer's interests. In Illinois we are trying to establish a uniform fee sufficiently large to enable the organization to do effective work. If we put ten cents in this work, we will expect to secure ten cents' worth of service, but if we put ten dollars into it, we can then expect ten dollars' worth.

A Poor Farmer Gets the Right Vision.

Our state organization was supported by a \$100 fee from each of the organized counties. With this money we were supposed to do the things that a

state organization should do for the farmer members. But this was found inadequate, so last February about three hundred representative farmers and farm advisors met at Peoria and took up the matter of reorganization. For a whole day we debated the question of financing the state association without reaching any decision. On the second day a farmer from one of the poorest agricultural counties of the state started the ball rolling in the right direction. He said: "I have a boy in France, and if this organization doesn't provide funds sufficient to get behind our farm problems to make farming what it should be for my boy when he returns the whole business isn't worth anything. I had better quit the farming business right now unless we can have some means of handling our problems effectively. I want my boy to stay on the farm when he comes back, but he will not do this if it is not a profitable business. We must therefore put enough money into this organization to enable it to put our agriculture on a level with other industries."

This speech started things. The men present began to realize what a powerful farmers' organization might do in a state like Illinois. They realized further that to secure service from such an organization ample funds must be available to meet situations as they arrived. As a result, these men adopted a plan which provides that each member of a county association pays to the state organization a fee of \$5.00 per year. Now, following out this plan every member we have taken into the farm bureau since the fifteenth of last March has paid a fee of \$5.00 to the state association, besides paying to the county whatever fee the county organization decided upon.

We have now gone far enough with the work to get an idea about the service that can be rendered, and we are finding that there is no limit to what our people are asking us to do. We must send men to Washington, to Springfield, to the phosphate fields of Tennessee and to every conference that has a bearing upon agriculture. These representatives voice the sentiments of the farmer members, and they learn something of the problems of other industries. We are satisfied that through these expressions and understandings many of our difficulties will be easily ironed out. But to do these things requires a considerable capital, for only men who have a successful business, can be sent upon such missions, and these men must be paid for their time.

Now this is a farmers organization. We do not expect anybody to be active in the directorship of our work who does not actually own a farm and operate it, and furthermore, we do not want to run the organization with public funds. There are too many strings to pull when we use public money. This is our own business and we should not expect other classes of people to aid us in running it. Furthermore, outside financial help would compromise our working plans.

An executive board of thirteen men was agreed upon. One man was selected from each of the thirteen congressional districts of the state. Every one of these men owns a farm and works it. These men started the state association work. They called a meeting of one hundred representative farmers, and at that meeting each of these farmers subscribed \$100, making a fund of \$10,000 to start the organization work. That was the first real money that the Illinois Agricultural Association had.

With this fund the thirteen members of the executive committee and the president, Mr. Scott, prepared for action. They planned to go into the various counties and put on a campaign to build up the membership in the county farm bureaus. Mr. D. O. Thompson, advisor of McLean county, a man of exceptional ability, was hired as state secretary. Mr. Thompson called me from my farm work where I had been constantly employed for the past thirty-three years, to get farmers who would go out and solicit memberships for the farm bureau. County agricultural advisors were asked to recommend farmers from their respective counties who might be able to get away and help in this organization work. In less than a week I had seven prospects, out of which I picked four that I felt were the right fellows. They had a vision of the future, understood pretty well the psychology of men, could meet the arguments of a farmer on most any question he might propose, and give an intelligent answer in a way that would satisfy the suspicious.

We started in Lake county. Here they had 400 members in the farm bureau, and we added 489 more. At that time the federal government threatened to prosecute the dairy farmers for fixing the milk prices, and this helped us in securing followers. In Iroquois county we secured 447 members by merely calling a general meeting and asking for \$5.00 memberships. Our next county was Woodford, which we worked during very inclement weather where we secured 429 members. In McLean county we had nine men working, which was later increased to twelve, and in about eighteen days' time with some days lost because of rain, we got 2,308 farmers into the organization at \$10 apiece. Here many of the farmers asked what we were going to do with all the money we were getting, but up to this time we did not have money enough to carry on the organization work and send men to the places where the farmers should be represented without borrowing on the side. In Logan county eight men secured 1,054 memberships, and in De Kalb county ninety-seven per cent of the farmers or 2,022 men became members of the farm bureau. Here they had experienced seven years of farm bureau work and the response to our appeal is a fitting testimonial of what these successful farmers think of the farm bureau organization. Then in McHenry county not so well organized, but supplied with a progressive coun-

(Continued on page 289).

It will be of interest to the farmers of this state to know that the Michigan State Farm Bureau Association is being organized along the same lines as those followed by Illinois. For that reason this article by Mr. Sailor should receive the closest attention of our farmer readers.

Utilizing Cull Apples

By F. B. McMillin

IN these days it is unwise to overlook any resources that will add good nourishing food to the nation's supply.

Therefore it is surely in order to again call special attention to the importance of properly utilizing that large proportion of the apple crop which grades below standard. In many states the percentage of cull or cider apples runs fully one-third of the total and it is frequently estimated that thousands of tons of such apples are wasted each year. No one will deny that this loss along with all other food waste should be reduced to a minimum. Another important consideration is the good profit that the utilizing of these apples affords the grower.

While a portion of the large culls may be evaporated to excellent advantage, the most practical way of diverting this enormous waste into good food is by pressing. Practically all the valuable and nutritive elements of fruits are contained in the juice. The other parts consist largely of cellular tissue and are of little value except to retain the juice, which in ripe apples runs as high as ninety per cent. Therefore a short cut to conserving the rich life-sustaining elements possessed by even the smallest of cull apples is by first grating and pressing, then working up the juice.

A modern hydraulic cider press will extract an average of a little over four gallons of cider from each bushel of ordinary undergrades. This juice can be readily converted into a variety of food products that are not only appetizing and nourishing, but most of them are in concentrated form convenient to market and easy to preserve. Sweet cider, cider vinegar, boiled cider, apple syrup, apple jelly, apple butter and pasteurized cider are all in active demand and can be sold at a better net profit than is usually obtained from the apples in a fresh condition.

Even the pomace need not be wasted. It is being used extensively as feed for dairy and beef cattle, and for hogs and sheep. Many pronounce it equal to ordinary corn silage. Pomace also has a distinct value as jelly stock because of its pectin content which is not impaired by drying. Frequently the pomace is repressed, the resulting juice being used for making vinegar or jelly.

Fresh sweet cider and pasteurized cider are highly recommended as a health drink by eminent physicians and scientists. Sweet cider is a tonic as well as a nutrient, containing natural salts and acids of special value in the correcting of stomach complaints and liver and kidney trouble. Pure sweet cider can readily be made available as a delightful home beverage the year around and is far superior to the ordinary type of soft drinks. Chemical preservatives should be avoided, but pasteurized to one hundred and sixty degrees for two hours and sealing tight is effective for preventing fermentation.

One of the staple food products from waste apples that is in universal demand is cider vinegar. Pure cider vinegar commands a premium on the market.

In the process of transforming cider into vinegar, two distinct fermentations take place. First is the vinous or alcoholic fermentation which is the changing of the sugar of the cider into alcohol, caused by the action of certain natural yeast bacteria. Second is the acetic fermentation by which the alcohol thus formed is changed to vinegar acid or acetic acid. The alcoholic fermentation may be accelerated by the addition of yeast, using a cake to each five gallons, dissolved in warm water before adding. The acetic fermentation is also aided by the addition of good vinegar containing some mother of vinegar. It is important to allow plenty of room for air in the barrel during all stages of fermentation and also to maintain the temperature between sixty and eighty degrees. Care should be taken not to start the second fermentation until all the sugar in the cider is changed into alcohol, otherwise the change to vinegar will be retarded or prevented altogether.

There exists in this country a potential market for boiled cider that would consume a hundred times the amount now produced if the product could only be obtained. Boiled cider is the fresh juice concentrated by evaporation in the ratio of five gallons reduced to one. In this form it will remain in a perfect state of preservation for years. It is dark brown in color and of a syrupy consistency. It has an extensive use both commercially and in the kitchen, being especially desirable for making mince meat and apple butter as well as having a multitude of other culinary uses.

By continuing the evaporating process until the cider is reduced to the ratio of seven to one the product becomes jelly, which makes a delightful tart spread. To please varied tastes it may be sweetened and any desired flavoring may be added. A ready market at attractive prices awaits all apple jelly offered.

Sugar and sugar products are high and a practical use of the generous sugar content of apples is, therefore, especially acceptable. An extensive series of experiments by the Department of Agriculture resulted in the development of a method of making apple table syrup which produces an attractive article of very fine flavor. The process is as follows: Stir into seven gallons of sweet cider five ounces of powdered calcium carbonate—a harmless, low-priced chemical—and boil in a large kettle five minutes. If a large vessel is not available the cider may be boiled in batches. Pour the cider, after boiling, into glass jars and allow it to settle until perfectly clear, which will require about seven hours. Return the clear liquid to the preserving kettle, being careful not to

(Continued on page 290).



In Traverse County where Cherries Grow to Perfection.

Feeding the Millions

INCREASING the food supply of the world is the most vital problem which man must solve. The burden of this solution rests heavily upon the shoulders of the farmers of America.

The service rendered by the Standard Oil Company (Indiana) in producing fuel and lubricants for the economical and efficient operation of farm machinery has made it possible for the farmer to cultivate a greater acreage, produce larger crops, and get them to market at least expense.

By maintaining its comprehensive system of distribution, the Standard Oil Company (Indiana) makes it possible for the farmer to get his requirements of petroleum products easily, regularly and quickly.

By virtue of this complete service on the part of the Standard Oil Company (Indiana), he may, literally, "make hay while the sun shines."

He is independent of the health or endurance of horses. He can plow, cultivate or harvest when these tasks should be done. He can have a complete cycle of activity, operating even by shifts, if necessary. He can plan his operations on a definite schedule to produce a steady, constant supply of farm products for you and your family.

Thus is illustrated how you benefit by the service rendered by the Standard Oil Company (Indiana) to the farmer. These are benefits accruing to the world at large which accentuate the usefulness of the Standard Oil Company (Indiana) as a public servant, and emphasize how completely it discharges its obligation as such.

Standard Oil Company

(Indiana)

910 S. Michigan Avenue, Chicago, Ill.

The Farmer and the H. C. of L.

The Following Article is endorsed by the Officers of the Indiana, Illinois, Ohio, Iowa, Nebraska and Michigan Farm Bureaus.

THE members of the state farm bureau federations must now decide the extent of next year's food production on their farms. Present agitation over the high cost of living attempts to saddle in large measure responsibility for high prices on farmers, who, while discerning their share, justly refuse to bear any great part of the blame.

In the present chaotic state of affairs the farmer says to him who wishes to arrive at the facts as they are, "Come, let us reason together." In the whirl of affairs clear thinking is difficult; formulation of statements well-nigh impossible.

Today, however, the farm bureau federation of Ohio, Indiana, Illinois, Iowa and Nebraska, potent factors for increasing production in the heart of the meat, milk and grain producing sections of the United States, indorse the following statements through their authorized officers, O. E. Bradfute, president Ohio Farm Bureau Federation; J. G. Brown, president Indiana Federation of Farmers' Associations; D. O. Thompson, secretary Illinois Agricultural Association; J. R. Howard, president Iowa Farm Bureau Federation, and F. C. Crocker, president Nebraska Farm Bureau Association.

Original Price Not Cause.

The high cost of living is not due to the original price of the farm product to the grower. The government minimum price for wheat does not determine the cost of a loaf of bread. Fixing a resale price at \$1.50 a bushel would affect, if reflected to the consumer, very little the cost of living for the average family. Average wheat consumption in this country is about six and a half bushels per year per person. Reduction in price to \$1.50 per bushel would mean a saving of \$4.94 annually per person, or \$24.70 for a family of five. This is nothing at all compared with the reduction in wheat acreage and correspondingly small crop next season which would result from discouragement of the producer.

The high cost of living is not due to the storage of meats, vegetables, fruits, eggs and poultry in the season when these are produced in surplus against the season of short supply. Popular as is the hue and cry against shortage of foodstuffs, it is a palpable fact that modern storage methods are the greatest food savers in the world, saving food in time of plenty and supplying it in time of scarcity, and, moreover, maintaining a steadier level of prices throughout all seasons for any given commodity. Indiscriminate restrictions on food storage will serve only to wastefully glut the market in the harvest season of meats, vegetables, fruits, eggs and poultry at a price disastrous to the producer, and create a dearth of these products out of season at a prohibitive price. But food storage for speculative purposes is intolerable.

Exports Not to Blame.

The high cost of living is not due to exportation of food and clothing any more than it is due to our heavy exports of manufactured goods, machinery, etc., of which the farmer is a heavy purchaser. An embargo on foodstuffs to bring down the high cost of living will be as demoralizing to American agriculture as the embargo placed on foodstuffs was to French agriculture in the time of Louis XVI. Moreover, the high cost is not merely a local or national consideration. It is a world matter. Applying a first aid remedy at home to create and foster anarchy and revolution abroad should not

be the policy of the United States even at this critical juncture.

The high cost of living is not due to lack of desire or effort on the part of the farmers to produce to the limit of their physical ability. Not within the knowledge of the present generation have all the farmers so extended their every energy in a concentrated effort to produce to the last kernel and pound all the grain and meat products needed to feed a hungry world. The operation of the short-hour day in the industrial centers and talk of shorter hours and ever advancing pay has made it well nigh impossible for anywhere near the normal supply of help to be maintained on farms. The daylight saving plan has mitigated against maximum production by reducing materially the practical working hours of

miles of the city, as well as in Chicago.

Following the Chicago street car strike, a strike of the Aurora, Elgin & Chicago Electric Railway employees which threw thousands out of employment on account of lack of electric power in the towns along this line left the small Aurora meat packing houses without power to run their refrigerating plant. There were about ten thousand pounds of meat spoiling. It is said the manager appealed to the head of the union for power to keep this refrigerating plant running and prevent the spoiling of this meat, and the insolent reply hurled back was, "I don't give a damn if all the meat in the United States rots." Such are a few which the daily press records of the many instances of premeditated stagnation in production which shortens supply and

This illustration shows the extremes of exorbitant profits of the middlemen and the extravagant practices in the consumers in purchasing, including probably all the evils that are contributing in large measure to the high cost of living to the consumer. A reduction to the producer in the price of these foodstuffs to a point which would stagnate production of grains, produce and meats, would have an inconsequential effect upon final prices to the consumer.

The high cost of living is due to the failure of practically all folks to practice even ordinary economy in public and private life. A program of hard road building, contracted at almost twice pre-war costs per mile, due to advance of price of materials and labor, has been delayed and interfered with because of the fact that delivery of building material has been delayed by tying up transportation facilities.

Rail Men's Demands.

The question of lack of economy of public spending was brought within the focus of the American public's attention in July when the railway brotherhoods demanded of President Wilson that he bring down the cost of living immediately, threatening a demand in wage increase amounting to a total of \$800,000,000 a year, payable necessarily from one of two sources—revenues from increase of freight rates or from a deficiency appropriation, either of which would add to the cost of living.

A lack of practicing economies in private life may be illustrated without end. Theaters and places of amusement, resorts and watering places, are crowded with beautifully gowned women and handsomely tailored men. The price of shoe shines has doubled and trebled, yet one must wait his turn, though he could shine his own shoes at home for less than one cent. So illustrations might be multiplied, all showing that lack of practicing plain economy is a great contributing factor in maintaining the high cost of living.

"Passing the Buck."

The high cost of living is due to shifting individual responsibility for the present state of affairs and each component of the people of the nation seeking self satisfaction, instead of the answer to the great world question. This is our national state of mind. Instead of doing our national and individual best to produce more goods, so that there may be enough for all at a reasonable price, each is trying to better his own condition at the expense of the other fellow.

There is a limited supply in the world. Just now we are quarreling over the division of what we have. If we would stop quarreling and go to work, we would soon increase production so that all would have plenty.

Under war pressure when fighting a foreign foe farm production was not shortened; it was increased tremendously. Upon the fair or unfair attitude and action of capitalistic monopolies and organized labor, upon the sanity of their next immediate pronouncements affecting national and international affairs, depends the decision of the American farmer in planning his next year's program of work.

Now is Decisive Time.

Now is the seeding season for wheat. Now is the time the farmer selects the gilts and brood sows that will give birth to the 1920 pig crop. Now is the time when the dairyman determines the number of cows he wants to milk twice daily for the next year. Now is the time the cattle feeder determines

(Continued on page 292).

The high cost of living at the present time is due to a stagnation in manufacturing goods and prepared foods; lack of economy in public expenditures; manipulation and extravagant profits of middlemen and increased transportation costs and not to any failure on the part of American farmers to produce economically and abundantly.

the day on the farm, especially in so far as the hired man's labor is concerned.

Success Against Odds.

Following a beautiful promise of a bountiful wheat harvest, a most destructive attack of scab and rust cut the wheat yield very materially. Untimely heat and drought shortened the oat crop and adversely affected the corn crop. The long hours and strenuous diligence of the farm operator have, in spite of these adverse circumstances, put the crop across; as he harvests and markets it he wonders somewhat if he, with his disregard of the time clock and his recompense based on a gambling game in which the natural elements deal the yield and the middlemen deal the price, has not been pulling the short end of the hitch.

The farmer has not struck, walked out or otherwise slackened in production. He has increased his effort, extended his operations to the limit of physical ability and financial credit, and striven to feed the world, believing the world would fairly and gladly recompense him. Instead, he finds in many prominent places those who in their eagerness to find an answer where there is none and to shun the real facts of the situation, who point to him with scorn and malevolence, saying, "Thou art the culprit."

Stagnation in Trade.

The high cost of living is due to a stagnation in production of manufactured goods and prepared foodstuffs. Every labor strike that shuts down any plant engaged in the preparation of foods, or the making of clothing, that shuts down a mine or a mill, adds to the high cost of living. Shortly after a strike of the Union Stock Yards and packing plant employees the wholesale price of fresh meats advanced fifteen to thirty-five per cent, directly due to the short kill and consequent small supply of fresh meats. In Chicago one hundred thousand men have been out of work for months and all building operations have been at a standstill because the carpenters refused to work for 92½ cents an hour. This strike tied up building operations in many small towns within a radius of one hundred

plays into the hands of those who fix the price to the consumer.

Price Manipulation, Too.

The high cost of living is due to price manipulation and extravagant profits of middlemen. Refer again to a Chicago situation. A small group of milk wagon drivers at one of the milk distributing plants struck for \$44 per week and regular commissions. All the other milk distributors at once declared a lockout against their drivers. After two or three days of sparring the employers agreed to meet the demands of the men and announced a one-cent per quart advance in the price of milk to the consuming public. Analysis of the arithmetic of the case shows that it took about four-tenths of that cent to pay the employees and that six-tenths of each cent was added to the profits of the distributors.

Food on the table costs out of all proportion to the price to the producer. Part of the reason for this is due to the short hours and high wages for labor, part to the exorbitant profit of the several middlemen between the producer and the consumer, and a considerable part to the extravagance of the consumer in methods of purchasing supplies. Without going into an analysis of who gets it, compare the difference in price of choice beef on the hoof at eighteen cents a pound with that of a moderate meal for five, at any one of the modest hotels, the meal consisting of steak, potatoes, corn, bread and butter and coffee, costing \$11.00.

Farmer Got Seven Per Cent.

Of this \$11 the producer of the food, the farmer, got about as follows: Beef, two pounds, thirty-six cents; potatoes, thirteen cents; bread, two cents; butter, seven cents; coffee, cream and sugar, four cents; corn, twenty cents, making a total of eighty-two cents. This is about seven per cent of the total cost. A fifty per cent reduction in the price of these products to the producer would have lessened the total cost of the whole meal on the hotel table only forty-one cents; smaller by half than the customary ten per cent tip, which, by the way, is not included in the above price for the meal.



A Better Farming Tour

TO the man who is striving along the road of accomplishment the "How he did it" of one successful man is worth more than whole volumes of advice.

It was the realization of this fundamental idea that prompted four live wire county agents to organize an In-

The route covered and the farms visited were as follows:

Jackson County.—Rice Seed Farms—1,200 acres of seed crops; M. L. & John Noon—Duroc Jersey hogs and self-feeding experiments; H. F. Probert—Jersey herd and dairy barns; St. Austell Farms—Guernsey herd; Boardman Farms—Holstein herd; W. E. Livingston, Parma, Poland-China herd; J. A. Campbell & Son—Holstein herd; J. F. Thompson & Son—Hereford cattle and Percherons.

Lenawee County.—Adrian Community Market; F. S. Thayer, the tubercular test from the farmer viewpoint; Lenawee County Infirmary—soy beans as a hay crop and as silage; A. E. Illenden and E. R. Illenden—Cost of production under drouth conditions; L. W. Harwood—Holsteins; Witt Bros.—Poland-China hogs; E. A. Beamer—Stock feeder; Davis & Hall—Milking Shorthorns; Bidwell's Stock Farm—Scotch and Scotch-topped Shorthorns.

Washtenaw County.—A. A. Wood & Sons—Rambouillet sheep; Jay Smith—Shorthorns; Brookwater Farm—Duroc hogs and Jersey cattle; C. & O. Deakes—Jerseys; Bazley Stock Farm—Holsteins.



ter-County Better Farming Tour. It might almost be called a rapid fire panoramic fair. The four county agents are to be congratulated upon the unquestionable success of the undertaking.

The value of such an event cannot be overestimated; here the interested observer has the opportunity to see the best of the flocks and herds in the environment in which they were developed. They get at first hand live ideas, from the most progressive farmers in the several communities in regard to every branch of farm work. To the young farmer this is of especial value and the appearance of so many of the younger men on this tour was evidence of their appreciation of the opportunity.

On Tuesday morning, August 12, the long line of automobiles left the court house at Jackson, and winding their way down through the busy streets and out over the country roads traversed the four counties in four consec-



utive days, stopping here and there to inspect this flock, that herd, a field of alfalfa here, and one of soy beans or clover there. It was a jolly, happy, progressive and greatly interested bunch of men who improved every minute of the trip, and who were equally eager to disseminate and acquire information in regard to all phases of better farming.



Livingston County.—W. W. Knapp—Shorthorns; Wm. McQuillan—Shorthorn cattle, Shropshire sheep, O. I. C. hogs; J. G. Hayes—Holstein cattle, self-feeder pigs, common and Grimm alfalfa; Charles Heeg—Holstein cattle; Smith & Parker—Jerseys; Silas Munsell—Holsteins; Robin Carr—Holsteins; Armstrong Bros.—Shropshire sheep and Poland-China hogs.

The self-feeder at the Noon Farm attracted much interest. It is the invention of Mr. Noon. The bin of the feeder is suspended from an iron rod through the top center. The grain coming down on either side of the bin is worked back and forth by the hungry porkers, the swing of the bin is regulated by a screw adjustment regulating at the same time the flow of feed. Mr. J. Hayes, of Livingston county, also exhibited a self-feeder; this was of the home-made stationary type. Mr. Hayes says he is feeding corn flakes and tankage exclusively through same.

The Community Market at Adrian was also of marked interest. It is a cooperative market established by the business men of Adrian and serves as a clearing house for odds and ends of the garden as well as for the major

(Continued on next page).



County Agents. Osler, Washtenaw; Sheap, Jackson, and Dunks, Livingston.



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A Better Farming Tour

(Continued from preceding page).

products of the farm. There the farmer always finds a market for whatever he has to sell, and there, too, the grocer and consumer can purchase their daily supplies fresh from the farm. The surplus is sent to Detroit by motor truck.

Soy beans and corn growing together for silage, also soy beans seeded in drills for hay and seed, were seen at the Lenawee county farm; these crops of beans showed a growth of from three to four feet and gave an idea of their wonderful possibilities as an emergency hay crop.

During the trip many interesting talks were heard. At the Thayer Farm Mr. Thayer and Dr. B. J. Killham gave some interesting talks on tuberculosis and the federal work in detecting and controlling the disease.

Mrs. Dora Stockman, member-elect of the State Board of Agriculture, gave a twenty-minute talk Tuesday noon. At the Beamer farm, Mr. E. A. Beamer picked out his best feeding steer and also his poorest and gave a good idea of the type of steer he likes to buy for feeding.

T. G. Hayes exhibited his Holstein herd which recently won the first place in the economy production contest conducted by M. A. C. Mr. Hayes' total cost of production was \$2.730 per hundred pounds, value of same amounting

to \$2.828 per one hundred pounds, making a net profit of nearly ten cents per hundred pounds. The four best cows produced an average of 13.139 pounds of milk.

The several herds of Shorthorn, Jersey and Holstein cattle were given a great deal of attention, a detailed description of which would much more than fill the space allotted to this story. The general realization of the necessity for pure-bred sires in all herds, foretells as nothing else would, an era of dairy prosperity and supremacy for Michigan. I. O. C. and Duroc Jersey hogs were well in evidence as were also the Rambouillet and Shropshire sheep. They were all of the pure-bred type, and of remarkable quality.

The time of the year for a Better Farming tour was perhaps not altogether well chosen, as so many who would have liked to have attended were kept at home by the farm work which could not be neglected. And it is quite probable that should another tour be staged next year, the time will be later in the fall, probably in October or early November. Nevertheless those who did attend this year were well satisfied and went home with new ideals, broader visions and a fuller knowledge of the possibilities in their chosen life work.



NEW WHEAT PRICES FOR LOWER GRADES.

ANNOUNCEMENT that the United State Grain Corporation would at once declare the basis on which it will purchase the various lower qualities of wheat was made recently by Julius H. Barnes, United States Wheat Director, following an all-day meeting at the offices of the corporation, 42 Broadway, N. Y., during which Mr. Barnes discussed wheat grading and prices received by farmers for wheat with various members of congress, representatives of farmers' organizations and vice-presidents of the Grain Corporation.

In discussing the conference Mr. Barnes pointed out that the relative prices which the Grain Corporation might fix would bear a relation to the guaranteed price at the terminal markets only and not to the current price which in such markets as Minneapolis is ruling thirty to forty cents above the guarantee basis and that no attempt would be made by the Grain Corporation to reflect any premium basis above the actual guarantee price. He added that with the execution of seventeen thousand contracts between the Grain Corporation and the country mills and dealers, any producer who felt that he was not being fairly treated in grades and price could, by submitting a sample through the mails, receive a decision, binding on the buy-

er, as to the proper relation to the guarantee No. 1 price at the terminals, but not as to its relation with any premium basis currently ruling in the terminals and outside of the Grain Corporation buying.

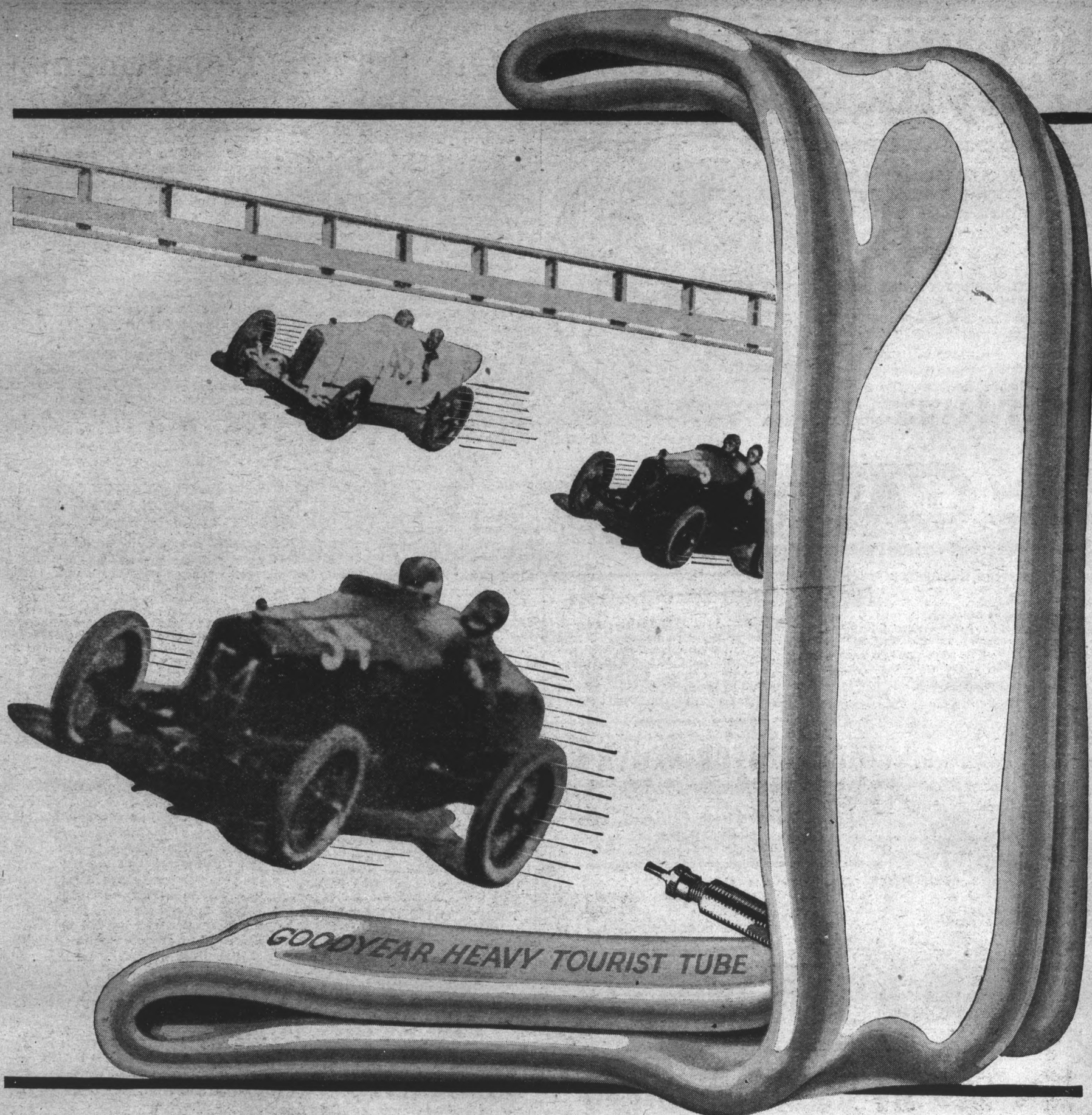
CHICAGO MILK PRICES ANNOUNCED.

After much deliberation and careful consideration of the present conditions regarding necessities and food products, the Marketing Company has decided to accept for the September milk of their members, \$3.55 per cwt. for milk testing 3.5 per cent butterfat, delivered at country plants, with the usual four cents a point above and four cents below that test. Milk delivered f. o. b. Chicago will be \$2.75 per can.

MARL FOR PLASTERING SILO.

FOR the past two years I have used marl fresh from the bed to plaster cracks in a stave silo. It is plastic and adheres to any surface well, also is convenient to apply. It can be applied as the filling progresses so it is not necessary to waste any time before starting to fill silo. It can be applied with a trowel or with the hands as it does no harm to the hands, and if any is spilled it will not harm the stock. A pailful hung on the ladder of the silo makes a short job of patching.

J. V.



Think What the *Tube* Has to Do

ALMOST everyone knows, now, that Goodyear Cords are the first choice of the race driver.

For all important track records, from one mile to six hundred miles, have been established by cars shod with Goodyear Tires.

But we wonder how many people realize that this fact is one of the most emphatic endorsements possible for Goodyear Tubes?

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Goodyear Heavy Tourist Tubes are made of purest rubber—gray gum strips built up layer-upon-layer many plies thick, then welded inseparably together into an integral mass.

They are of even heavier construction than usually used in racing tires.

Because of their longer life and their unfailing retention of air, they undeniably do give much protection to casings.

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Our Service Department

LEGAL FENCE—HOG TIGHT.

What constitutes a legal fence in Michigan? Does it have to turn hogs and sheep? Can a man put stone on the line to be kept up by the farmer adjoining?

O. K.

In the last analysis, what constitutes a legal fence is a question of fact to be determined by the fence-viewers if the case is put to them by demand for a better fence, or by the jury if it comes up in a suit for damages. The statute declares: "All fences, four and a half feet high and in good repair, consisting of rails, timber, boards, wire, or stone walls, or any combination thereof, and all brooks, rivers, ponds, creeks, ditches and hedges, or other things which shall be considered equivalent thereto, in the judgment of the fence-viewers within whose jurisdiction the same may be, shall be deemed legal and sufficient fences." The supreme court has said the fence should be so constructed as to turn the stock ordinarily kept on a farm; but it has never decided, in specific application just how small stock it must turn. Those who have tried it know that small pigs will get through a pretty good fence if there is something they have found to be good on the other side. We doubt the court requiring a farmer to maintain a fence that will exclude very small pigs. But some farmer may some day pay the cost of getting a decision on the point. Undoubtedly a legal fence should be such as to turn sheep that are not breachy.

A farmer has a right to store stone on any part of his farm; but he must not store stone on his neighbor's land without the neighbor's consent. If stored in such a manner as to make the building of a fence at that point impossible that might excuse failure to build. We give no opinion on that.

JOHN R. ROOD.

RIGHT TO HOG-TIGHT FENCE.

Is my neighbor compelled to build his share of the fence hog-tight?

Cass Co.

W. L. G.

The statute declares that all fences four and a half feet high, in good repair, consisting of rails, boards, wire, stone or other things which shall be considered equivalent thereto in the judgment of the fence viewers shall be deemed legal and sufficient fences. The statute seems to leave considerable to the judgment of the fence viewers. The only expression on the matter by our supreme court was in a case concerning a railway fence, in which the court said the fence should be of reasonable strength to turn animals usually kept on farms and turned by fences in this country. There might be difficulty in compelling the neighbor to fence against little pigs. Tradition has it that no pig ever grew fast enough to outgrow a hole he had found in a fence; and our experience leads to the conclusion that small pigs will go through quite small holes.—R.

WHEN TO SOW SWEET CLOVER.

I would like to ask if sweet clover should be sown in the fall or spring to get best results. If sowed on bean ground should the ground be plowed after the beans, or simply dragged in good shape?

Barry Co.

H. J. K.

It will depend a good deal upon whether this land is light or heavy and upon the condition of the soil. Of course, H. J. K. understands that lime is just as essential for sweet clover as it is for alfalfa. In fact, it has been my observation that an alfalfa seeding can be obtained easier than sweet

clover. I would not think the sweet clover could be safely seeded later than September 1, even on sandy loam soil. If seeded as late as this, it will pay to sow about three pecks of oats per acre with the sweet clover, as a protection this winter. If this seeding is made on bean ground, it will be better not to plow. Prepare a good seed bed by surface cultivating. I believe the chances for getting a seeding will be better in the spring than in the fall. This land can be prepared in the spring by first discing it well, then keep it well dragged until the middle of May to the first of June, then seed. If time is needed, apply it this fall or early next spring. If sown in the spring, a light seeding of oats or barley might be used, although the chances are better if seeded alone.

D. WOODMAN.

LEGHORN HENS DIE.

I had this spring 100 pure-bred Brown Leghorn hens; since then I have lost on the average of four a week. They seem to be in sound health except for a lameness that comes in their right legs, and from my observation, it soon develops cholera. I have tried copperas, commercial poultry compound, have doctored for lice, and used liniment—but all to no avail, they gradually pine away and die. I am becoming discouraged, as care and attention seem to be of no use; they die anyway.

Lapeer Co.

L. A. V.

The lameness and emaciation indicates tuberculosis in the flock and there is no cure. The sick birds should be killed and burned or buried very deep. Disinfect the house and plow up the yards or range. Do not use such a flock for breeding purposes but plan on getting a new start next year with strong vigorous birds. The liver most often shows signs of the disease, being covered with grayish-white nodules. When a flock shows this disease it pays to have the birds inspected by a veterinarian and he will be able to determine if any are healthy and suitable for food purposes. Do not try to continue with a flock that contains many sick birds as it is quite hopeless and only leads to disappointment and financial loss.

R. G. K.

FEEDING RYE TO HOGS.

Have just read your article regarding rye as a feed for hogs. I expect to have about 300 bushels, and would like to know how to feed to best advantage. Whole, ground or cooked, alone or in combination with other feeds? I expect over one hundred bushels of barley. Can I afford to buy corn as a part ration? Is rye suitable for young pigs?

Gratiot Co.

R. B. C.

Extensive feeding experiments conducted in Denmark indicate that rye meal ranks a little below corn meal in feeding value for hogs. As a general proposition it will pay to feed ground rye along with other grain feeds. For young pigs a mixture of equal parts of rye and barley ground together and fed at the rate of one hundred pounds with ten pounds of tankage, should produce good results. For fattening hogs a mixture of rye, barley and corn meal, proportioned equal parts, should prove both economical and efficient. Such a grain mixture will produce a better quality of pork and the hogs will make more rapid gains than will be the case if fed rye meal alone. I believe that you can afford to buy a third corn meal as a part of the ration. Feed the ground grains in the form of a thick slop unless you have a self-feeder which prevents the hogs from wasting the grain mixture. W. M. K.

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Make work easier and more pleasant in the kitchen with a "Standard" one-piece sink.

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Forty-four years' manufacturing experience are back of the name "Standard" on plumbing fixtures. Write us for special booklet, "Standard" Plumbing Fixtures for the Farm Home," illustrated in four colors and showing many styles of fixtures. You will find it a big help when you make your selection.

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Bog Spavin



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Loans Not Granted

Your article on Lifting the Farmer's Financial Load was surely good. But how is a young man deserving to get a start with a few hundred dollars in personal property, going to buy a farm, when he has to give security on two dollars to get one, and those are the very ones who need a lift? I have just had a sorry experience with the land bank myself. Our local committee reported favorably, as did the appraiser, on my application, and then the land bank turned it down, saying they were controlled by our local committee and the appraiser. I am quite sure the local committee did all they could for me, so it rests between the appraiser and the bank. When the appraiser was here he said I could have the money on the security I offered, but I am out my application fee and have no loan granted. What shall I do?

Monroe Co.

J. W. K.

As I outlined in my article, every farmer making application for a loan through the Federal Farm Loan system, should secure financial aid to the extent of fifty per cent of land value and twenty per cent of building value. Why this young man did not receive this amount I cannot say. The very fact that his local loan committee recommended that his loan be granted, added to the fact that the federal appraiser advised him that he could secure the loan, must mean that some misunderstanding occurred between the appraiser and the land bank. It is the duty of the secretary-treasurer of the national farm loan association through which this loan was filed, to take the subject up immediately with the secretary of the land bank of the district, and ascertain just why a farmer is rejected when an appraiser, who is the legal representative of the land bank, advises that the money will be forthcoming.

There is a possibility that the appraiser made certain statements in his report to the land bank which caused the executive committee to report adversely upon this application.

Unless there is a misunderstanding between the appraiser and the land bank, this is a plain case of "passing the buck," a custom altogether too much in evidence between land banks and the applicants for loans. They advise the farmer whose application is turned down that the appraiser reported adversely, or that there was some technical reason, rather than having the ability to come right out and state their reason.

Federal appraisers as a class have been altogether too free in advising farmers that they could have the money they asked for. Many of them so advise farmers when they know that they have no intention in recommending any part of the loan being granted. The system can well do without a class of men who are so devoid of integrity as to make such free statements. Truthfulness and frankness is required in the Federal Farm Loan system as in any other system. A federal land appraiser should come to the farmer-borrower with every friendliness, and discuss the subject of the loan with perfect freedom. Aloofness, way-offness, etc., do not aid the farmer and the system to get acquainted as they should.

The Michigan Farmer recently reported a part of the address delivered (in the columns of the Congressional Record), against the Federal Farm Loan, in which a national banker representative from a Pennsylvania district advises readers of the wholesale manner in which loans are being granted. There is not a solitary grain of truth in this statement, and the congressman who made it knows it just as well as I do. The land banks are, rather, rejecting farmers by the wholesale, as the above case; farmers whose loans should be granted many of them. Of \$300,000,000 in closed loans, more than \$100,000,000 had been rejected, which shows that the system is really

closing only seventy-five per cent of all loans applied for. There is no wholesale loan business in these figures.

The aim of this congressman is to hide his real purpose. He desires to start a propaganda movement to remove the present exempt clause in the Federal Farm Loan act, whereby Federal Farm Loan bonds would be taxed if he had his way. This means that the farmer's interest rate would be increased, Federal Farm Loan mortgages would be less attractive to the farmers, and the banks of the country would again enjoy their former usurious harvest of farmer loans.

Every farmer in the country should immediately write his representative and senator at Washington and advise them to keep the Federal Farm Loan bonds free from taxation. Agriculture demands that this be done. There are hundreds of millions of municipal and public service bonds free from taxes. Why not also the farmer's?

E. W. GAGE.

TESTING SEED WHEAT FOR STINKING SMUT.

Will you please advise me through your service department how to treat seed wheat for stinking smut.

Allegan Co.

G. H. B.

There are three common ways of applying formaldehyde for the control of stinking smut of wheat. In all these methods there is danger of injury to the germination of the wheat unless directions are followed closely, because formaldehyde acts slowly. Wheat so treated must not be covered too long and must be planted at once.

After securing clean grain of good variety, the farmer should fan the grain thoroughly to remove the light, shriveled grains and smut balls. The grain should then be treated by one of the following methods:

1. "Wet method." Dilute formaldehyde. Sprinkle the grain until thoroughly wet with solution of one pint of formaldehyde to forty gallons of water. Cover with blankets or sacks for two hours. Spread out thinly to dry and sow within twelve hours. Formaldehyde treatments are necessary for crop protection but they must be given carefully and with scrupulous attention to directions. Allow for the swollen condition of the grain.

2. "Dry Method, (Concentrated Formaldehyde): The convenience of this method is its chief advantage. Only those who will follow directions carefully should employ it since considerable loss resulted during the past season through improper handling.

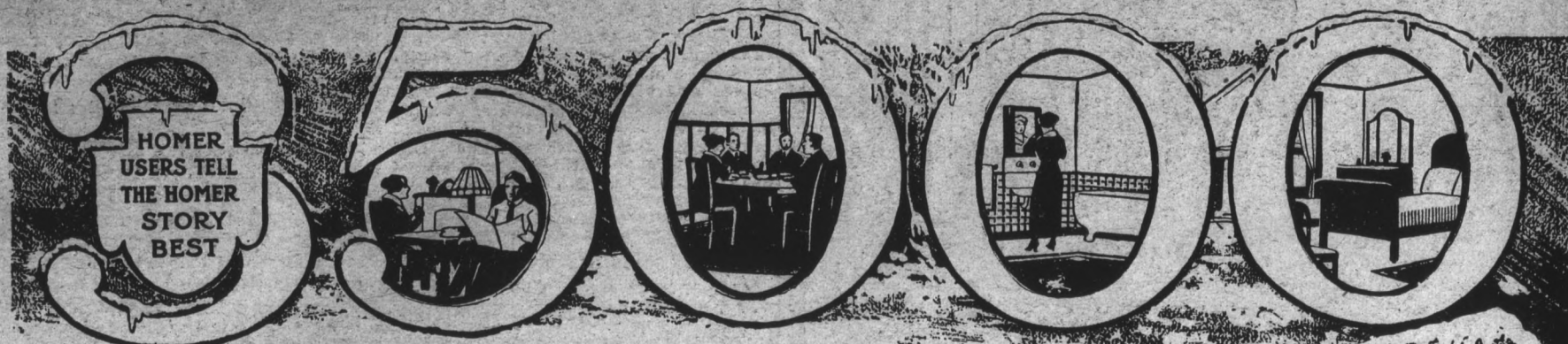
Apply formaldehyde, full strength, with hand-sprayer while the grain is being shoveled over and over. Use at the rate of one pint to fifty bushels, half a pint to twenty-five bushels, one-fifth pint to ten bushels, etc. A dose is a dose—this is as strong as formaldehyde can safely be used on wheat.

Cover the grain four hours—absolutely no longer. Then spread to air in a warm, dry place for an hour or two. It is unsafe to leave grain covered or sacked over night. Formaldehyde cannot be thoroughly aired out of grain. Therefore, plant at once. Treat no more grain than can be sown the same day.

3. "Soak and Skim Method." Excessively smutty wheat is probably unsafe to plant. Stinking smut can be practically eliminated, however, by the "Soak and Skim" method. Stir the grain slowly into a solution of one pint of formaldehyde to forty gallons of water. Then skim off the smut balls and light grain. The grain should be taken out at once, dried, and planted immediately.

M. A. C.

G. H. COONS.



35,000 Homer Users Advise You to Install a Homer Pipeless Furnace

If you want to keep your house warmer this winter with less fuel, less bother, without dirt or dust, heed the advice of the 35,000 Homer users and install a Homer Pipeless Furnace now.

Come and look over our shoulder as we open the day's mail and see for yourself the genuine enthusiasm, over Homer Heat, expressed in Homer users' own words. These letters may help to solve your own heating problem.

Harve Baxter up in Windsor, Wis., signs this one:

"For twelve years have tried to heat my house with one of the best 'old style pipe furnaces' made, and last winter was the first time the house was evenly heated in all rooms, and your furnace did not use half as much coal as the pipe furnace costing me over three times as much money to install."

Here's an interesting letter from Edwin Stoughton in Kalamazoo, Mich.:

"We have had the pleasure of using one of your furnaces for the last four years, and we bless the day you sold it to us."

"We heat five rooms to an 85 degree temperature, and we use on an average 4 1/4 tons of gas coke per year."

Here's one from way down in New Jersey. S. J. Ridgway of Tuckerton writes:

"I was using three stoves and only heating four rooms. Since installing one of your furnaces I have heated the whole house of eleven rooms with less coal and had no trouble in keeping the temperature from seventy to eighty degrees without forcing the heater."

No More Messy Stoves

Why put up with the bother and inconveniences of dirty, messy stoves that require constant attention. When you install a Homer Pipeless Furnace you rid yourself forever of this disagreeable bother, dust, and dirt. You keep your rooms and walls, your furniture, curtains and drapes free from smoke, ashes and dirt—and at the same time you and your family enjoy plenty of uniform heat with less trouble and at less cost.

Pipe Furnaces Waste Fuel

Installing a pipe furnace means tearing up your floors and walls—the installation takes days, and labor is expensive—the heat must travel through pipes and much of it never reaches your rooms—your cellar is warmer than the upstairs rooms and you cannot store your vegetables or fruits there. And the average pipe furnace is wasteful of fuel and requires close attention for successful operation.



HOMER

ORIGINAL PATENTED PIPELESS FURNACE

**It Heats—It Ventilates—It Satisfies—
Less Price—Less Fuel—More Heat—No
Pipes—No Flues—No Dirt—No Dust**

Ten years ago, Mr. S. D. Strong, president of the Homer Furnace Company, offered the public the first patented pipeless furnace. Today there are more Homers in use than all other Pipeless Furnaces combined. No stronger confidence in a furnace can be expressed than by the universal adoption of the Homer and the Homer pipeless heating principle.

The Homer Furnace heats and ventilates through one combination register. Its design is based on sound laws of nature.

In the great outdoors warm air rises and cool air, being heavier, descends. And so it is with Homer heat.

Perfect Circulation

On leaving the center section of the register the warm air rises, spreads out and is deflected by the walls and ceilings. The steady flow of warm and pure air fills every corner and nook of the house and forces the return air back through the outer portion of the register to the furnace, where it is heated again. Our famous Thermo-Seal Inner Lining insures this circulation.

Saves 30% to 50% of Fuel

The Homer is the great saver of fuel, because it is designed and constructed to use the maximum amount of heat generated by the fire.

The Homer radiator, with its long travel, supplies more heat in the hot air chamber and sends less up the chimney. And because the Homer water pan furnishes the right amount of moisture you will not need so great a temperature to keep your house comfortable, for moist air heats more thoroughly than dry air.

These features mean that you will save with your Homer a third to a half the fuel other systems would require to maintain.

Lasts a Life-Time

THE HOMER is made by the original pipeless furnace men. From the ash pit to the combination register, it is the production of expert workmen and honest material. That is why we are able to guarantee the lasting qualities of the Homer.

The Homer is made to last a life-time. It will burn hard or soft coal, coke or wood or slack—in fact any fuel, and deliver the maximum amount of heat.

The Homer cast parts are made of

special Stokel iron. It was selected because of its excellent heat withstanding qualities and its ability to stand the severest breaking tests.

Homer Cleanliness

The Homer does away with useless pipes. It will remove the ever present objections to stoves in living rooms—the smoke pipes, the carrying of fuel and ashes through the house. No dirt, no dust, no pipes, no flues—cleanliness assured.

Homer Convenience

Because it is simple in design and operation, the Homer is convenient to manage. Any woman can run it easily and successfully. The draft controls are operated from the rooms above. There is nothing complicated about the Homer.

Cool and Roomy Cellar

The Homer is the first furnace that sends all the heat to the living rooms and keeps the cellar permanently cool. It can be set up in your cold storage cellar without danger of injuring vegetables.

It is suitable to any cellar of six feet depth or more. It can be operated in a space six feet square.

Why the Homer Pipeless Furnace Leads

- 1 It heats and ventilates the whole house, keeping the rooms filled with pure, moist warm air.
- 2 It is the only furnace equipped with the Thermo-Seal Inner Lining, which insures a perfect circulation throughout the entire house whenever there is a fire in the Homer.
- 3 It burns any fuel satisfactorily—hard or soft coal, coke, wood or slack.
- 4 It delivers more heat with less fuel.
- 5 It heats the entire house through one combination register.
- 6 It does not interfere with cold storage because it keeps the basement cool.
- 7 It can be installed in one day's time—no tearing out the walls or disturbing the plaster.
- 8 It costs but little more to install than an ordinary stove.
- 9 All cast parts are made of guaranteed Stokel Iron.
- 10 It is the Original Patented Pipeless Furnace.

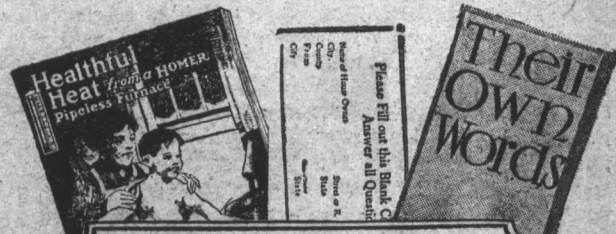
One Day to Install

The Homer is as easy to set up as an ordinary stove. The Homer Furnace Man cuts a square hole in your floor for the register, connects the register to the furnace, runs the smoke pipe to the chimney, and the Homer is ready to fire. There is no need of muzzing up your house or disturbing your walls and plaster. The whole operation takes only a few hours.

The Homer Guarantee Protects You

We guarantee that the Homer Furnace when properly installed will heat to a temperature of seventy (70) degrees any house, store, church or one-room school-house, during the heating season if installed in accordance with the guarantee.

The Homer Furnace Company further guarantees for a period of five years from date of installation to replace any casting used in connection with said furnace (except grate and shaker) if said casting is shown to be defective.



Dept. F-9

Name _____

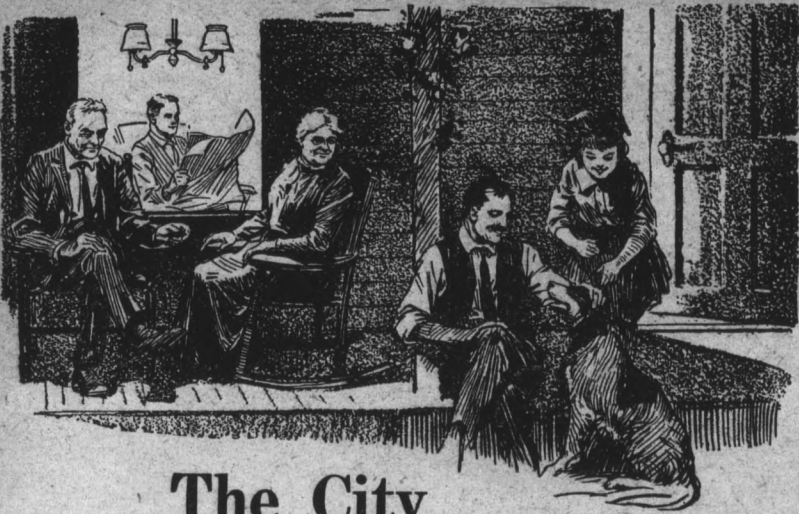
Street _____

City _____

County and State _____

HOMER FURNACE CO., HOMER, MICH.

It Will Pay You to Send the Coupon Right Away
HOMER FURNACE COMPANY Dept. F-9 HOMER, MICHIGAN



The City Conveniences That Hold Families Together

The humblest city homes are well-lighted and have gas for cooking. You have earned the right to these conveniences. You certainly ought to have them for your family.

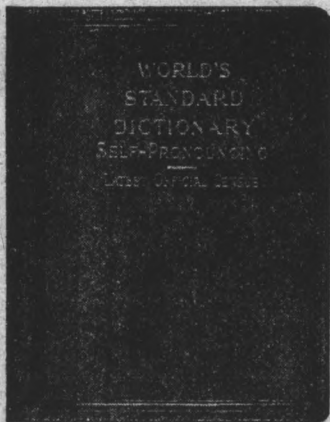
Up-to-date homes like this one have the things that make life worth-while. The Colt Lighting and Cooking Plant stands in the corner of the cellar, cow-barn, or outhouse. Occupies no more room than a couple of apple barrels. Lights the house and barns. Does the cooking, too. No other lighting plant does that. Nothing to get out of order. No skill or experience required to operate—it's automatic. In over 250,000 country homes the

Carbide Lighting **COLT** and Cooking Plant

is preferred to all other systems. Is by far the most efficient and economical. As far as light goes, none can compare with it. Write us for names and addresses of neighbors who have used them for years and can tell you all about them.

J. B. COLT COMPANY, 288 Fourth Ave., N. Y. City 15

WORLD'S STANDARD DICTIONARY



One of the best. Twelve hundred explanatory illustrations, with maps, flags of all nations, and chronological history of world in colors. Forty-seven thousand words defined—over 600 pages. Contains concise history of English language, abbreviations, rules for punctuation, business and letter-writing forms, table of weights and measures, statistics, parliamentary rules, etc. Also latest official census.

Bound in best morocco, and is as flexible as any \$5.00 bible. Title stamped in gold, burnished pages, patent thumb index.

Sent prepaid for two subscriptions, or for one subscription and 90 cents additional.

The Michigan Farmer, Detroit

When Writing to Advertisers, Please say "I Saw Your Ad. in The Michigan Farmer".

PROTECTION COMFORT SERVICE

are the things that count when it rains

TOWER'S FISH BRAND REFLEX SLICKERS

have made good since 1836

Look for the REFLEX EDGE

A. J. TOWER CO.
Boston, Mass. 1819

New Way to Bale HAY

No Blocks
No Bale Ties
2 Men Less

Baled 43 TONS in 10 Hours!

We claim only 2 1/2 tons per hour with only 4 men—but one user baled 43 tons in 10 hours! And you need not choke it to get big capacity! Think of it! 2 men saved! No bale ties—just straight wire! No blocks! No one needed on feed table or for back wiring. That's what the Blockless Thresher Press means to you!

Save \$100 or More Now!

Yes, sir! Save \$100 to \$200 or more quick on price. Get my startling offer. This is the year for hay and straw profits! Make big money baling your own and for your neighbors. Your Blockless Thresher Press will make as much money as acres of extra land!

BOOK FREE Get the Thresher Press book free by sending your name on a post card or in a letter now. Let me show you what others say. Let me quote our amazing, eye-opening price to you on the style machine you want. Do not miss the facts and rock-bottom prices. Send your name now.

WILLIAM A. SEYMOUR, General Manager
Thresher Press and Manufacturing Company
1020 Ottawa Street Leavenworth, Kansas

State Grading and Packing Laws

Will you please advise me regarding the legal requirements for packing, grading and shipping grapes, pears, apples and other farm products, both for local and distant markets? I have been informed that several changes have been made in the laws governing the size of packages and the marking of the contents of same. Any information you may furnish along these lines will be greatly appreciated.

Berrien Co.

F. D. H.

Standard Apples.

(Act No. 75, Public Acts of 1917).

AN ACT to fix standards for apples, grown in this state when packed in closed packages, and to regulate the packing and sale of such apples.

357. Section 1. The people of the state of Michigan enact: The standard grades for apples grown in this state when packed in closed packages shall be as follows:

First, "Michigan Standard Fancy" shall consist of hand-picked, properly packed apples of one variety, which are well-grown specimens, normal in shape, uniform in size, of good color for the variety, and which are free from dirt, insect injury, fungus disease, bruises and other defects, except such as are necessarily caused in the operation of packing. "Uniform size" shall be construed to mean that apples contained in any one package shall not vary in size more than one-half inch in diameter;

Second, "Michigan Standard A" shall consist of hand-picked, properly packed apples of one variety, which are well grown specimens, normal in shape, of not less than fifty per centum of good color for the variety, and which are practically free from dirt, insect injury, fungus disease, bruises and other defects, except such as are necessarily caused in the operation of packing.

Third, "Michigan Standard B" shall consist of hand-picked, properly packed apples of one variety, which are well grown, and practically free from insect injury and fungus disease: Provided, that the apples having healed-over insect punctures, small scab or blotch infections, fruit spots, or other defects which, taken singly or collectively, do not materially deform or discolor the fruit or injure its keeping quality shall be admitted to this grade;

Fourth, "Michigan Unclassified" shall consist of apples which do not conform to the foregoing specifications of grade, or which though conforming, are not branded in accordance therewith.

358. Sec. 2. In the interpretation of this act as a tolerance of six per centum below the standard shall be allowed in the Standard Fancy grade, ten per centum in the Standard A grade, and fifteen per centum in the Standard B grade. Such tolerances shall apply in size, color and other grade specifications and shall be computed by counting or weighing the specimens which are judged to be below the standard for the grade in any respect, and those which are found to be smaller than the minimum size, marked on the package.

359. Sec. 3. In all of the grades specified in this act, the apples included in the face or shown surface shall fairly represent the size and quality of the apples in the package.

360. Sec. 4. Every closed package containing apples grown in the state of Michigan which is sold, offered or consigned for sale, packed for sale, or shipped for sale, shall bear upon the outside of one end in plain letters or figures, or both, the name and address of the person by whose authority the apples were packed, the true name of the variety, the grade of the apples therein contained when packed or repacked, and the minimum size or the numerical count of the fruit in the package. If the true name of the

variety is not known to the packer or the person by whose authority the apples are packed or branded, then such varieties shall be designated as "unknown." Every package of apples which is repacked shall also bear upon the same end of the package the name and address of the person by whose authority it is repacked, such name and address to be preceded by the words "repacked by." The letters and figures used in marking or branding closed packages of apples under the provisions of this act shall be of a size not less than twenty-four point gothic. Provided, that closed packages containing apples which cannot be readily marked on one end, so as to bear conspicuously the information herein specified shall be marked or branded in such other conspicuous place as may be prescribed by the regulations promulgated hereunder.

361. Sec. 5. The marks and brands prescribed in this act may be accompanied by any additional marks or brands which are not inconsistent with or do not in any way obscure the marks and brands required by this act. Apples packed and branded in accordance with the United States apple grading law, approved August 3, 1912, shall be exempt from the provisions of this act.

362. Sec. 6. The minimum size of the fruit in all grades shall be determined by taking the transverse diameter of the smallest fruit in the package. Minimum size shall be stated in variations of one-quarter of an inch, as two inches, two and one-quarter inches, two and one-half inches, two and three-quarter inches, three inches, three and one-quarter inches, and so on, in accordance with facts. Minimum sizes may be designated by either figures or words and the word "minimum" may be designated by the use of the abbreviation "min."

363. Sec. 7. It shall be unlawful for any person to pack for sale, ship for sale, offer or consign for sale, or sell, in closed packages, any apples grown in the state which are not graded, packed and marked or branded in accordance with the provisions of this act and the regulations made hereunder, or closed packages of apples bearing any false statement, design, or device regarding such apples within the meaning of this act.

364. Sec. 8. Any person who violates any of the provisions of this act, or of the regulations promulgated hereunder, shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than \$50 for the first offense and not more than \$100 for each subsequent offense: Provided, that no person shall be prosecuted under this act who can establish satisfactory evidence that no part of the packing or branding of the apples concerned was done by him or under his authority and that he had no knowledge that they were not packed and branded in accordance with said provisions and said regulations.

365. Sec. 9. The word "person" as used herein shall be construed to include individuals, corporations, partnerships and associations. The act, commission or failure of any official or employee of any person, when such official or employee is acting within the scope of his employment or office, shall in every case, be deemed also the act, omission or failure of the person, as well as of the official or employee. The words "closed package" shall mean a box, barrel, basket, or other package, the contents of which cannot be inspected when such package is closed.

366. Sec. 10. It shall be the duty of the Dairy and Food Commissioner to diligently enforce the provisions of

(Continued on page 282).

CAN YOU GROW GOOD CLOVER?

ALL over the country clover is the foundation of good farming. Land that will grow good clover will ordinarily grow good corn, good oats and good wheat. Of course, the growing of clover in itself makes the other crops produce more bountifully, but clover will not grow on poor land.

The first requisite for clover is a sweet soil. A sour soil can be made sweet by liberal use of lime, either in the form of ground limestone or burnt or hydrated lime.

If plant food is lacking in the soil it must be supplied before good clover or any other crop, will grow. Some farmers try to supply this plant food through the long-time process of adding small amounts of manure and turning under a sod now and then. This plan may maintain fertility but it will seldom add fertility. The small crops grown on the impoverished fields do not supply sufficient humus-making material to get the soil into a loose mellow condition, and since but little plant food is available from year to year, no progress toward higher fertility is made.

It is poor business to spend years in trying to "bring up" badly depleted soil by cropping and culture methods alone. There is nothing to build on. It is far cheaper in the end to buy good fertilizer at first and grow crops which will not only pay for the labor expended but will leave humus-making roots and stems in large enough quantity to improve the soil for next year's crop. After a year or two of this latter sort of treatment, most any soil, except the lightest sands or heaviest clays, will grow good clover.

J. W. HENCEROTH.

GETTING READY FOR WHEAT.



This Fall Many Michigan Fields will be Plowed with Tractors.

A HEAVY DROP OF PEACHES IN YORK STATE.

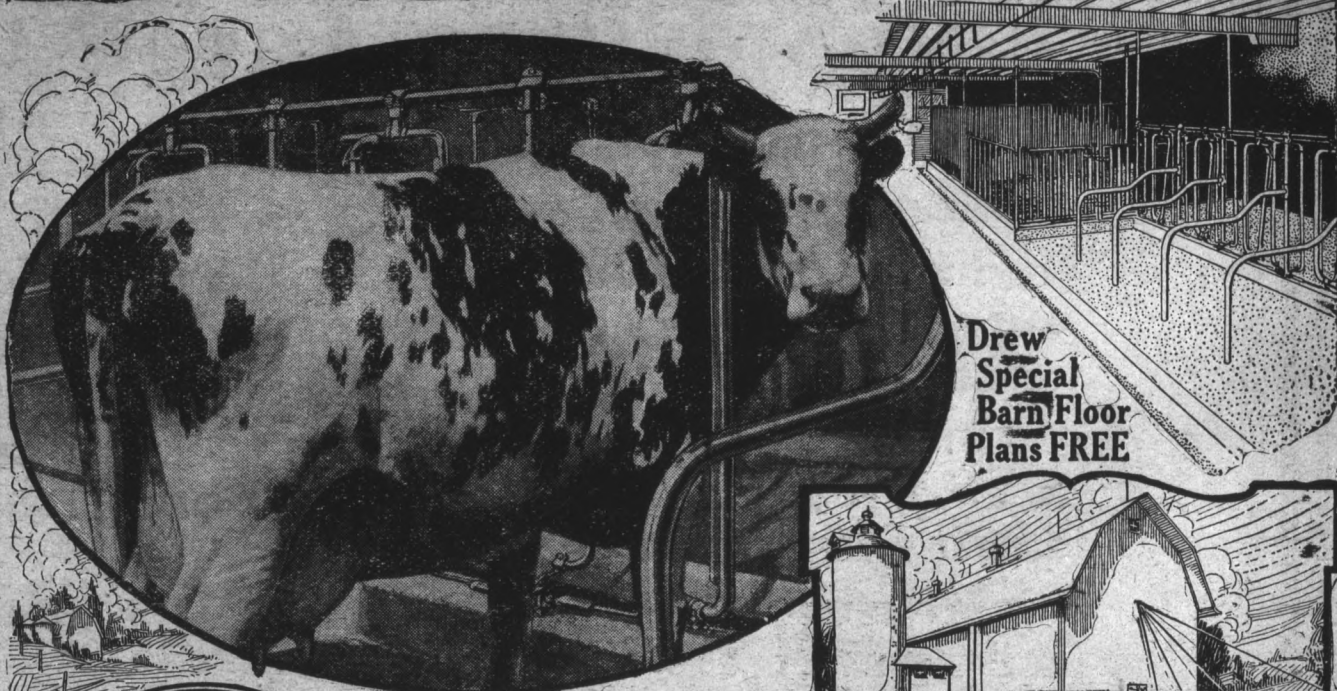
GREAT concern is felt over the continued dropping of peaches in western New York. With picking time but a short time away and many of the peaches well toward full size, the fruit in many orchards shrivels and drops. This condition is not confined to isolated orchards, but is quite general over much of the territory.

Entomologists and experts have been called in for consultation by some of the big growers, but it is improbable that anything can be done to check it now. While it is not established, it is believed by many that the condition is an aftermath of the severe winter of 1917-1918, which left the trees in a weakened condition generally, and in addition killed tens of thousands outright.

With vitality lowered, those trees which did survive are now unable to carry a full crop through to full maturity with the result that there is a heavy drop now long after the drop period should be over. If it continues it will materially cut earlier estimates of the crop.—R.

DREW BARN Fixtures

MODERN STOCK HOUSING



Drew Special Barn Floor Plans FREE

BESS BURKE ORMSBY
(Value \$25,000.) Sire, Sir Pieterje Ormsby Mercedes. Dam, Spring Brook Bess Burke. Yearly record, 26,044.7 lbs. of milk. 1164.14 lbs. of butter.

A Famous Cow in a DREW Stall

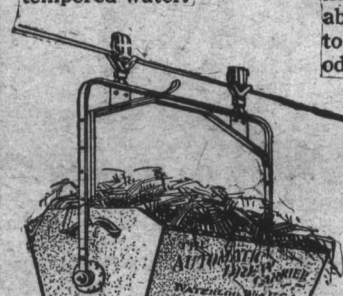
Bess Burke Ormsby is housed in a great barn on the Blaine Farm, Lake Mills, Wis., that is equipped with DREW All-Steel FIXTURES. Why do owners of high-priced herds select DREW FIXTURES? Because the many advantages of exclusive features in DREW Stanchions, Stalls, Water Bowls, Ventilators, Carriers and other dairy farm equipment give a direct benefit in increased milk production and reduced labor expense. They're guaranteed.



DREW QUICK DETACHABLE Water Bowls

If You are Milking Five Cows or More Drew Fixtures will Add to Your Profits

Have double locks, all-brass valve. Cannot be dislodged by cattle. Will not overflow. Instantly removed. Always give a full supply of evenly tempered water. Every DREW product combines the utmost in labor-saving usefulness with great strength, long-lasting service and live stock comfort. For over twenty years DREW experts have constantly studied the dairy farmer's needs and have met them completely. You must know all about DREW FIXTURES and DREW SERVICE if you want to be fully informed on modern, improved dairying methods. You are not obligated in the slightest by asking for our advice and suggestions on anything pertaining to stock housing. We are glad to serve you whether you purchase or not.



DREW CARRIERS
(For Litter-Feed-Milk Cans) Have extra strength where needed. Run easily on the famous Round Track or Cable. Large, smooth running wheels. Lift easier than all others. Have extra raising height. Will not jump the track.

WRITE US TO-DAY
Ask for the **Drew Idea Book No. 7**
See Our Exhibit at the State Fairs
Drew Carrier Company
Established 1899
Waterloo, Wisconsin
EVERYTHING FOR THE DAIRY BARN

Mail This Coupon

DREW CARRIER CO., Waterloo, Wis.
Send the Drew Idea Book No. 7 without obligation or cost to me. I want to know about.....Stanchions.....Stalls.....Carriers.....Drinking Bowls.....Steel Pens.....Bull Staff.....Barn Plans for.....New Building.....Remodeling—(date).....

Name.....
P. O.
R. F. D. State.....
M.F.S.B.

"The Old Stove Master"

I'll SAVE You 25% to 60% on a Pipeless Furnace!

Because I build them myself. You can't beat the price of the man who makes the goods, Friend.

Write and Get My Book, FREE quoting my direct-to-you-from-factory price. Also get my offer on Kalamazoo Stoves, Ranges, Kitchen Cabinets and Tables, Phonographs, Fireless Cookers, Cream Separators, Sewing Machines, Washing Machines, Indoor Closets, Paints and Roofing. I'll quote easy terms, give you an unconditional guarantee and pay the freight.

Ask for Catalog No. 309.

"The Old Stove Master"
Kalamazoo Stove Co., Mfrs.
Kalamazoo, Mich.

"A Kalamazoo Direct to You"
Trade Mark Registered

Our Quality Knife

Made by the famous Valley Forge Cutlery Company. Two blades made of best razor steel. Ebony handle. Brass lined and well finished throughout. Guaranteed to give satisfaction. High-grade every way.

These knives were bought a pre-war prices, otherwise we could not make the attractive offers below. They are extra good value.

Sent prepaid for two yearly subscriptions to the Michigan Farmer at \$1.00 each, or for one subscription and 50 cents additional.

Cash for Your Spare Time

Put your spare time to pleasant and profitable use by cooperating with us in the securing of Michigan Farmer subscriptions.

A good way to get money for Thrift Stamps, Liberty Bonds, or to help in the high cost of living. From two to three dollars a week can be earned with little effort.

Details furnished upon request.

The Michigan Farmer, Detroit, Mich.

For Small or Large Cars

"The Best Tires made" is the widespread comment of dealers and users.

Fisk Tires are uniformly dependable for mileage, appearance and general satisfaction under any conditions.

Fisk is a quality product in every last essential, with a distribution rapidly increasing solely on merit and reputation.

Measure Fisk miles against any advertised mileage.

FISK CORDS
FISK RED-TOPS
FISK BLACK NON-SKIDS
FISK INNER TUBES



FISK TIRES

Next time-BUY FISK-At all Dealers

WORLD EVENTS IN PICTURES



Chas. Edison, son of Thos. Edison, treasurer of National Social Unit.



Miss Katherine M. Spruce who will identify in five or six minutes any one fingerprint desired among one million recorded in Washington.



Mrs. William Black, woman street corner orator, fights Bolsheviki.



Lieut. H. G. Peterson and Lieut. Paul H. Davis, the U. S. Army Aviators who were held by Mexican bandits for ransom.



"Fanchon," First Woman Aerial Mail Carrier being helped into her mail plane by Lieut. C. C. Nutt, U. S. Air Service at Sacramento, California.



Mrs. Jerome Bonaparte and her prize dog, "Eastney Bobs."



The Canine and Human Elements in New York Actors' Strike. The dog and the pretty actresses are picketing on Broadway.



Howard Chandler Christy, the famous artist weds pretty model.



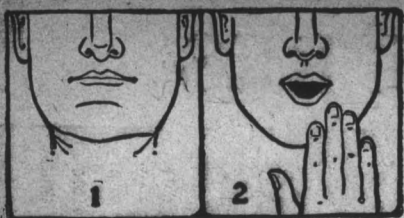
Two hundred soldiers proposed marriage to this popular K. of C. flower girl.



The surplus army food is being sold all over the United States.



The tallest visitor ever at the White House is seven feet six inches in his stockings.



Try this experiment

1. Take a deep breath of cold air through the nose, the mouth being closed. Hold it.
2. Open your mouth, hold your hand in front of it, and exhale. NOTE THE WARMTH OF THE AIR YOU EXHALE.

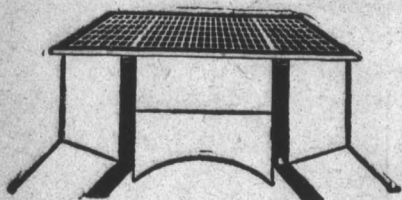
THIS is a simple demonstration of the air circulation system which Nature has installed in all human beings.

Cold air, inhaled through the nostrils, is carried over the heated surfaces of the nose and throat, and exhaled as warm air.

Nature's own circulation system applied to home heating in

Estate
SINGLE REGISTER
WARM AIR HEATING SYSTEM

"the furnace that breathes"



Note the register face of the Estate Single Register Warm Air Heating System. It is divided, you see, into three sections. The center section is the warm air discharge register, or mouth; the two outer sections are the intake registers, or nostrils, of this warm air heating system.

Air, drawn into the furnace (inhaled) through the two intake registers, is carried over the hot surfaces of the furnace, there thoroughly heated and moistened, then discharged (exhaled) through the warm air discharge register.

No pipes are needed to carry the warm air from one room to another. As the warm air rises into the house, cooled air sinks downward until it is drawn back into the furnace through the intake registers.

Thus a constant and thorough circulation of moist warm air is created—a breathing as regular as the human respiratory organs—which heats every room of a house—upstairs and down—thoroughly and uniformly.

This simple, scientific heating system is not an experiment—it's an established success

Many thousands have been installed during the past five years in old and new homes, stores, churches, etc., in every section of the country, and all are giving the greatest satisfaction. Send coupon for full information.

THE ESTATE STOVE CO.

629 South Avenue
Hamilton, Ohio

Send FREE BOOK with full information.

My house has _____ rooms downstairs;
_____ rooms upstairs.

(Name) _____

(Address) _____



The Men Who Lead

By Jennie Buell

THERE is a story of an old Maine fisherman who, when asked by a resorter what people of his trade do in winter time, replied, "Wal, sometimes we jest set and think; and then, agin, we jest set!"

Farmers, quite like fishermen, naturally fall into similar classes; that is, some who both farm and think, and others who merely farm. The first lead; the latter follow.

There is strong complaint at present that agricultural conditions are not being molded by country people themselves; that farmers are not being led by farmers. Is the fault not partly our own? Have we a clear enough conception of what constitutes farm leadership?

The man who "just farms," following the practices of his grandfather, is fast dropping out of the race and may not be considered in any discussion of farm leadership.

The Leader who Farms Surprisingly Well.

The first type, then, of farm leaders, is a man who is in evidence in any prosperous farm neighborhood. He is what one farm agent calls a "real farmer." So he is. He is the bone and sinew of food production. He cultivates its clean fields; he erects its substantial fences and he builds its big red barn. He grows its bumper crops, sleek herds, huge vegetables and prize-winning fruits. This man looks after the interests of his farm first of all and grants few departures from its routine. The "leadership" of such a man is mostly of the silent, though substantial, sort, and it is for the most part material in quality. If we had no other type of farmer than this, agriculture would blaze few new trails, would produce few new varieties of grains, improved strains of live stock and multiplied kinds of choice fruits, but it would suffer sorely nevertheless.

The Leader Who Experiments.

Leadership as we think of it calls for experimenting and initiative in farming lines, but when these gifts occur in an unassuming man, even his neighbors often fail to recognize him in the sense of a leader. A man in my county, Charles L. Foster, who last winter fell a victim of the present influenza epidemic, illustrates well this type of farm leadership—the kind that steadfastly, and, with studious devotion applies itself to problems of soil, feeding and breeding, without seeking any official recognition of himself.

When the news of this man's passing was announced by the papers, telephones clicked in distant parts of the county and strained voices asked, "That isn't our Mr. Foster, is it?" This sense of loss over the county was not due alone to the characteristic kindness of this man, although one of his immediate neighbors said of him, "We have grown to depend upon him as a leader in everything we sought to achieve as a neighborhood and he never failed us." But he was also so devoted to farming that he leaves those who did not neighbor with him farther along the way of scientific agriculture. He was a city lad who came to the country, deliberately choosing farming as a life work, irrespective of money rewards; he applied his mind, trained in chemistry, biology and physics, to his fields and animals. He was an enthusiast in applying new

knowledge to his wornout soils, his dairy animals and his poultry flock. Disregarding the balance that was often on the wrong side of his financial record, he followed the lure of experimentation and of helping others in his favorite lines. He well knew that if others were given cows, bred to produce more butter-fat, and hens, bred, fed and culled to laying standards, they could profit from them. His delight was to produce these types of animals, discover the best feeding ration for them and share his findings with his neighbors. A near friend said of him, "This sometimes opened the door to imposition, but he would say he would rather receive a little less than his due than expect more."

I doubt if many of us viewed Mr. Foster as a "leader," and yet, now that we talk of him and look at the large vacant place he has left, somehow we realize that he was, in his quiet, unseeking way, a true leader in the fundamentals of good farming—built-up soils, balanced feeding and breeding for business purposes.

There was, a generation ago, another Michigan man who, even more remarkably exemplified this same unobtrusive sort of what for a better name, we term farm leadership. I refer to Benjamin Hathaway, of Cass county. Here was a man who sought no official positions but whose work left an indelible impression on progressive agriculture. His work was with plants and fruits. Before the days of Burbank and others of brilliant record, Mr. Hathaway patiently explored the uncharted fields of plant improvement through seedlings, grafts, and cross-fertilization. As a result "Hathaway's Yellow Dent" corn would of itself en-

title him to be ranked among agriculture's chieftains. In addition to that strain of corn, which was perhaps Michigan's standard when scientific selection of seed corn came into vogue Mr. Hathaway had to his credit several strawberries, grapes and other fruits which he had originated and tested out by rigorous culling processes. His nurseries, hot-beds and orchards were feeders for a wide range of territory and many a home ground and school yard are now graced by mature specimens that came from that rare old farm. Could certain square yards of that farm speak a language which we mundane humans understood, they might tell a marvelous story of their former owner's long and patient effort to produce a flower, or vegetable, grain, nut or fruit which promised finer or greater yields.

A year ago I walked reverently—I say it advisedly—through the fine orchard of splendid towering chestnut trees which this plant lover set years ago. I went out into the remnants of what was once a wonder-garden—went to taste again the anise which grows in the corner where it grew in my childhood—walked along the old paths to smell again the box which bordered the beds, and recalled the rare specimens of imported flowers and shrubs which this man collected from distant connoisseurs and brought to our inland country neighborhood.

Others besides these men have done a similar work for their localities and every one of them has been in his field a farm leader. These instances but point to the type. Too often they are unrecognized as such; sometimes underrated because they do not measure up to the common standard of what is called "success." Advancing agriculture owes much to such men and there are more of them, of greater or less degree, than we usually suspect. As a people we need eyes to discover them.

The Leader Who Organizes.

We have thus far considered those who are content—more than content—to do their work on their own premises. There remains another group of farm leaders who, while tilling their fields and harvesting their crops, do so with a mind on their social, economic and citizenship relations to their neighbors, state and nation. To this group belongs many a farmer who holds political office of one kind or another as a public trust. To this group, also, belong those who see the value of united effort among their class.

Men of this type have considered farming in a large sense. They have seen the need of influence, of many focussed upon legislators. They have realized the utter futility of an individual struggle against big business combinations. Moreover, they have felt the pull of service for public betterment. Governor C. G. Luce, J. T. Cobb, C. W. Mickley and J. Webster Childs were others of that sturdy, fearless cast of characters, of those times, who defied precedent and championed the organizing of farm forces. These pioneer men have been succeeded by others of like conviction and organizing trend. We have many examples of each type in our midst today. Too often our eyes are holden and we do not perceive their possibilities of usefulness as leaders in their special lines of activities.



FALL IS HERE.

BY MRS. L. M. THORNTON.

When the west winds breath and blow
Sad and low,
And across the rolling plain
Comes refrain
From a cricket army calling
That the snows will soon be falling
Summer flies beyond recalling
Fall is here.

When the garnered grain fields lie
Stubble brown,
When a haze is o'er the sky
And the crown
Of the beeches turns to yellow,
When the quails call soft and mellow
Like the note of flute or 'cello
Fall is here.

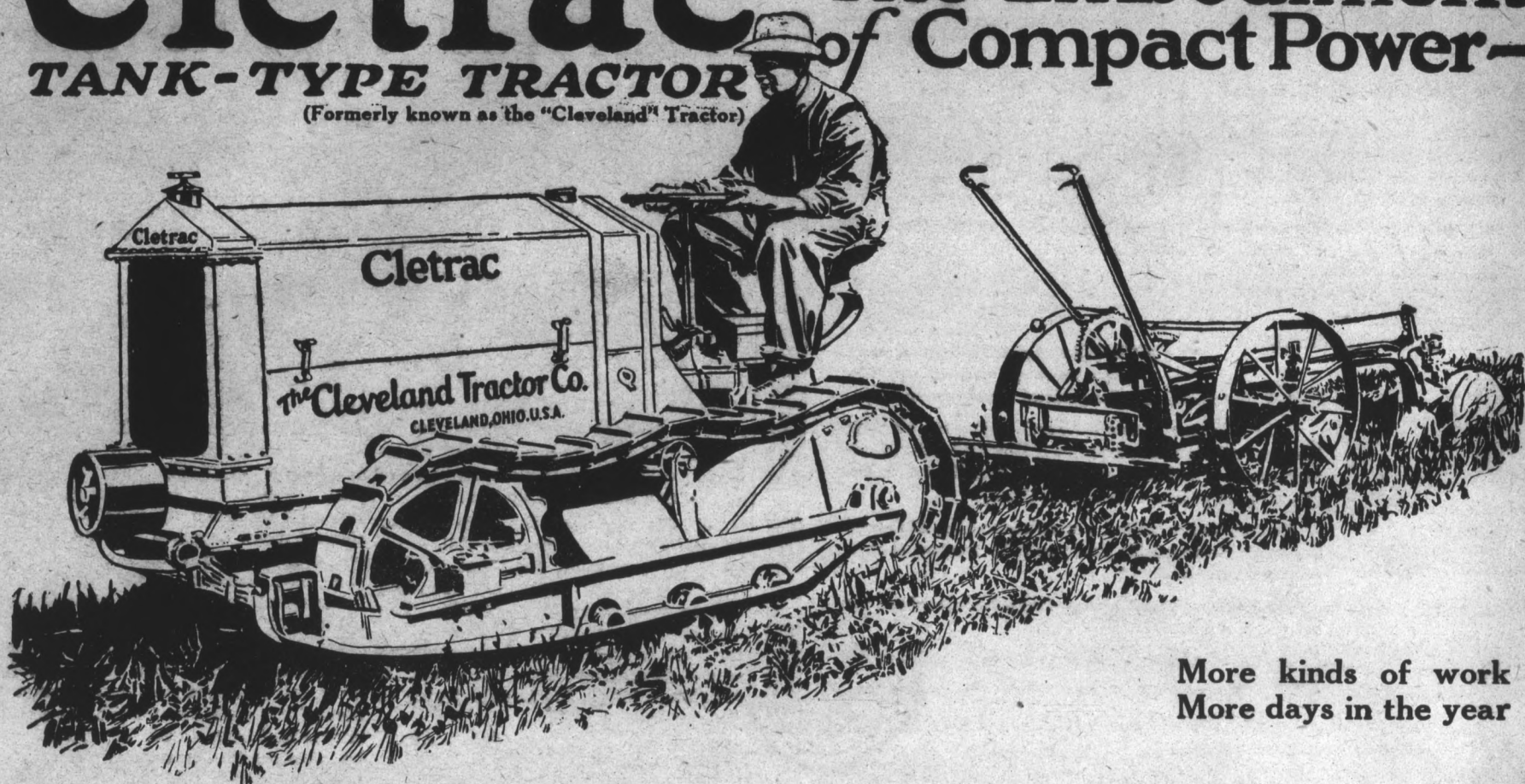
When the window light at even,
Brightly burns,
When the rover to that haven
Eager turns
When old grievances are righted,
When new fealties are plighted
Blessings crown the love united
Fall is here.

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More days in the year

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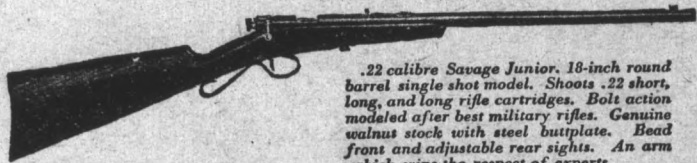
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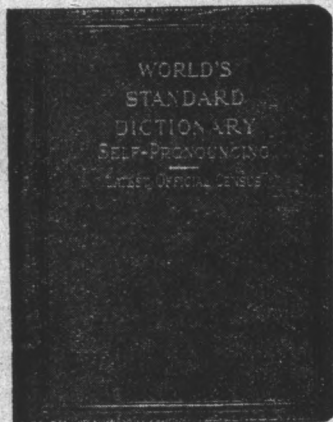
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Miss Trude's Bad Afternoon

By J. M. Merrill

MISS TRUDE started, uttering a sharp ejaculation as an unusually bright flash of lightning was followed by a heavy crash of thunder.

Joe Bixley and his chum Alix Donald laughed.

"Excuse me, boys" pleaded the schoolma'am, "I am not used to such heavy thunder." She had come but the month previous to this backwoods settlement of Michigan from the far away state of Maine, a state where 'twas said the farmers had to file the noses of their sheep that they might pick the grass from between the rocks.

"Oh, this is a mere nothing," advised Joe with a grin. "Wait till you see one of our hard wind storms."

"Oh, dear!" gasped the little teacher as another crash of thunder fell.

"Never you mind Joe," put in Alix at this moment. "We don't have bad storms very often, Miss Trude. The last one mowed down a bit of woods for Tom Studeford, killed a few of his stock—destroying his barn—but it didn't last long. Joe is only trying to frighten you."

"And what are you doing, Alix?" snickered Joe.

Two bad boys you'll say. Perhaps they did enjoy their teacher's trepidation, yet at heart they were considered as good as any lads in the settlement, and as this is a true story we must speak of them as they were.

When there came a lull in the storm Miss Trude dismissed the school. Some of her pupils had a mile to go through the woods, and the slender girl from Maine was too solicitous for the welfare of her flock to keep them long when danger might result.

School had been dismissed twenty minutes. It was now almost four in the afternoon and the teacher still lingered. She thought herself alone. She went to the open door, glancing down the forest road, dreading to set out on her homeward way which led through a deep swamp to the house of Alix Donald's parents, the pater being the director at whose place the teacher was temporarily domiciled.

"I wish Alix had waited for me," she murmured, noting a sudden darkening of the western sky. Another storm was brewing, since forked lightning jagged the heavens, followed by a distant rumble of thunder.

Hastily donning hat and coat the girl teacher stepped into the open air, securely locking the door.

A sudden flash and stunning roar startled her. Hesitating but a moment she gathered her skirts about her, and made a swift dart down the road. She was soon in the shadows of the wood. There was no wind. The dead calm was actually oppressive. Miss Trude had read about the dreadful cyclones that sometimes visited the western country, and would have ran all the way had she imagined anything like a tornado was soon to occur.

Half a mile down the road was Rudiman's creek. Several late rains had filled its banks to overflowing, which added to the rain of today might cause a flood. What if the bridge had been swept away?

The little school teacher scudded along, white-faced and a trifle uncertain of her position. Why had the boys all left her to hurry home. She felt it a shame to be thus deserted. Alix was such a tease. He seemed to delight in seeing his teacher wince when he told stories of the awful calamities

that had happened to the early settlers and now—what was that? A roaring sound far off filled the ears of Miss Trude.

The sound was like that of a moving train of cars, such a sound as the little teacher had not heard since leaving Buffalo on her way west, which was the "jumping off place" so far as railway traffic was concerned. Miss Trude had rather enjoyed the long ten days' trip by stage coach through the southern edge of Canada west to Detroit, thence by ox and horse team through Michigan to the Muskegon, on whose banks squatted the little lumber hamlet of Sandy Bar. Here an aunt resided, and here the girl had expected to make an indefinite stay. Having been engaged to teach, she felt it incumbent upon her to do the very best that was in her for the up-bringing of the boys and girls of the settlement school.

Miss Trude stood still in her tracks and listened. The roar of that train grew more pronounced each moment. Mercy! she could not for the life of her understand how a train of cars should be plowing the western woods when her good sense told her the nearest locomotive was hundreds of miles away.

Ah, she understood now. She had arrived at the brow of a considerable hill, denuded in part of its timber growth by the hand of the lumberman. Off to the southwest grew a clump of dead pines. These were writhing as though in agony; the rough bark and limbs were dashed through the air, followed immediately by the fall of timber. Down crashed those dead pines like wheat before the reaper's scythe. And then she knew the meaning of that roaring sound—a cyclone!

A funnel-shaped cloud, black as ink, rolled and gyrated across the woods, tearing a complete pathway through, leaving nothing standing in its wake. Dust and twigs were whirled in clouds about the slender girl standing on the hill. She clung to her hat, darting to the roots of a big pine stump. Here she clung to the ground, thrilled with a nameless horror.

A minute later the sun shone forth from behind that black cloud. The wind dropped away in the distance and all nature smiled once more o'er the landscape. Such a scene. Like one of old, we might exclaim, it beggars description.

The foot of the hill was piled high with fallen timber. Where once was

(Continued on page 280).



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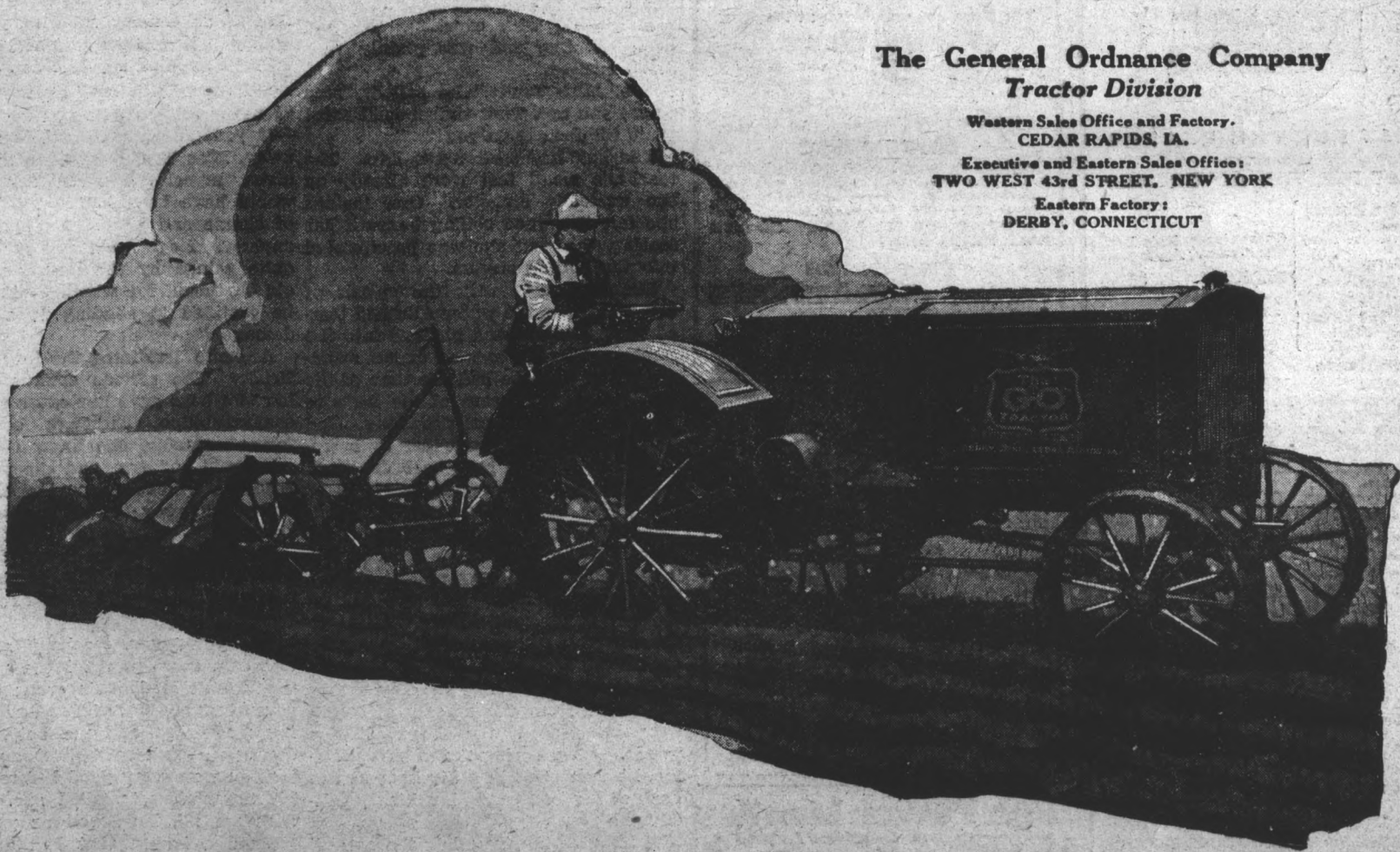
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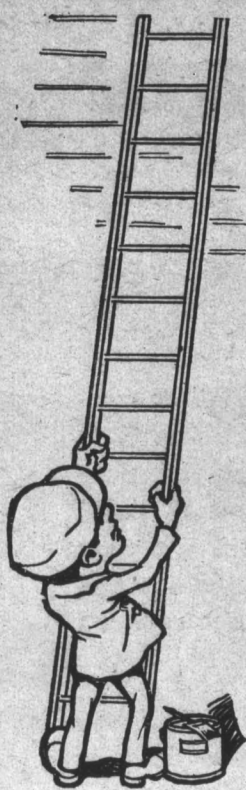
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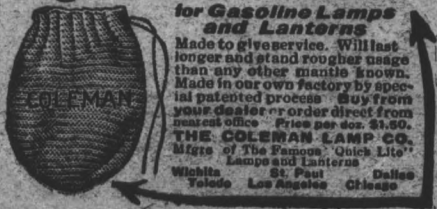
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Miss Trude's Bad Afternoon

(Continued from page 278).

A well defined wagon road now presented a wall of fallen dead pines and green hemlock. Slowly Miss Trude made her way down the incline, treading daintily over limbs and rifted tree trunks which littered the way.

She halted before a mass of fallen timber which seemed to defy further progress. The air was much cooler than before the storm. How could she get around that mass of fallen trees to the road beyond? She wondered how far it was. Night was not very far off. Where were Alix and Joe? Had they been exposed to the fury of the cyclone? Would they miss her if alive and come back seeking her?

The girl sat down on a fallen tree, and cupping her chin in one hand, sat cross-limbed gazing at the magnificent ruin all about her.

It was yet nearly a mile to the home of the director. Along an ordinary road this would not have seemed far, but the obstacles now in the way daunted the girl from way down east. With a deep sigh she rose and began picking her way to the left, keeping along the edge of the devastated strip, hoping she might come to a point for crossing.

By miraculous chance she found a narrow lane seeming untouched, down which Miss Trude made her way with the fleetness of a doe. She feared night might come on with her still in the woods. A light broke in the west; she was approaching an opening. Ah, there was the glitter of water in the distance—Rudiman's creek on a rampage.

The girl pushed on, soon discovering to her joy that the storm had left the woods near the bridge intact. A nearer approach, however, showed her one end of the bridge gone, the water growling like a caged lion as it swept in swollen flood along between banks.

A single timber remained undestroyed, to which the schoolma'am made her way. As she stepped foot upon the quaking timber her ears were assailed by a shout from beyond the swollen creek. On the opposite shore appeared one of her pupils, Alix Donald, whose face glowed with exertion. He had been running, and was plainly very much excited.

"Oh, Miss Trude," he called, "stop where you are. That timber isn't safe! Wait till I come to you!"

The boy had spoken too late. The teacher's small feet were already on the unsteady stringer. One instant she felt the wood rolling beneath her footing, the next she was precipitated into the boiling stream.

Simultaneously with the splash of her body upon the water Alix had tossed aside his coat and plunged into the stream. The boy was an expert swimmer, yet withal he had the time of his life making a success of his dash to save Miss Trude from drowning. Had Rudiman's creek been wider by a single rod both would have been drowned.

As it was Alix dragged her free of the water by the hair of her head, which came uncoiled in his grasp. This hurt both the boy and his teacher, but it seemed the only way, and he did not hesitate an instant. The two sat on the bank drying off a little, waiting to recover their full senses before setting out on the road home.

The strong hands of the boy wrung the water from the masses of raven hair that graced the head of Miss Trude. After drying it the best possible, he twisted it in a big knot at the back of her head, then laughingly called for a pin.

"I imagine they're all in the creek," said the teacher, forcing a smile to her

damp features. "Never mind. Wait till we get home. I feel all right now, Alix, quite able to walk, and so thankful to you—"

"Lucky I turned back as I did," said the boy. "It wasn't fair to frighten you with our yarns, then run away as Joe and I did. Can you ever forgive us, Miss Trude?"

"I'll forgive you, at least," she assured him, the smile accompanying the words very soothing to the boy's heart. He had not yet reached home when he saw the approach of the wind storm and turned back to look after his teacher, knowing full well how frightened she was sure to be. "You saved my life, Alix. I can't swim a stroke, and I was too frightened to help myself."

"Thanks, Miss Trude," blushing spoke the boy. The two were standing now. Taking her arm he led the way to the road, which was not obstructed by trees on this side of the creek.

The two had not proceeded far when a light wagon appeared drawn by a big farm horse, with Joe Bixley driving.

"Ah, here you are and wet through!" exclaimed Joe, wheeling his wagon about, springing to the ground. "I was afraid all the way that I'd find you both drowned. It was Alix suggested coming back for you, Miss Trude."

Joe assisted the teacher to a seat in the wagon.

"You get in with Miss Trude and drive, Alix, I'll ride behind."

Alix folded his dry coat about the shoulders of the teacher, then followed the instructions of his chum. Two rather crestfallen boys they were as they rode slowly homeward after the adventures of the day.

"It'll take a week for the men to clear out the road," said Alix. "I'd no idea we were going to have such a wind. I talked simply to scare you this afternoon when the thunder cracked so loud. It wasn't nice of me was it Miss Trude?"

"I suppose you enjoyed it at any rate," she returned.

"At first we did," admitted Alix, "but after we left the schoolhouse and saw that storm coming, knowing you were all alone back there, I tell you it set us boys to thinking, didn't it, Joe?"

"That's what it did," agreed the boy. "I never felt so cheap in my life. If—if you'd been drowned, or blown away, Miss Trude, I'd have never forgiven myself. I think my dreams would have been haunted till I'd die of shame and grief. It's bad enough anyhow. I can see that your gown is quite ruined by the muddy water of old Rudiman, for which I think you'd be justified in sending in a bill for damages."

A smile irradiated the face of Miss Trude. The serious countenances of her two boys gave her cause for much congratulation. Although both were forever teasing, she knew they were pure gold at heart, and she was quite ready to believe the incidents of this day would prove of lasting benefit to them both—perhaps to herself as well.

Miss Trude did not lose a day from her duties because of what the young teacher designated as her one bad afternoon.

"Do you know, teacher," said Alix one day, some weeks later, "that adventure at Rudiman's creek cost me several nights loss of sleep, and I know it's made Joe and me better boys; don't you think so?"

"You were very good before, only a bit thoughtless," smiled she. "I am sure we all, I as well as you boys, learned a lesson that bad afternoon that not one of us will ever forget."



"By the Way"

THE SURE TEST.

Johnny—"Huh! I bet you didn't have a good time at your birthday party yesterday."

Willie—"I bet I did."

Johnny—"Then why ain't you sick today?"

WOULDN'T TAKE A CHANCE.

"Why don't you get out and hustle? Hard work never killed anybody," remarked the philosophical gentleman to whom Rastus applied for charity.

"You're mistaken dar, boss," replied Rastus; "I'se lost fowh wives in dat way."

HEATED.

Customer (angrily)—"Waiter, there is a dead fly in my soup! This is the second time such a thing has happened."

Waiter (sympathetically)—"Ah, the poor things! It's boiling 'em that kills 'em!"

A COOL ONE.

Jenkins—"How is it that you never suffer from the cold?"

Winderby—"Oh, I'm always wrapped up in my work!"

Visitor—"How long has this man worked for you?"

Farmer—"About four hours."

Visitor—"I thought he had been here longer than that."

Farmer—"Yes, he has been here for four weeks."

ADVICE TO A SOLDIER.

"Remember, my son," said his mother as she bade him good-bye, "when you get to camp try to be punctual in the mornings, so as not to keep breakfast waiting."

JOHNNY ON THE SPOT.

A youngster went into a merchant's busy office. Not getting immediate attention he approached the boss and said: "Excuse me, sir, but I want a job and I'm in a hurry."

"You do, eh?" said the merchant. "And why are you in such a hurry?"

"Got to hurry," replied the youngster. "Left school yesterday and I haven't struck anything yet. I can't waste time and if you've got nothing I'll be moving on. The only place I can stop long is where they can pay me for it."

"When can you come?" asked the surprised boss.

"Don't have to come," was the quick reply. "I'm here now, and would have been at work before this if you'd just said so."

Today's Riddle

WHAT IS THAT
WHICH WORKS
WHEN IT PLAYS,
AND PLAYS WHEN
IT WORKS?

(Answer)



POWER - LIGHT For the Farm



Electrify Your Farm!

The Silent Alamo supplies brilliant illumination in the house. You merely press a button. Floods the barns and other buildings with safe light. Adds many hours to working time.

Provides running water for house and barn. Supplies power to run small power machinery, operates the churn, separator, washing machine, electric iron, etc. It's the greatest time and labor-saver ever invented.

Expensive? No! Electric power and light is an investment. Especially if you select the quietest running plant of all—the plant from which ruinous vibration has been scientifically eliminated—the

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The Silent Alamo has a rotating sleeve-valve motor—the quietest running, most powerful and durable used on any lighting plant. No valves, cams, or push rods to cause trouble. All carbon trouble and spark plug fouling is done away with. Due to this quiet Idle Super-Silent motor and scientific balancing of weight there is

No Ruinous Vibration

A highly perfected rotating force-feed pump system of lubrication insures positive oiling at all points. Patented throttle governor automatically controls motor speed. Gives a tapered charge to batteries, which insures maximum battery life. All parts are enclosed. When oil is low motor automatically stops. When water is low motor automatically stops. Motor stops when batteries are fully charged. It is practically trouble-proof.

Our Silent Alamo Book gives vital pointers on how to select an electric light and power plant. Write for free copy. In the meantime see the local Silent Alamo man or write us for the name of nearest agent.



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NO MONEY DOWN

—YEAR TO PAY



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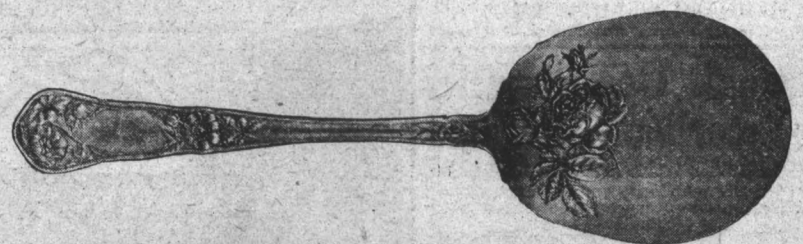
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We send you any size without a cent of advance payment. No deposit; no C. O. D.; no references. If you keep it, make first payment 60 days after arrival; balance in equal 60-day payments. Otherwise return it and we will pay freight both ways.
Compare Point for Point with others costing a great deal more. Jacket-hopper water cooled. Perfect lubrication. Perfectly balanced fly wheel. Order Before Price Advances. Increasing costs will soon force an advance in price. Get yours now at present lowest bed-rock price—and take a whole year to pay. Free Book 25 gives you all the facts. Also 601 reasons why you should have a Majestic—testimonials from users in every state. Wonderful bargains in cream separators and all kinds of farm equipment. Write for it.
The Hartman Co., 4043 LaSalle Street Dept. 1948 Chicago

CORN HARVESTER. One man, one horse, one row, self-gathering; equal to a corn binder; sold direct to farmers for 23 years. Only \$25. with fodder binder, shipped by express to every state. Free Catalog showing pictures of Harvester. CORN HARVESTER CO., Salina, Kas.

Wanted to buy—second hand two wheel tractor. Al. H. Chalmers 6-12 HP. preferred. Address J. Piotrowski, 2250 Armitage Ave. Chicago, Ill.

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Handsome Berry Spoon of the well known Community Silver Reliance Plate. A ten-year guarantee by the Oneida Community, with every spoon. Packed in suitable, individual cases. Popular rose design. Length, nine inches.

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The Michigan Farmer, Circulation Dept., Detroit

Mention The Michigan Farmer When Writing to Advertisers

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DOUBLE-BODY UNDERWEAR combines maximum protection and comfort with minimum bulk and weight. DOUBLE-BODY UNDERWEAR is constructed with a double thickness of fabric over the chest, abdomen and back. The arms and legs are covered with but a single thickness of fabric. This is the ideal undergarment for those who do not want to hamper their movements by wearing heavy and bulky outer clothing.

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Sears, Roebuck and Co.
Chicago

SINGLE FABRIC IN SLEEVES AND LEGS

State Grading and Packing Laws

(Continued from page 272).

this act and his officers, employees and agents are authorized to enter upon the premises of any person within this state for the purpose of inspecting packages of apples and securing evidence of violation of this act, and the said Dairy and Food Commissioner is hereby authorized and empowered to make, promulgate and enforce such regulations as may be necessary for interpreting the grade specifications prescribed in this act, and for otherwise enforcing its provisions: Provided, however, that any grades or classes of apples packed in closed packages, or any requirements for making closed packages containing apples, mandatory as applying to interstate commerce, which may hereafter be established by the authority of the congress of the United States, shall forthwith, as far as applicable, be established and promulgated by the Dairy and Food Commissioner as official grades, classes and marks for apples packed in closed packages in the state of Michigan.

367. Sec. 11. All acts and parts of acts in conflict with this act are hereby repealed.

Standard Barrel.

(Act No. 88, Public Acts of 1917).

AN ACT to fix the standard barrel for fruits, vegetables, and other dry commodities.

368. Section 1. The people of the state of Michigan enact: The standard barrel for fruits, vegetables, and other dry commodities other than cranberries shall be of the following dimensions when measured without distention of its parts: Length of staves, 28½ inches; diameter of heads, 17½ inches; distance between heads, 26 inches; circumference of bulge, 64 inches, outside measurement; and the thickness of staves not greater than four-tenths of an inch: Provided, that any barrel of a different form having a capacity of 7,056 cubic inches shall be a standard barrel. The standard barrel for cranberries shall be of the following dimensions when measured without distention of its parts: Length of staves, 26½ inches; diameter of heads, 16¼ inches; distance between heads, 25¼ inches; circumference of bulge, 58½ inches, outside measurements; and the thickness of staves not greater than four-tenths of an inch.

369. Sec. 2. It shall be unlawful to sell, offer, or expose for sale in this state, or to ship from this state, to any other state, territory, or the District of Columbia or to a foreign country, a barrel containing fruits or vegetables or any other dry commodity of less capacity than the standard barrels defined in the first section of this act, or subdivisions thereof known as the third, half, and three-quarter barrel, and any person guilty of a wilful violation of any of the provisions of this act shall be deemed guilty of a misdemeanor and be liable to a fine not to exceed \$100, in any court of this state having jurisdiction: Provided, however, that no barrel shall be deemed below standard within the meaning of this act when shipped to any foreign country and constructed according to the specifications or directions of the foreign purchaser if not constructed in conflict with the laws of the foreign country to which the same is intended to be shipped.

370. Sec. 3. Reasonable variations shall be permitted and tolerance established by rules and regulations made by the director of the bureau of stan-

dards and approved by the Secretary of Commerce. Prosecutions for offenses under this act may be begun upon complaint of local sealers of weights and measures or other officer of the state appointed to enforce the laws of the said state, relating to weights and measures: Provided, however, that nothing in this act shall apply to barrels used in packing or shipping commodities sold exclusively by weight or numerical count.

371. Sec. 4. This act shall be in force and effect from and after the first day of September, 1917.

372. Sec. 5. An act entitled "An act to regulate the size of dry or packing barrels for fruits, roots and vegetables," being section 6,254 of the Compiled Laws of 1915, be and the same is hereby repealed.

Fruits and Vegetables.

(Act No. 207, Public Acts, 1913).

AN ACT to prevent fraud and deception in the sale of Michigan grown fresh fruits and vegetables, and to provide penalties for violations of this act.

206. Section 1. The people of the state of Michigan enact, In this act, unless the contents otherwise requires, the term "closed package" shall be construed to mean a barrel, box, basket, carrier or crate, of which all the contents cannot readily be seen or inspected when such package is prepared for market. Fresh fruits or vegetables in baskets or boxes, packed in closed or open crates, and packages covered with burlap, tarlatan or slat covers shall come within the meaning of the term "closed package." None of the provisions of this act shall apply to other than Michigan grown fruits and vegetables.

207. Sec. 2. Every person who, by himself or by his agent or employee, packs or repacks fresh fruits or vegetables in closed packages intended for sale in the open market, shall cause the same to be marked in a plain and indelible manner, as follows:

First. With his full name and address, including the name of the state where such fresh fruits and vegetables are packed, before such fresh fruits or vegetables are removed from the premises of the packer or dealer.

Second. The name and address of such packer or dealer shall be printed or stamped on said closed packages in letters not less than one-quarter inch in height.

208. Sec. 3. No person shall sell or offer, expose or have in his possession for sale in the open market, and fresh fruits or vegetables packed in a closed package and intended for sale, unless such package is marked as is required by this act.

209. Sec. 4. No person shall sell or offer, expose or have in his possession for sale, any fresh fruits or vegetables packed in a closed or open package, upon which package is marked any designation which represents such fruit as "No. 1," "Finest," "Best," "Extra Good," "Fancy," "Selected," "Prime," "Standard," or other superior grade or quality, unless such fruit or vegetables consist of well-grown specimens, sound, of nearly uniform size, normal shape, good color, for the variety, and not less than ninety per cent free from injurious or disfiguring bruises, diseases, insect injuries or other defects, natural deterioration and decay in transit or storage excepted.

226. Sec. 5. No person shall sell or

THE SELF-OILING WINDMILL

has become so popular in its first four years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil, preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load. We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws. Write AERMOTOR CO., 2500 Twelfth St., Chicago



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Wanted Man and Wife to work farm. Must be ambitious man and not afraid to work and run the farm in capable manner. Electric lights, hot and cold water, bath and heat furnished. Good wages to the right man. Give all particulars with reference. Michigan Farmer, Box 8 823.

Milch Goats For Sale. Saanen and Nubian Buck for service. J. W. Dasef, Stanton, Mich.

BUY FENCE POSTS direct from forest. Prices delivered your station. M. M. care of Michigan Farmer.

Flemish Giant Rabbits, dark steel black. Grays 2 months old. \$3.00 & \$2.00 each. Pedigreed stock. DAVID GAY, 709 Norris St., Ypsilanti, Mich.

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You can buy this tested quality-grade paint and our special red barn paint at factory prices now. Freight prepaid. There is an Arlington paint for every use—silos, interior and exterior house paints, implement enamels and MORE-LYTE, the interior sanitary white enamel for dairies. Arlington has stood for quality paint for 17 years. All paint sold on money-back guarantee. Try some and return what's left if not exactly as represented. Reference any Canton bank. Write at once for color card, prices and directions for ordering. Get a quality, guaranteed paint at factory prices

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Easily Sawn By One Man. Easy to move from cut to cut. Make big profits cutting wood. Cheap and easy to operate.

OTTAWA LOG SAW

Does 10 men's work at one-tenth the cost. Makes work easy. Engine can also be used for running pumps and other machinery. Saw blade easily removed. Write for our low price. 10-Year Guarantee.



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Trained American Fox Hounds Rabbit and Skunk dogs all ages. Send stamp. W. E. LECKY, Holmesville, Ohio.



offer, expose or have in his possession for sale, any fresh fruits or vegetables packed in any package in which the faced or shown surface gives a false representation of the contents of such package, and it shall be considered a false representation when more than twenty per cent of such fresh fruits or vegetables are substantially smaller in size than or inferior in grade to, or different in variety from, the faced or shown surface of such package, natural deterioration and decay in transit or storage excepted.

227. Sec. 6. Every person who, by himself, his agent or employe, knowingly violates any of the provisions of this act shall for each such offense, be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$10, or by imprisonment in the county jail for a period not exceeding thirty days, or both such fine and imprisonment in the discretion of the court.

Standard for Baskets.

(Act No. 74, Session Laws of 1917).
AN ACT to fix standards for climax baskets for grapes and other fruits and vegetables, and to fix standards for baskets and other containers for small fruits, berries and vegetables, and to punish violators of the same.
350. Section 1. The people of the state of Michigan enact, that standards for climax baskets for grapes and other fruits and vegetables shall be the two-quart basket, four-quart basket and twelve-quart basket, respectively.

(a) The standard two-quart climax basket shall be of the following dimensions: Length of bottom piece, nine and one-half inches; width of bottom piece, three and one-half inches thick; thickness of bottom piece, three-eighths of an inch; height of basket, three and seven-eighths inches, outside measurement; top of basket, length eleven inches and width five inches, outside measurements. Basket to have a cover five by eleven inches, when a cover is used.

(b) The standard four-quart climax basket shall be of the following dimensions: Length of bottom piece, four and one-half inches; thickness of bottom piece, three-eighths of an inch; height of basket, four and eleven-sixteenths inches, outside measurement; top of basket, length fourteen inches; width, six and one-fourth inches, outside measurement. Basket to have cover six and one-fourth inches by fourteen inches, when cover is used;

(c) The standard twelve-quart climax basket shall be of the following dimensions: Length of bottom piece, sixteen inches; width of bottom piece, six and one-half inches; thickness of bottom piece, seven-sixteenths of an inch; height of basket, seven and one-sixteenth inches, outside measurements; top of basket, length nineteen inches; width nine inches, outside measurement. Basket to have cover nine inches by nineteen inches, when cover is used.

351. Sec. 2. That the standard basket or other container for small fruits, berries, and vegetables shall be of the following capacities: namely, dry one-half pint, dry pint, dry quart, or multiples of the dry quart.

(a) The dry half-pint shall contain 16 8-19 cubic inches;

(b) The dry pint shall contain 33 6-10 cubic inches.

(c) The dry quart shall contain 67 2-10 cubic inches.

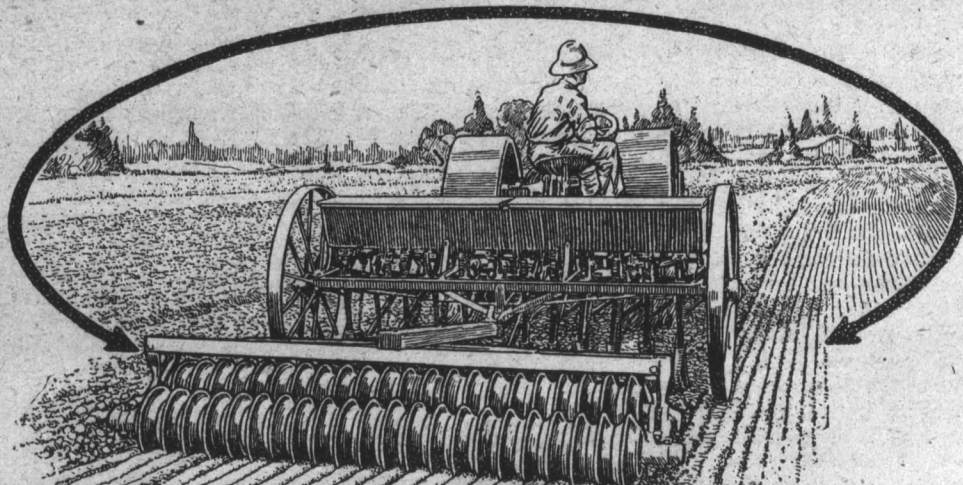
352. Sec. 3. That it shall be unlawful to manufacture for shipment, or to sell within the state any climax baskets or other containers for small fruits, berries, or vegetables, whether filled or unfilled, which do not conform to the provisions of this act; any person guilty of a wilful violation of any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not exceeding \$25.

(Continued on page 291).



TRADE MARK REG.

It Cultivates — It Packs



Culti-Pack After The Drill

Culti-Pack your soil after the grain drill or seeder. You can pull the Culti-Packer and seeder with a tractor at almost no extra cost—or you can pull them separately with horses.

Here are five things you will gain by so doing:

1. Quicker germination especially in dry weather, due to firming of soil about seed, and the moisture-saving mulch on top.
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3. Fewer weeds because the crop will get an early start and choke out the weeds (which are unevenly planted).
4. Less crusting of soil on account of the ridged condition in which it is left.
5. Better root development due to the fine, compact, moist bed of soil. These and hundreds of other soil facts are illustrated and described by leading soil experts in our 56-page book, "Soil Sense."

Ask your dealer for a copy.

CULTI-PACKERS for sale by your local implement dealer.

The Dunham Company, Suburb of Cleveland **Berea, Ohio**

"The Show Window of Michigan"

West Michigan Fair

Grand Rapids, September 15, 16, 17, 18, 19

A complete and great exposition of the products of the farm and the orchard. Conducted strictly upon the lines of the real agricultural and live stock fair with exhibits that are unequaled in quality and seldom surpassed in volume.

No Michigan farmer has seen the real fair until he has visited this one.

We do not deal a great lot in the spectacular but every year show something new. This year's novelty is

Lieut. Ormer Locklear

changing planes in mid air—a feat no other aviator has attempted. There are five big aeroplane acts in the Locklear show, which he puts on for us September 16, 17, 18.

Reduced Rates On All Michigan Railroads

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Michigan Crown
Winter Vetch, Rye and Vetch, June and Mammoth Clover, Alfalfa, Sweet Clover, Alsike and Field Peas. Known varieties of Garden Peas, Beans and other Garden Seeds, if High Germination and 1919 crop.

Send samples for test.
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RED ROCK WHEAT

Grown from certified seed; absolutely pure and free, from smut, no rye, no foul stuff. In 10 bu. lots, \$2.50, bags extra. Wesley Hile, R. D. 8, Ionia, Citizens phone. Saranac, Mich.

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BARN PAINT \$1 PER GALLON

Get factory prices on all paints. We guarantee quality. We pay the freight.
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A good way to get money for Thrift Stamps, Liberty Bonds, or to help in the high cost of living. From two to three dollars a week can be earned with little effort.

Details furnished upon request.

THE MICHIGAN FARMER,

Please Mention The Michigan Farmer When Writing to Advertisers

Our Boys' and Girls' Department

From Boy to Man--with Sheep

By E. L. Vincent

AMONG my earliest recollections stand out prominently the sheep which my father kept on his farm in the western part of New York state. One such flock holds a prominent place in my memory. It was made up entirely of Merino sheep of choice quality, by which we set great store. The days when we went to wash our sheep before shearing were red-letter days in my boyhood life, for the creek in which this work was done was some three miles from our home and I was privileged to go with father and the other men and help to corral the sheep in the little yard close down by the water's edge, from which they were taken in their turn to be dipped, back-deep, into the creek and their wool cleansed from the dust and other accumulations of the winter then at an end. My father was very particular that the wool he offered for sale should be as clean and free from any objectionable matter as possible. In those early days I came to love sheep, and my love for these animals never has faded away since.

Then came the great War of the Rebellion, which robbed us of father, for he never came home, seeing his last service at the battle of Gettysburg; but mother and her six boys and girls kept the sheep, hoping at first that the war would end and father would come back to shepherd not only his flock of sheep, but the other little flock he loved so well. All through those years it was mother and I—for I was the oldest of the six—who cared for the sheep. I remember that at one time we kept a little group for a neighbor who had not as much pasture as he needed, on

the old plan then in force among the farmer folk of our neighborhood, doubling once in four years. I do not remember the number in that flock, but if there were ten, then at the end of

around, always seeking the best, until we had Shropshires, a little group of which is shown in the accompanying illustration. The picture was taken by our youngest son.



Sheep Have Always Held a Good Place in Our Farm Life.

the four-year term we returned the original ten and had ten for our own profits. In those later years at home it fell to me to wash and shear the sheep myself, which I did more than once.

After we bought a farm for ourselves in the southern tier of New York state, in Broome county, we had sheep of our own. The day of the Merino's had gone by in that section and we had little by little shifted

The days of washing wool as described earlier in this story had then gone by, the wool being sold unwashed, but one of the early summer jobs was shearing the sheep, a job from which I was later relieved by our oldest son when he was strong enough for such work. Many a night have I gotten up in the spring of the year to go down to the barn to see how the ewes were coming on when the lambs were coming; and when I was not at

home because of absence at the county seat, serving on the board of supervisors, or at the state capitol where I served as member of the legislature, mother and this oldest laddie were the ones who made these trips, caring for the wee lambkins and attending to the wants of the mother sheep. More than one of these was thus tided over when chilled, by being brought into the house and warmed by the kitchen stove until the breath of life came back to it.

The first sheep our oldest boy ever had was a gift of the fine old farmer grandfather, whose farm was three miles away, on the hills of Broome county, at Mt. Ettrick, where lived as fine a body of Scotch farmer shepherds as this country ever knew, one of whom was 'Squire William Hogg, a direct descendant of the famous Ettrick Shepherd of Scotland. It was grandfather's plan to give every grandson born into the family a lamb as soon as he was large enough to keep and take care of it; and that little Nan was beloved as few lambs ever were, and Laddie had the offspring for his own for many years, until he had a nice flock of his own.

So that sheep have always held a good place in our farm life, and no one rejoices more than we do to see these creatures coming to their own once more. The farmers of Broome county have lately sold their wool on the co-operative plan for fifty to sixty cents a pound, realizing by this method five or six thousand dollars more for the clip than they otherwise would. And we hope for better things for the days to come.

Prize Letter Contest--"The Circus"

FIRST PRIZE.

The Circus.

One day my mother, sister and myself went to the city to see the circus, and as we wanted to see the whole performance we went to the grounds right after dinner.

First, we went into a large tent where they kept the animals and there we saw elephants which caught the peanuts which the people threw to them, with their trunk, and also some camels which had two humps and others one. One animal which I saw was the blood-sweating hippotamus, and he certainly was a big, queer-looking beast.

About two o'clock we went into a still bigger tent, and here we took our seats, for in this tent we were to see the show.

Soon the clowns began to come in and they looked awful funny. After they had gone out ladies came in who swung on ladders, and others swung with the ropes held between their teeth.

Horses, ponies and dogs together did tricks, and there also was a man and woman who walked on a rope.

Something that was very pretty were the different groups of statues composed of ladies all dressed in white and white horses. They were motionless and looked as though they had been carved out of marble.

We certainly had some good laughs at the different clowns who came and went between each performance.

After that we went home, after a

day not quickly forgotten.—Ruth E. Johnson, Gowen, Mich. Age twelve years.

HONORABLE MENTION.

The Circus.

On August 2 the combined circus of Ringling Bros. and Barnum & Bailey came to Lansing. My papa took my two sisters and little brother and myself. I saw many strange things. The parade was very nice. First the horses came, and little ponies, the camels,

the elephants, then came large wagons, some of them had lions in, some bears, and tigers. I went into a side show and saw two little ladies and three little men. They were about three feet tall. One little lady and man had just got married. They seemed very happy and they danced for us.

I saw a wild man, a man that was eight feet six inches tall. He was very large. I cannot tell you all the things I saw, but these are the ones I remember the best. We got home at ten o'clock at night. I was very tired, but

was glad I had gone.—Lucille Patrick, Dansville, Mich. Age ten years.

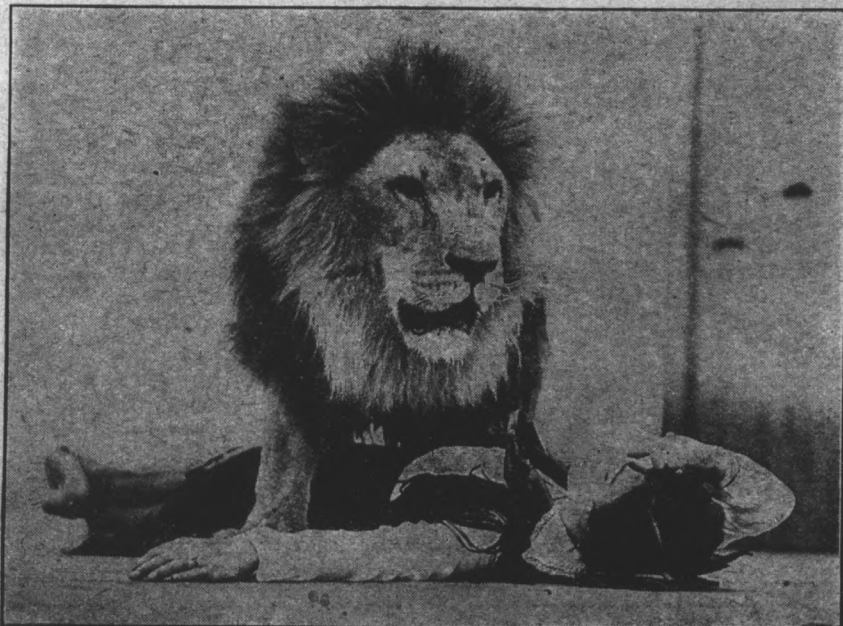
HONORABLE MENTION.

The Circus.

Oh! the thrills that I experienced when I was told that on the morrow we would leave early for the circus. The day of the circus dawned bright and clear. We left for the city about twenty miles away. We arrived about eleven-thirty, just in time to see the parade, which was the longest I have ever seen. After the parade we lunched at a cafe and about two o'clock left for the circus. It took us about ten minutes to purchase our tickets and followed the crowd into the tent which contains the animals.

Among the animals that I had never seen and are uncommon to most of the circuses, are the giraffes, hippotamus, kangaroo, zebra and tigers. The common ones were bears, elephants, monkeys, camels, seals and a few others. Upon arriving at the big tent we bought some peanuts and took our seats. Soon the bugles were blown by the heralds and all the performers paraded around the arena. Among them being Cinderella, Queen of Sheba, many court jesters, king and queen, knights of the middle ages. Chinese princes and men, hunters, huntresses and dogs, made up the parade.

Among the many things that happened in the circus rings was a wonderful slack wire dancer, a bareback rider who turned a somersault through a hoop, acrobats, trapeze performers,



The Lady Lion Trainer Takes Big Risks.

clowns who did many funny things. Wonderful living statues, trained dogs, elephants and bears. The circus had three rings and three stages and lasted about two hours. After leaving the tent we saw some side shows, got some red-hots, orangeade, ice cream and crackerjack.

A tired party left for home about five thirty after a most exciting day.— Louise Gregory, Bay City, Mich. Age fifteen years.



GIRL ENTERS SHOW RING WITH RHODE ISLAND REDS.

DOROTHY YOUNT, Lincoln county, N. C., is the proprietor of the best "one-ring circus" ever owned and operated in the Tarheel State, according to her own statement. Instead of using clowns, trained ponies, troops of acrobats, elephants, snake charmers, and wild western cowboys to disport themselves and amuse the spectators, Dorothy works with Rhode Island Red hens, and her fowls cater to the plaudits of the state at large.

Two years ago the poultry club agent of North Carolina, a representative of the United States Department of Agriculture, examined Dorothy's flock. He admired the birds and suggested that she exhibit a few at the state fair that season, and he promised to return in the fall and assist in selecting her exhibition fowl. That is how Dorothy happened to go into the "circus business." At the first show she attended she was awarded first and second honors on a Rhode Island Red cockerel, and first and third prizes on a Rhode Island Red pullet, and furthermore, sold all her winners at high prices before she left the show. Later in the winter, at Wilson, N. C., she exhibited and captured other honors. At this exhibition the judges pronounced her cockerels fit to show in any competition.

More Prizes Won.

Then Dorothy assembled a flock of forty females and three males, and in the spring of 1918 began keeping records on her birds. That year she sold \$178 worth of foundation stock, some of the cockerels selling as high as \$15 apiece, while the pullets brought as much as \$12.50 each. Dorothy culled out and marketed \$59.22 worth of unsatisfactory fowl from the flock and disposed of \$72.50 worth of eggs for hatching purposes, as well as \$32.30 worth of market eggs. During this period her feed bill totaled \$139, which left her a net return of \$209.02 from her forty hens.

Our Prize Contest

TO the boy or girl writing the best letter, of less than 250 words on each of the following we will give a cash prize of \$1.

Subject of letter to be mailed by September 15:

"The first day of school."

Subject of letter to be mailed by September 22:

"My best Kodak Picture."
(Inclose the picture with the letter).

Write neatly with ink on one side of the sheet only. Give your age, full name and address.

Address your letters to The Boys' and Girls' Dept., Michigan Farmer, Detroit, Mich.

REMINGTON UMC

Look To Leadership Every Time

THE SAME leadership in industry which saves America from the perils of a laggard nation, puts pleasure and profit in modern farming. And it gives you in Remington UMC the same modern service for your shooting.

No other manufacturer has made so many important improvements in arms and ammunition as has Remington UMC. The latest in shot shells is the wonderful Wetproof improvement. The wettest day, the leakiest boat, can not spoil your shells if they are Remington UMC Wetproof "Arrow" or "Nitro Club" smokeless or "New Club" black powder.

No matter how "wet," they will not swell, bulge, broom out at the crimp, mush up or scuff. Work them through your Modern Remington UMC autoloading or pump gun and they will slide as smoothly, fire as surely and give the same superior speed, pattern and penetration for which Remington UMC steel lined speed shells are famous.

The best sporting goods and hardware dealers all over the United States—in all more than 82,700—recognize Remington UMC leadership by extending Remington UMC Service to Shooters.

For Sale In Your Nearest Town

Use Rem Oil to Clean and oil your gun—the combination Powder Solvent, Lubricant and Rust Preventive.

THE REMINGTON ARMS UNION METALLIC CARTRIDGE COMPANY, Inc.
Largest Manufacturers of Firearms and Ammunition in the World
WOOLWORTH BUILDING NEW YORK

Ring Necked Pheasants

We can now make shipments of our birds. They will lay next spring—are easy to raise and do not eat one-half as much as chickens. These birds are not subject to disease—are hardy and unrelated. You can sell their young and eggs at good prices—they are much more profitable than chickens.

Single Pheasants \$ 6.00 Each
5 Hens, 1 Cock (Pen) 30.00

Genuine Wild Mallard Ducks

Guaranteed to be from nothing but genuine Wild Trapped stock—not the coarse semi-wild strain. Will lay next spring. Fine eating—good decoys—and money makers.

Single Ducks or Drakes \$ 5.00 Each
5 Ducks, 1 Drake (Pen) 25.00

Bloomfield Giant Bronze Turkeys

We have some of the young for sale, from our wonderful 55 pound tom "BLOOMFIELD KING." Why not buy one of our fine extra toms and improve your flock.

Pullets . . . \$ 15.00 Each
Cockerels . . . 20.00 to 35.00 Each
Hens . . . 20.00 Each
Toms . . . 35.00 to 50.00 Each

We are accepting orders now for eggs from our Pheasants, Wild Mallard Ducks, Turkeys and Single Comb Rhode Island Red chickens for spring delivery. Orders will be filled in the rotation that they are received.

Bloomfield Farms

America's Largest Game Farm

1714 Penobscot Bldg.

Detroit, Michigan

Get your order in early and send check with it. Send for free descriptive booklet of instructions.

POULTRY

Buff Leghorns, and White Leghorns. 400 early hatched Cockerels from great laying strains \$1.50 each.
Dr. WILLIAM SMITH, Petersburg, Mich.

HOMESTEAD FARMS

We want the farmer poultrymen and women of Michigan to know the Homestead Farms work: it is a work that unites the interests of people.

Every bird we send out is guaranteed to be true to representation; any bird not satisfactory may be returned.

Pullets and Yearlings—White Leghorn yearling Pullets in lots of 6, 12, 25 or 50. A limited number of Barred Rock spring Pullets.

Cockerels—Barred Rocks, White Rocks, White Orping tons, S. C. Black Minorcas, S. C. and R. C. White and Brown Leghorns, Anconas.

Guineas, Ducks, Geese—White Pekin, Gray Tonlouse, Turkeys—Bronze, White Holland, Bourbon Reds.

Rabbits—Belgians, New Zealands, Rufus Reds, Flemish Giants.

Please send for Fall Price List and for Spring Catalog, if you do not have one already.

STATE FARMS ASSOCIATION,
Bloomington, Michigan

Barred Rocks Exclusively. Baby chicks all sold. Thanks to all our customers. Order early for next season: H. H. Pierce, Jerome, Mich.

Barred Rocks egg contest winners, eggs from strain with records to 230 a year. \$2.00 per setting prepaid by P. P. Circular free.
FRED ASTLING, Constantine, Mich.

Fowler's Buff Rocks Cockerels \$4 up. Utility eggs for hatching \$2.00 for 15.
R. B. FOWLER, Hartford, Mich.

For sale "Buy the Best" eggs for hatching from 200 Egg strain Barred Plymouth Rock \$2.00 per 15, \$5.00 for 45 eggs. H. B. PROCTOR, Grand Haven, Mich.

March Hatched R. I. Red Cockerels

Both Combs. Write for prices and order early. Interlakes Farm, Box 39, Lawrence, Michigan.

R.C. Brown LEGHORNS, Pekin Ducks, W. Chinese Geese. Place orders early for young stock. Mrs. Claudia Betts, Hillsdale, Mich.

S. C. B. Minorcas. Eggs from pen 1, \$3.00 per 15. from pen 2, \$2.00 per 15. Incubator eggs \$7.00 per hundred.
B. W. MILLS, Saline, Mich.

Silver Golden and White Wyandottes young breeding stock after Oct. 1st. Choice cockerels \$5 to \$15. Write your wants now. O. W. Browning, R2 Portland, Mich.

S. C. Ancona Cockerels April-May hatch. Best laying strains \$2.50 each. A few hens \$2 each. S. J. Edwards, R. 1, Sears, Mich.

Single Comb White Leghorn Cockerels, Ferris 230-254 egg strain April and May hatch, from \$1 to \$2.50. Alva Stengena, Portland, Mich.

LOOK BABY CHICKS \$13 A 100 UP

By Special Delivery Parcel Post, postage paid 20 different thoroughbred breeds. Utility & Exhibition grades. Live delivery guaranteed. Capacity 100,000 weekly. Catalog free. Nabob Hatcheries, Gambler, Ohio.

Some Special Clubbing Offers

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Michigan Farmer\$1.00
Cloverland Magazine 1.00
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Regular price, one year.....\$3.00
OUR PRICE ONLY \$2.10

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Michigan Farmer\$1.00
Hoard's Dairyman 1.00
Woman's Magazine 1.00

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Swine Breeders' Journal..... .50
Today's Housewife 1.00

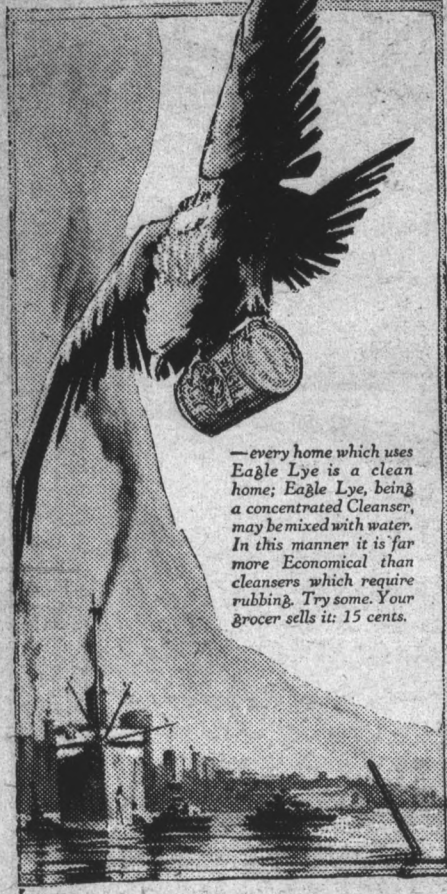
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—every home which uses Eagle Lye is a clean home; Eagle Lye, being a concentrated Cleanser, may be mixed with water. In this manner it is far more Economical than cleansers which require rubbing. Try some. Your grocer sells it: 15 cents.

Cleans upon contact
—instantly!
—no rubbing!

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1,000,000 ROLLS { Write for Free Sample Catalog of 87 new designs and colorings. Per Roll Why use Paint when 52c will paper Room 12 x 14, 9 ft. high Martin Rosenberger, 811 RACE STREET, CINCINNATI, O.

Please Mention The Michigan Farmer When Writing to Advertisers.

Woman's Interests

Community Work Shops

IN a series of three articles in recent issues of a widely read women's magazine, Zona Gale launches her idea of the coming methods in housekeeping. To begin with Miss Gale divides a housekeeper's work into four classes, cooking, cleaning, laundry work and chamber work. A real housekeeper may be excused a smile at Miss Gale's glib summing up of our duties. If that were all there is to it, who of us would need help? It is the thousand and one little things which nobody notices unless we leave them undone that wear us out.

At any rate, taking her classification as it stands, she is going to settle the whole thing by sending mother out as a wage earner, hiring an eight-hour-a-day trained specialist to do these four things, bundle the children off to school and inaugurate a system of community kitchens to send in the meals. She, with poetic license, fails to say what is to be done with the children before they can go to school, who is to nurse the baby during its early months or who will walk the floor with it nights. For, of course, mother being a wage earner, will need her sleep just as poor dad needs his now.

Taking these articles at their face value, there is still the germ of a good idea in them. That is the thought of community kitchens. It will probably be many a year before farm homes would come to the idea of buying all their meals from a community kitchen, and in fact it is doubtful whether such a scheme would pay in the country. Distances are so great, transportation

facilities so limited that it would scarcely be feasible. Though with "jitney" service it might be worked out in more thickly settled farming districts. But cooking is only one of the many forms of work which go on in a farm kitchen.

A farm woman told me the other day with a tired sigh, that if she could only get someone to do her washing she wouldn't ask for anything more in life. How many thousands of farm women, who this morning are tugging heavy pails of water and lifting tubs which they know they have no business to touch, can echo her sentiments? Why couldn't you have a community laundry, a cooperative affair where your work could be done for a moderate price? You have cooperative creameries which are successful, and a few districts already have cooperative laundries. The scheme is entirely feasible and easily put into execution. All it needs is a leader who will talk long enough and convincingly enough to get the thing started. Once relieved of the drudgery of wash day what woman would voluntarily go back to it?

There's your canning, too. What a lot of time it takes, just in the busiest season when your garden and poultry demand extra time and there are always two or three more to cook for. Why couldn't you have a cooperative

cannery? The girls who have been learning how in the clubs could do the neighborhood canning and earn their own pin money. In a few schools they are already trying it out a little. The women send their own cans and rubbers with the fruit or vegetables and the girls do the work for three cents a can. Wouldn't it be worth that much to you to get the canning done?

Why wouldn't a cooperative bakery be practical? I am not sure of this figure but I am almost positive that one girl told me she and her mother baked up a barrel of flour a month. Often they are up scrubbing the floor at midnight. They might get that scrubbing out of the way by four o'clock in the afternoon if someone else baked those pies and cakes and all those countless loaves of bread.

It is in such ways as these that the farm women must get help if the girls are to be kept on the farm where they are so sorely needed. For certainly no up-and-doing 1919 girl is going to devote her young years to such grueling work as she sees her mother tied up to. One look at mother's drooping shoulders, tired face, roughened hands and fading complexion, is enough to decide daughter that life in a city with labor-saving devices is more to be desired than the broad, free expanse of the country, with all the hard work it entails.

DEBORAH.

It's Tomato Time

By Lydia M. Thornton

IN the home where tomatoes are a popular product of the garden, they will be found on the table twice a day, but if you become tired of the plain sliced or stewed article, try the following, some of which will make tasty supper dishes:

Escalloped Tomato.

Put cold meat of any kind—or of several kinds if you have them—through a meat chopper. In a buttered baking dish put a layer of sliced cold boiled potatoes, then a layer of the meat, over this a layer of sliced ripe tomatoes and a sprinkling of salt and pepper. Repeat until the dish is filled. Over the top put a scanty layer of bread crumbs dotted with butter. Pour in a cupful of rich sweet milk and bake forty minutes.

Tomatoes and Macaroni.

Boil one cupful of macaroni in salted water until tender. Cut six pieces of bacon in inch pieces and put in a pan over a slow fire until part of the fat is tried out; add one medium-sized onion chopped and the macaroni which has been previously drained. Stir in a small teaspoonful of sugar, a piece of butter, and one and a half cupfuls of stewed tomatoes. Cook fifteen minutes over a moderate fire, then set aside to cool. When quite cool, stir in the beaten yolks of two eggs; return to the fire and reheat, being careful to remove before the eggs begin to curdle, which will be at about the boiling point. Serve with a few very thin strips of sweet green pepper scattered over the top.

Tomato Scramble.

Beat four eggs slightly, season with salt and pepper and turn into a buttered frying pan. Stir the eggs until they are well scrambled but still soft; add

a cupful of stewed tomatoes, stir up once, then serve hot on buttered toast.

Tomato Rabbit.

To one-fourth cupful of milk add one teaspoon of butter, one-half teaspoonful of salt and a little red pepper and mustard, grate in one-half pound of mild cheese and heat slowly until cheese is nearly melted. Beat five eggs in a separate dish and add one cupful of stewed tomato—not too juicy—to the hot cheese mixture. Cook two minutes and serve on toast.

Tomato and Olive Salad.

Pare firm yellow tomatoes and cut them in pieces about as large as a chestnut. Mix with stuffed olives cut in half lengthwise and serve with a cooked or mayonnaise dressing.

Tomatoes with Dumplings.

Pare and slice the tomatoes and put in a kettle of a suitable size. Over the top put corn meal dumplings made of milk, salt, baking powder, and equal proportions of corn meal and wheat flour. Put the kettle over a moderate fire and cook until the dumplings are done. A little water should be put in the bottom of the kettle to keep the tomatoes from burning until the juice begins to cook out. Serve with slices of fried bacon over the top.

Beans with Tomato Sauce.

Cook the beans until all extra water has boiled out, leaving them almost as dry as baked beans. Serve with a sauce made of one cupful of strained tomato juice, one tablespoonful flour, one tablespoon butter, and season with salt and pepper. Stir the mixture well and cook until it thickens.

Tomato Oysters.

Remove inside from large smooth tomatoes. Chop two dozen raw oysters, one ounce chopped salt pork, one

25 Cents

Will buy
a Big Package of

POSTUM CEREAL

weighing over a
pound, net.

What are you paying
for coffee?

cupful bread crumbs, the juice and pulp taken from the tomatoes, one choppen onion, and salt and pepper to season. Fill the tomatoes with the mixture and bake in a moderate oven for thirty minutes.

Tomatoes and Cheese.

Slice large firm tomatoes, drain, salt and let stand in a cool place. When chilled, spread with a paste made of cream cheese or cottage cheese, finely chopped green pepper and a little paprika. Place two slices together sandwich fashion, and serve on lettuce with a little salad dressing to which a little finely chopped onion has been added.

Tomato Spice.

To three pounds of skinned and sliced tomatoes add one pint of vinegar, four cups of sugar and spices to taste. Boil down until it is the consistency of jam, taking care not to let the mixture scorch. This is delicious with cold meats.

Tomato Jelly Salad.

To a pint of strained tomatoes, seasoned, add one-fourth package of gelatin, mold in cups and when cold turn onto lettuce leaves and serve with salad dressing. A nice variation of this is the addition of a little finely chopped cucumber or stuffed olives.

BULLETINS FOR THINKING PARENTS.

The Michigan State Board of Health has a series of bulletins which every thinking parent should possess. They are "For Parents of Children," "For Girls and Young Women," "For Boys," "For Young Men." Write to the board of health at Lansing for these, asking for only the ones for which you have actual use.

MICHIGAN FARMER PATTERNS.

Any of the patterns illustrated may be secured by sending order to Pattern Department, Michigan Farmer, Detroit, enclosing the amount set opposite the patterns wanted.



No. 2907-2931.—Ladies Costume. The waist, 2907, cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 3½ yards of 27-inch material. Skirt, 2931, cut in seven sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 2½ yards of 50-inch material. Width of skirt at lower edge is about 1½ yards. Two separate patterns, 10c for each pattern.

No. 2926—Ladies' Dress. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires four yards of 54-inch material. Width of skirt at lower edge is about 1½ yards. Price 10 cents.



No. 2957—Girls' Dress. Cut in four sizes, 8, 10, 12 and 14 years. Size 12 will require four yards of 40-inch material. Price 10c.

No. 2808—Girls' Dress. Cut in four sizes, 6, 8, 10 and 12 years. Size eight requires 3½ yards of 27-inch material for the dress, and three fourths of a yard for the bolero. Price 10c.

Lily White

"The flour the best cooks use"

For exacting women who place quality above price; who realize true economy is practiced when complete satisfaction is obtained.

Of course, a good cook will be able to bake good bread and biscuits from the ordinarily good flour.

But if you desire something A LITTLE BETTER, more light, flakier—with a delicious flavor and splendid color—LILY WHITE should be used.

Money back if it does not give complete satisfaction.

VALLEY CITY MILLING COMPANY

GRAND RAPIDS, MICHIGAN.

Farms and Farm Lands For Sale

160-Acre Michigan Farm \$5500; Mile to

Depot town, on state road, 7 miles large city. 60 acres dark loam tillage, clay subsoil, 40-cow, woven wire, fenced pasture, home wood, good apple orchard, fruit, 8-room house, large modern stock barn, silo, poultry, hog, corn houses, all good. Owner retiring offers quick sale bargain, \$5500, terms. Details page 85 Catalog Bargains 19 States, copy free. STROUT FARM AGENCY, 814 BC Ford Bldg., Detroit, Mich.

We Have For Sale the following lands and stock. 1200 acres of fine improved lands, well located, easy terms. 150 acres situated 5 miles from Gladwin, on daily mail route, close to school, all fenced with woven wire. 20 acres under fine state of cultivation, 6 acres in fruit, 70 acres more pure water, good markets, excellent transportation and many social and educational advantages. Much desirable land at moderate prices. The book is fully informative about "The Bread and Butter State." If interested, send name and address, for a free copy of the Minnesota book, J. L. Edwards, Mgr. Agt. Sec., Room 635 U. S. R. R. Administration, Washington, D.C.

MINNESOTA farm opportunities are described and pictured in a book just issued by the U. S. R. R. Administration for the information of home seekers. Minnesota offers strategic location, dependable climate, fertile soils, abundant rainfall, pure water, good markets, excellent transportation and many social and educational advantages. Much desirable land at moderate prices. The book is fully informative about "The Bread and Butter State." If interested, send name and address, for a free copy of the Minnesota book, J. L. Edwards, Mgr. Agt. Sec., Room 635 U. S. R. R. Administration, Washington, D.C.

Never For Sale Before

173 acres A-No. 1 Farm ¼ mile outside Lapeer. Splendid clay loam, productive soil, 160 cultivated, tiled, Slopes southeast. Owner here 52 years will retire. Good 12-room house, 5 good barns, silo. Stream thru barn yard. 200 rds. roadside hedge. 40 rds. school. 30 meadow, 25 a. wheat this year averaged 30. Farm in best cultivation, never rented. Lapeer has first class Ry. markets, high school. Detroit prices for whole milk. \$125 a. E. Z. terms. Holman Real Estate Agency, Lapeer, Mich.

Here is a Beauty and a good money-maker. Corn and wheat farm 126 acres on macadam road; level, near lake 12-room house, 3 barns, 32x60, 30x70, 24x70; silo, hog house, hen house, garage. Water piped to barn. Grows fine alfalfa. Apples, berries, cherries, plums, grapes. Insurance \$5,000. Church and school close by. R. F. D., phone. The following stock goes to a quick buyer—pair young 3000-lb. horses, 3 fine cows, 50 chickens, harness, tools; all for \$8,500, \$4,500 cash. HALL'S FARM AGENCY, 33 Market St., Corning, Steuben Co., New York.

160 Acre Bargain. 100 acres under plow, balance wood and pasture land. Good buildings, close to school, churches, and stores. 12 head of cattle and all farm tools and crops. Price, \$7500.

40 acres, good buildings. Close to city, \$1300. 80 acres, stock, tools and crops, \$5250. All on easy terms. John Conant, Grand Haven, Mich.

Michigan Country Home in "The College County" for sale. Immediate possession; on long term contract if desired, fully equipped 220-acre dairy farm with established state and federal inspected herd, registered Holstein-Friesian cattle; two good farm homes within 15 minutes of State Normal College, 30 minutes of University of Michigan, 50 minutes of Detroit, 90 minutes of Toledo, over good roads. With or without cattle and equipment. William B. Hatch, Ypsilanti, Mich.

80 ACRES, 1 mile Columbiaville. First class, level, clay loam. Well fenced and watered. 12 acres heavy beech and maple. 63 cultivated, 50 meadow. 12-room house, basement barn 36x62. School 80 rds. Improved road, fine country. \$8,000, half cash. HOLMAN REAL ESTATE AGENCY, Lapeer, Mich.

Looking for a Farm? Don't fail to send for our list and prices. T. S. AUBLE CO. WELLINGTON, OHIO.

Gladwin County Productive

Investigate this desirable section before buying a farm. It will pay you. Write for information. U. G. Reynolds, Gladwin, Mich.

120 Acre farm, low price. 50 acres clear. 10 Maple timber, rest pasture. New building. 1½ mile from E. C. L. Station, etc. Owner, H. De Groot, Northland, Mich.

Nevada grazing land \$2 per acre, \$1 cash per acre down, young man this is your opportunity. Nevada Land Co. 33 Baker St. Detroit, Mich.

Rich Michigan Farms. Low prices. Easy terms. STAFFELD BROTHERS, 15 Merrill Building, Saginaw, Michigan.

Highly improved 87 acre farm \$7000, E. Z. terms. Address Mr. McAdams, 1250 W. Euclid, Detroit. Will mail views.

Rich Michigan Farms. Improved and unimproved. Clay subsoil and clovered. Well drained, near school. C. M. Smith, State Bank, Coleman, Mich.



No. 2729—Ladies' Costume. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires six yards of 44-inch material. Width of skirt at lower edge is about 1½ yards. Price 10c.

No. 2954-2874—A Smart Coat Suit. Coat 2954 cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires four yards of 44-inch material. Skirt 2874 cut in seven sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires three yards of 36-inch material. The width of skirt at lower edge is about 1½ yards. Two separate patterns 10c for each pattern.



No. 2513—Child's Short Clothes Set. Cut in five sizes, 1, 2, 3, 4 and 5 years. Size four requires for the dress 2½ yards. For the petticoat 1½ yards. For the combination 1½ yard of 36-inch material. Price 10c.

No. 2955—Girls' Dress. Cut in four sizes, 4, 6, 8 and 10 years. Size six requires 2½ yards of 42-inch material. Price 10c.

No. 2750—Ladies' Cover-all Apron. Cut in four sizes; small 32-34; medium 36-38; large 40-42, and extra large 44-46 inches bust measure. Size medium will require 4½ yards of 36-inch material. Price 10c.

No. 2943—Ladies' Service Dress. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6½ yards of 36-inch material. Width of skirt at lower edge is 2½ yards. Price 10c.

Cut Down Milking Costs

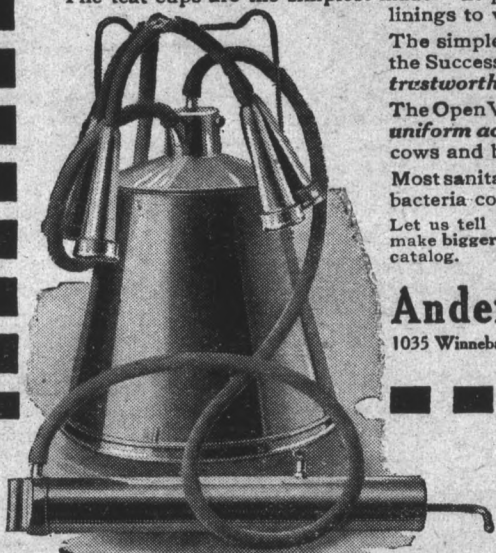
LIKE a hole in the milk pail, the cost of hand milking is a big drain on dairy profits.

"I have had a great deal of trouble in the past in keeping competent hired men, particularly during winter," writes Mr. Clarence Vose, Kenosha, Wis. "Last fall I purchased a Success Milking Machine and let my man go in the fall. Milked 22 cows all winter with the Success and am highly pleased with it. It has made money for me."

SUCCESS *Open Valve* MILKER

is the greatest time and labor saver on the dairy farm. In every herd, from eight cows up, a Success Outfit will quickly pay for itself, and *make your cows pay you extra profits for many years.*

The Success has so few parts that it is easy to operate and the upkeep cost is next to nothing. No pulsators or other complicated contrivances—no big expensive vacuum tank or pipe line to install or bother with. The teat cups are the simplest made—fit perfectly, yet have no rubber linings to wear out.



The simple and durable construction of the Success Milker accounts for its *long, trustworthy service.*

The Open Valve accounts for the *steady, uniform action*, which means contented cows and better milk yields.

Most sanitary milker made—keeps down bacteria count.

Let us tell you how a Success Milker will make bigger dairy money for you. Write for catalog.

Anderson Sales Co.
1035 Winnebago St., Milwaukee, Wis.



THE 70 lb. bag is just the right size for farm use. It is easy for the dealer to stack them up and again it's easy for the buyer to place them in a truck or wagon, automobile or buggy and keep in a good dry place in the house.

It is convenient to open at the top and a simple matter to take out the salt. Being packed in

a good bag, it is less expensive and much easier to handle than a barrel.

For these reasons we pack

COLONIAL SPECIAL FARMER'S SALT

in 70 lb. bags.

THE COLONIAL SALT COMPANY

AKRON, OHIO

Chicago, Ill. Buffalo, N. Y. Boston, Mass. Atlanta, Ga.



Variations in Milk Tests

AS a general proposition milk is a product that is fairly uniform in composition. At the Maine experiment station the fat content of the milk from a herd of mixed cows fluctuated on an average of 3.75 per cent of its usual amount at each milking, and the total yield of butter-fat varied from eight to ten per cent of its ordinary yield at the same time. Nevertheless the milk yield and composition of cows that are on official test shows some remarkable variations, in some cases the percentage of butter-fat varying from 2.7 to 6.7 per cent in the different milkings of two consecutive days.

What causes these variations in milk tests of individual cows? As a rule they result from the succulence and nutritive value of the food, temperature and nutritive value of the food, temperature of the weather and the health condition of the cow. The ordinary dairy cow on dry winter feed or good pasture in summer will show less variation in the per cent of butter-fat produced than during months in which her ration is frequently changed. The first principle of maintaining a uniform butter-fat test is uniformity of feeding and management since cows regularly fed and handled show more uniform milk and butter-fat production.

It is always a perplexing problem for the breeder of registered dairy cattle to determine accurately between the difference in milk tests due to heredity and those due to feeding and management. When one studies the variation in milk tests made by individual cows he is frequently led to believe that heredity plays a less important part in determining the per cent of butter-fat produced than is popularly supposed.

Successful breeders believe and maintain that the only way to permanently influence the percentage of butter-fat is through the breeding of the animals. That is, that every cow maintains a certain definite percentage of butter-fat that is normal for that particular cow. While changes in age, condition, environment and feed may temporarily change the fat content of her milk for brief periods, she will eventually return to her normal test and maintain nearly the same average for each period of lactation.

Of course, it goes without saying that the well-fed, properly treated cow will show a higher per cent of butter-fat than the same cow would if poorly fed and badly treated. Exceptions may be noted, but as a general breeding proposition families that produce milk with a low percentage of fat will continue to produce cows with that characteristic. Innumerable experiments conducted in an effort to increase the test of milk have failed.

On the other hand it is a well-known and generally recognized fact that if a cow is fed a heavy ration of rich protein feeds during the period she is dry, she will not only store up on her body an excess of lean protein flesh, but will also, when fresh, if fed a narrow, but stimulating ration, milk off this surplus lean meat, at the same time showing a percentage of butter-fat considerably above her normal test. This probably explains why it is possible for some of the famous breeders of dairy cattle to make such wonderful seven-day, thirty-day and sixty-day butter-fat records.

The best cow in the world if given improper food and care would prob-

ably fall considerably below her normal test. Her production of butter-fat might differ greatly from what it would when she was given proper treatment. Sustenance and attention are the requisites of obtaining a maximum percentage of butter-fat from the individual cow, the same as they are in obtaining a maximum flow of milk. The cow that makes a credible record as a producer of fat does so because she receives a line of treatment calculated to bring out the best of her inherited possibilities.

W. M. K.

AMERICAN CATTLE FOR URUGUAY.

THREE leading beef breeds and one dairy breed are represented in a shipment of forty-one head of purebred cattle which recently left on the first leg of the journey to Montevideo, Uruguay. The cattle are consigned to E. Parreja Reissig at that port.

The selection was made in this country on Mr. Reissig's order through the various breed organizations, the actual shipment being made through the export department of the American Shorthorn Breeders' Association, which sent a consignment of that breed to South America a few months ago.

Mr. Reissig ordered the cattle, acting as the representative of a group of prominent cattle breeders in his country, to whom the animals in this consignment will be distributed by him on their arrival.

Twenty-one Herefords, twelve Shorthorns, three Angus and five Holsteins make up the number going. The Hereford group is made up of six bulls and fifteen cows; four bulls and eight cows are Shorthorns, two bulls and one cow are Angus, and two bulls and three cows are Holsteins.

The cattle went east by rail for the coast and will sail for their new home on the steamer West Avenal from New York.

The Hereford herd of E. H. Taylor, Jr., of Frankfort, Ky., contributed five animals to the lot, headed by the bull Woodford 30th 691553. S. H. Velie, of Kansas City, Mo., and Herbert Hazlett of Eldorado, Kan., each had four animals among the whitefaces selected, while S. Moser, of Kansas City, had three, and Walter Yost, of the same place had two. J. W. Van Natta, of Lafayette, Ind.; H. C. Cox, Lee's Summit, Mo., and J. N. Camden, Versailles, Ky., had one each.

Lodi, Wis., was triply represented by a Shorthorn from each of three herds there, those of Stasley F. Miller, C. M. Herr & Son, and Reynolds Bros. being represented. Anoka Farms, of Waukesha, Wis., had two animals, as did also E. B. Thomas of Audubon, Iowa. One animal each was drafted from the herds of James Brown, Dundee, Ill.; Eben E. Jones, Bloomington, Ill.; Carpenter & Ross, Mansfield, O.; Edward Kemp, Tiffin, Ohio, and A. R. Fennern, Avoca, Iowa.

The Angus bull Enrite 293813 and the cow, Queen of Buckleby 9th 284-925 from the herd of the Rosengift Stock Farms, Kelley, Iowa, and the bull Bar Marshall 3d 287263 from Escher & Ryan at Irwin, Iowa, completed the beef breeds.

Pabst Champion Mechthilde 250552, from Pabst Stock Farm, Oconomowoc, Wis., and Howard Beauty Prince 251-138, from J. W. Howard, Genesee Depot, Wis., were the two bulls in the Holstein contingent.

Mention The Michigan Farmer When Writing to Advertisers

The Big Idea In Farm Bureau Work

(Continued from page 260). ty agent, 1,378 men were enlisted at \$10 a membership. Farmers in the poorer counties of the state also responded. In Edgar county where one would declare that the farmers would not pay the price, 212 memberships were secured.

In one county the farmers threw up their hands saying, "Oh, the membership fee is too much, we can't pay it." But inside of fifteen minutes a slick-tongued chap representing a magazine and some scientific works that could be bought by the payment of \$1.50 a month for each of twelve months came in to ask the endorsement of the farm bureau that he might sell the works to the farmers of the county. This man was evidently getting \$18 a year out of farmers or he would not be in the business. Now, why will farmers spend their money for things of this character and not support the farm bureau? Farming is not much of a business, and farmers have very little faith in it if they are not willing to back up the business with ten or fifteen dollars a year. There are many things to do and they can be done with the proper support.

Now let us turn our attention to some of the things our association has accomplished since its reorganization. Our legislative committee has been at work since the first of March. Through their effort we have secured the best legislation in the interests of agriculture that has ever been enacted in our state. Not a single law went through that was unfair, and we killed some of the worst bills that could have been proposed from the farmer's standpoint. One of these was the scavenger bill. This bill provided for a scavenger organization in each county. If an animal died the farmer would be obliged to report to this organization and they would come and remove the animal and charge him \$10 for the service. Then they endeavored to enact a bill providing that no one except a trained nurse could be employed in case of sickness. This was during the influenza epidemic when we were glad to secure anyone to aid in the sick-room. A veterinary bill which prevented the owner of live stock from administering first aid to his own animals, but required that one secure the services of a registered veterinarian, was killed by our committee. These are samples of measures that our association kept from the statute books of our state.

The work, however, was not all negative. The committee was largely responsible for putting some very good laws in effect. Chief among these is a statute that makes it lawful for farmers to market their produce cooperatively. This law also gives farmers the right to set a just price on their goods the same as do manufacturers of machinery. Governor Lowden said that he did not know whether the law was constitutional or not, but that he was going to sign it anyway, because he believed it was right. Right now one of our organizers, Mr. Cooper, is under arrest for cooperating with other farmers in selling milk. If this law holds then it will be impossible for the interests to use the courts in preventing farmers from securing the advantages of cooperative selling and buying.

We also have the problem of revising our state constitution. We as farm bureaus are going to sift out the petty

politicians who are anxious to revise our fundamental law, and try to put men there who will give just consideration to the farmer's interests. The constitution must be equitable to all classes, and agriculture must have its place in the constitution. Remember, however, that we are not in politics, we are merely trying to put a little common sense into the public's business.

The progressive farmers should not have any trouble in developing an association that is big enough to do the farmer's business here in Michigan. When the call was sent out for the meeting at Ithaca, New York, last February to organize a national federation of Farm Bureaus twelve states were represented, but not a single one of them had any financial backing. There is no use bringing a child into the world with no prospect of clothing it. In New England farm bureaus have been promoted with public funds, but public appropriations for farm bureaus, state associations and a national organization will some day not exist. For this reason we should start at the foundation and provide money enough to take care of the farmer's interests.

Other projects have been carried out by our home association. We have effected shipping associations of different kinds in various counties of the state. Cooperative wool market associations have been organized with a big warehouse located in Chicago. Our members have handled practically all of their wool through this organization. Dealers were paying from thirty-two to forty-five cents. A report from the warehouse the other day stated that the members would receive something like sixty-four cents a pound for their wool. We are also investigating the packing interests. We do not propose to do anything until we know what is the right and proper thing to do. Congress is considering the Kenyon bill, which provides restrictions on some of the activities of big business. It is not our purpose to destroy the packers or other big concerns, but we do want to take charge of some of the things that are lawfully our own.

The farmers of Illinois need lime and raw rock phosphate to secure the maximum of production at the lowest cost. Several years back a number of Illinois farmers secured an option on phosphate fields in Tennessee. Some large concerns are now trying to get hold of this phosphate land. So we are sending a committee of our organization to Tennessee to investigate the proposition. If this committee finds that the outlook is such as to warrant the formation of a stock company, the farmers will organize such a company, put in grinders and furnish raw rock phosphate to members of the association at cost.

These are some of the things we have accomplished in Illinois. As we go on in the work, we see unlimited opportunity for serving our members. At almost every turn there appears a chance to save money for and defend the rights of the rural folks. Our plan is to have this one big organization to champion every cause of the farmer. We believe it is far more economical to have one strong organization than it is to form an organization that has a single problem in view. If you get Michigan farmers to understand the big idea about this work, I am sure you will have no difficulty in securing their moral and financial support.



You can tell at a glance

This house is beautiful. But you must look at the floor-plans to see how convenient it is. So, too, you must not select the woodwork for your new home simply because it is good-looking in pictures. That is not enough—look for the CURTIS trade-mark, for that is a guarantee that the woodwork is not only of good design but of standard quality of material and workmanship. You can always KNOW good woodwork, if it has the CURTIS imprint.

Because we manufacture large quantities of woodwork, we are able to produce standard designs in standard sizes. These CURTIS Standard Designs will save you time and money. Ask your lumber dealer for them when you build.

Let us help you, too, with your home-building plans in any way that we can. Our Home Books contain the plans of many homes and pictures of them, both exterior and interior. Write for one of these free books—"Better Built Homes," and when writing tell us about the size house you want and what you will invest in it.

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"The Permanent Furniture for Your Home"



JOHNSON IDEAL HALTER

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Patented

ADOPTED BY YOUR UNCLE SAM after rigid tests. Ask your dealer to show them to you.
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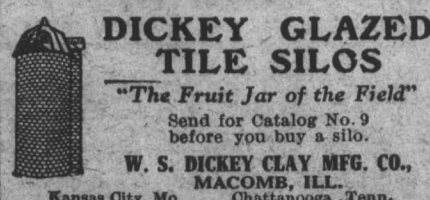
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A perfect working self-feeder for hogs. A 100-lb. pig pays for it. Saves on purchase price, time, floor space, repairs and feed. Will feed 40 hogs. Sold direct, \$18.50. Money refunded if not satisfied. For further information address, THE ECONOMY FEEDER CO., Box 536, New Washington, O.

FOR SALE by "Fertile Farms." Five hundred fifty bushels of Red Rock Wheat inspected by Michigan Crop Improvement Association. Registration No. 9012. M. C. I. A. prices. Quality good. Class I. Samples furnished prospective buyers. W. T. Bandeen, Mt. Pleasant, Mich.

Michigan A. C. Inspected RED ROCK Wheat. Grown from certified seed. Pure and free from smut, perfectly clean and free from weeds. Inspected by M. A. C. Price, 10 bu. lots, \$3 per bu. sacks free. Best crop of wheat ever grown in our section of the state. The Jennings Farms, Bailey, Mich. R. F. D. No. 1.

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MACOMB, ILL.
Kansas City, Mo. Chattanooga, Tenn.



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Toppy red bags, tidy red tins, handsome pound and half-pound tin humidors—and that classy, practical pound crystal glass humidor with sponge moistener top that keeps the tobacco in such perfect condition.

PLAY the smokegame with Prince Albert if you're hunting for tobacco that will cheer your smoke-appetite! For, with Prince Albert, you've got a new idea on the pipe question that frees you from stung tongue and dry throat worries! Made by our exclusive patented process, Prince Albert is free from bite and parch and hands you about the biggest lot of smokefun that ever was!

Prince Albert is a pippin of a pipe tobacco; it certainly does beat the band! And, what you're going to find out pretty quick thousands of men discovered as long as ten years ago when P. A. started a smoke revolution!

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Send for my New BARGAIN FENCE BOOK showing the biggest line and lowest prices on all kinds of wire fencing. My latest direct-from-factory prices save you a lot of money. 150 STYLES—FREIGHT PREPAID. We use heavy ACID TEST GALVANIZED wire—outlasts all others. Book and sample to test—FREE by return mail. (1)

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Send For Free Book Great Windrow Baler

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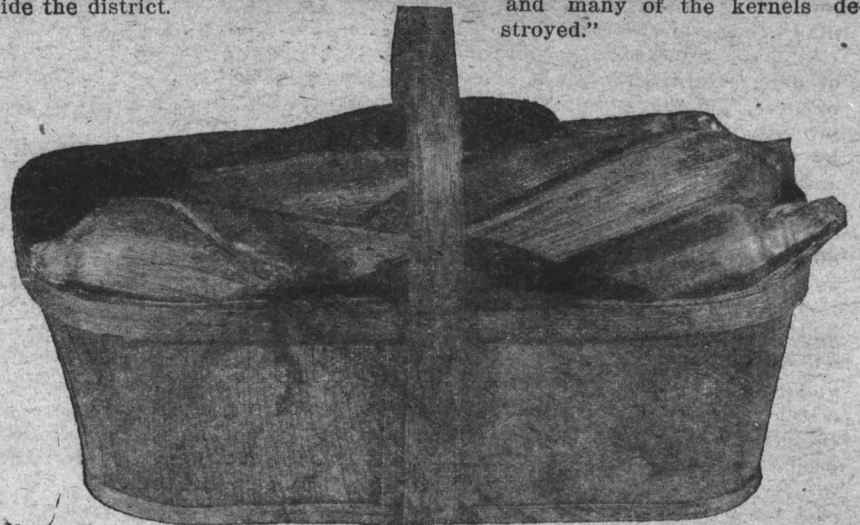
High or low wheels—steel or wood—wide or narrow tires. Wagon parts of all kinds. Wheels to fit any running gear. Catalog illustrated 10 cents free.

Electric Wheel Co., 35 Elm St., Quincy, Ill.

Corn Borer Dangerous Pest

THE European corn borer is an unwelcome immigrant from the land of war and famine. It is a dangerous pest. So alarmed over its arrival on our shores are the authorities and farmers that they have secured an appropriation of \$75,000 from the New York state legislature and congress has been asked for an appropriation of one-half million dollars for the extermination of the borer.

The corn borer made its first appearance in Massachusetts in 1917, and has already infested an area near Boston of three hundred and twenty square miles. This area is now under strict quarantine, and no corn can be shipped out of this district. Corn can be shipped from points outside the infested area through Boston to other points beyond the quarantined district, but it cannot be consigned to Boston and there reshipped to other points outside the district.



A few weeks ago an infestation of the borer was found in corn stubble covering an area of four hundred square miles near Schenectady, in the lower Mohawk valley. Four hundred men employed by the New York state authorities are engaged in the work of extermination in this area, but as the infested fields are on the river flats it is feared that infested stalks may be carried down the river and deposited on the banks of the Hudson river far below the present infestation.

In April the discovery of corn borers at Milford, Connecticut, led to investigations which led to knowledge of a wide distribution in that vicinity. A representative of the state entomologist is assisting the Milford corn growers in clearing up their infested fields.

These widely scattered infestations all developed within two years, indicate the rapidity with which the corn borers increase and their capacity for spreading over a wide range of territory.

The coming of this dangerous pest is a matter which concerns the farmers of the west fully as much as it does those of New York and New England. It is exceedingly difficult to control, and farmers even in the infested region are slow to realize its destructive capacity. During a recent meeting of farmers in Albany, at which the writer was present, State Entomologist E. P. Felt and other experts, spoke of the work being done to suppress the borer in Schenectady county, and the need for greater effort on the part of the farmers whose fields were infested. One of these farmers, however, said the blackbirds were doing more damage in his fields than the corn borers, and he thought the state could better devote its energies to exterminating blackbirds. It is evident from the attitude of this farmer that there is need for greater publicity in regard to the extreme danger to crops from the borer menace.

It has been found by investigations in Massachusetts that the corn borer not only feeds on field corn, sweet

corn and fodder corn, but on celery, potatoes, beans, beets and several other plants. In eastern Massachusetts it has been especially destructive to sweet corn, and if it should be allowed to spread unchecked the great sweet corn industry of New England and New York would soon be destroyed. State Entomologist Felt reports that "during field counts last year, federal and state agents found on a quarter of an acre of sweet corn one hundred per cent of the ears infested, and in such areas an average of forty-six caterpillars to a plant. As many as 311 full-grown caterpillars have been found in one hill of corn, and 117 in one plant. Badly affected stalks are honeycombed and this causes them to break or to lodge. The ears may be blighted by the pests working in the supporting stalk, or the cob may be tunneled from top to bottom and from side to side and many of the kernels destroyed."

Dr. Felt estimates that the general prevalence of the cornstalk borer in the fields of the United States would result in annual losses of a billion dollars or more. This being true, the necessity for utilizing all the warring machinery of the nation against the corn borer will be apparent to all. It is a national menace, one of the most destructive and dangerous enemies of farmers that have come to this country.—E. E. R.

UTILIZING CULL APPLES.

(Continued from page 263.)

pour off any of the sediment. Fill the vessel only about half full as it foams up when boiling. Add a level teaspoon of the lime of carbonate for the seven gallons of liquid and boil rapidly until a temperature of 220 degrees is reached, or until it is about one-seventh of the original volume, and the consistency of maple syrup when cooled rapidly, and poured from a spoon. To insure clear syrup the cooling must be done slowly. A good way is to set the jars of syrup in a wash boiler of hot water and allow the whole to cool. Use this syrup like any other table syrup, and as a flavoring adjunct. Also as a sauce for puddings and for making brown bread, fruit cake, candy, etc.

Apple butter has long been a standby as a staple food and table delicacy and merits a place in the diet of every family. A favorite home recipe is as follows: Boil three gallons of apple cider down to one and one-half gallons. Pare and quarter sufficient apples to make three gallons. Pour over these sufficient additional cider to cover apples well. After cooking until tender run through colander, then add boiled cider and boil down to desired thickness. When nearly done add one and one-half pints sugar and when done flavor with one teaspoonful of allspice and one teaspoonful cinnamon. For making apple butter on a large scale, a steam apple butter cooker should be used. It makes a butter with the right flavor quickly and with the very least amount of labor.



STATE GRADING AND PACKING LAW.

(Continued from page 283).

Provided, that nothing herein contained shall apply to the manufacture, sale, or shipment of climax baskets, baskets or other containers for small fruits, berries, and vegetables when intended for export to foreign countries when such climax baskets, baskets, baskets or other containers for small fruits, berries and vegetables accord with the specifications of the foreign purchasers or comply with the law of the country to which shipment is made or to be made.

353. Sec. 4. That the examination and test of climax baskets, baskets, or other containers for small fruits, berries, and vegetables, for the purpose of determining whether such baskets or other containers comply with the provisions of this act, shall be made by the Dairy and Food Department, and the Dairy and Food Commissioner shall establish and promulgate rules and regulations allowing such reasonable tolerances and variations as may be found necessary.

354. Sec. 5. That it shall be the duty of each prosecuting attorney, to whom satisfactory evidence of any violation of the act is presented, to cause appropriate proceedings to be commenced and prosecuted in the proper courts of the state for the enforcement of the penalties as in such case herein provided.

355. Sec. 6. That no dealer shall be prosecuted under the provisions of this act when he can establish a guaranty signed by the manufacturer, wholesaler, jobber, or other party residing within the United States from whom such climax baskets, baskets, or other containers, as defined in this act, were purchased, to the effect that said climax baskets, baskets or other containers are correct within the meaning of this act. Said guaranty, to accord protection, shall contain the name and address of the party or parties making the sale of climax baskets, baskets or other containers to such dealer, and in such case said party or parties shall be amenable to the prosecutions, fines and other penalties which would attach in due course to the dealer under the provisions of this act.

356. Sec. 7. That this act shall be in force and effect from and after the first day of November, 1917.

Table Grapes.

(Act No. 107, Public Acts, 1913).

AN ACT to regulate the packing for shipment and sale of table grapes, and providing penalties for violation thereof.

212. Section 1. The people of the state of Michigan enact, no grapes that are not ripe, or are the fruit of unhealthy vines, or are for any reason unhealthy or in a state of decay shall be packed for shipment by any grower, packer or shipper in any package or basket of less than sixteen pounds capacity.

213. Sec. 2. Any person or persons found guilty of violating any of the provisions of this act, in any court of competent jurisdiction, shall be deemed guilty of a misdemeanor and shall be punished by a fine of not less than \$10 nor more than \$100, or by imprisonment in the county jail for not less than ten days nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

214. Sec. 3. It shall be the duty of the state dairy and food commissioner, his deputies and assistants, to enforce the provisions of this act.

Pear Psylla and Blight

Can Be Controlled by Fall Spraying with

SCALECIDE

THE COMPLETE DORMANT SPRAY

"Makes a Tree Outgrow Its Troubles"

"SCALECIDE" kills the adult Psylla, and, if sprayed before they lay their eggs, control is easy and effective. Therefore spray in Fall or early Winter.

And this same spraying will also control Blight Canker which is the source of infection for Fire Blight. No cutting-out is necessary. "SCALECIDE" meets every requirement without cutting or painting.

But don't expect to clean up your orchard in one season. Two or three years of faithful spraying with "SCALECIDE" will secure practical control of Pear Psylla and Blight, and invigorate your orchard. "SCALECIDE" makes a tree outgrow its troubles."

A fruit grower near Buffalo, N.Y., who failed to control Pear Psylla

with Lime-Sulfur, losing his entire crop in 1916, "became desperate" and tried two barrels of "SCALECIDE". In 1918 he wrote:

"We were delighted when June came to find no trace of Psylla nor any since, and, instead of sooty twigs, had the most beautiful foliage imaginable. In justice to your material, I think you ought to be in possession of these facts."

We recently visited several large orchards, embracing 150,000 trees of all varieties. Two years and a half ago, when we first saw these orchards, many of the trees seemed past redemption from Blight and Canker, but after three dormant sprayings with "SCALECIDE", they are now in perfect health and vigor, and loaded with fruit, while other orchards in the neighborhood are badly blighted.

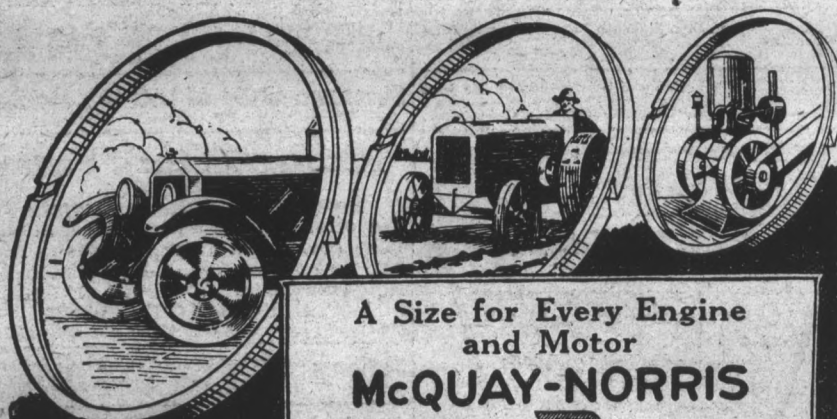
We would like to give you more information about "SCALECIDE" and the names of these and other big men who are making money by using it. Write today for a copy of our guarantee and name of dealer near you. Address Dept. 13

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Save Gas

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Wherever you are and whatever your motor, you can get immediate service on these rings. Complete stocks of standard and over-size rings are carried by over 300 jobbers and supply houses throughout the country. Many thousands of dealers can extend to you our service, which enables them to specify your size requirements for practically every make or model of motor without delay. You don't have to wait.

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RINGS

A special ring for engines that pump oil.

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Press, Grand Rapids	5.00	4.50
News, Grand Rapids	5.00	4.50
News-Courier, Saginaw ...	5.00	4.50
News-Statesman, Marshall.	4.00	3.25
Journal, Flint	5.00	4.50
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A bull calf, sired by our imported "EDGAR of DALMENY"

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Bull Sale for the record price of 2,100
guineas, or \$10,584.00 in our money.
This goes to show the quality of the

ABERDEEN ANGUS

that Mr. Scripps is breeding. He enjoys feed-
ing good stock on "Wildwood" and believes that
THE BEST IS NONE TOO GOOD.

"Edgar of Dalmeny" won the Michigan Grand
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We have a few females with calves at foot and
re-bred to "Edgar of Dalmeny" that Mr. Scripps
has consented to sell to reduce the fast growing
herd. Write to

WILDWOOD FARMS

ORION, MICHIGAN

W. E. SCRIPPS, Prop., Sidney Smith, Supt.

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Established in 1900.

TYPE—QUALITY—BREEDING

The herd (tested annually) is absolutely
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A few bulls (no females) for sale

WOODCOTE STOCK FARM, Ionia, Mich.

Cloverly Angus Bred cows, heifers and bull
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GUERNSEYS

Young bulls of quality for sale,
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ers. All tuberculin tested. Come and
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Registered Guernseys

Choice May Rose Bull Calves—at prices you can
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Guernsey Pure Bred Bull Calves from one to
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GUERNSEYS—REGISTERED BULL CALVES
Containing blood of world champions.
HICKS' GUERNSEY FARM, Saginaw, W. S. Mich

GUERNSEYS must reduce herd, so offer
a few choice females of
Glenwood breeding also bulls, all stock of A. R. breed-
ing, herd tuberculin tested.
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ton, 43028; born December,
1915. Sired by Don Diavolo of Linda Vista; Dam Lang-
water Suffragette, A. R. 2346 Class A 585.18 butterfat.
Also Niagara 2nd Duke, 51564; born December, 1917.
F. E. Robson, Room 307 M.C.R.R. Depot Bldg. Detroit.

Reg. Guernseys Bull and cow. Also eight
highgrade cows and heif-
ers. Price right. C. W. Comfort, Engadine, Mich.

Reg. Guernseys For Sale—3 cows, due this fall,
2 yearling heifers, 1
yearling bull. Eugene Wilcox, Bangor, Mich.

\$75 gets 1½ mo. old gdson Maplecrest Korn. Heng. and
27 lb. daughter of Johan Heng. Lad. and 18.48 lb.
daughter of Cal. Jane Paul A. Dam is my best milk-
er. Terms. M. L. McLAULIN, Redford, Michigan.



\$150,000 For Prizes,
Publicity And Extension Service

Breeders of Holsteins unanimously vot-
ed to quadruple the fees for recording trans-
fers of their cattle sold, and spend the in-
come therefrom to place the merits of this
greatest of dairy breeds before the public.
If interested in

HOLSTEIN CATTLE

Send for our booklets—and inform yourself
on how to make money in breeding dairy cattle
THE HOLSTEIN FRIESIAN ASSOCIATION
OF AMERICA Box 164, Brattleboro, Vt.

The Traverse Herd

We have what you want in BULL CALVES, the
large fine growthy type, guaranteed right in
every way. They are from high producing A.R.
O. ancestors, Dam's records up to 30 lbs. Write
for pedigrees and quotations, stating about age
desired.

TRAVERSE CITY STATE HOSPITAL
Traverse City, Mich.

THE HOLSTEINS

At Maple Avenue Stock Farm are under Government
supervision. The entire herd have just been tuberculin
tested and not one reactor. A good place to buy that
bull you are looking for, and I have two very fine,
richly bred, and splendid individuals ready for any
amount of service. I want to answer any question
you may ask about them.

L. E. CONNELL, Fayette, Ohio

"Top-Notch" HOLSTEINS

The young bulls we have for sale are
backed up by many generations of
large producers. Buy one of these
bulls, and give your herd a "push".
Full descriptions, prices, etc. on request.
McPherson Farms Co., Howell, Mich.

"Winwood Herd"

REGISTERED
Holstein-Friesian Cattle

Sire in Service
FLINT MAPLECREST BOY

His sire is Maplecrest Korndyke Hengerveld. His
three nearest dams each over 30 lbs. of butter in 7
days. His dam and granddam both made over 123 lbs.
of butter in one year. It is the yearly cow we are
looking for to deliver the goods. Flint Maplecrest
Boy's Dam is Gluck Vassar Bell, 30.57 lbs. of butter
in 7 days and 121 lbs. in 30 days. Her butter fat test
is 5.27. We have a few choice bull calves about ready
for service and one or two ready. Remember we are
breeders and not dealers in cattle. Our price is right,
breeding considered. Write us your wants, or come
and look this herd over before you buy, and see for
yourself. You will be glad you came. Herd tuberculin
tested.

JOHN H. WINN, Inc.
Lock Box 249, Roscommon, Mich.
Reference Roscommon State Bank.

Wah-Bé-Mé Farms

Pure Bred Registered

Holstein-Friesian Cattle

Herd Headed by
Segis Pontiac De Nijlander

A 32 lb. grandson of Michigan's great 35 lb. champion
cow, Pontiac De Nijlander. His dam, Oak Valley
Korndyke Beets Segis Fan, 32.06, also a Michigan
prize winner last year and a prize winner in the Na-
tional Ass'n. and classes, as a 4 year old last year. Her
dam is a granddaughter of King Segis and as a 5 yr. old
has 73.5 lbs. milk, 29.47 lbs. butter in 7 days and 294.4
lbs. milk, 116.9 lbs. butter in 30 days. Segis Pontiac De
Nijlander's dam as a four year old (she is 5 yrs. now)
made 122.1 lbs. butter and 272.1 lbs. milk in 30 days.
Write for list of bull calves from 18 lb. 2 year olds to
over 30 lb. dams. Have a five year old son of Rag Apple
Korndyke 8th, a half brother to the \$125,000 bull for
sale. Also Big Type Poland China hogs sired by a litter
mate to the Illinois Grand Champion. Albert G. Wade,
Prop. White Pigeon, Michigan.

A Good Note accepted in payment of finely bred reg-
istered Holstein bull calves. Quality
of the best, and at prices within reach of all. Write.
GEO. D. CLARKE, Vassar, Mich.

CLUNY STOCK FARM

100--REGISTERED HOLSTEINS--100
When you need a herd sire remember that we
have one of the best herds in Michigan, kept un-
der strict sanitary conditions. Every individual
over 6 mos. old regularly tuberculin tested. We
have size, quality, and production records back-
ed by the best strains of breeding.
Write us your wants.

R. BRUCE McPHERSON, Howell, Mich.

NO more bull calves to offer until next fall. Place
your order for one from next fall's crop. My herd
is on the state and federal accredited herd list.
A. F. LOOMIS, Owosso, Mich.

LIGHT colored Reg. Holstein Bull 15 mo. old. Sure
breeder. 30 lb. Pontiac breeding. Priced to sell.
B. B. Reavey, Akron, Michigan.

REGISTERED heifer and bull calves, of the best
breeding in Holsteins for sale. Special price on 2
heifers and bull. C. H. GIDDINGS, Gobleville, Mich.

UP NORTH

JERSEY COWS are adapt-
able to any climate. Hale
in the North—hardy in the
South.

Always efficient yielders
of the richest quality
milk—always depend-
able and gentle—
always a pride to
their owner.

JERSEYS

Jerseys consume less
feed than any other breed.
Every dollar you put into
Jersey feed doubles its value
in the milk pail. Her milk
averages 5.37% butter fat.
Butter and cheese made from
Jersey Milk is the best obtainable.
Let us mail you free some interest-
ing data and information about the
Jersey Breed.

The American Jersey Cattle Club
322-M, West 23rd Street, New York

DOWN SOUTH

BULL CALF; solid color, black tongue and
switch; dropped Mar. 16, 1919.
Sired by Star's Ogallala Chief No. 130711, a son of Hag-
atelle's Reception. Dam—Oakland Song Through, Imp.,
a grand-daughter of Warder's Champion 326. A fine,
peppy individual. Price \$75. Also several females of
various ages, markings, etc. Write for information.
H. B. WATKINS, Sunnycrest, Troy, Mich.

Jersey Bull Opportunity

The Register of Merit Kind

You buy a Jersey bull with the hope that his
heifers will make better cows than their dams.

The surest way to accomplish this is to buy a
bull sired by a tested sire and a tested dam. After
this it is desirable to get a bull of popular blood
lines and as typey as possible. Last but not least
buy a bull from a breeder whose standards of bus-
iness ethics are beyond question.

Brookwater Farm offers you all of these and
more—several choice ready-for-service and young-
er bulls at prices that will make them profitable
to you. Visit the farm or write.

Brookwater Farm, Ann Arbor, Mich.

Herbert W. Mumford J. Bruce Henderson
Owner Manager

ILLIE Farmstead Jerseys. A few heifers bred to
L. Freshen this fall, also yearling heifers; and two or
three R. of M. cows. Colon C. Lillie, Coopersville, Mich.

BUTTER BRED JERSEY BULLS
CRYSTAL SPRING STOCK FARM
Silver Creek, Allegan County, Michigan.

Maple Lane R. of M. Jersey herd. Bull and heifer
calves sired by a nephew the new World's
Champion. Sophie's Agnes. Also R. C. Red eggs and
chix. IRVIN FOX, Allegan, Mich.

The Wildwood Jersey Farm

Bulls for sale by Majesty's Oxford, Fox 13424 and Em-
inent Lady's Majesty 150934, and out of R. of M. Ma-
jesty dams. ALVIN BALDEN, Capac, Mich.

For Sale Registered Jersey bulls ready
for service and bull calves.
SMITH & PARKER, R. 4, Howell, Mich.

JERSEYS FOR SALE

Two young cows due to freshen in Oct., one-bred heif-
er due to freshen in Dec., two heifer calves dropped
last Dec. All are recorded or eligible. No bulls or bull
calves at present. Will ship C. O. D. Newman's Stock
Farm, Marlette, Mich. R. No. 1.

Herefords

20 cows and heifers for sale.

ALLEN BROS., Paw Paw, Mich.

Herefords Polled and Horned blood lines
embrace Fairfax. Polled Per-
fection and Prime Lad 9th breeding. Prices reasonable.
COLE & GARDNER, Hudson, Mich.

Herefords Bob Fairfax 49027 at head of herd.
Stock for sale, either sex, polled or
horned, any age. Priced right. EARL C. McCARTY,
Sec'y. H. B. Ass'n. Bad Axe, Mich.

Harwood's White Faces

Owing to labor shortage will sell one
half my herd, consisting of 120 head of
Reg. Herefords, yearling and two year
old heifers, cows with calf at side, re-
bred to ton' bull. Ten short yearling
bulls. Priced right for quick sale.

JAY HARWOOD, Ionia, Mich.

Hereford Bulls Just two yearlings left. Herd-
header quality. You will buy
on sight at the price. E. J. Taylor, Fremont, Mich.

BIDWELL SHORTHORNS

For Beef and Milk

Registered bulls, cows and heifers. Good Scotch and
Scotch-Topped for sale. In prime condition. Modern
sanitary equipment. Herd under state and federal
supervision. Farm 10 minutes from N. Y. O. depot.
1 hour from Toledo, Ohio. Automobile meets all
trains. Write

BIDWELL STOCK FARM
Box B, Tecumseh, Mich.

Shorthorn Cattle of both Sex for Sale
W. W. KNAPP, Howell, Michigan.

Richland Stock Farm

SHORTHORNS
HOME OF THE MICH. CHAMPIONS

We offer for sale a few good dual pur-
pose cows with calves at foot. Also
two three year old bulls suitable for
range purposes. We invite inspection.
C. H. PRESCOTT & SONS,
Office at Tawas City, Mich. Herds at Prescott, Mich.

Shorthorns Scotch and Scotch Topped cows and heif-
ers, priced right. Come and see them or
write W. B. McQUILLAN, R. 7, Howell, Mich.

For Sale Shorthorns of Quality Scotch and
Scotch Topped descendants of Archers
Hope, Avondale, Maxwilton Sulton and White Hall
Sulton. Model Type, by the Oscola Co. Shorthorn
Breeders Ass. John Schmidt, Sec. Reed City, Mich.

Scotch Topped Cows For Sale. Bred by the Mich.
M. V. Butler, Williamston, Mich.

Shorthorns New list, 27 bulls; 26 females. Feb. list
all sold. Central Mich. Shorthorn
Breeders' Assn., Oscar Skinner, Sec'y., Gowen, Mich.

The Kent Co. Shorthorn Breeders have both males
and females for sale. Ask about them.
L. H. LEONARD Sec., Caledonia, Mich.

Milking Shorthorns of best Bates breeding and
O. I. C. swine. Bulls for sale 1 mo. to 1
year old. E. H. KURTZ, Mason, Mich.

SHORTHORNS A young Mary cow and
calf, also a young bull for
sale. Louis Bubbitt, Williamston, Mich.

Meadow Hills Shorthorns—For sale females
of all ages, including one roan bull
ready for service. Geo. D. Doster, Doster, Mich.

MILKING SHORTHORNS. Clay
bred
bull calves. Davidson and Hall, Tecumseh, Mich.

Special Offer Shorthorns—Cows \$250 to \$300.
Bulls \$200 to \$250.
Wm. J. Bell, Rose City, Mich.

Red Polled Bulls For Sale
also cows and heifers. G. A. Oshoon, Bronson, Mich.

HOGS

Registered Berkshire Boars; ready for service. A few
gilts and sows bred for May and June farrow. A few
spring pigs. CHASE STOCK FARM, Marlette, Mich.

DUROC--JERSEYS

E. D. HEYDENBERG Wayland, Mich.

Attention Breeders and Farmers Now is the
time to buy that Duroc Boar for fall service. We have some
Corkers. March pigs will weigh 100 lbs. July let.
Inspection Solicited. Prices very reasonable.
RUSH BROS., Oakwood Farm, Romeo, Michigan.

DUROC JERSEYS

Fall pigs either sex also spring pigs pairs not skin.
Sired by the Grand Champion and Junior Champion
boars. F. J. DRODT, E. I. Monroe, Mich.

DUROC SOWS

sired by Walt's King 92949, the sire of 1st. prize win-
ners last year, and bred to Orion's Fancy King, the
real big type Duroc, NEWTON BARNHART, St.
Johns, Mich.

DUROC JERSEYS

CAREY U. EDMUNDS, Hastings, Mich.

Registered Duroc Boars

We have a choice lot of spring boars, sired by Michigan
Cherry Col. No. 118778. 1st Jackson selected this boar to
head our herd. Our prices are within every farmer's
reach. The Jennings Farms, Bailey, Mich., R. F. D. No. 1

DUROC Jersey spring boars sired by Orion Cherry
King Col. 2nd. with size and feeding qualities.
W. C. Taylor, Milan, Michigan.

8734 Hampshires recorded from Jan. 1 to Apr. 1 '19.
Did you get one? Boar pigs only for sale now.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

THE WORLD'S CHAMPION

big type O.I.C.S. Stock of all ages for sale. Herd
headed by Calloway Edd, the World's Champion O. I.
C. boar assisted by C. O. Schoolmaster. Grand Cham-
pion boar of Michigan, New York and Tennessee state
fairs. Also, C. O. Giant Buster, undefeated Senior
boar pig wherever shown and Grand Champion of Ok-
lahoma state fair. Get our catalogue of Orandell's
prize hogs, Cass City, Michigan.

O.I.C. One very choice 9 months old boar and
gilts, spring pigs sired by Prandell's Big Bone,
(68928), Glenwood Stock Farm, Zealand, Mich.

O. I. C's. Big type boars of April and May
farrow.
G. P. Andrews, Dansville, Mich.

Shadowland Farm

O. I. C's

Bred Gilts 200 to 300 lbs. from prize win-
ning stock. A few fall year-
lings and 2 yr. old sows, big type, growthy boars
of all ages, guaranteed as breeders. Everything
shipped C. O. D. Express paid and registered in
buyer's name. J. CARL JEWETT, Mason, Mich.

O. I. C. and Chester White Swine

Strictly Big Type with quality. Spring pigs of March
and April farrow. A choice lot of boars. Will only
spare a few more gilts at present. Will ship C. O. D.
and record them free.
Newman's Stock Farm, Marlette, Mich. R. No. 1.

O. I. C's. Bred gilts all sold. Plenty of spring
pigs good enough to ship C. O. D.
F. C. BURGESS, R. 3, Mason, Mich.

O. I. C's One very good yearling boar, and this
spring pigs to offer, registered free. ¼
mile west of Depot. Citizens Phone 154.
OTTO H. SCHULZE, Nashville, Mich.

O. I. C's. One extra good fall boar and spring pigs
for sale. Stock registered free and guar-
anteed satisfactory. John O. Wilk, R. 2 Alma, Mich.

O. I. C. 20 Choice Young Boars and a few
fine gilts.
Clover Leaf Stock Farm, R. 1, Monroe, Mich.

Raise Chester Whites

Like This
the original big producers

I HAVE started thousands of breeders on the road to
success. I can help you. I want to place one hog from
my great herd in every community where I am not already rep-
resented by these fine early developers—ready for market at six
months old. Write for my plan—More Money from Hogs.
S. S. BENJAMIN, R. F. D. 10, Portland, Michigan

Big Type Poland Chinas

Sired by Smooth Mastodon a son of A's Mas-
todon and litter mate to the Illinois Grand Cham-
pion. Boar pigs and gilts, bred sows from above
sire and Big Bob dams, the big boned, deep, long
bodied kind at farmer's prices.

Wah-be-me-me Farms
White Pigeon, Michigan.

For 25 Years We have been breeding Big
Type Poland China hogs
of the most approved blood lines. Our new herd boar
"Michigan Buster" is a mighty good son of the great
"Giant Buster" dam "Mow's Miss Queen 2." Some
breeding! Litter of 14. We are offering some sows bred
for fall farrow. J. C. BUTLER, Portland, Mich.

LARGE Type P. O. the largest in Mich. Spring boars
now ready to ship. Boars for the breeders and
boars for the farmers. Come and see the real large
type with quality. Free livery from Parma furnished
visitors. Look up my exhibit at the Great Jackson Co.
Fair, Sept. 8th. to 12th, expenses paid if not adver-
tized. W. E. Livingston, Parma, Mich.

Big Type Poland Chinas with quality. Pigs for
sale by Robert R 334793,
out of Upsome Matron 240346, and by Upsome Lad
90566, out of Eureka Giances 241026. New herd header
B's Bonanza Joe 100992, by Bower's Mammoth Joe
77441. G. A. BAUMGARDNER, R. 2, Middleville, Mich.

L. S. P. C. Boars all sold. A few nice gilts
bred for fall farrow.
H. O. SWARTZ, Schoolcraft, Michigan.

MICH. Champion herd of Big Type P. O. Nothing for
sale but fall pigs; orders booked for spring pigs.
E. R. LEONARD, St. Louis, Mich.

Fall gilt will farrow in Sept. \$100, and yearling sow
that had 9 pig spring with farrow in Sept. \$150.
C. E. GARNANT, Eaton Rapids, Mich.

THE FARMER AND THE H. C. OF L.

(Continued from page 264).
whether he will sell his corn as beef or as corn. Now as the time, silos must be filled if feeding operations are to be engaged in. Now is the time the farm woman determines the size of next year's flock of poultry. Now is the time when the farmer plans the next year's farm acreage. In short, now is the season when the efficient farmer plans his whole 1920 program.

Right now, the American farmer holds in his hands the power to determine quite definitely the size of next year's crop of wheat, milk, meat, cheese, butter, poultry, eggs, in short, all foodstuffs, and with that, to determine whether or not the world's table will be abundantly supplied next year.

Recognize Responsibility.

The American farmer, individually and in his organizations, recognizes his responsibility in this matter—provided, however, that every other good American citizen or foreigner within our borders will let the scale drop from his own eyes and witness that he also has an individual and an organized responsibility that cannot be shifted. The American farmer does not sympathize with artificial or political quackery which befores the real issues, but is impotent to give even passing relief.

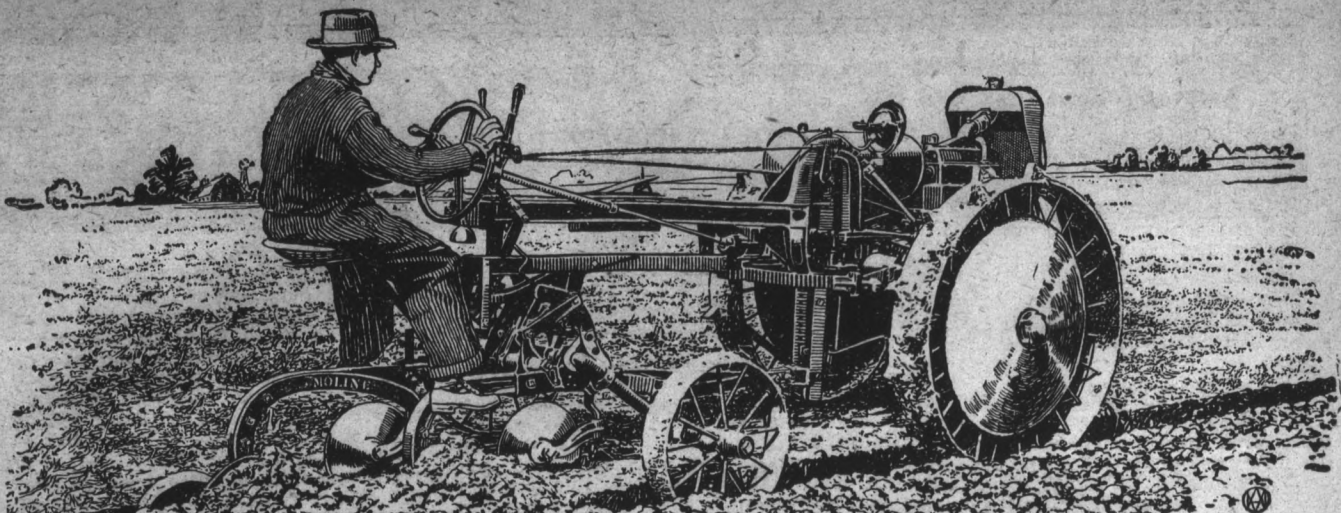
The American farmer is willing to meet the issue squarely. If prices cut to the bone all along the line—farm products, wages, manufactured goods, rent, wholesalers and retailers' profits—will bring the desired result, which he rather doubts, he will go as far along that road as any, but he will not go alone. Let the whole brotherhood of man go the full route. If increased production will clarify the situation, the American farmer will jointly with all of his fellow citizens, buckle his belt for a most strenuous campaign of production, but here again he is determined that he will not work alone.

If capitalistic monopoly wants enough food produced that it may be feasted, if organized labor wants enough food produced that it may be fed, if the do-nothing dawdles want enough food production so that they may occasionally eat, let them stand forth now at this time, when the farmer must determine his 1920 food production program and declare by deeds—cutting out profiteering in goods and wages, going honestly to the business of preparing and purveying the necessities of life, going honestly to the job of doing a full day's work for a full day's pay—their willingness to cooperate. Failure of these forces to do this now will be a boomerang that ere the next cycle of the seasons will effect a condition of living now undreamed of.

MECOSTA FARMERS BUY CATTLE IN ONTARIO.

THIRTY-FIVE head of registered Shorthorn cattle were recently purchased for distribution among farmers of Mecosta county. Jacob Klinefelter, supervisor of Colfax township, R. W. Wigle, cashier of the Big Rapids Savings Bank, and Paul H. Smith, County Agricultural Agent for Mecosta County, were selected as a purchasing committee and made the purchase in the vicinity of Myrtle Station, Ontario. The car was made up partly of eight-month-old heifers which will be used for Junior Calf Club work, a number of two-year-old heifers, a few three-year-old cows, and three young bulls. The cattle arrived in Big Rapids, Sunday, August 24, and were exhibited at the Fair Grounds until Friday, August 29, at which time they were distributed among farmers from nearly every part of the county.

Vote according to the dictates of your own conscience, but cross-question conscience pretty closely before you go into the voting booth.



MOLINE

System of Power Farming

You buy a tractor to make money. The more money a tractor or implement will make for you the more you are willing to pay for it.

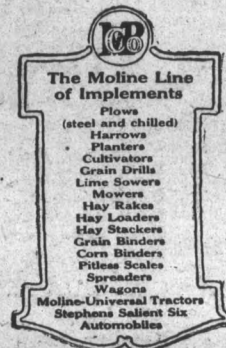
Consider then what a tractor will make for you in dollars and cents—how much man power it saves, how many horses it displaces, and the more and better work it will do. That is the way to buy a tractor—the purchase price alone should not influence you.

When you buy a Moline-Universal Tractor you get one of the finest power plants on wheels. You get a completely equipped tractor, with self starter, electric governor, electric lights, belt pulley, power lift gang plow—everything you need.

You not only buy a quality tractor, but a complete system of power farming. The Moline-Universal enables you to do all farm work including cultivating. One man operates both tractor and implement from the seat of the implement.

Actual figures from over 200 farms in 37 states show that the Moline System of Power farming saves an average of $1\frac{1}{2}$ men and 5 horses per farm.

Figure what such a saving will mean to you. Considered from this point of view the Moline-Universal is the lowest priced tractor made. Thousands of farmers are proving this every day. Write us today for full information. It's free on request.



Moline Plow Company, Moline, Ill.

Atlanta
New Orleans
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Kansas City
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Jackson, Mich.

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Sioux Falls
Des Moines
Bloomington, Ill.

SOPHIE'S AGNES JUST
BROKE THE WORLD'S
JERSEY YEARLY
BUTTERFAT RECORD.

**BUFFALO
CORN**

BUFFALO GLUTEN,
1/2 HER GRAIN RATION
WAS ONLY HIGH-PRO-
TEIN FEED SHE WASHED

GLUTEN FEED

Write to H. CHRYSTAL, Selling Representative, 909 Ford Building, Detroit.

for sample, feeding formulas, etc. Who is your dealer?

Gall Cure That is GUARANTEED

Bickmore's Gall Cure is guaranteed to do all we claim for it. If it doesn't, you get your money back. Successfully used on over a million horses each year all over the world! Cures while the horse works! Wonderful for collar and saddle galls, broken skin, rope burns, sore shoulder, mange, and other skin diseases, bruises, cuts, chafes, mud scalds, grease heel, chapped teats on cows and other wounds on horses, cattle, pigs, and poultry. "Your Gall Cure," says C. A. Irp, of Marshfield, Wis., "is wonderful stuff. Had a mare could not get her shoulder healed all summer. Got a small box of Bickmore's and did not use it all up before her shoulder was healed. Worked her every day in the meantime." Ask for Bickmore's at any druggist's, harness dealer's, general or hardware store. Accept no substitute. Watch for the "Old Gray Horse" trademark—for 34 years the identifier of the best. Or send for liberal trial size box of Gall Cure and valuable Farm Account Book, showing how to keep track of your expenses and receipts. Don't forget—Bickmore's Gall Cure is guaranteed. Your dealer will give you your money back if you are not satisfied after using it. Bickmore's is now being refined and put out for human use. It is called, "Bickmore's X.Y.Z. Skin Ointment" and is going to make as big a reputation as Bickmore's Gall Cure. At your dealer—or write direct to us. The Bickmore Company, Dept. 159 Old Town, Maine.

DON'T CUT OUT A Shoe Boil, Capped Hock or Bursitis

FOR
ABSORBINE

will reduce them and leave no blemishes. Stops lameness promptly. Does not blister or remove the hair, and horse can be worked. \$2.50 a bottle delivered. Book 6 for free.

ABSORBINE, JR., for mankind, the antiseptic liniment for Boils, Bruises, Sores, Swellings, Varicose Veins, Allays Pain and Inflammation. Price \$1.25 a bottle at druggists or delivered. Will tell you more if you write.

W. F. YOUNG, INC., 268 Temple St., Springfield, Mass.

HOGS

Big Type P. C. Choice bred sows from Iowa greatest herds, the big bone prolific kind with size and quality. E. J. MATHEWSON, Burr Oak, Mich.

Big Type Poland's all sold out, nothing for sale at present. Booking orders for spring pigs. Thanking my customers. L. L. Chamberlain, Marcellus, Mich.

Big Type P. C. Spring Pigs

Either sex. A. A. WOOD & SON, Saline, Mich.

B. T. P. C. Some of the best males I ever raised. Two B. October Boars extra good. April pigs weight 100 lbs. Price reasonable. JOHN D. WILEY, Schoolcraft, Mich.

Large Type P. C. Nothing for sale now. Will be in market with better than ever this fall. If herd stuff counts. W. J. HAGELSHAW, Augusta, Mich.

Miller Meadows, L. T. P. C. Ready to ship immune. None better in Mich. Write or come and see. 2 1/2 miles west of Marshall. Clyde Weaver, Ceresco, Mich.

Two gilts for sale, sired by C. A. King Joe. Dam is sired by Great Big Half Ton, by Big Half Ton and out of a Disher's Giant Sow. (Breeding.) Bred to Monster Big Bob by Luken's Big Bob (same breeding as the Grand Champion of the World, Caldwell's Big Bob). A very valuable litter to possess. Fall pigs farrowing now. Book orders early. C. A. Boone, Blanchard, Mich.

YORKSHIRES FOR SALE

Gilts bred for October farrowing. WATERMAN & WATERMAN, Meadowland Farm, Ann Arbor, Mich.

Fairview Stock Farms Tamworths. Registered spring pigs for sale, either sex, from massive ancestors. W. H. Warner, Concord, Mich.

SHEEP

HAMPSHIRE

One of the best bred flocks in America. Home of the International Champion ewe of 1918. Rams of all ages for sale. Write me your wants or come and see them. Harley R. Emmons, Elsie, Mich.

Additional Stock Ads on Page 295

LATEST MARKET REPORTS

FIRST EDITION.

The markets in this edition were revised and corrected on Tuesday afternoon, September 2.

WHEAT.

Threshing returns continue to disappoint producers. In Illinois the farmers now predict that the average yield will not exceed 17 bushels per acre. Very little plowing has been done for the new crop, and in a large portion of the winter wheat area there is too little moisture to prepare a satisfactory seed bed. Since a week ago the United States Grain Corporation has announced a change of prices for the lower grades of wheat. Practically all country elevators are full of wheat. This is partly due to a shortage of cars for moving the grain to marketing centers. Following are the quotations at Detroit:

No. 1 red	\$2.27
No. 1 mixed	2.25
No. 1 white	2.25
No. 2 red	2.24
No. 3 red	2.20

CORN.

At the opening sessions of the corn markets this week trade took a bullish turn following a reduction in estimates on the yield in important corn growing states. A much smaller crop than was expected a month ago is now predicted. The chief bearish news has been the decline in hog prices. The Chicago market is quoting September corn at \$1.77½ and December at \$1.37. Following are the Detroit quotations:

No. 3 corn	\$1.96
No. 3 yellow	2.00
No. 4 yellow	1.98
No. 5 yellow	1.93

OATS.

Returns from threshing show yields that tally up well with earlier expectations on the oat crop. For a month or more back farmers have figured on a small yield of this cereal. In the market prices are generally following those of corn. On Tuesday the trade opened a fraction higher than Saturday, and quotations continued to ascend. Following are prices quoted at Detroit:

No. 2 white	.81
No. 3 white	.80½
No. 4 white	.79½
No. 3 white (new)	.76½

RYE.

Receipts at country elevators are increasing, while prices have weakened, being quoted at \$1.40 for cash No. 2 on the local market.

BEANS.

The bean market continues light and steady. Lacking any speculative interest and export demand, the dealers have very little to do just now. Quotations on the various markets do not represent actual sales in most cases. In New York choice pea beans are quoted at \$8.50; common to fair \$7@8.25; medium choice \$8.50; red kidneys choice \$13.50@14. The trade is slow at Chicago, where the market is feeling the influence of the fight on the high cost of living. Hand-picked pea beans, choice to fancy are quoted there at \$8.75@9; do fair to good \$8@8.50; red kidneys \$11.50@12. Detroit's market is inactive and easy, with prices steady to \$8.10 per cwt, for immediate and prompt shipment.

FEEDS.

The feed market shows no change, and the Detroit quotations to jobbers are: Bran \$47; standard middlings \$56; fine middlings \$64; coarse corn meal \$81; cracked corn \$83; corn and oat chop \$63 per ton in 100-lb. sacks.

SEEDS.

In Toledo prime cash cloverseed is quoted at \$29.75; October at 29.90; prime cash alsike \$29.75; October alsike at \$24.90. The Detroit market quotes red clover at \$29.50; October at \$29.50; timothy \$5.50.

HAY.

Consumers of hay are having difficulty in satisfying their wants. Detroit prices are unchanged as follows: No. 1 timothy \$31.50@32; standard at \$30@31; light mixed \$29@30; No. 1 clover \$25@26.

Pittsburgh.—The market is improv-

ing, with clover selling especially well. Quotations are: No. 1 timothy \$33.50@34; No. 1 light mixed \$29@30; No. 1 clover mixed \$30@31; No. 1 clover at \$30@31.

POTATOES.

Prices show a firmer tendency with the demand good and supplies coming in moderately heavy. Early Ohios are selling at \$3 per cwt. for field run. On the Chicago market the demand and movement is slow with the market unsettled and prices steady; the Early Ohios, field run, are selling there at \$2.40@2.60 per cwt. The Pittsburgh market is in a similar position, having liberal supplies.

BUTTER.

A firm, active market with prices working gradually to a higher level obtains in the majority of our large cities. The greatest advance is seen in prices for top goods. Lower grades have moved upward only a fraction of a cent. At Detroit there is a fair demand with the trade firmer at 52@52½c for fresh creamery firsts. No new export orders are reported though there has been further inquiry from various European countries for American butter.

CHEESE.

In the public warehouses of New York, Chicago, Boston and Philadelphia, there is a rapidly increased accumulation of cheese. This may be

due in part to the storage of Canadian cheese in bond. The market, however, is developing a firmer tone, and jobbers and chain store operators are showing more confidence in present prices by purchasing liberally for near future wants. At Detroit Michigan flats are jobbing at 31@31½c; bricks 34½c; Michigan single daisies 32c and Wisconsin twins at 31½c. In New York whole milk, current make, generally average from 29½@31½c. No export business is reported.

EGGS.

No important change is reported in this market. The quality of current receipts shows a somewhat larger proportion of good eggs. The demand for fresh stock is growing apace and more of storage stock is being used than a week ago. At Detroit fresh eggs are jobbing at 43½@48c per dozen. In New York the western fresh gathered whites are quoted at 50@65c.

WOOL.

The big buyers of wool are already finding that the supply of good grades of wool are inadequate for the needs of the coming year. Consequently they are scouring the world for supplies to supplement the home stores. It is now learned that the exportation of wool from Australia to the United States may begin in June of 1920 instead of at the end of next year. Last week 100,000 pounds of Ohio half-blood

combing sold in Boston at 80c a pound. During July the consumption of wool in this country increased 15 per cent over the amount used in June, and 21 per cent over that used in May.

DETROIT CITY MARKET

Apples and potatoes are offered more plentifully on the city markets, with prices declining. The best potatoes are now selling at \$2.50 a bushel, and small sizes at \$2; plums are more abundant at \$3@4 per bushel, while peaches and pears are getting scarce, the former selling at \$2.50@4, and the pears at \$2@4; apples bring \$2@2.50 per bushel; cabbage 75c@1.25; onions \$2@2.50; peppers \$1.50; summer squash 50c; tomatoes \$1@1.25; corn 12@20c per dozen; grapes 25@30c for 3-lb. basket; hens 33c per lb; springers 32@35c; fresh country eggs 48c; butter 55@60c.

GRAND RAPIDS

Wholesale egg dealers report many cases received last week which upon being candled show shrinkage as high as two dozen per case, indicating long holding. During the war government regulations fixed penalties for marketing stale eggs which reduced the shrinkage. These regulations ended with the war and producers have returned to their old practice. Reports from many of the large potato raising counties in western Michigan are that the little leaf hopper is doing great damage to the late crop. They cause the leaves to curl and turn brown at the tips and edges, causing what is termed tip burn. The M. A. C. is sending out a recipe for control of the insect. During the month of August there was a drop in the price of green hides of 15c per pound in this market, or 20 per cent. Prices of farm products, to growers, the past week were as follows: Potatoes \$2@2.50 per bu; hay \$30 per ton; apples 75c@1.50 per bushel; grapes \$2.50@3 per bushel; tomatoes \$1@1.25 per bushel; eggs 41c; No. 1 dairy butter 45c; pears \$1.50@2.50 per bushel; peaches \$3@3.50 per bushel; oats 75c per bushel; rye \$1.30 per bushel; white cabbage 75c per bu; osage melons \$1.50@2.25 per bushel; hubbard squash 3c per pound; broilers 24c per pound live weight; plums at \$2.50 per bushel.

NEWS OF THE WEEK.

(Continued from page 258).

Monday, September 1.

GENERAL PERSHING sails from France for the United States.—President Wilson announces that he will call a conference of capital and labor to put the whole question of wages on a different footing.—The wife of President Carranza, of Mexico, reaches the border town of Eagles Pass, preparatory to making a tour of the United States.—Munich, Bavaria, is under martial law.—Czecho-Slovakia is preparing to go to war against Poland.—A threshing rig explodes near Carson City, Mich., burning machine and barn and scorching the crew.—Seven persons are dead at Alliance, Ohio, as a result of a private club dinner.

Tuesday, September 2.

IN his message to the Mexican congress, President Carranza upholds the sovereignty of his country, declares that the government is rapidly growing in strength, and that the future of Mexico is exceedingly hopeful.—The federal government issues subpoenas for complete records of meat packers in forty cities throughout the country to be placed before a federal grand jury in Chicago.—Following the race rioting at Knoxville, Tenn., troops restore order.—The attendance at the Michigan State Fair on Monday reached 160,000, a new record.

THE TIME FOR BETTER THINGS.

This is the year to work for better things in our farming, not some other year. The only time we are at all sure of is now. Let's go out now and do something that will send the old place along the road to better things. May be only to trim up the yard or prune the hedge or shade trees. Perhaps we can do no more than tidy up the back yard; but if we do it well, we have made the world a bit better.

Live Stock Market Service

Reports for Tuesday, September 2nd

BUFFALO.

Hog prices ruled from 25@50c higher on this market today. Lambs and veal calves were steady, while cattle sales were on a weak basis.

DETROIT

Cattle.

Market dull. All grades 25c lower than Monday, and 75c lower than last week's close.
Best heavy steers \$12.50@13.00
Best handy wt bu steers... 10.25@10.75
Mixed steers and heifers 9.25@ 9.75
Handy light butchers.... 7.50@ 8.00
Light butchers 6.75@ 7.00
Best cows 8.50@ 8.75
Butcher cows 7.50@ 7.75
Cutters 6.25@ 6.50
Canners 5.75@ 6.00
Best heavy bulls 7.75@ 8.00
Bologna bulls 7.00@ 7.25
Stock bulls 9.00@ 9.50
Feeders 7.00@ 8.00
Stockers 7.50@ 8.00
Milkers and springers... \$ 75@ 125

Veal Calves.

Market 50c lower.
Best \$22.00@22.50
Other grades 10.00@18.00

Sheep and Lambs.

Market dull; 25c lower.
Best lambs \$13.00@13.75
Fair lambs 11.00@12.50
Light to common 8.00@10.00
Fair to good sheep..... 8.00@ 8.50
Culls 4.00@ 6.00

Hogs.

Market steady to 25c lower; heavy grades very dull.
Pigs \$ 18.50
Bulk of mixed 20.00@20.25
Heavy 18.00@19.00

CHICAGO.

Hogs.

Estimated receipts today are 12,000; holdover 6,169. Market on the better grades is very slow, mostly 25@50c lower than early; packers' grades are strong. Tops \$20.80; heavy 250 lbs up, medium, good and choice \$17.50@19.50; medium 200 to 250 lbs, medium, good and choice \$18@20.25; light 150 to 200 lbs, common, medium, good and choice \$19@20.40; light lights 130 to 150 lbs, common, medium, good and choice \$18.50@19.50; heavy packing sows 250 lbs up, smooth \$16.20@17.25; packing sows 200 lbs up, rough \$15.50@16.25; pigs 130 lbs down, medium, good and choice \$16@18.75.

Cattle.

Estimated receipts today are 9,000; choice grades strong; others steady; calves 25c lower. Beef steers, medium and heavy weight 1100 lbs up,

choice and prime \$15.85@18; do medium and good \$11.50@15.85; do common \$9.50@11.50; light weight 1100 lbs down, good and choice at \$13.75@17.50; do common and medium \$9.25@13.75; butcher cattle, heifers, common, medium, good and choice \$6.75@14.50; cows, common, medium, good and choice \$6.50@13; bulls, bologna and beef \$6@9.25; do canner steers at \$6@9.25; veal calves, light and handy-weight, medium, good and choice at \$10.50@20.25; feeder steers, common, medium, good and choice \$6.75@10.25; stocker steers, common, medium, good and choice \$6.50@8; stocker cows and heifers, common, medium, good and choice \$8@10; stocker calves, common medium, good and choice \$11@15.75; western range cattle, beef steers, medium, good and choice \$8@12.75.

Sheep and Lambs.

Estimated receipts today are 32,000. Native and western lambs are steady. Sheep steady to lower; feeders 25@50c lower. Lambs 84 lbs down, medium, good, choice and prime at \$12@15.25; do culls and common at \$7.50@11.50; spring lambs, medium, good, choice and prime \$10@11; ewes, medium, good and choice \$7.25@8.50; do, culls and common \$2.50@6.50; breeding ewes, full mouths to yearlings at \$8.25@14.50; yearling wethers, medium, good and choice \$12.25@14.

BUFFALO.

Monday, September 1, 1919.

Cattle.

Receipts 235 cars; slow, 50@75c lower; prime steers \$16@17; best shipping steers \$13@13.50; medium shipping steers \$12@12.50; best yearling steers, 950 to 1000 lbs \$15@16; light yearlings, good quality \$12.50@13.50; best handy steers \$11.50@12.50; fair to good \$11@11.50; handy steers and heifers, mixed \$12@12.50; western heifers \$11@11.50; best fat cows \$10@10.50; butcher cows \$8@8.50; cutters \$6.50@6.75; canners \$5@6; fancy bulls \$10@10.50; butchering bulls \$8@9; common bulls \$7@8; best feeding strs \$10.50@11; medium feeders \$8@9; stockers \$7.50@8.50; light common at \$6.50@7; milkers and springers \$75@150 per head.

Hogs.

Receipts 50 cars; strong; heavy at \$20@20.25; yorkers \$20.25@20.50; pigs and lights \$18.50@19.

Sheep and Lambs.

Receipts 20 cars; slow. Top lambs \$15@15.50; yearlings \$11@12; wethers \$9.50@10; ewes \$8.50@9.

Calves.

Receipts 1,100; 50c lower; tops \$22@22.50; grass calves \$8@11.

WINE MAKERS TURNING TO OTHER GRAPE PRODUCTS.

In line with national prohibition, the Irondequoit Wine Company, Rochester, New York, has been taken over by a new organization known as the Irondequoit Fruit Juice Company, capitalized at \$150,000. The wine company was originally organized in 1832 and put out vineyards on the slopes that rise from Irondequoit Bay. For years the company has supplied retail druggists largely and sold in all states of the union. As early as 1909, it became evident to the managers that prohibition was only a matter of time. The manufacture of grape juice was begun in a small way, together with fruit products. The new company is the outgrowth of this start. In 1916, the first wine grapes, some of them set seventy-five years ago, were pulled. Since then this change to other kinds of grapes has been steadily going forward and the re-planting was completed this spring.

Reflecting the changed policy in the grape business, is the information that the Grimley packing house in the Lake Keuka district, which has been closed for several years, will be reopened this season under the direction of grape growers. For several years the package grape business has been permitted to lapse and about all attention was paid to producing wine grapes. It is now realized that the package end of the business presents great possibilities.

The crop generally is in excellent condition. Already some talk of price is heard, with unconfirmed reports that offers have been made up to \$100 per ton. It looks as though the grapes would ripen a fortnight ahead of time which means that the crop will likely escape all frost damage.

ROADSIDE MARKETS.

ALONG the main traveled highways of Niagara county in Western New York the roadside market is a new development of the past two or three years. On a recent trip through this county I saw these markets on farm after farm. Some of them were quite pretentious with a fine display of fruit, vegetables and eggs, and an attendant in charge. Others consisted only of a few baskets of tomatoes or fruit with a "for sale" sign and the price tacked to a post.

The possibilities in the roadside market are limited only by the location of the farm, and the ability of the farmer to produce and display attractively those good things of the farm that meet the requirements of the city consumer. Every year more town folks are getting the habit of running out into the country in their automobiles and buying their vegetables, fruit, poultry and egg supplies direct from the farmer. It is a trade worth cultivating.

E. E. R.

TO EXPORT HORSE MEAT.

TO open up the channels of trade for some of the inferior horses in this country that do not pay for their keep, and to increase the meat supply in some of the larger cities in the United States and abroad where horse meat is used for human food, the United States Department of Agriculture is authorized by congress to inspect horse meat and horse-meat products.

The amendment to the regulations governing meat inspection by the Department was passed by congress on July 24, with an appropriation of \$100,000 to carry on the work during the fiscal year ending June 30, 1920.

While it is expected that as a result of this amendment inferior horses throughout the country will be slaughtered for human food, it will open a market especially for the small horses (many of them wild) on the western range.

These animals are eating much of the limited supply of range feed which is needed by live stock that is better able to pay for its keep. Elimination of the undesirable horses not only will save feed for more worthy cattle and sheep but will add hides to the leather supply and increase meat stocks.

Every establishment in which horses are slaughtered for the preparation of food products for transportation or sale in interstate or foreign commerce must be federally inspected under the new regulations. All horse meat for export trade must be inspected. The slaughter of horses and the preparation and handling of horse meat must be conducted in establishments separated from those in which other animals are killed and handled.

All horse meat or horse-meat products must be conspicuously labeled or branded "horse meat" or "horse-meat product," and must bear the statement "U. S. Inspected and Passed by the U. S. Department of Agriculture." The regulations list a number of horse diseases which, if found in any animal slaughtered, will cause it to be condemned as food.

One of the most important reasons for the new regulations is that many foreign governments will not import horse meat from the United States unless it is federally inspected.

Briefly, in making possible the utilization of horses for meat, the regulations place the matter under federal supervision, thereby insuring that the product is clean and wholesome.

The regulations, it is explained, merely provide for the inspection. The number of horses used for meat will depend on the extent to which horses are marketed for that purpose and likewise on the demand for the product.

NEED TILE.

Cheboygan county farmers are anxious to have a tile manufacturing plant located in their county. Much tile drainage is needed, but tile now must be shipped two hundred miles or more. They have good clay for manufacturing tile. Anyone interested should correspond with the County Agricultural Agent, Cheboygan, Mich.

NEW YORK PRODUCE MARKET.

Butter.—Receipts of butter have run considerably higher than last week. However, that is not due to increased production throughout the country, but rather because much of the centralized butter that ordinarily has gone to Chicago has been diverted to this market because the Chicago packers have been curtailing their purchases of butter since the recent agitation against the hoarding of food supplies. Local consumption of butter is running higher than for some time and it is expected that it will continue good as many of the summer vacationists are returning to the city. There has been no export demand of late but several inquiries from exporters have led many to feel that we may expect some active export business soon. The market has been very active and strong throughout the week and the price of butter has advanced one and a half cents since last Saturday. High quality butter continues scarce and is eagerly purchased whenever any does arrive. The price advance is not affecting the under-grades to the same degree as the higher quality stock. However, there is a somewhat stronger demand for under-grade stock than has been in evidence for some weeks heretofore. Established quotations at the close on Friday were as follows: Extras 57c; higher scoring than extras 57½c; firsts 53c; seconds 50c.

Cheese.—The cheese market has been active and a stronger tone has developed during the week. Local demand has been strong and large orders have been placed by wholesalers and large chain store operators. The production of cheese is considerably greater than at this time last year and greater stocks are in public warehouses. It is thought, however, that local and foreign demand will be strong enough to care for all stocks that have accumulated. Considerable Canadian cheese has been purchased by Ameri-

can operators and a small amount of export business is being done with it. Quotations at the close Friday were: Common to good 26c; average run 29c; specials 30c.

Eggs.—Receipts of eggs have been higher during the week. That is thought to have been due to forwarding of shipments that were held back because of the embargo of some time ago. The quality of the stock being received is slightly improved but as yet dealers find it difficult to meet the demand for high quality stock. In order to get better stock many dealers have resorted to the use of storage eggs during the week. The market can be said to be firm and the price tendency has been slightly upward during the week. Quotations are: Firsts 48c; extra firsts 52c; extras 55c.

Poultry.—Receipts have been heavy and the price has worked downward. Demand has materially lessened during the week. Quotations are as follows: Spring chickens 33c; fowls 33c; old roosters 22c; ducks 30c; geese 20c.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Indigestion—Crib-biter.—Some time ago I purchased a thin horse; gave him condition powder, also one pound of worm powder. He also cribs, and with good care and plenty of feed he is weak and don't pick up. I am inclined to believe he has back or kidney trouble. When stepping from one side of stall to the other he trembles. When worked he perspires too freely. E. C. D., Fowlerville, Mich.—Give him 40 drops of fluid extract nux vomica, 1 oz. tincture cinchona and ½ oz. of Fowler's solution at a dose in feed three times a day. Give 1 dr. acetate of potash at a dose in feed or in drinking water once a day. He should be well fed, not over-worked, and if he is heavy-coated, clip him.

Indigestion.—My cows are inclined to eat wood. I also have two cows that give strong tasting milk. F. K., Richmond, Mich.—Put three tablespoons of powdered wood charcoal in each cow's feed two or three times a day and turn her on grass as soon as possible. Give cows that give the strong tasting milk a teaspoonful of hyposulphite of soda in feed twice a day. Change their feed.

Warbles.—Some of my cows have warbles and I wish you would tell me what to do for them. R. F. L., Litchfield, Mich. Open skin, squeeze the grub out and kill it, dust boric acid into openings daily, until skin heals.

Overheated Black Mare.—I have a black mare that seems to be in good health, which pants badly when the weather is very hot. What can I do for her? T. D., Soldan, Mich.—First of all, it is well to keep in mind that the horse which becomes overheated is suffering more or less from indigestion, not in a fit condition to do hard work; furthermore, black-colored horses never stand the heat as well as the light-colored ones. Give her 2 drs. of chloride of ammonia at a dose in water three or four times daily. If she is large it will do no harm to give her three dram doses on hot days.

Diseased Teat—Cows with Three Teats.—Last June I bought a cow, and three weeks later one teat hardened. Later on it broke open in several places. I was inclined to believe it a bee sting. The teat is of blue color. I attended an auction sale of cows lately and noticed several cows with only three good teats. Is this caused by disease? E. P., Black River, Mich.—Apply one part alum, two parts oxide of zinc and three parts boric acid to sore teat twice a day. Bacterial udder infection is often spread by milker being careless and not milking the diseased cow last, or cleaning the hands after milking those with diseased teats before milking a well cow.

HAY Ship To The Old Reliable House, Daniel McCaffrey's Sons, 623-625 Wabash Bldg., Pittsburgh 'Pa.

Mr. POULTRY FARMER:

We make a specialty of White Henner Eggs and have created a profitable market for your eggs the year around. We pay the highest premium for your Henner Whites—We remit same day shipment arrives. Ship Often—Ship by Express.

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Hustles Heavy Hogs to Market

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Guaranteed Trial Offer We will ship you ten gallons, half a barrel, or a barrel. Take 30 days—feed half to your hogs and poultry. If not absolutely satisfied return the unused part and we will refund every cent you paid us—no charge for the half you used.

Milkoline has a base of Pure Modified Buttermilk to which essential fats and acids are added. Milkoline comes in condensed form. Will keep indefinitely in any climate. Will not mould, sour or rot. Files will not come near it.

2c a Gallon For feeding mix one part Milkoline with 50 parts water or swirl and feed with your usual grain feeds. It helps keep hogs healthy, their appetites keen and makes more pork per bushel of grain. Stop buying buttermilk of uncertain quality. Use Milkoline and you will always be sure of uniform acidity, and at a cost of 2c a gallon or less when fed as directed. Many users say Milkoline saves them one-third on feed bills because it makes their hogs and poultry assimilate all their feed.

1400% Profit W. H. Graham, Middleton, Mo., writes that he got an extra \$50 worth of pork from \$50 worth of Milkoline in a sixty day feed. He made an actual test of this lot of hogs in comparison with another bunch. We could quote hundreds of testimonials, but the best proof is that we legally guarantee Milkoline to be satisfactory or refund your money, (you are the judge) and refer you to S. W. Blvd. Bank of Kansas City, Mo., and R. G. Dunn & Co. **MILKOLINE is just as good for Poultry as for Hogs.**

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80 recorded Shropshires—12 flock leaders, 25 yearling rams for range or grade use, 43 ewes—mostly yearlings. Herbert E. Powell, Ionia, Mich.

Idle Wild Stock Farms Shropshire yearling rams for prize winning stock. Make your selection early. Cliff Middleton, proprietor, Clayton, Mich. R. 3.

Shropshires Am offering 16 yearling rams and 8 yearling ewes of Senator Bibby breeding. C. J. THOMPSON, Rockford, Mich.

Shropshires—Rams Bred from McKerron's Holker 275(014259R) 377379 English strain. Dan Booher, R. 4, Ewart, Mich.

For Shropshire Yearling Rams write or call on ARMSTRONG BROS., R. 3, Fowlerville, Mich.

80 Reg. Shropshire Ewes yearling and ram lambs for sale. Jno. Grieve, Fowlerville, Mich. R. F. D. No. 3.

For Sale Three Registered Oxford Yearling Rams \$40 each. Reg. and Del. for quick sale. Don't wait. J. Robert Hicks, St. Johns, Mich.

For Sale. Registered Oxford rams, 2 ram lambs 1 and 3 years old, beauties. Geo. T. Abbott, Phone Deckerville. 783 R. 2, Palms, Mich.

Extra good yearlings and lamb rams of good breeding for sale. We are also offering a few aged ewes. Floyd J. Anderson, R. D. No. 10, St. Johns, Mich.

Reg. Shropshire Ram Lambs with both size and quality. O. K. Topf, Eaton Rapids, Mich.

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Percherons, Holsteins, Angus, Shropshires, Durocs DORR D. BUELL. Elmira, Michigan.

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Important, (Wt. 2550) Sire of one & two yr. olds. Sire of a son with 14 in. bone at two years in service. Mares as good. Young stock for sale. Chas. Osgood & Sons, Mendon, Michigan.

Percheron Stallions and mares at reasonable prices. Inspection invited. F. L. KING & SON, Charlotte, Mich.

For Sale—A Car Of Grade Draft Colts Chas. Bray, Okemos Ingham Co. Mich.



The Winchester Pattern. 320 pellets out of a possible 481, or 74% of the shot charge, evenly distributed; no birds get through

How big a bag will you bring back?

THE difference between a bulging bag and a lean one is often a question of gun and shells and not of shooting skill.

Make sure you have the right game-getting combination—shells that kill when the aim is true, and a gun that enables the shell to make its best pattern.

Good shell patterns are either *allowed* or *prevented* by the character of the gun barrel—the chamber, bore and choke.

Faulty chambering even more than faulty choking tends to mash and “ball” the shot, making pellets fall short or fly wide.

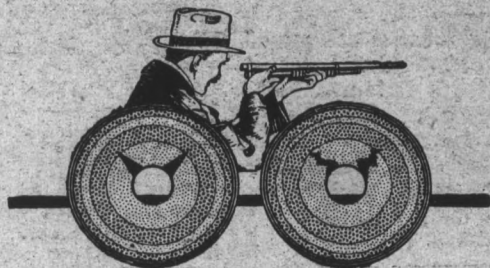
And if a gun is faulty in its most vital part, the chamber, the chances are that the bore is also carelessly made.

From chamber to choke, the barrels of the famous Winchester Repeaters are bored to make the shell throw its highest pattern. They are free from shot-jamming defects. They let the shell do its full work.

“Line” test the barrel

Point a Winchester barrel toward the light and look through the bore.

It looks like a highly polished mirror. Not a false shadow throughout the bore. Sight through the bore at a horizontal black line on the window. This line will throw a “V” shadow in the bore. Tilt the barrel till the point of the “V” touches



The “Line” test

Perfect bore of Winchester barrel revealed under “Line” test.

Irregularities revealed in inferior shotgun barrel under “Line” test.

the muzzle. The perfect “V” shows absence of irregularities.

This is the “Line” test of a perfect bore. No faulty barrel can pass this test—the “V” will be distorted.

What means

This mark on a Winchester barrel means that the gun has passed the “Winchester Provisional and Definitive

Proof” test, having been fired many times for smooth action and accuracy, and strength-tested by firing 25 to 40 per cent excess loads. This stamp stands for Winchester’s guarantee of quality, with 50 years of the best gun-making reputation behind it.

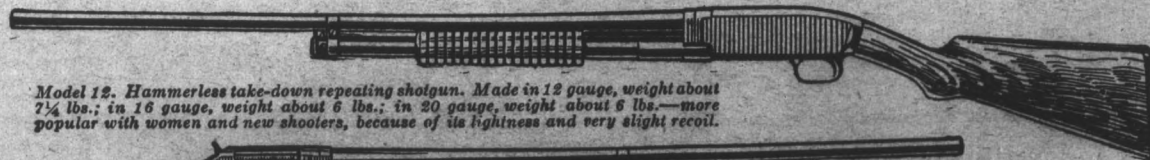
Your dealer will show you Winchester Guns and Ammunition

Before you take to the woods this Fall, get your dealer to show you a Winchester Repeater—Model 97 for hammer action; Model 12 for hammerless. Put one to your shoulder, try its balance, see how beautifully it handles. Your sportsman’s instinct will tell you it’s the best weapon you could choose. Leading hardware and sporting goods dealers in every community carry Winchester Arms and Ammunition. They will be glad to assist you in selecting the gun best suited to your needs. Upon request, we will mail you, free of charge, the complete catalog of Winchester guns and loaded shells.

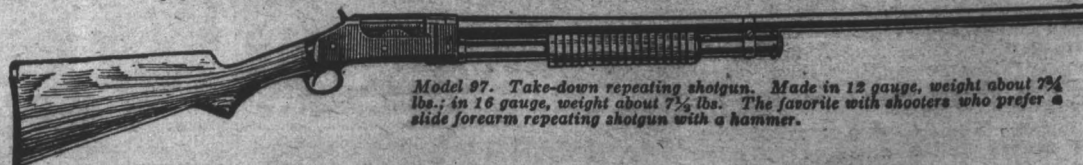
WINCHESTER REPEATING ARMS CO.
Dept. 149 New Haven Conn., U. S. A.

Important Notice

The chamber, bore and muzzle choke of all Winchester Shotguns are *reamed* to micrometer measurements for the particular Winchester Shells they are meant to shoot. You will get the highest and most uniform pattern results by shooting Winchester shells in Winchester guns. The two are made for each other.



Model 12. Hammerless take-down repeating shotgun. Made in 12 gauge, weight about 7½ lbs.; in 16 gauge, weight about 6 lbs.; in 20 gauge, weight about 6 lbs.—more popular with women and new shooters, because of its lightness and very slight recoil.



Model 97. Take-down repeating shotgun. Made in 12 gauge, weight about 7½ lbs.; in 16 gauge, weight about 7½ lbs. The favorite with shooters who prefer a slide forearm repeating shotgun with a hammer.

WINCHESTER

World Standard Guns and Ammunition