

"—for all the Farmers of Michigan!"

MICHIGAN BUSINESS FARMING

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BUILD A SILO!

Profit by last years experience. Unless you have a Silo, an early frost will leave you short of feed to winter your stock. Stock feeds are found to be high. The Silo will make up for the clover which was killed last winter and lower your feed bills.

WHY?

THE SILO increases the feeding value of the corn crop from 25 to 30 per cent.

THE SILO helps the farmer make the best possible use of frosted corn. Even immature corn can be saved by putting it in the silo.

THE SILO gives insurance against short, drought-stricken pastures.

THE SILO provides juicy feed in winter which helps to keep the cows healthy and productive when green feeds are lacking and dairy prices are high.

THE SILO furnishes the cheapest winter feed. Three tons of silage are worth fully as much as a ton of good hay.

THE SILO aids in fattening stock.

THE SILO enables the farmer to feed his stock from less acres.

THE SILO should be a partner of every creamery and cheese factory patron. Good silage does not in the slightest injure the quality of milk, butter or cheese.

What Crops can be put in the Silo?

Corn, oats and peas, pea cannery waste, soy beans and corn, finely chopped clover (better if mixed with corn), green clover and timothy, sugar beet tops cut with corn fodder or stover.

U. S. Department of Agriculture Says--

"Less corn can be fed by many dairy-men without reducing milk production, providing they feed more silage and legume hay.

Less corn will be available for feeding the cattle for much more than usual is needed now for human food.

Succulence is just as essential to the cow as to the human being.

Silage provides succulent feed during the winter when pasture is not available.

Silage is palatable and no other feed will combine so well with dry hay and a little grain to produce maximum and economical results."

If there isn't a Silo on your farm, build one this summer. You will need silage next winter.

From a Poster Issued by
EXTENSION SERVICE
MICHIGAN AGRICULTURAL COLLEGE
EAST LANSING, MICHIGAN

This space donated by the Publishers of
Michigan Business Farming
to help win the war by conserving
food-stuff for our army and navy

"A Silo on every Michigan farm"

"HOLD STEADY" SEC'Y REED TELLS FARMERS

Success of Producer's Organization Depends Upon Loyalty of Its Members to the Terms of the Ass'n's Contracts

This is the time for our people to consider seriously, and take action, upon the future of this very important industry.

Very unusual conditions confront us. We would not suggest to our people to be unpatriotic in any way. We want to go the limit in a patriotic endeavor at this time, but the government has fixed—as a basis upon which to place every commercial activity—a cost of production plus a 10% profit, and while it is conceded, and by many accused, that the action of the officers of the Michigan Milk Producers' Association has been ultra-conservative in all of the past (and we believe that safe business action depends upon conservative thought and action), yet we must come to that basis where we will be like other business interests, receiving for our product the cost of production plus a 10% profit.

No one deplors the erratic ways and lack of stability of some of the milk producers more than does your field secretary. It has come to be conceded by all good thinking men that in order to do the best constructive work we must be steady to our purpose and hold to every agreement we make. We must not allow any petty grievances or imaginary evil to swerve us from the absolute discharge of our every obligation, and in order to obtain the business principle for which we contend—of a price for our product that equals the cost of production plus a profit—which is the foundation for every other industry, we must not be vacillating and turn aside from our agreements by any call that might be presented to us to yield to that temptation.

This is the time when the buyers, who are anxious for the milk, will go onto the territory of other buyers and offer an inducement of a few cents a hundred pounds over the commission price in order to get more milk. After they have induced our producers to violate their contract then the word comes back to me that they have been able to buy our men at a few cents per hundred pounds on their milk.

A TEST CASE

In pursuance of the above outlined thought, and with a knowledge of the vacillating nature of some men, and what may be before us, we desire to call your attention to the fact that within a few recent days we have been put to our utmost endeavor to avoid suits being brought before us in the courts, where the selling agent of the Michigan Milk Producers' Association, and the patron, who put his product in the hands of the Association to sell, would be co-defendants in a suit before the court for damages. It has been the fortune of your field secretary, through all his business career, never to have been either a plaintiff or defendant in a suit at law, contending that one had lost in a financial way in a suit at law as soon as the suit was started—whether the suit was decided for or against him.

The buyers all over Michigan have our contracts. We have sold the products of our patrons to them and if we fail on this contract we are liable to suit and damages. Don't let anyone persuade you that these agreements do not carry with them in any court of law a damage consideration in case of failure for their performance. Not only this, but we are trying to establish the fact in the minds of all good people that the milk producer will honor his contract whether he gains or loses by so doing. Should other of our patrons do as some have in the past, we may not be as fortunate in avoiding suit and damages in our adjustment as we have been in the past.

DON'T CHANGE

Don't attempt to change to another buyer without consulting the agent.

Don't think that the patrons of other buyers have not just as great grievances as have you.

Don't think that by changing you will relieve yourself of the annoyance incident to the business.

When you attempt to change you weaken yourself in the estimation of your buyer and also of the one to whom you would sell. This is always the case.

More than this—the Detroit patrons should be well satisfied with the ruling of the Detroit Commission.

PRICES IN OTHER CITIES

When we compare the prices received by the milk producers of the Detroit area with those of

other cities, we are led to feel that we have been very fortunate in the decisions of the Detroit Area Milk Commission. The prices quoted in other cities are laid down at the city receiving station (mostly). The price quoted in the Detroit area is in the 15c zone. Add to the \$2.56, the Detroit price on milk, the 15c zone freight rate and you have \$2.71 in Detroit as compared with the following quoted prices in other cities:

Philadelphia.....	\$2.47
Chicago.....	2.30
Carlyle, Ill.....	2.30

It will thus be seen that the Detroit area producers have received better consideration in the hands of the Commission than have the producers of other cities.

COMMISSION MEETING

Two very important problems will come up in the near future before the next Commission meeting, which we trust will not be very distant. One is concerning the gallon shippers' problem. These men are making strong contention concerning a better price than the station shippers. We are not at all certain but that their position is justified and that they should receive, probably, 10c per hundred pounds more than the station shippers.

THE TEST PROBLEM

The test problem is ever before us. We have, at the present time, men sent by Prof. Anderson who are devoting their time to the territory of Detroit buyers. These men are paid by the college, and the buyer remits to the college. These

Do You Like Your Silo?

Hundreds of readers of MICHIGAN BUSINESS FARMING own silos. We know that some of you like silos and some do not. We want to give your experiences both pro and con, to the rest of our readers.

We will give \$3 in cash to each writer of the four best letters giving actual silo experiences. To writers of any letters used we will give a year's free subscription to MICHIGAN BUSINESS FARMING.

The length of the letter will be left to you. It must give your actual experience with the silo. We hope to receive letters telling of the kind of silos which are satisfactory and unsatisfactory. Some of you have had unfortunate experience with wood, concrete or underground silos. If so, write us fully about it.

We hope some of the letters will tell of the cost of filling, and would like these to include all the items of expense contributing to this cost. Doubtless some have had experience with community owned silo filling outfits. If so, be sure to describe these, their original cost, cost of up-keep and their method of operation.

Particularly do we want letters on farm results of feeding ensilage. Do you use it for feeding dairy cattle, beef cattle, breeding herds, sheep, hogs and chickens? Tell us all about it so we can pass your information on to the M. B. F. family.

All letters to be considered must reach us by Tuesday, August 13th.

men are under no obligation to the buyer—only being told where to make the test. Whether this will be further extended or whether another agreement between the milk organization and the buyer, whereby the agent will supervise and direct the tester, are problems for immediate consideration.

PRESIDENT HULL

President Hull is giving quite a portion of his time to the work in the Detroit area, co-operating with the field secretary. The field secretary's work is calling him, not only to the Detroit area, but over the entire state. His dates are arranged as carefully, to save time, strength and money, as can well be done.

Last week meetings were held at Eureka, Goodrich and Fenton. This week meetings will be held at Cadillac, Traverse, City, Manistee and Honor. Many buying centers in the state are asking the State Association to become the selling agent for their product. It is only because of the lack of available help that we are not entering into a broader field of usefulness and in a short time, if we continue to demand the respect of the buyer and the public, the Michigan Milk Producers' Association may be a great factor in price, methods and position of this great industry in this state. Trusting for your continued co-operation, I remain, very truly yours.—R. C. Reed, Field Secretary, Mich. Milk Producers' Ass'n.

CO-OPERATIVE ELEV'R PAYS BIG DIVIDENDS

Caro Farmers' Co-operative Concern Earns Over \$8,000 During Past Year Despite Many Adverse Conditions

According to the Tuscola County Courier, the Caro Farmers' Co-Operative Elevator Company has just closed one of its most successful seasons, despite the many difficulties encountered in handling grain and beans because of the wet condition.

A profit of \$8,821.59, a sum only slightly less than the best of the four years the company has been doing business, was distributed as interest and dividends among the stockholders.

During the four years the amount distributed to stockholders in interest and dividends totaled \$35,258.01, which to the man in the street would appear to prove the success of co-operative enterprises when managed by capable men of former successful experience.

The company now has a membership of over 300, and during the last fiscal year did a gross business of \$406,811.36 on a paid in capital stock of \$24,100. The sales exceeded those of the previous year \$87,000.

Changing conditions in the business world caused the company to go on a spot cash basis early in 1918, and so successful was the result of that move that since May 4, it has not been necessary for the company to borrow a single dollar.

Under the plan adopted by the company, stockholders are first paid 6 per cent on the stock owned, then the surplus profits are paid on the basis of the amount of business done by each. This year it amounts to 2½ per cent and the accounts of the 10 persons given below will indicate the amount each bought and sold through the company, and the amount of the check each will receive for the interest and dividends:

Ami G. Terry.....	\$4,619.99	\$132.30
Henry Lane.....	4,060.04	107.50
Mrs. Jennie Esler.....	4,051.98	107.30
Dwight Turner.....	3,907.00	103.67
Claude Cole.....	3,834.48	104.86
Ed Coler.....	3,392.98	90.82
David Taylor.....	3,177.58	91.44
Wm. Carpenter.....	3,127.40	79.98
Henry Pattison.....	3,071.25	88.78
Rudolph Montei.....	2,911.07	78.77

MY EXPERIENCE IN RAISING MY CHAMPION CROP OF CORN

Weather conditions made it late when I got my acre of corn planted. I could not work at it only on Saturdays as school wasn't out yet. My seed was good as it was some that had taken 3rd place



in the state the year before and it came up quick and grew to beat the band. I thinned it to from 2 to 3 plants to a hill. I cultivated it 8 times, also hoed it once.

The ground before planting was top dressed with a light coating of barnyard manure.

The early frost caught the corn before it was ripe, otherwise I would have had a lot of seed corn. As it was I harvested 88.7 bushels of shelled corn and my profit was \$98.95.

My exhibit in the county won first prize and was sent to Lansing where it won second prize in the state. I am in the game again this year and of course you will guess that my ambition is to get first but time and attention to business will tell.

—Glenn H. Whidby, Delton.

Caro—The first calf club in Tuscola county was organized here July 20th, under the supervision of C. A. Spaulding of the M. A. C.

DO WE NEED THE NON-PARTISAN LEAGUE?

Can this New Political Organization "Deliver the Goods" to Farmers of Michigan After it has Secured Foothold

If an organization that had been charged time and time again with disloyalty and pro-German leanings, should publish a portion of its official organ in the German language, what would be your conclusion?

We ask this question advisedly, for it is closely related to a subject upon which the farmers of Michigan will undoubtedly be called upon to make a decision within the near future. This decision must be right, for it will have a tremendous influence upon the future welfare of the farmers of the state.

We are referring to the Non-Partisan League and its official publication, the Non-Partisan Leader. Are they loyal? Are they 100 per cent American? Can they successfully carry out their program without seriously hampering the nation's war work? And lastly, can they "deliver the goods" that they are now trying to sell to the farmers?

There has been much opposition to the Non-Partisan League, most of which no doubt has been inspired by selfish motives. Wall street views with alarm any movement tending to disturb the normal social and economic conditions of the country and would stop at nothing to check such a movement in its infancy. In considering the charges that have been made against the League we must not overlook their sources nor the motives that lay behind them. On the other hand, we have ample evidence to show that while the League may not have been openly disloyal, it has been at least lukewarm in its support of the government and does cater to a class which is either distinctly pro-German or lacking in the proper American spirit.

Figures are not available to show the number of German reading people who are members of the League but the fact remains that the Non-Partisan Leader has found it necessary to publish a portion of its news for the benefit of its subscribers who do not read English. While this is, of course, a perfectly proper service for a publisher to render to his subscribers, at this particular time the entire nation naturally looks with suspicion upon any publication that gives such open evidence of its German support. Moreover, we cannot help but entertain a suspicion that many of these subscribers were secured by reason of the pro-German sentiments.

MICHIGAN BUSINESS FARMING will endeavor to secure all possible information concerning this organization that its readers may be guided intelligently in making a decision. We have wired the Non-Partisan League of North Dakota for an article setting forth the League's program for the Great Lakes states, and have been assured that it will be provided. Pending its arrival, we publish below two letters setting forth both pro and con arguments. They are used thru the courtesy of the *Idaho Farmer*:

"Granville Lowther writes in the *Farmer* of June 6, that he has investigated the nonpartizan league from several sources and that he must reject it as a result of his investigations.

"Mr. Lowther has investigated the League from every source of information except the North Dakota farmer. This great body of progressive men, who are pointing the way to farmers of other states, Lowther directly insults by refusing their testimony and swallowing whole the words of their enemies.

"The business and political elements in North Dakota have had hard sledding. They fought the Equity exchange by slandering its leaders and by breaking up its meetings with mob violence. But the Equity grew in spite of them.

"When the Non-Partisan League appeared, the same tactics were used against it. Mr. Townley was attacked on all sides and painted as a monster. If the Equity had frightened the politicians, the league threw them into a terror. But they had shot their wad during Equity days and their assaults and slanders fell harmless in North Dakota. The farmers replied to them by a vote of 87,000 to 22,000, leaving no doubt that in this state the minority would no longer swing the majority, and that the former would not be able any longer to use the power of government to exploit the latter.

"Then the war came on and this discredited minority seized on the loyalty issue in the hope of rehabilitating themselves. If any farmer in Washing-

ton wants to believe that all of the farmers of North Dakota are disloyal and only the money sharks, the corrupt politicians and the get-rich-quick artists in that state are loyal, that is his privilege, but he is doing it at the behest of the gang that wants to keep on exploiting him. So long as the farmers let the other fellows do the thinking for them we will have laws giving the farmers the worst of it.

"So long as the unorganized farmers allow the organized business men to dictate not only their political actions but their belief, we will have politics run in the interest of the organized business men.

"Mr. Lowther doesn't think the people should be divided during the war. His idea of unity is for the farmers to take all of the insults and mob violence of the profiteers and pretend that they like it. But wouldn't the better way be for the business men, being in the minority, to go with the farmers in patriotic endeavor? Then after the war was over and it didn't matter so much, the business men could resume their rotten egg tactics.

"If the bankers had a successful organization in North Dakota would the bankers of Washington go to the farmers of North Dakota to find out about it?—*National Non-Partisan League*, by W. W. Liggett, Publicity Agent.

St. Paul, June 21.

The article on the nonpartizan league by Granville Lowther, published in the *Farmer* of June 6, to which W. W. Liggett refers, follows:

"From several sources I have had inquiries about the nonpartizan league. 'What is it? What is its purpose? Should I join it?' Many other questions are generally connected with the inquiry, most of which I do not feel sufficiently informed to try to answer. About six months ago, I was solicited by an organizer to join the league. I had previously read something about it on both sides of the question; but had not reached a conclusion. The talk of the organizer was plausible, and in ordinary peace time, I have no doubt, I would have joined it. There is no question but they embody in their statement of principles many things the people need and will some time be able to obtain. The question in my mind was, 'How will these good things be interpreted and used by the leaders, in the great crisis through which we are now passing?'

"There are many things that should be different and many wrongs that might be righted. However, we are now in the midst of the greatest war of history, a war for universal democracy as opposed to a world-wide autocracy. The one, great, all-absorbing issue is to win the war; and all minor questions, all political differences, all family quarrels should be held in check until the world is made safe for representative governments, and the protection of free peoples from international robbers and murderers. Interpretation and the application of principles are very important factors. For instance the Bible is a good book; but I could never respect its teachings as interpreted by some very good and devout religionists. I could not respect the principles of the nonpartizan league as interpreted by I. W. W., pacifists, pro-Germans and Senator LaFollette, all of whom I am informed are operating through the league. This is not because I am in favor of war instead of peace; but because I know the only way to have peace is to compel the disturbers of the peace to respect the rights of others. This can not be done by writing essays, philosophizing on social ethics or by making contracts that the disturbers regard as 'scraps of paper,' to be broken at will. In the hands and under the leadership of intelligent and loyal farmers or laborers, I would want to be counted in. In the hands of German pacifists, who are the most warlike nation on earth, except in countries they want Germany to conquer and rule, I want to be counted out. In the hands of the I. W. W., whose methods are impossible, count me out. In the hands of men of the views on the war expressed by LaFollette, at a meeting of the league members, count me out. In the hands of real workers like the average farmer and wage worker, count me in. Because I was in doubt about its direction and the use of power by its leaders I did not join. However, my action is not intended to be a guide for others; it was only satisfactory to myself, with my present understanding of the subject."

Benton Harbor.—The Emergency Farm Labor Reserve of Berrien county has been organized, and the city folks who have been in the habit of spending their vacations at the lake resorts are already volunteering their services for farm

Marquette.—It is expected that there will be 35,000 sheep and 5,000 cattle brought into Cloverland this summer. Seventeen grazers have already located in this section and the available grazing lands are going fast. The first shipment of sheep from the west arrived two weeks ago, and consisted of 12,000 "woolies."

STATE AGRICULTURAL BRIEFS

MICHIGAN BRIEFS.

Milan.—The Washtenaw county war board has issued a warning to farmers to beware of the stranger who comes to the door and asks for a crust of bread. Some slick rogue has been visiting farm homes of this county, and after securing a piece of bread, declares that it was made entirely of wheat, announces himself as a government agent and tells the people that the only way to avoid arrest and imprisonment is to pay him the probable amount of the fine, or \$25. The stranger has victimized several families in this manner. The war board cautions farmers that government agents do not do business in this manner. It is a good idea in such cases to demand the visitor's credentials—and use substitutes.

Coldwater.—The Detroit Board of Commerce has made arrangements for motor truck freight service between Detroit and this city, the freight being carried by five-ton trucks which will run every other day at first; oftener as the business increases to warrant. The first truck load arrived in the city last week.

Lexington.—Surveyors are at work on the Huron shore pike, working north from the county line. The contract for building the pike has been let and construction work will start as soon as the survey is finished.

Milan.—The eastern Washtenaw good roads district commissioners have let the contract for three miles of the Detroit and Chicago paved way between the city line of Ypsilanti and the county line between Washtenaw and Wayne. The contract price is \$71,800. The road will be 18 feet wide, of concrete.

Milan.—The joint drain deal being entered into by Washtenaw and Wayne county gives Washtenaw six joint drains, with Monroe, Lenawee, Jackson, Hillsdale and Ingham. Negotiations are also under way for joint drains with Livingston and Oakland counties. Washtenaw county is claimed to be the peak of a watershed and the water from that county flows in all directions.

Sandusky.—Local threshermen are charging at the following rates for threshing: Oats, 4 cents per bushel; wheat and barley, 5 cents; rye and peas, 7 cents, and a minimum of \$7 a set; beans, 12 cents per bushel, and \$10 per set; timothy, 25 cents per bushel.

Ashton.—Last week 3,500 head of sheep were placed on a large ranch near here by New Mexico parties. The owners stated that grass in the southwest had dried up as a result of the drought, and that cattle are dying for want of food.

St. Johns.—Clinton county boys and girls have begun the canning of 6,000 quarts of fruit and vegetables as their share of the national canning quota of 1,250,000,000. Michigan young men and women are urged to can 400,000 quarts, and the boys' and girls' club department of the M. A. C. has taken on the responsibility of organizing the young folks and assisting them in the work.

Manistique.—Farmers of Schoolcraft county are taking a large interest in sheep-raising, an industry for which this section of the state seems admirably suited. County Agent Kinsting has advised all farmers interested in starting a flock of sheep to see him before August 1st.

Caro.—A meeting is on foot in Tuscola county, fathered by county agent MacVittie, to organize a county beekeepers' association.

EXECUTIVE COMMITTEE HOLSTEIN ASSOCIATION MET AT DETROIT

In response to a call issued by President D. D. Aitken, the officers and directors of the Holstein-Friesian Ass'n of America, met Monday in executive session at the Hotel Statler, Detroit. The following were present: Pres. D. D. Aitken of Flint, Mich.; vice-president, G. Watson French, Davenport, Iowa; secretary, Frederick L. Houghton, Brattleboro, Vt.; treasurer, Wing R. Smith, Syracuse, N. Y.; superintendent of advanced registry, Malcolm H. Gardner, Delavan, Wis.; and the board of directors, consisting of nine members and representing the leading dairy sections of the country.

At the present time the Holstein-Friesian Ass'n has a total membership of 10,739 and is rapidly growing. During the past year the membership increased about ten per cent. Memberships are held in every state of the union, in five provinces of Canada, in Cuba, Hawaii, Philippine Islands, Mexico, South America and Switzerland. To the efforts of the association must be given the credit for the tremendous growth of the Holsteins' popularity.

How Silo Makes Money for Live Stock Feeder

D ID you get 16 cents a pound for a drove of fat western lambs this winter or spring? Have you a bunch of native lambs that will bring you a handsome profit on your initial investment?

How many pounds of wool have you sold this year at sixty-five cents per pound? Maybe you are interested in guessing just how high wool and mutton will go and how much wool your winter suit will actually have in it. The sheep business is booming. Are you planning to get into the sheep business, either feeding a car or two of western sheep this coming winter or picking up a bunch of ewes to run on your farm? Sheep eat weeds, clear out fence corners and return a double profit of mutton and wool.

If you are already in the sheep business without using a silo, you are not making the maximum profits possible. If you are planning to try a bunch of sheep, get a silo as a part of the equipment. The silo will enable you to stay in the business much more profitably.

The sheep is an animal adapted to use considerable quantities of roughage. It is also an animal that returns the maximum profits when given good rations and the best of care. Succulent feeds in the ration keep breeding ewes in the best condition for successful lambing, and aid in returning the most mutton per pound of feed in finishing sheep for the block. Corn silage is the succulent palatable roughage that can be provided by almost all farmers in this section.

The Silo and Mutton Production.

The farmer who is in the habit of feeding sheep in the fall, winter and early spring for the market, should be interested in the increased profit in lamb feeding due to the addition of corn silage to fattening rations. For the last seven years, the Purdue Experiment Station has been feeding western lambs on different combinations of feeds, and fed in different manners. In all cases, the lots fed contained twenty-five lambs. These lots were so divided as to get uniform lambs in weight, in quality and in gaining ability. All of the trials were repeated several times so that a poor ration would not accidentally show results better than good rations. The following table shows the result of several years' work in adding corn silage to a ration of shelled corn, cottonseed meal and clover hay. This ration is used to show the profit in using corn silage even in such a good fattening ration.

Value of Corn Silage in Lamb Feeding.

Ave. per lamb	Clover hay lots	Corn silage and clover hay lots
Initial weight.....	60.4 lbs.	60.3 lbs.
Final weight.....	90.7 lbs.	89.9 lbs.
Average daily gain.....	0.364 lbs.	0.356 lbs.
Average daily feed—		
Corn.....	1.14 lbs.	1.12 lbs.
C. S. Meal.....	.16 lbs.	.16 lbs.
Hay.....	1.69 lbs.	.93 lbs.
Silage.....		1.31 lbs.
Feed required per lb. gain—		
Corn.....	3.14 lbs.	3.17 lbs.
C. S. Meal.....	.44 lbs.	.45 lbs.
Hay.....	4.98 lbs.	2.65 lbs.
Silage.....		3.68 lbs.
Average selling price.....	\$6.72	\$6.73
Average cost of gains.....	6.26	5.52

Even in such a good ration as shelled corn, cottonseed meal and clover hay, the average lamb in the lots receiving corn silage in addition to clover hay as roughage made more profit. In making one hundred pounds of mutton, 368 pounds of corn silage replaced 233 pounds of clover hay. From this replacement value of corn silage, the following table showing the value of a ton of corn silage is made:

It is no Longer Possible, with Present High Priced Feeds, for the Cattle Raiser to Operate Profitably Without Plenty of Silage

Clover Hay price per ton	Corn Silage is worth per ton
When at \$ 8.00	\$ 5.06
When at 10.00	6.32
When at 15.00	9.48
When at 20.00	12.66

With corn at \$15.00 per bushel and clover hay at \$15.00 per ton, the sheep feeder can make approximately a dollar per ton over and above the cost of the corn in the silage and the cost of putting the silage into the silo. A fifty bushel corn crop will make ten tons of silage per acre. Ten dollars per acre more from his corn crop will mean more real money.

The Silo and the Sheep Breeder.

The farmer who is maintaining a flock of breeding ewes upon his farm is interested in the cost of carrying his ewes through the winter. The silo offers an opportunity to such a man in cutting the cost without injuring the lambing percentage and the vigor of the lambs or milk flow of the ewes.

The Purdue Experiment Station during the three winters from 1906 to 1909 fed breeding ewes on rations containing corn silage and check rations with no corn silage. The ewes were fed during the winter of 1906-07, mixed hay, corn stover and corn silage as roughages and oats as grain. During the other two winters clover hay was used as the hay and the grain mixture was shelled corn, oats and bran. The following table gives interesting data upon the value of corn silage for a breeding flock:

Winter Breeding Ewes—Purdue Experiment Station.

Average per ewe	Without Silage	With Silage
Feed eaten daily—		
Grain.....	.9 lbs.	.86 lbs.
Hay.....	4.19 lbs.	2.84 lbs.
Silage.....		3.33 lbs.
Total gain.....	13.75 lbs.	6.0 lbs.
Per cent of lambs.....	105%	114%
Birth weight of lambs.....	8.9 lbs.	9.09 lbs.

The measure of good rations for breeding stock must be made from a consideration of loss or gain in weight, effect upon the percentage of offspring, the vigor of the offspring, the milking qualities of ewes and the economy of the ration fed. The addition of silage is a benefit. The succulence furnished by corn silage is especially valuable in a flock of breeding ewes. Silage is probably the best substitute for roots. Corn silage can be had anywhere in Indiana for the trouble of erecting a silo and filling it.

The farmer who now has sheep or is planning to get into the sheep business either feeding sheep in the fall or winter months or maintaining a breeding flock for its four-fold profit—wool, lambs, weed eradication, and manure—will find the silo a very necessary part of his sheep equipment. Couple a silo with the Golden Hoof and the farm will grow richer and the pocket-book fatter.

G. I. CHRISTIE,
Purdue University.

WHY SOME FARMERS PROSPER WHILE OTHER FARMERS DO NOT

WHY is it that in every community, certain farms are pointed out to visitors as those not paying while often just across the road are farms that are paying a very excellent interest rate? The general drainage and soil type

of the good and poor farms are the same, the climatic conditions are the same but differences in the management result in very different net incomes at the close of each year. Through the

different management, the crop yields of one farm far surpass those of another in the same vicinity. The amount of income derived from live stock is much greater with one farmer than with his next door neighbor.

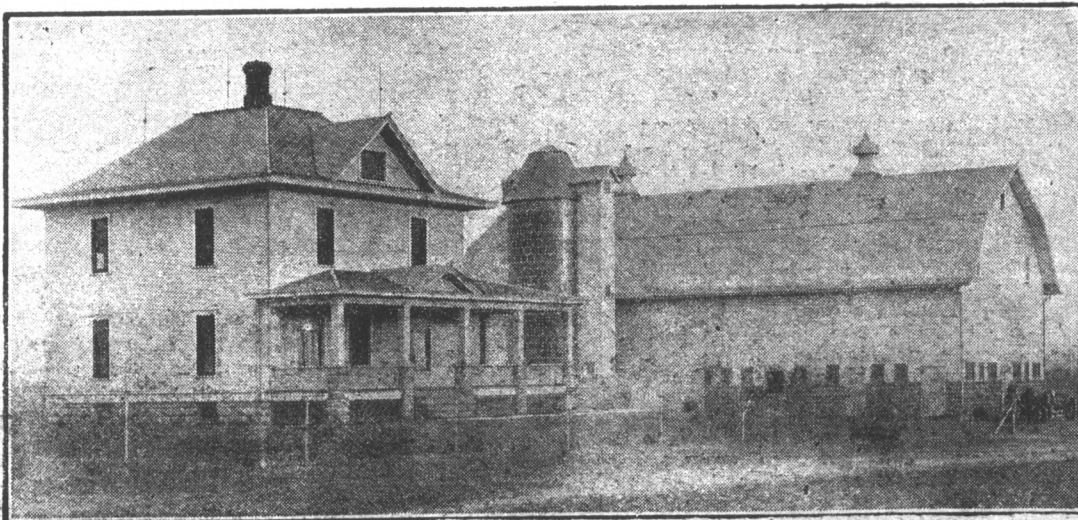
Practically every farmer is interested in making a little more than a bare living. It requires money to pay taxes, to pay grocery bills, to pay for schooling the farm boys and girls. All of these calls must be met from the net proceeds of the farm. The hope of every person is to lay a bit away for a rainy day. If after all of the urgent calls upon the farm income have been met, there is nothing left, farming soon becomes a very discouraging business. The result of the discouragement is a move to town by the farmer in search of more remunerative employment. The census returns from any Corn Belt state show the results of unprofitable systems of agriculture.

In the past few years, studies undertaken in representative sections in different states have thrown a great amount of light upon why some farms make money for their owners and why some make little or even lose money. There has been a surprising degree of agreement upon the general factors underlying profit and loss upon all of the farms in every section. In every case, the averages taken from all of the farms in a township or county have shown that the live stock farmers have been the men who have been enjoying the greatest return from their operations. By the term—live stock farmer—is meant the one whose income is made largely from the sales of live stock products. His grain sales form a very small part of his annual cash profits. In working a farm, a live stock system of management has advantages that are inherent to that business. The labor demands are scattered throughout the year more uniformly so that there is no great overwhelming rush at one season and nothing to do at other times. If the farm is large enough for employment of labor other than that of the owner or tenant, the live stock farmer has steady work and consequently is able to hire a good class of labor at fair wages per day. The grain growing farmer must be content with a less desirable class of labor and pay higher daily wages since he is forced by his system of farming to hire men at the busiest seasons of the year. The horse labor has been found to be a source of large losses upon many farms, whose system of management is such that many horses must be boarded through seasons of idleness. This condition is less apt to occur upon live stock farms.

Another source of income that is enjoyed by the live stock man is that extra profit derived from the conversion of the raw products of his farm—corn, oats, clover, alfalfa, straw, etc.—into the finished products of milk, cream, butter, pork, beef, mutton and wool. This profit compares with the profit of the steel mill that converts raw iron ore into iron and steel. The live stock manufacturer has the advantages of the producer of raw materials in obtaining higher prices for his products.

As a result of the use of live stock to market the crops of the farms, the soil fertility of these live stock farms are more easily retained or enhanced. Under the best conditions, when farm crops and purchased feeds are fed to live stock, it is estimated that two-thirds of the nitrogen, three-fourths of the phosphoric acid and four-fifths of the potash contained in the crops or feeds may be returned to the soil. This means that in addition to the actual money received above the cost of the raw materials, the manure resulting from live stock is a very considerable item in the ultimate returns from live stock farms. The average value of a ton of manure when judged by the increased crop yields obtained by the Purdue Experiment Station over a period of 23 years, from 1890 to 1912, is approximately two dollars per ton. At the present prices of crops and fertilizers, the value would be still higher.

The increased income enjoyed by live stock farmers is aptly illustrated by the study of Monroe Township in Pulaski County. Every farm was visited and the farm records taken. It was found that the farms that had only 3.8 acres to the animal unit or the equivalent of a mature cow or horse, returned an average income above all expenses, taxes and interest of \$385.00. The



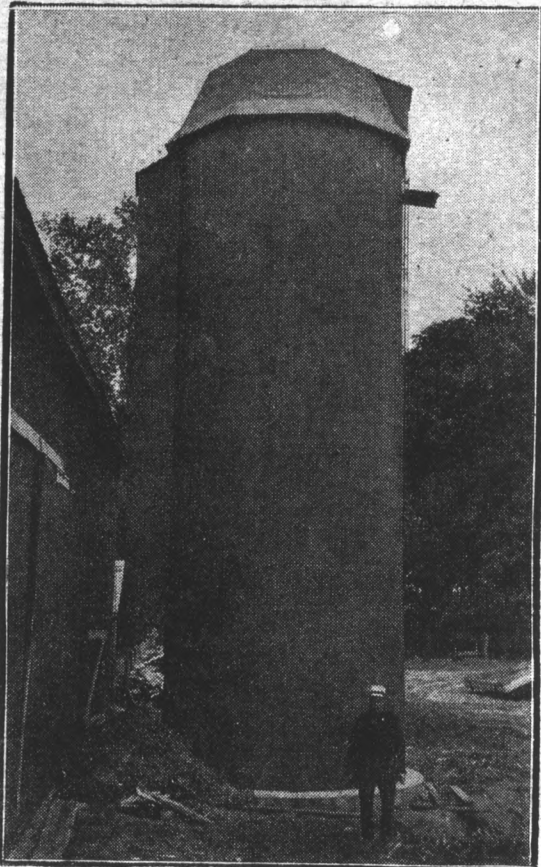
Scene of an Iowa Farm, showing Lansing Vitified Silo. Note the pleasing harmony between the Silo and the Buildings.

farms that were so lightly stocked that there were 22.8 acres to the animal unit returned an average net income of only \$61.00. The live stock men of this township were receiving over six times as much for their labor as their grain growing neighbors. The comparison between the two classes goes still farther. The average fertility of their farms was compared. It was found that on the lightly stocked farms 120 acres

(Continued on page 20)

HOW EXPERIMENTS HAVE PROVEN VALUE OF SILAGE FOR CATTLE

The total output of beef herds in this state is not sufficient to begin to supply the number of feeding calves, yearlings and two-year-olds that are required to annually fill the lots of the cattle feeders. Upon the western range country and rougher portions of the central west, has fallen largely the task of supplying the number desired above home supply. For some years, this has worked to the advantage of the cattle feeder. Stock and feeder cattle could be purchased at some of the public markets or upon the range for less than the same cattle could be produced upon the states farms. Recently, however, the shortage in supply of western cattle has caused a general advance in prices so that stock and feeding cattle have become very high in price and also often difficult to obtain. At the present time, on many Michigan farms that have a considerable portion of rough broken land not fit for producing cultivated crops, herds of beef



The pride of Tuscola at the present time in silos is the 12x32 Liberty Hollow Wall Redwood Silo which was recently erected on the farm of Mrs. E. Mueller at Richville. This was the first silo of this kind to be erected in that vicinity and has attracted a great deal of attention.

cows can be and are profitably used. In many cases, the pastures that are now existing are not used to their best advantage, either because of not enough live stock or of the poor quality of the stock now used. In many counties in this state, there are considerable areas of hill land that should be used for grazing purposes. Many of these fields have been washed badly when used for cultivated crops.

In a recent publication of the Department of Agriculture, the results of some researches into the profits of farms in the Blue Grass region of Kentucky appear. The farms studied in this region are more or less hilly with soil inclining to be shallow. The general description of the farms fits very closely farms in many southern Indiana counties.

The author says: "The most successful farmers visited seldom had less than 1,000 pounds of live stock for each six acres of farm land. Farms that had labor incomes below \$500.00 and were rated as unsuccessful had an average of 1,000 pounds of live stock to about ten acres of land." The following sentence is a rather striking illustration of the importance of beef animals upon these farms. "The study made of these farms shows that when 50 to 60 per cent of the live stock was in beef animals the greatest profits were realized."

One of the reasons why there are not more beef herds upon farms is that the annual

cost of carrying the cows has been so much that there has been but little profit. The feeds used for winter maintenance have this excessive cost. Beef cows carried through the winter on clover or alfalfa hay and grain can easily eat their heads off.

The silo is now affording a means of cutting this winter maintenance cost. The use of silage in the breeding herd does not cause any bad effects upon the strength of the cows, the percentage of calves, or the milking of the cows after calving. The cows come through the winter in good shape, drop strong calves and suckle them in good shape.

During the winter of 1904-05, the Illinois Experiment Station carried 30 beef cows through the winter upon three different rations. Lot 1 received silage, clover hay and oats straw; Lot 2 received shocked corn, clover hay and oat straw; Lot 3 received corn stover and oat straw, clover hay being fed for the last 82 days in addition. The following tables give the results of these three rations.

Wintering 30 Beef Cows for 140 Days

Average Cow	Silage Lot	Shock Corn Lot	Stover Lot
Initial weight	860.33 lbs.	858.5 lbs.	859.83 lbs.
Final weight	1010.43 lbs.	964.69 lbs.	916.36 lbs.
Average daily gain	1.07 lbs.	0.758 lbs.	0.41 lbs.
Average daily feed—			
Silage	16.65 lbs.		
Clover hay	3.50 lbs.	3.50 lbs.	3.50 lbs.
Oat straw	9.56 lbs.	10.83 lbs.	8.19 lbs.
Shock corn		8.60 lbs.	
Stover			13.7 lbs.
Acres needed to supply feed for 140 days for 1 cow	0.95 acres	1.03 acres	1.14 acres

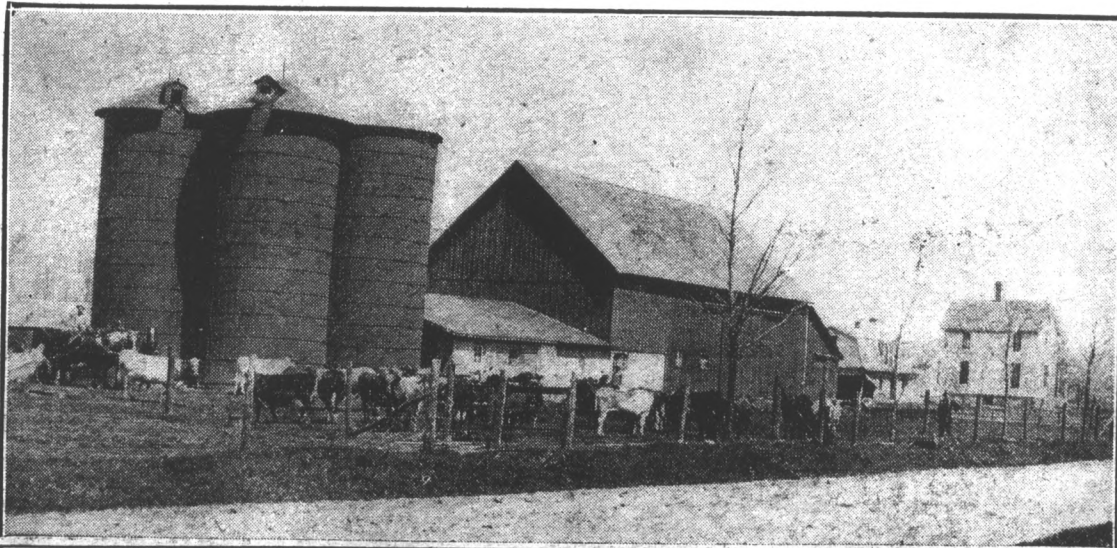
The lot receiving corn stover did not winter well. Their hair was in poor condition, they did not relish their feed and gained very slowly. In feeding a herd of twenty cows through the winter it would have taken 19 acres to feed them with the silage ration, 20.6 acres with the shock corn and 22.8 acres with the corn stover. The silo, beside making the highest and the most economical gain required less acreage to provide the feed needed by the cows.

For the last several years, the beef herds at Purdue University have been maintained during the winter upon rations containing considerable amounts of corn silage. There have been no lots fed other rations to be used as check lots. However, the amount of feed eaten and gains in live weight will be of value in indicating successful silage rations for wintering beef animals.

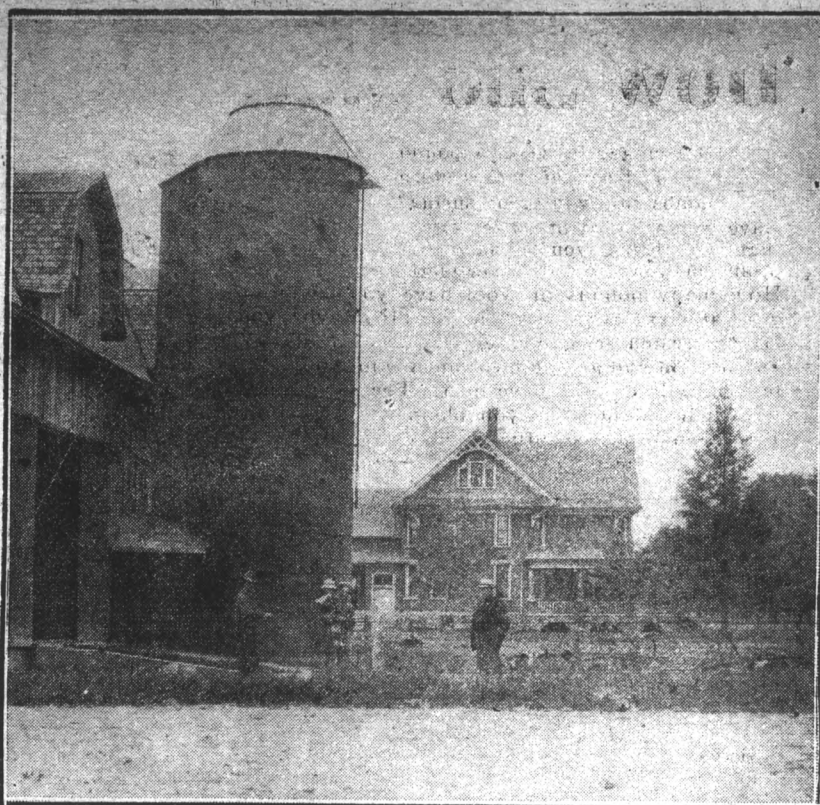
The first table shows the rations used with yearling heifers. The reader will notice that some grain has been fed. Yearling heifers should receive some grain or concentrate so that they may make suitable growth.

Wintering Yearling Heifers

No. of heifers	1913-14	1914-15	1915-16
Total average gain	142.8 lbs.	225.7 lbs.	179.4 lbs.
Ave. daily feed per heifer—			
Corn silage	18.77 lbs.	12.77 lbs.	21.48 lbs.
Oat straw	2.98 lbs.	4.64 lbs.	
Corn stover			5.77 lbs.
Corn	1.99 lbs.	2.91 lbs.	3.4 lbs.



Lansing Silos on the Riverside Dairy Farm of W. H. Boardman, Vassar, Mich.



This Saginaw Steel-built Redwood Silo saved its owner, Mr. Richard Holzhef, of Gilford, Tuscola county, over \$500 which was more than the silo cost him. The frost cut his corn last season before it matured and without this silo his corn crop would have been a total waste; as it was he fed a car load of cattle making a profit that exceeded his expectations. The silo is the most important building on the farm is the statement of this Tuscola farmer.

Clover hay	3.58 lbs.
Oil meal	1.99 lbs.

The next table is for two-year-old heifers. The heifers in the majority of cases were bred to drop calves in the spring. In one case, the animals lost five pounds per head and in the other gained slightly over two pounds per head.

Wintering Two-year-old Heifers

No. of heifers	1914-15	1915-16
Total gain or loss	Loss 70.0 lbs.	Gain 27.5 lbs.
Ave. daily feed per heifer—		
Corn silage	24.8 lbs.	27.0 lbs.
Oat straw	5.7 lbs.	
Corn stover		6.25 lbs.

The next table is that of wintering cows, calving in the fall and nursing calves. Grain and concentrates are needed by wet cows in order to maintain a good milk flow in winter. The object in feeding these cows, as well as in the case of the heifers, was to maintain them as cheaply as possible but with care so that their future usefulness and the proper growth of their offspring be maintained.

Wintering Cows with Suckling Calves

No. of cows	1913-14	1914-15	1915-16
Total gain per cow	109.0 lbs.	112.5 lbs.	83.0 lbs.
Ave. daily feed per cow—			
Corn silage	26.33 lbs.	26.35 lbs.	31.4 lbs.
Oat straw	4.51 lbs.	51.8 lbs.	
Clover hay	5.02 lbs.	2.64 lbs.	
Corn stover			6.25 lbs.
Oats	5.03 lbs.	6.0 lbs.	4.0 lbs.
Shelled corn	4.41 lbs.	6.0 lbs.	4.0 lbs.
Bran	2.51 lbs.		2.0 lbs.

A further illustration of the importance of corn silage with the beef man is the carrying of dry cows through the winter on liberal amounts of silage. During the winter of 1915-16, ten Hereford cows were wintered at the Purdue farm on corn silage and oat straw, consuming approximately thirty pounds of silage and ten pounds of oat straw daily. During the winter of 1916-17, the same cow ate corn silage and stover. The calf crop averaged 100 per cent both years. The cows and their offspring were in good condition and the calves have grown satisfactorily.

Live stock means permanent agriculture. The question can aptly be asked: "What is a live stock farm without a silo?"

FARMERS SERVICE BUREAU

(A clearing department for farmers' everyday troubles. Prompt and careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. Call upon us.)

GRAIN CORPORATION BELIEVES WHEAT FEEDS WILL BE PLENTIFUL

Sometime ago the Detroit Milling Company wrote us the following letter upon the probable growing scarcity of wheat feeds and asked us to present the information to our readers:

"The United States Grain Corporation, which is the grain division of the Food Administration, has put out tentative rules governing the milling and handling of wheat next year, and apparently the plan is to export a great deal of wheat. This is shown by the fact that a very low rate of freight has been arranged on wheat from the Pacific to the Atlantic coast. The rate is about one-half of the rate on flour so that it would appear that the wheat millers of the Pacific coast will be put out of business. Also the buying of all the export flour of the country is to be in the hands of the Grain Corporation.

"The plan also involves the use in this country of only three pounds of wheat flour per person per week. This all confirms the opinion that wheat will be exported very largely, therefore no wheat feed, or a very small amount, will be available for sale in this country, and while the regulations call for a low price on wheat feed there will be no more for sale than there has been this past year. As the oat and corn crops are not made yet, mill feed is very essential to the farmer, and we believe that the farmers should be interested in these rules as affecting their supply of wheat feeds.

"It will do no good to have low prices on wheat feed if the farmer cannot get it. The farmer is very much interested in the price of wheat feeds, because from it he produces butter, milk and animal products."—*Detroit Milling Co.*

This letter was referred to the Grain Corporation who replied as follows:

"I would say first, with reference to the Pacific coast, that this entire question has been the subject of a very exhaustive inquiry and every interest affected has been able to present its side of the question, and I am quite satisfied that the final plan applicable to the Pacific coast will be found to work no special hardship on any industry or interest, and that fears to this end will be dissipated quickly once the plan is thoroughly understood and becomes operative.

"Speaking broadly as to wheat mill feeds, I think it only reasonable to expect that with large wheat crop there should be an increase in the amount of feed available in the United States. Will cheerfully give you any specific information you may wish."—*Food Administration Grain Corporation, H. D. Ince, Second Vice President.*

WHAT PRICE DO FARMERS THINK RYE SHOULD BRING

I think the M. B. F. is doing more for the farmer than any other paper. I don't want to be without it. I enclose a dollar to pay up. Is there a price on rye? If not, why not, if the government wants it?—*C. E. P., Hesperia.*

The government has not set a price on rye although there has been considerable agitation along that line. Any price that the government might set, however, would probably be lower than the price might ordinarily go according to the law of supply and demand. We infer that you are not satisfied with the present prices on rye. What do you think would be a fair price?

SHALL I SELL MY CHICKS FOR BROILERS OR HOLD THEM?

I have about three hundred young chickens and would like your advice about marketing them. Shall I sell at the broiler stage or keep them till roasting size. I am paying 5½¢ a pound for chick feed by the hundred pound lots; paid 7½¢ rolled oats; 4½¢ for barley, and will not have any grain of my own until after the new crops are harvested. From the Hoover standpoint it would seem better to keep them until late fall but I do not want to lose out on them. I am offered 33¢ for broilers now. I don't think that will leave me much for my time after expenses are deducted.—*Mrs. R. G. C., Adrian.*

It is very difficult for us to give our readers advice upon this subject. The amount of time one has to give to the feeding and care of the chicks, local feed prices, and many other local factors with which we are not familiar might have a very material effect upon one's profit in either case. The Food Administration has asked the farmers as a patriotic measure to raise the chicks, and many will be guided by this request rather than a desire to gain the most profit. In our judgment, the Food Administration would have placed the poultry raiser in a better position if it had sanctioned the sale of at least a portion of the spring flock as broilers, for many, if not the

majority will make more money disposing of broilers right now than they will in selling roasters next fall. While it is generally expected that people engaged in other businesses will naturally sell their product when it will bring them the most returns, even in war time, for some reason or other the rule does not seem to apply to farmers. The meat supplies of the Allies are on the increase and we do not believe the future supply will be at all jeopardized if farmers who do not desire to carry their chicks thru till fall and dispose of them at an uncertain price, should sell their chicks for broilers now. But you ought to get more than 33¢ a pound for them in Monroe county. The week your dealer offered you that, broilers were bringing 40 to 45 cents in the city of Detroit.

NEW GOVERNMENT BULLETINS THAT FARMERS SHOULD HAVE

Below is a list of the bulletins that have been issued by the United States Department of Agriculture during the past couple of weeks. Farmers desiring to secure copies of these may do so on application to the Division of Publications, U. S. Department of Agriculture, Washington, D. C.

Bulletin No. 961, "Transferring Bees to Modern Hives."

No. 963, "Tractor Experience in Illinois."

No. 952, "Breeds of Light Horses."

No. 972, "How to Use Sorghum Grain."

No. 984, "Farm and Home Drying of Fruits and Vegetables."

No. 688, "Marketing Berries and Cherries by Parcel Post."

No. 918, "Peach Varieties and Their Classification."

No. 949, "Dehorning and Castrating Cattle."

No. 926, "Some Common Disinfectants."

No. 921, "The Principles of the Liming of Soils."

No. 967, "Purple Vetch."

No. 964, "Farm Household Accounts."

No. 977, "Hay Caps."

From the Morning's Mail

One of my friends says the M. B. F. is the best farm paper he has ever seen and would like to take it.—*A. J. M., Ceresco.*

We like the M. B. F. fine and look forward anxiously to each copy. We are doing all we can for the paper and will get subscriptions whenever we can but are so busy now. Wish you the best of success, I am yours for right prices and a square deal.—*C. L. B., Williamsburg.*

I like your paper very much as it is one I think is deeply interested in farmers and their rights.—*A. M., Fowlerville, Mich.*

The M. B. F. is by far the best farm journal I receive.—*M. L. L., Sunnyside Farm, Calhoun County.*

PRICES GROCERS SHOULD CHARGE FOR THE SUBSTITUTE FLOURS

I would like to know if the grocer charged me too much for the following:

10 lbs. corn flour.....	\$.90
10 lbs. rye flour.....	1.40
25 lbs. wheat flour.....	1.85

—*Subscriber, Germask.*

Eight cents per pound is the retail price of corn flour today in the lowest sections of Michigan. The wholesale price is \$5.25 per cwt. This price should be general for Michigan. The price of wheat flour seems to be at least 20 cents too high and the price of rye is also above what would be a fair price in most of the markets in Michigan. It is possible that transportation and other expenses connected with securing stocks of food in Germask are unusually high and it is impossible to positively state what the prices should be without knowing the cost of the products to the dealer.—*Ged. A. Prescott, Federal Food Administrator.*

THE ALPIAN TUNNEL IS THE LONGEST IN THE WORLD

The Simplon tunnel is the longest tunnel in the world, being over twelve miles in length. The boring of this famous tunnel through the Alps occupied ten thousand men almost ten years, and cost over fifteen million dollars. The wonderful feature of this tunnel is the immense distance below the top of the mountain through which it runs. The tunnel climbs up into the heart of the Alps, and yet at the highest point there is over a mile of the lofty peak above it. It could have run nearer the top of the mountain, but that would have made the grade too steep for the trains to climb. On the Swiss side the entrance to the tunnel is 2,249 feet above sea level, and on the Italian side it is 2,079 feet. The Alps are pierced by two other tunnels, the Saint Gothard and the Mount Cenis.—*Young People.*

FACTS ABOUT ROSEN RYE AND RED ROCK WHEAT

Many times during the last few weeks the writer has heard farmers make some such statement as, "I wish I had known that Rye cross fertilized and I would have kept my Rosen Rye farther from my field of common."

This fact has been given considerable publicity in the past and stress has always been laid on this point in the sale of pedigreed Rye. But the majority of people have not realized the necessity of growing Rosen forty rods or more from common with the result that the most of the former is badly crossed.

Rosen Rye has yielded phenomenally and yet consistently better than common rye from Menominee county in the Upper Peninsula to the extreme southern Michigan, and moreover, its value has not been confined to his state alone. For two years now, it has proven its worth in Northern Indiana, and this year reports are now coming in from more than a dozen different states over a wide range, commending the variety.

There is no longer a question in the minds of Michigan farmers, who have tried this rye, as to its superiority over common varieties. Practically the entire acreage of the state this year, will be sown to Rye, bearing the name Rosen. It is the chief purpose of this article to point out the necessity of buying the genuine article in reality as well as name.

Pure Rosen Rye has heads bearing four completely filled rows of kernels. This condition is rarely found in a field of common rye. The latter very seldom pollinates properly and as a result there are usually a number of blanks in every head where there should be grains.

The result is common rye ordinarily has about two thirds as many grains per head as Rosen.

Now the pollen for rye is wind-borne, like corn, and if common rye is grown within 40 rods of Rosen especially on the side from which prevailing winds come cross fertilization of the varieties occurs. As far as Rosen Rye is concerned this is about as productive of results as attempting to increase the milk production of Holstein cattle by crossing with Polled Angus.

Practically all the Rosen Rye in the state is now more or less mixed, so in selecting Rosen Rye for seed this fall, try and examine the field from which you intend to get seed and use from a source bearing the largest proportion of perfect heads or obtain Registered Inspected Seed Requirements of the Michigan Crop Improvement Association.

Improvement can be made by field selecting perfect heads from a field not too badly crossed. These of course, will have some block of common, but will be a great improvement over the average.

Rosen Rye has proved a boon to thousands of Michigan farmers, especially in the sandy and sandy loam section.

Now if the satisfactory yields obtained during the past four years are to be maintained, more attention will have to be given to seed selection from now on.

As to Red Rock Wheat this variety has firmly entrenched itself in favor of farmers in practically all the clay and clay loam wheat growing sections of the state. This variety is not especially adapted to light sand or infertile sand loams, its long hard berry tending to produce more shrunken and yellow berry grains under these conditions than some of the softer wheats.

But on good land its winter hardiness, its high yielding ability and good milling quality have won it a deserved reputation as a desirable wheat for Michigan, and placed it in five years since it was first distributed, as the most extensively sown single variety of wheat in Michigan.

As wheat does not cross fertilize, this factor has not influenced the purity of Red Rock. However, a great deal of it has been badly mixed through common threshing practice and cleaning in public elevators, so that the securing of pure, clean seed is also an essential factor with this variety.—*J. M. Nicholson, Extension Specialist, M. A. C.*

Lansing.—Thru the efforts of Chas. A. Parcels, Michigan state director for the Boys' Working Reserve, it is expected that a number of farm training camps will be established in Michigan this fall for the purpose of training boys for work on farms next summer. The success of a camp at Wixom, Oakland county, has prompted Gov. Sleeper to give his endorsement of the idea.

J. M. Preston writes that silos can be erected as late as September tenth in Michigan and still be in time for cutting. He advises however that owing to present railroad conditions your order be placed through your local agent right away, or you may be disappointed.

Pure Breds mean more Profits

EDITOR'S NOTE: D. D. Aitken, the author of the accompanying article, is one of the best known men in the entire dairy world, and agricultural Michigan should and does feel honored to claim him as a resident of the state.

At the 33rd annual meeting of the Holstein-Friesian Association of America, June 5th, D. D. Aitken was re-elected president of the association, for his fifth consecutive term, a well merited honor and a recognition of the tremendous growth of the association during the four years of his incumbency.

Mr. Aitken owns a large dairy farm near Flint, this state, where he has bred and developed some celebrated cows. Butter Boy Rosina was the world's champion 3-year-old in 1908 and Flint Bertjusca Pauline was the world's champion senior 2-year-old in 1915. Mr. Aitken's efforts of later years have been in developing a herd of long distance animals. His senior herd sire now has a dam and granddam each with a record of better than 1200 lbs. of butter in a year, and his junior herd sire has a dam and granddam with an average of better than 1200 lbs. of butter in a year. Mr. Aitken is well qualified from a long personal experience in the breeding of Holsteins to write with authority on any subject akin to dairying.

He has consented to write upon other dairy subjects for the benefit of MICHIGAN BUSINESS FARMING readers, and his co-operation will help to make M. B. F. a thoroly representative organ for the promotion of the varied dairying interests of the state.

I have noticed recently that you are giving special attention to the dairy interests, and I am convinced that no branch of agriculture offers greater opportunity for profits than that of dairying.

The want of more profits in dairying in the past has been to a certain extent the fault of the farmer himself. He has not adopted the practices that were calculated to bring him the best returns and has not, in my judgment, given the dairy department the consideration to which it is entitled.

When I was a boy at home on the farm in this county fifty years ago we kept scrub cows, we cut the hay with a scythe and the wheat with a cradle. To punch the cradler with the end of the rake stake while binding up his swathe required not only skill but quick movements, and during the harvesting period that was one of the important functions I performed as I grew older. My youngest effort was spreading the hay from the swathes of the mower. Later on we discarded the scythe and used a mowing machine. The cradle was discarded for the reaper, and the crude machinery first offered has gradually developed into our present machinery for handling the usual and ordinary products of the farm, but the scrub cow still remains. Thousands of the good farmers of Michigan are using that same scrub machine. It may have improved slightly but still represents the intellectual parallel of the cradle and the scythe.

There have been just as great advancements in dairy industry machines as in the tools for handling hay and grain. The old scrub cow that made from 4 to 7 pounds of butter in a week was the best to be had in that period. 250 to 300 pounds of butter in a year represented good dairy husbandry of that date and was far beyond the average of the state. The dairymen of the country, however, have been improving. There has been evolved by correct principles in breeding milking machines called dairy cows, that are producing from two to five times as much product as did the scrub of fifty years ago.

The Holstein-Friesian Association of which I am president, has what we call the advanced registry, where tests are made of the production of these dairy animals. We have records that show that a cow has produced as high as 1500 pounds of butter in a year—three-quarters of a ton! That cow has produced as high as 50 pounds of butter in one week. Other pure-bred dairy milking ma-

chines have made large and satisfactory records, and thousands of persons, each selecting their choice, have improved their herds by using pure-bred sires and turning out what is known as grade milking machines, a tremendous improvement over the scrub, likened to, we might say, the reaper as compared with the cradle. Still the great majority of the butter producing animals of Michigan are today grades, producing not less than 250 pounds of butter in a year. That is why Michigan is not the first dairy state in the union.

There is not a state better calculated for dairying than Michigan; there's no state that contains more flowing wells and other sources of pure water than Michigan; there's no climate better calculated for the development of the dairy cow and no state with less pests to harass them. With alfalfa and corn ensilage produced in as liberal amounts and of as high quality as any in the land there is absolutely no excuse for us being out of the front ranks, except the use of poor machinery in the production of our product, and that is the cow, the milking machine.

You ask for the remedy and my answer is, that the farmer must have improved machines. If he does not feel like using pure-breds then he should use a pure bred sire and by evolution improve his dairy machinery. I believe, however, that any farmer who is operating his own farm, supervising his work, could gain not only increased satisfaction but increased financial returns if he will start with a few pure bred animals of the breed of his choice for good families, keeping the females until in a few years his entire herd will be pure-bred and of a family and a strain calculated to produce the dairy products at the lowest possible cost.

The theory that the farmer cannot afford to have better dairy cows, cannot afford to have pure-bred milking machines, to me is an idle argument. My contention is (and I know I am right) he cannot afford to have anything else if he is going to produce milk, butter and cheese. The only machinery that will produce these commodities at a profit and with efficiency is that calculated by nature for that purpose, and nature's instrumentality has been animals from certain lines of breeding, for generations utilized and operated for the production of milk. How idle it would be for a man operating a farm to say that he could not afford a mowing machine, or could not afford a grain binder, and attempt to cut his hay and grain with the scythe and the cradle. Still there is just as much argument for it, for while we only use the scythe and the cradle a few days in the year we use the milking machine nine months in the year, and when you are only producing a pound of butter or 25 pounds of milk when you ought to be producing 2 pounds of butter or 50 pounds of milk at practically the same cost, then you are demonstrating to a moral certainty that you cannot afford to keep these low producing animals.

I am acquainted with a number of farmers in Michigan who keep scrub cows and feed and care for them in first-class manner, and get as good results as it is possible to get from that character and class of tools. Those same men, however, and with the same care and the same amount of feed with genuine dairy animals could double the production and triple the profit, for I am firmly convinced that if they were to count their labor at the present prices the average scrub cow would be kept at a loss, and it is only because the farmer does not appreciate the value of his own services that he keeps these inferior animals.

I think, therefore, Mr. Editor, that it is up to the farmer to install different machinery for the manufacturing of milk, butter and cheese, and I want to congratulate you for the assistance you are giving in that direction.—D. D. Aitken, President, Holstein-Friesian Association of America.

well repaid with increased lamb and wool results. The flock can exist on little, but if you starve them to it you will get little in return and it don't pay. There is only one way—be a good feeder, be careful, be thoughtful of your flock in advance, before they are hit by neglect. Do not let the little lambs stop for a moment in their growth from the time they are born until they are one year old.

At weaning time lambs must have the best of pasture, clover preferred, but later beware of frosted grass. Put ewes on short feed until dried up. All ewes with teeth gone should be disposed of regularly each fall before winter sets in, and have cabbage or roots on hand to ease off the decided charge from green pasture to green hay. Learn at once to tell a sheep's age by its teeth; it means more to the flock-master than you think. Rams should not be with the flock except through the breeding season. Build the right kind of feeding mangers that will keep the hay dirt out of wool and remember that sheep want their feeding troughs kept clean. Supply water fresh throughout the winter. Sweep out each day if necessary and disinfect every thirty days.

Look out for ticks and lice. If your flock has them shear before lambing time or if afterwards be sure to dip the lambs, as the ticks will immediately go from the old sheep to the lamb. If you haven't time you can afford to pay some man or boy \$10.00 a day to do it for you and you will then, boy \$10 a day to do it for you and you will then be many dollars ahead; it costs a lot to feed ticks.

Beware of stomach worms—the lamb's worst enemy. More lambs and sheep die in summer, fall and winter from effects of worms than from all other causes combined. Ticks and starvation take their toll in late winter and spring.

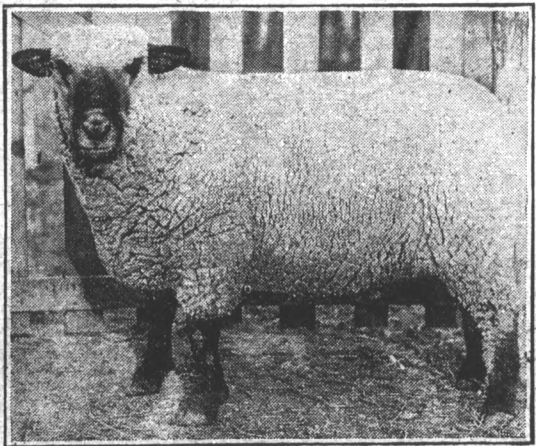
If your lambs or sheep look gaunt and dull with ears dropped and some scour without good cause you can be quite sure that the trouble is worms, which should be removed at once or a big loss will result. Don't delay to drive the ticks and worms from the sheep or they will put you out of business. Remember the law of reward and punishment is certain with sheep. They will pay you back in lambs and wool for all the good you do for them.

The good flock-master sees that the new born lamb gets nourishment from the ewe as soon as it is dry and in no case should the little one be chilled. You can't earn higher wages than by sitting up nights at lambing time. The tails on lambs should be docked before four weeks old; cut tails one inch from the body. All rams, unless pure-bred, should be castrated.

Many unexpected early lambs are lost each winter by carelessly leaving a neglected ram lamb in the flock. During the mating season which is from August 1st to February 1st, and some few breeds of sheep mate any time of year, but no matter what kind of a ewe flock you have, it can be improved and it should be your job to do it with care, feed, and high class rams. A safe rule is to buy a pure-bred ram whose value is four times the average value of your ewes, that is, if your ewes are worth \$12.50 a head you should expect to pay \$50 for a ram. Hot house or show sheep are seldom good sires and many times not even good sheep. They would only look good to the inexperienced. The deceptive part of the show ring will some day pass away to be superceded by the products of our scholars in the true art and science of breeding. Also I hope to see our government establish an experimental station for the scientific development of sheep and the study of sheep diseases. It has been my experience and I think it is common knowledge that even our best veterinaries know very little about doctoring sheep and I know of no school where a special course in this line can be had. This prevailing condition has caused me to establish an experiment station at "Leona Park Farm," Grand Ledge, Mich. The commendable work being done with plant life by Luther Burbank at Santa Rosa, California, is not impossible to duplicate in animal life, although the short space of one lifetime is not sufficient for full accomplishment.

The Nature, Care, Feeding and Breeding of Sheep

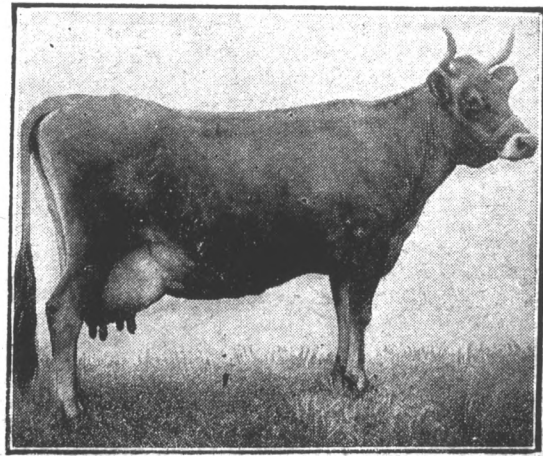
By ROMEYN C. PARSONS



Michigan Hampshire Ram of the Parsons Flock at Leona Park Farms, Grand Ledge, Mich.

Sheep are like rabbits in nature and need a variety of feed, therefore frequent change of pasture. Low lands are dangerous except for a short period in summer when very dry. They do best where it is dry underfoot at all times with high land for their resting place. They should be protected from cold rains in the fall if you would avoid sickness. Provide good winter shelter with plenty of air, without direct drafts. Spray the walls, feeding racks and floors with some good disinfectant. Plenty of feed is necessary for success; roots are needed, clover, alfalfa, peas and bean pods, fine grass and corn fodder, all much better than timothy hay.

Grain, ensilage, or some succulent food should be given the ewe flock beginning January 1st, until grass time. It's up to you so don't fool yourself, if you feed and care for your flock well, you will be



The Owl S. Golden Queen 275736, a Jersey cow owned by E. L. Brewer of Satsop, Wash. This cow has a record of 14,226 pounds of milk and 918 pounds of fat in one year.

WEEKLY WASHINGTON LETTER

WASHINGTON, D. C.—Is the sectional feeling between the north and the south again to be revived at this critical period when all minds of all sections should be planning for the common good. Unconsciously at first, but latterly with studied intent, northern and southern congressmen and senators have arrayed themselves against each other upon the issues of cotton and wheat prices. The south has stood solidly back of the President in his opposition to a higher wheat price, but until recently has been violently opposed to any control whatever over the cotton market. As a result of the government price on wheat, growers are obliged to sell that cereal at from \$1 to \$2 per bushel less than would have prevailed had the law of supply and demand been permitted to take its course, as it has in the cotton industry. Naturally, the subject is one calculated to arouse disension between the two sections of the country and one that requires the utmost diplomacy in dealing with.

Northern senators have repeatedly scored the southern members for their self-interest, claiming that they do not have the good of the country at heart by taking such an attitude on two of the most important commodities. If price-fixing on wheat is a good thing, price-fixing on cotton should be equally good and the nation's legislators should unite on a program which will treat both commodities alike.

Last year's crop of cotton, consisting of 11,000,000 bales was less than an average crop. With limited supply and increased demand, the price has naturally advanced very rapidly, and has brought a steady stream of gold into the pockets of southern planters and manufacturers. The price of cotton advanced over 70 per cent during 1917, whereas the price of wheat declined about 70 per cent under government control. The current year's crop looks like a big one. The forecast is for 16,000,000 bales, and the planters are beginning to worry lest bumper crop presages a period of low prices. As a result there is some agitation for a fixed price on cotton as on wheat, a subject upon which the south itself is divided. However, no one claims that any part of the south would be willing to see a price fixed on cotton that would reduce the present price.

Senator Gore, in attacking the president's veto of \$2.40 wheat, offered a comparison between the advances in cotton prices and wheat prices, as follows:

Year.	Wheat.	Cotton
1912	\$.76	11.52
1913799	12.80
1914986	11.13
1915919	10.14
1916	1.603	14.45
1917	2.009	23.49

The market price of cotton has been as high as 36 cents this year.

American soldiers are now being sent overseas at the rate of 100,000 per week. If the supreme war council decides to continue if not to increase this rate, troops soon will be leaving the training camps in much greater numbers than draftees are entering. At the present rate of movement it is estimated that class 1 of the draft will be exhausted in September.

The figures on the number of men remaining in Class 1 are:

Number remaining on Aug. 1 next from the 1917 class.....	277,359
Estimated additions from reclassification, etc.	200,000
Estimated additions from class of 1918 registered June 5 last.....	400,000

Total

At the present rate of shipment 800,000 men will go over seas between August 1st and Sept. 30th. What will happen when Class 1 is exhausted, no one seems to know.

Secretary Baker insists that the deferred classifications will not be called upon, and announces that he has a program which calls for the raising of an additional 5,000,000 men who will be secured by extending the draft age limits. Congress will have to act immediately upon reconvening in August to change the age limits else the deferred men will have to go or there will be lag in our shipments.

National prohibition received a hard bump when in the discussion of the new revenue bill it was shown that the abolishment of alcoholic liquors would deprive the federal government of a round billion dollars of tax money which it sorely needs at the present time. Like the

old-time booze-barons, the anti-prohibitionists in congress base their figures entirely on one side of the ledger. No figures are submitted to show the tremendous saving to the government and to the people when the money that is now spent in a useless drink, in enforcing the liquor laws, and in administering the liquor tax laws that would be diverted to the war chest. This sudden "discovery" may stave off prohibition for the time being, but as soon as the American people have recovered from the shock and begin once more to use their brains, they will see thru the shallow argument without difficulty.

Herbert C. Hoover has gone to England. There he will meet with the food representatives of all the other allied countries to discuss the food needs and supplies for the ensuing year. All the vast food resources of these great agricultural countries will be pooled and each will contribute its portion to the allied world's table. America will be the great reserve supply house. What the European nations lack the coming year in making up their food budgets will be supplied by America.

Congressman Cramton has gone to Europe, leaving his political fortunes in the hands of his friends where, we are told, they will be quite safe.



Moths are destroying Massachusetts cranberry bogs.

Denver has a new company which will can rabbit meat.

United States has 268,000 Civil War veterans on the pension rolls.

Los Angeles is producing glycerin enough for 1,220 shells daily from garbage.

Up to June 29th United States had expended \$13,800,000,000 to fight Germany.

Independence hall, Philadelphia, has abolished visitors' register. Too many callers nowadays.

Clairton, Pa., claims the largest coke oven plant in the world; 650 ovens of twelve tons capacity.

Negro women of the United States raised about \$5,000,000 for the Third Liberty Loan, according to a report from Mrs. Harry B. Talbert, President of the National Association of Colored Women.

Flaxseed and Linseed have been placed upon the list of restricted imports. All outstanding licenses for the importation by sea of this commodity have been revoked, except for such goods as are now in transit or to be sent by boats which are now loading.

Sugar planters in the Hawaiian islands are facing a shortage of bags used as containers for raw sugar. These bags have been imported from Calcutta. Recently machinery was sent to Honolulu from Washington for manufacturing the bags from the fibre of banana tree trunks.

The preliminary estimate of the Rice Millers Association, published recently, gives the total rice acreage in the south this year as 1,130,717, compared with 978,107 acres last year. The acreage of the three principal rice producing states, Texas, Louisiana and Arkansas, exceeds the entire 1917 acreage in the United States, according to the estimate.

The Government asks everyone to be careful and pass the word along to all that stray pigeons are being trained to carry messages and the loss of such would be a severe loss to the Government. So try to impress upon your family and your acquaintances the necessity of heeding the request. This is a very easy but efficient manner in which to aid in becoming victorious.

NEW YORK BEAN SITUATION CLOSELY RESEMBLES MICHIGAN'S

It is reported that under the direction of the State Farms and Markets Council, that a check is being made on the bean holdings of growers and dealers in the Western New York territory. Questionnaires have been sent out in large numbers. Coupled with this effort is the statement that an effort will be made to increase the consumption of beans, but growers have had false hopes raised several times already and some seem inclined to be skeptical of the plan.

The bean market is still so quiet that any prices that might be quoted would be nominal. However, despite the fact, that the few beans that have been sold in recent weeks have gone at decidedly lower figures than prevailed early in the season, retailers maintain the same high prices to the consumer. The ruling price at the stores now is from 16 to 18 cents a pound for state beans. This, it is held, retards sales and reduces consumption. There is some agitation against this short-sighted policy but it has never developed past the talk stage.

WAR WIRES

For a solid week the battles along the western front have brought victories to the Allies. The year-old struggle for control of the territory in the vicinity of the Marne river which has brought Germany a few minor gains at a terrible loss of life, is turning, and the counter-offensive, launched by French and American troops has forced the Germans back along the entire 60-mile front to a depth in some instances of eight to ten miles. Many towns and guns have been taken by American forces, in addition to about 20,000 prisoners. The presence of American troops in such large numbers has taken the Germans by surprise and greatly weakened their morale. The present Allied drive is but a minor operation, we are reminded, and that the big smash will come later on.

The Kaiser's U-boats Monday sunk the tug Perth Amboy and four barges off Cape Cod. The firing attracted thousands of people to the beach from where the battle could be plainly seen. A number of poorly aimed shells fell inland. No one, either on the boats or on shore were killed during the action, altho three sailors were injured.

The U-boats bagged their biggest game off the Atlantic coast last Friday when they attacked and sunk the armored cruiser, San Diego. The ship's entire complement of 1,187 officers and men were saved. The San Diego was by far the biggest boat lost by the U. S. during the war. It is reported that the gunners remained on the boat until the water was in on them in the hopes of getting a shot at the submarine.

"The Americans are only cannon fodder and not the equal of our war-seasoned, unconquerable troops," is the way the German official mouthpiece summed up the American troops only a few days before they smashed into the German lines and sent the Huns retreating. After being repeatedly fed on such stories as these, it is not to be wondered at that they go into battle over-confident of their superiority over the Americans, or that they are surprised into surrender when they find the Americans are fully their match.

Secretary Baker has decided that base-ball is a non-essential occupation and orders that all men of draft age playing professional baseball, get into some useful occupation or fight. Owners of the professional teams profess to see a menace against the entire future of the national pastime in the Secretary's order as it will take from 85 to 90 per cent of the League players, and it will be impossible to continue the game with the small number of remaining players over and under the draft age.

A Michigan boy, Assistant Paymaster Robert Herbert Halstead of Lansing, is among the missing from the army supply ship, Westover, which was torpedoed and sunk in the war zone, July 11th, while on its way to Europe.

Six Custer Soldiers were killed Sunday when a freight car telescoped a D. U. R. limited near Chelsea, snuffing out the lives of 13 people and injuring 47.

The death of Lieut Quentin Roosevelt, son of Theodore Roosevelt, who fell inside the German lines during an engagement with a Hun airplane, has been confirmed by enemy dispatches. Young Roosevelt died like a hero and was buried with military honors by German airmen, who discovered his identity from the name on his pocket cases. The young man's personal belongings are being kept to be sent later to his relatives.

As we go to press the first authentic dispatches come from overseas showing the total German losses during the nine days engagement on the western front. During this period between 60 and 70 divisions have been employed, with a loss of 180,000 men killed wounded and taken prisoner.

A Berne, Switzerland, dispatch commenting on the health of the Field Marshall von Hindenburg would seem to give the lie to the story widely circulated last week that the general was dead. The dispatch claims that the German war lord has been unable to take active part in any of the military operations of the present year.

An Austrian newspaper comments upon the superb organizing genius of the American people which has put over a million soldiers in France during the first year of its entrance into the war. "All latest reports," says this paper, "are in agreement that there is no longer any doubt about the fact that one million Americans are in France today," and it goes on to point out that Germany is now facing three nations whose population is three times as great as hers and whose talents for organization and economic power are equal to those of Germany.

Busy? Of course you are! But a few weeks from now you'll need a silo and you'll wish you had ordered one—why not get in touch with the manufacturer of the kind you want RIGHT AWAY, let him worry about getting it on your farm in time!



WEEKLY AGRICULTURAL DIGEST



THE POPULARITY OF THE PERCHERON BREED IS GROWING

During the last 19 months the Percheron breeders of the United States have sold more than 1,000 Percherons to Canadian buyers. 611 of these were purchased during the last 7 months by 91 different Canadian buyers. 32 purchasers were located in Alberta; 4 in British Columbia; 12 in Manitoba; 1 in New Brunswick; 7 in Ontario; and 35 in Saskatchewan. 239 out of the 611 sold this past season were mares. It is believed that this constitutes a record for the exportation of any kind of purebred livestock into Canada. These very heavy exportations are significant of the growing popularity of Percherons in all parts of the Dominion, and of Canadians' firm belief in the prosperity in store for breeders of good draft horses.

Measured by the total number of registrations made last year, Illinois and Iowa are far in the lead of all other states in Percheron production. Out of the 10,508 Percherons recorded during the last fiscal year, Illinois recorded 2,386, or 22.7% of the total; Iowa, 2,110, or 20.07%; Ohio 864, or 8.22%; Kansas 759, or 7.22%; Nebraska 523, or 4.97%; Minnesota 447, or 4.25%; Indiana 440, or 4.18%; South Dakota 392, or 3.73%; North Dakota 370, 3.52%; Wisconsin 353, or 3.35%; Missouri 308, or 2.93%; Pennsylvania 244, or 2.32%; Michigan 223, or 2.12%; Oklahoma 168, or 1.59%; Montana 146, or 1.38%; and Virginia 107 or 1.01%.

FOOD ADMINISTRATION ANNOUNCES NEW FLOUR MILLING REGULATIONS

With the end of the milling year on July 1, the Food Administration reviews conditions which have prevailed in the flour milling industry and also announces new regulations to be put in effect.

Under the original regulations, the millers were allowed a maximum gross profit of 25 cents per barrel, based on their annual business. The business is recognized to be a seasonal one and cannot be judged on profits determined upon a few months' operations, nor can annual profits always be accurately forecast at the beginning. Millers finding themselves at the end of the fiscal year with an amount in excess of 25 cents a barrel profit have been notified that they release themselves from the difficulty by selling a sufficient amount of flour at a nominal price to the Food Administration to liquidate any such surplus profit. Millers' accounts are audited by representatives of the enforcement division of the Food Administration.

Under the new plan of mill regulation now being organized, trade will be free but profits closely limited. Speculation will not be permitted, but no limitations are placed upon the freedom of flour mills or traders to buy or sell in any market. The mills are, however, under restrictions to reflect the government price within the profit limitations upon flour. The whole plan has been approved by the Agricultural Advisory Committee, the board of 24 members which confers with the Food Administration on matters affecting producers.

AN OFFICIAL STATEMENT OF IMPORTANCE TO AGRICULTURE

It is now possible to summarize the shipments of foodstuffs from the United States to the Allied countries during the fiscal year just closed—practically the last harvest year. These amounts include all shipments to Allied countries for their and our armies, the civilian population, the Belgian Relief and Red Cross. The figures indicate the measure of effort of the American people in support of Allied food supplies.

The total value of these food shipments which were in the main purchased through, or with the collaboration of, the Food Administration, amount to, roundly, \$1,400,000,000 during the fiscal year.

The shipments of meats and fats (includes meat products, dairy products, vegetable oils, etc.), to Allied destinations were as follows:

Fiscal year 1916-17.....2,166,500,000 lbs.
Fiscal year 1917-18.....3,011,100,000 lbs.

Increase 844,600,000 lbs.

Our slaughterable animals at the beginning of the last fiscal year were not appreciably larger than the year before and particularly in hogs; they were probably less. The increase in shipments is due to conservation and the extra weight of animals added

by our farmers. The full effect of these efforts began to bear their best results in the last half of the fiscal year when the exports to the Allies were 2,133,100,000 pounds, as against 1,266,500,000 pounds in the same period of the year before. This compares with an average of 801,000,000 pounds of total exports for the same half years in the three-year pre-war period.

In cereals and cereal products reduced to terms of cereal bushels, our shipments to Allied destinations have been:

Fiscal year, 1916-17.....259,900,000 bushels
Fiscal year, 1917-18.....340,800,000 bushels

Increase 80,900,000 bushels

Of these cereals our shipments of the prime breadstuffs in the fiscal year 1917-18 to Allied destinations were, wheat 131,000,000 bushels, and of rye 13,900,000 bushels, a total of 144,900,000 bushels.

The exports to allied destinations during the fiscal year 1916-17 were, wheat 135,100,000 bushels and rye 2,300,000 bushels, a total of 137,400,000 bushels. In addition, some 10,000,000 bushels of 1917 wheat are now in port for allied destinations or en route thereto. The total shipments to allied countries from our last harvest of wheat will be, therefore, about 141,000,000 bushels, or, a total of 154,900,000 bushels of prime breadstuffs. In addition to this we have shipped some 10,000,000 bushels to neutrals dependent upon us and we have received some imports from other quarters. A large part of the other cereals exported have also gone into war bread.

It is interesting to note that since the urgent request of the allied food controllers early in the year for a further shipment of 75,000,000 bushels from our 1917 wheat than originally planned, we shall have shipped to Europe or have en route, nearly 85,000,000 bushels. At the time of this request our surplus was already more than exhausted. This accomplishment of our people in this matter stands out even more clearly if we bear in mind that we had available in the fiscal year 1916-17 from net carry-over and as surplus over our normal consumption about 200,000,000 bushels of wheat which we were able to export that year without trenching on our home loaf. This last year, however, owing to the large failure of the 1917 wheat crop, we had available from net carry-over and production and imports, only just about our normal consumption. Therefore our wheat shipments to allied destinations represent approximately savings from our own wheat bread.

These figures, however, do not fully convey the volume of the effort and sacrifice made during the past year by the whole American people. Despite the magnificent effort of our agricultural population in planting a much increased acreage in 1917, not only was there a very large failure in wheat but also, the corn failed to mature properly and our corn is our dominant crop. We calculate that the total nutritional production of the country for the fiscal year just closed was between 7 per cent and 9 per cent below the average of the three previous years, our nutritional surplus for export in those years being about the same amount as the shrinkage last year. Therefore the consumption and waste in food have been greatly reduced in every direction during the year.

I am sure that all the millions of our people, agricultural as well as urban, who have contributed to these results should feel a very definite satisfaction that in a year of universal food shortages in the northern hemisphere all of those people joined together against Germany have come through into sight of the coming harvest not only with health and strength fully maintained, but with only temporary periods of hardship. The European allies have been compelled to sacrifice more than our own people but we have not failed to load every steamer since the delays of the storm months last winter. Our contributions to this end could not have been accomplished without effort and sacrifice and it is a matter for further satisfaction that it has been accomplished voluntarily and individually. It is difficult to distinguish between various sections of our people—the homes, public eating places, food trades, urban or agricultural populations—in assessing credit for these results but no one will deny the dominant part of the American women.—Herbert Hoover.

The important question isn't *what kind of a silo*, because there is not a neighborhood in Michigan where you cannot easily answer this by talking with the men who own different kinds—the big thing is a SILO THIS YEAR.

WEEKLY CROP SUMMARY

For Week Ending July 16

New England.—Boston: Haying general, but retarded by frequent showers; crop rather light. Oats and rye good. Too cool for corn. Potatoes good; generally in blossom; some blight in Connecticut. Tobacco rather uneven, but quality good; harvesting Havana begun. Cranberry bogs mostly in full bloom; apparently setting well.

Pennsylvania.—Philadelphia: Moderate local rains with considerable hail. Oats filling well and ripening; harvest begun in some southern counties. Damage to potatoes by blight and green aphids continues. Growth of corn slow on account of cool nights, but improving. Harvest of winter wheat in southern and in a few central counties; condition and prospects excellent.

Minnesota.—Minneapolis: Spring wheat and oat harvesting July 20 in southern to August 10 in northern portion. Barley and rye harvesting now general in southern portion, begins in northern portion August 1; yields good. Pastures poor. Potatoes fair to good. Corn is fair to good. Spring wheat is in good to excellent condition in the south and fair to good condition in the north.

Illinois.—Springfield: Dry and cool; favorable for harvesting and threshing oats, but pastures and gardens in southern division suffering from continued drought, although good to excellent elsewhere. Harvesting, threshing and haying continue. Corn made excellent growth in north and central portions, but poor growth in the south as result of the continued dry weather; the conditions were favorable for cultivation and this work was nearly completed.

New York.—Ithaca: First half of week cool and showery; latter half warm and dry. Rains very beneficial, but haying delayed temporarily. Corn somewhat checked, but looking good. Spring wheat, oats, barley, beans, and other crops doing well. Potatoes being sprayed, as bugs and blight troublesome in some sections. Apples dropping badly. Rye harvest will begin in upper Hudson Valley this week. Haying begun in northern counties.

Indiana.—Indianapolis: All growth slow on account of cool weather. Rain again needed in many places. Oats heavy to medium generally; harvest not yet general in north, but finished in some places in south. Early potatoes below average. Late potatoes, truck, pastures, and gardens fair to good. Yield of winter wheat generally much above the average. Corn made good growth generally, but is in fair to poor condition in a few localities; growth was retarded by low temperatures and in places by lack of moisture.

Wisconsin.—Milwaukee: Good weather for hay and rye harvesting, which is general. Harvesting barley and early oats begun in south; barley and winter wheat harvest begins in Brown county about the 25th. Much needed rains at close of week. Picking raspberries, currants, and cherries begun; crops very light. Some barley and oats lodged in south. Corn tasseling; laid by in south; condition only fair on account of light rain and low temperature. Winter and spring wheat are filling well generally.

Nebraska.—Lincoln: Continued dry weather favorable for threshing, harvesting and haying. Second cutting of alfalfa progressing; crop light. Rye harvest well advanced, and spring wheat and oat beginning in north counties. Pastures exceedingly short and potatoes damaged in central and southeastern counties and rain much needed. Corn is generally in fair condition as a result of moderate rainfalls, but some fields made poor growth in southern portions, due to dry weather; tassel appearing generally.

Oklahoma.—Oklahoma: Hot, dry week, unfavorable for all crops. Beneficial rains in north portion July 15. Sorghum grains suffering. Sweet potatoes and peanuts holding up well. Pastures and truck failing fast. Corn made very poor growth generally because of the lack of rainfall and the excessive heat; in some parts of the northeast, however, where light to moderate rains fell, it made a fair development. Cotton continues in good condition most places, but is only fair in portion of southwest account of dry weather. Some weevil are reported in southeast portion.

Arkansas.—Little Rock: Rice good to excellent where watered, but considerable loss because not watered. Meadows, pastures, and truck seriously damaged by drought. Late potatoes being planted. Sweet potatoes, peas, beans, melons, cantaloupes, peanuts, and sorghum good. Early corn in poor condition, except in central and southwest; late corn in fair condition. Threshing winter wheat well advanced. Showers were beneficial and cotton generally made good growth; condition good and fruiting well.

Ohio.—Columbus: Conditions generally unfavorable for growing crops, but favorable for outdoor work. Oats good to excellent; harvest progressing in southwest; will begin next week in northwest counties. Haying practically done; large crop. Tobacco, pastures, and late potatoes need rain. Winter wheat excellent; harvesting practically completed, except a few lake counties; thrashing progressing in western central, and some northwestern counties and will be general by next week. Corn made poor growth due to dry weather and low temperature. It is tasseling low and appears imperfect in some sections.

Texas.—Houston: Pastures, feed crops, sweet potatoes, and peanuts deteriorated in most sections, but revived in a few scattered localities. Rice generally good, but locally injured. Late corn made poor growth due to dry weather and high temperature; early corn in fair to good condition and was matured previous to the dry weather. Cotton deteriorated in the central, western, and south western portions from the continued dry, hot weather, but is still fair to good north, east, and coast portions. Picking general in south. Amarillo: The condition of the cattle and the range throughout the Panhandle is good, except in the region of the south plains country, where conditions continue poor.

Kansas.—Topeka: Harvest over, except in north-west and threshing half done in east and south-central portions, with yield good to excellent in those districts. Pastures, hay crops, potatoes, and gardens poor. Temperature was below the normal in most of the State, while the rainfall was light except moderate locally in central and southwest portions. Corn made good to excellent advance in important producing counties in central and northeast portions, and is standing the drought well in most other places. It is generally laid by, and is silking and tasseling; will be in roasting-ear stage in about two weeks.



MARKET FLASHES



WHEAT

GRADE	Detroit	Chicago	New York
No. 2 Red	2.24	2.23	2.36 1-2
No. 3 Red	2.21	2.19	2.32 1-2
No. 2 White	2.24	2.23	2.36 1-2
No. 2 Mixed	2.23	2.22	2.35

WHEAT. The mills in many sections are getting all they need to run full time. On account of the grand rush for flour the mills are accepting only the best grades at the government price. There is such a demand for flour that the mills are not taking time to blend the flour.

Threshing returns continue favorable and the final returns will probably show larger than the government July estimate. The quality so far has been excellent, grading No. 1 and 2, with a small percentage of No. 3. The government prices carry on those three grades; other grades sell on their merits.

The first export sale was made last week of 25,000 bushels at Chicago. Within a few weeks new grain will begin to move to foreign channels just as fast as boats are obtainable for handling the shipments.

A very well illustrated cartoon recently appeared in a Chicago paper. The cartoon showed a mother and father with head bowed. "Give HIM this day OUR daily bread—if need be," with a shadowgraph in the background of their son in France.



OATS

GRADE	Detroit	Chicago	New York
Standard	77 1-2	.78	.85 1-2
No. 3 White	.77	.77 1-2	.84 1-2
No. 4 White	.76	.77	.83

OATS. New oats are beginning to move in large quantities. A year ago the stocks of oats on hand were small, but this year it is quite the contrary. Buyers are buying the old stock in preference to the new. We believe the market will soon adjust itself and the volume of business will increase and all markets will develop more strength and buyers will be picking up the large lots. With the demand for feeds and all oat products there is going to be a place for every oat.



CORN

GRADE	Detroit	Chicago	New York
No. 2 Yellow	1.72	1.70	1.91
No. 3 Yellow	1.70	1.66	1.81
No. 4 Yellow	1.60	1.60	1.75

CORN. The movement of corn has been heavier than was anticipated some time ago. So far cars have not been reserved or given preference for shipping wheat, and the movement of all grain has been put on its own footing.

Hot weather reports covering the corn belts have offset the heavy receipts, but at the same time the existing conditions have brought on unsettled condition of the markets.



HAY

Markets	No. 1 Timothy	Standard Timothy	No. 2 Timothy
Detroit	20.00 2.50	18.00 2.50	17.00 17.50
Chicago	22.00 24.00	19.00 22.00	16.00 17.00
Cincinnati	22.75 24.00	19.00 23.50	16.00 19.00
Pittsburgh	26.00 27.50	20.50 23.50	15.50 19.50
New York	28.00 30.00	23.00 28.00	18.00 21.00
Richmond	24.00 27.00	22.00 25.00	17.00 18.00

Markets	No. 1 Light Mixed	No. 1 Clover Mixed	No. 1 Clover
Detroit	18.00 18.50	13.00 14.00	12.00 12.50
Chicago	19.00 19.50	11.00 13.00	10.00 11.00
Cincinnati	19.00 19.50	15.00 16.00	11.00 13.00
Pittsburgh	19.00 20.00	12.00 12.50	10.00 12.00
New York	23.00 25.00	19.00 19.50	19.50 19.50
Richmond	22.00 23.00	7.00 18.00	15.00 16.00

HAY. During the past season, some remarkable changes have taken place,

LAST MINUTE WIRES

BOSTON.—Bean market situation active and steady. Off grades cleaning up satisfactorily and expect demand for C. H. P. white pea beans will show some improvement.

CHICAGO.—The situation on hay very firm and active. Shippers of old hay ought to get busy and get in on present marketing conditions.

PITTSBURG.—Hay market firm and active on best grades. Positively no demand for off grades.

DETROIT.—Produce market firm and steady. Potatoes easier and selling lower. Fresh eggs bringing premium prices; butter steady at quotations.

SPECIAL NOTE: Do not ship veal when weather is hot unless located near the market. Play safe and hold on to the veal for cooler weather.

apparently going from one price extreme to another. During the close of 1917 and the earlier part of 1918 the demand for hay was unlimited and no limit to prices but it simply was only a matter of getting the hay as the car situation was very bad. That was why the market went out of sight. At one time the government was buying considerable hay and their orders were given preference so far as shipments were concerned. So much hay was purchased by the government that they discovered that more hay had been contracted for than they needed, resulting that a large tonnage of this hay had to be diverted to the different markets resulting in markets being overcrowded and the situation continued for about thirty days.

In order to give you a range of prices paid during the season we will quote the average monthly sales on the Detroit Market. During the month of

	Per ton
September	\$17.00
October	22.00
November	25.00
December	25.00
January	27.00
February	28.00
March	29.00
April	25.00
May	19.00
June	17.00
July	19.00

The above prices apply on sales of No. 1 timothy. Other grades sold according to quality. The market on low grade hay was so demoralized that the sale would hardly pay transportation and the cost of handling. The change in the market was so sudden that no one was anticipating the change, consequently a great many buyers lost heavily. Shipments made direct by the growers brought back disappointing returns.

The present market situation is active and reasonably firm with no demand for off grades. The markets are fairly well cleared of the surplus and are now bidding freely on arrivals of No. 1 timothy.

PITTSBURG. Good hay scarce and bringing top prices. This applies on No. 1 timothy, No. 2 timothy and No. 1 light mixed. Grassy and low grade hay almost unsalable.

RICHMOND. Reports show light receipts with a moderate demand leaving the market in such shape that the market may show better developments although we are of the opinion that the trading will be on new hay. Of course there will be a demand for old hay for some time although the selling prices may not be attractive. It is a market that needs to be followed closely and make bonafide sales before shipping.

ST. LOUIS. The market for timothy and clover mixed hay grading No. 1 is steady and strong. The receipts are not of the quality that most buyers want.

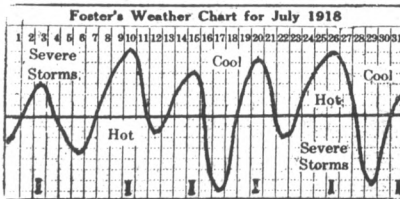
NEW YORK. It is quite a difficult matter to judge this market on account of the receipts running heavy to the poorer classes of hay. All buyers are more or less skeptical in bidding on hay until it is on track for inspection. They bid up on the choicest grades and the market is considered firm and active. There is considerable hay at the Harbor rejected by the government on account of quality. We say if you are going to New York with hay, ship the very best you have and in large bales.

CHICAGO. This market is in need of good timothy and light mixed hay. The present supplies will not go around. Poorer grades are selling but buyers are able to get plenty at the old prices. The whole thing in a nut shell is that if you have just an ordinary No. 3 grade or lower the best thing to do is to work it off locally through feeding and then by shipping the better grades you will make some money off the hay. Every market wants the best hay produced because that is what the buyers demand during the summer months.

DETROIT. The supplies are hardly adequate to supply the trade. This

THE WEATHER FOR THE WEEK

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



WASHINGTON, D. C., July 27. Last bulletin gave forecasts of disturbances to cross continent July 29 to August 2 and Aug. 1 to 5, warm waves July 28 to Aug. 1 and July 31 to Aug. 4, cool waves July 31 to Aug. 4 and Aug. to 7. Temperatures of this period will be moderate, ending with cooler than usual. Storms of these disturbances will be unusually severe. Thunder storms in the drouth sections will bring some relief but they may develop dangerous storms.

The limit of the 1918 drouth cannot be definitely located, but on the crop-weather map a line was drawn from Helena, Montana, to the Atlantic, a little southeast of Richmond, Va., passing near Pierre, S. D., between Fortia and Chicago, thru Dayton, Ohio. This line approximates the northeastern limits of the great drouth area. The above described storms are expected to bring some relief to the drouth section and also to the country northeast of it, including middle provinces of Canada. Pacific slope is not reckoned within the drouth area and the

eastern sections are doubtful. August will cover the most critical period.

With these uncertain crop-weather conditions for August before us it would be unwise for farmers to dispose of all their surplus corn and oats before they know more about August weather. As the writer sees it the corn and cotton crops will be damaged by the August drouth.

Next warm wave will reach Vancouver about August 5 and temperatures will rise on all the Pacific slope. It will cross crest of Rockies by close of Aug. 6; plains sections 7, meridian 90, great lakes and Ohio-Tennessee valleys 8, eastern sections 9, reaching vicinity of Newfoundland about Aug. 10.

Storm wave will follow about one day behind warm wave and cool wave about one day behind storm wave.

This disturbance will start with low temperatures, preceded by showers in many places. Temperatures will rise after July 5 as the disturbance approaches your vicinity and when you see these conditions coming in you may expect a two weeks hot wave, relieved in some places by thunder storms and showers. When you are at the end of that expected hot wave—near Aug. 20—you will know more about the corn and cotton crops of 1918 than you now do. Many of you will also be anxious about winter grain. Don't forget that good wheat and corn crops seldom come in the same crop season.

W. T. Foster

is partially due to farmers being very busy and very little loose hay is coming in. In fact we know there is very little old hay near Detroit and from the fact that buyers will not buy new hay in quantities for at least thirty days, we believe the market will continue firm until the new hay takes the place of the old. Now is this time to move the old hay and we advise all prospective shippers to get busy, even thought they have to take a day or two off for hauling.



BEANS

GRADE	Detroit	Chicago	New York
C. H. P.	9.25	9.75	12.00
Prime	8.75	9.00	11.50
Red Kidneys	13.00	10.00	13.00

The bean situation appears to be more encouraging. The demand is picking up a little and buyers are bidding up a little on the best grades. The New York market is cleaning up and sellers are endeavoring to move certain grades. This is especially true of foreign colored beans and California Pinks, a very large stock of which is in first hands and offerings in some cases rather urgently.

Keep your eye on the beans if stored. Some farmers report beans are heating in the bins. They should be stirred up occasionally.



POTATOES

Market continues firm and active. New potatoes selling at a range from \$6.00 to \$6.25 per barrel. We do not anticipate a higher market new potatoes will be coming in more freely from near by shipping points. A few of our Michigan readers advise that they expect to L. C. L. shipments in about two weeks.

Berries

Receipts have been very light and all berries in good demand. Red currants selling \$5.50 to \$6.00 per bu., Michigan cherries \$4.00 to \$4.50 per 16 qt. case, raspberries \$7.50 to \$9.00 per bushel, blackberries \$7.00 to \$8.50 per bu.



APPLES

In good demand price ranges from \$1.75 to \$2.50 per bushel according to quality. Be sure and ship apples in crates or ventilated barrels.



BUTTER

DETROIT.—The market has displayed considerable weakness during the past week although quotations have been well maintained on the best grades. The only butter that has been scored so far as price is concerned is the poorer grades.

Receipts have been running heavier but do not anticipate they will run any heavier. The accumulated stock will not depress the market because buyers are anticipating their supplies a little ahead of time.

Creamers firsts selling 42½ to 43c, extras 43 to 43½c, good dairy 40 to 42c.

July 20, 1918—The Market: Receipts have been heavy this week, running somewhat higher than those of last week. The large receipts of the week are not due to increased production but because many double shipments arrived here early in the week and because several carload lots, purchased recently, have come forward. As a whole the week has not been as active as last, and for the last two days indications have been that a lower quotation might be expected. Quotations throughout the week have been as follows since Tues-

day, Mondays quotations being one-fourth cent lower on all grades:

Extras, 45¢@45½¢, higher scoring than extras, 45½¢@46¼¢. First, 43½¢@44¼¢, and Seconds, 41½¢@43¢.



EGGS

Stop shipping bad eggs or Uncle Sam will be on to your trail. The food administration is out with a rule that all eggs must be candled or in other words must be fresh when shipment is made. As a rule the majority of farmer shippers will play the game safe but to those who have been making a practice of finding a new hens nest with twelve or fifteen eggs under the supervision of a hen that is determined not to move, you had better let the hen stay and do her bit rather than to take these eggs and ship them with good eggs.

The market continues firm and especially so on newly laid country receipts. There is a call for Poultry Farm eggs and those that can ship that call of eggs will have no trouble in selling them at attractive prices.



POULTRY

LIVE WT.	Detroit	Chicago	New York
Turkey	24-25	17-22	19-20
Ducks	30-32	21-25	29-30
Geese	15-16	13-15	17-18
Sprangers	27-28	27-28	27-29
Hens	29-30	27-29	28-30

No. 2 Grade 2 to 3 Cents Less

The market has been a little easier although selling prices have been well maintained. Receipts of hens are showing very little increase but on broilers receipts are a trifle heavier. The market is lower on broilers but do not anticipate another drop of any consequence for at least two weeks. However, the price on broilers will all depend on how fast they come in. Some farmers put up the argument that it is more profitable to ship broilers when they weigh from 1½ to 2 lbs and sell at present prices than to feed them along until fall and sell on basis of the fall prices.

In all probability poultry will sell at high prices this fall due to prospective high prices on cattle, hogs, sheep and veal and the difference in price between hens and broilers is approximately 6 cents. By increasing the weight of the chicken from 1½ to 4 pounds you will realize approximately 60 to 75 cents more for each bird. As the fall season advances the price on broilers gradually gets in line with the price on No. 1 old hens. Shall I sell now or shall I feed and sell this fall? If you can figure out the approximate cost of the feed that it will take to feed the chicken until fall; you will then be able to solve your own problem.

Wool

The handling of wool is gradually being adjusted by the government and the present movement is heavy. Dealers have realized that in order to make anything in handling wool that they must handle the same in large quantities. The result is car load shipments are moving to the large receiving markets. Dealers are more anxious than ever to speed up their shipments to the mills in order to make more room for receiving and storing. Medium wools are in especial demand, the need being so keen that the wool administrator has asked the importers to specify what wools they have either in transit or awaiting shipment from the River Plate.

Live Stock

LIVE STOCK—Detroit. The general trend of the market is active but with a slight undertone. When the weather is warm it has a tendency to depress buying. However the situation as a whole looks reasonably good and the following prices ought to be a basis to work on. Best heavy steers \$14.00 to \$16.00; hardy weight steers \$10.50 to \$11.00; mixed steers and heifers \$8.50 to \$9.00; light butchers \$7.50 to \$8.50; cows \$7.00 to \$9.00; canners \$6.75 to \$7.00; feeders \$9.50 to \$10.50; stockers \$7.50 to \$8.50, and milkers \$60.00 and up.

Best lambs \$17.50 to \$18.50; light lambs \$14.00 to \$15.00; yearlings \$10.00 to \$14.00; sheep \$10.00 to \$11.00.

Hogs, market strong and higher \$17.70 to \$18.50.

Veal calves \$14.50 to \$17.00, market trifle easier.

East Buffalo.—Receipts of cattle on Monday, 225 cars, including 75 cars of Canadians and 14 cars left from last week's trade. Trade opened steady on native medium weight and weighty steer cattle which were in very light supply; butcher steers and handy weight steers sold 50c to \$1.00 lower than last week; fat cows and heifers sold 50c lower; bulls of all classes sold 25c to 50c lower; canners and cutters were in moderate supply, sold 25c to 50c lower than last week; fresh cows and springers were in light supply, sold \$10 to \$15 lower per head; stockers and feeders were in moderate supply, sold 50c lower; yearlings were in very light supply and sold steady. At the close of our market about 35 cars went over unsold.

With about 500 cattle on sale Tuesday, the market was 15c to 25c lower than on Monday.

Receipts of hogs Monday totaled 2560, which was very light, and the market opened 50c higher, with the bulk of the hogs selling from \$19.75 to \$19.90 with heavy ends, which were thrown out of decks, selling as low as \$19.25; roughs, \$17@17.25; stags, \$11.00@13.00.

Tuesday, with about 1600 hogs on sale, the market opened steady to 5c lower, with the bulk of the hogs selling at \$19.85; yorkers, \$19.90; roughs, \$17; stags, \$11.00@13.00.

The receipts of sheep and lambs Monday were around 1000 head. Best spring lambs sold for \$17.00@17.50, which was 50c lower than last week's

close; culls, \$15.00@15.50; yearling lambs, \$15.00@15.50; wethers were steady and sold from \$13.00@14.00; Ewes were also steady and sold from \$12.00@13.00.

Tuesday, with about 500 sheep and lambs on sale, everything sold about steady with Monday.

We quote: Choice to prime weighty steers, \$17.50@18.00; medium to good weighty steers, \$16.50@17; plain and coarse weighty steers, \$14.50@15.00; choice to prime handy weight and medium weight steers, \$14.50@15.00; fair to good handy weight and medium weight steers, \$13.50@14.00; choice to prime yearlings, \$14.50@15.00; fair to good yearlings, \$13.00@13.50; medium to good butcher steers, \$11.50@12.00; fair to medium butcher steers, \$10.50@11.00; good to choice fat cows, \$10.00@10.50; medium to good fat cows, \$9.00@9.50; fair to good medium fat cows, \$8.00@8.50; cutters and common butcher cows, \$7.00@7.50; canners, \$6.25@7.25; good to choice fat bulls, \$10.50@11.00; medium to good fat bulls, \$9.50@10.00; good weight sausage bulls, \$9.00@9.50; light and thin bulls, \$7.50@8.00; good to best stock and feeding steers, \$10.00@10.50; medium grades of stock and feeding steers, \$9.00@9.50; common to fair stock and feeding steers, \$8.00@8.50; good to choice fresh cows and springers, \$80.00@100.00; medium to good fresh cows and springers, \$65.00@75.00.

MID-SUMMER CROP, LABOR SURVEY

yield, some young orchards have some apples. Farmers are working short handed and a great part of the help is inexperienced and high priced, many asking \$4.00 to \$4.50 per day. Farmers generally feel opposed to potato grading and justly so, for the 1918 crop will have to all go over a grader so buyers say. This grading benefits the shippers only.

Newaygo County—potatoes, acreage 60 percent, condition 80 percent; beans, acreage 80 percent, condition 90 percent; corn, acreage 100 percent, condition 110 percent; oats, acreage 100 percent, condition 110 percent; fruit, condition 60 percent. Not much help to be had but farmers go it alone. Wages are too high, can't pay it out of crops. The estimate is given on localities not hit by frost in June. Some small parts can be reduced by 50 percent on corn and beans, but most of county will recover if frost does not come before normal seasons, Sept. 20.

Presque Isle county—potatoes, about 10 percent less acreage, 75 percent as good as last year; beans, about the same acreage, plants look good, are blossoming now; corn, about the same acreage and looks good; hay, good on the good land but is generally poor; oats, looks like a good crop on the best land but poor on the low land; fruit, strawberries short crop, no cherries or plums, lots of apples; there seems to be plenty of help but there is so many that wont work only in the cedar swamps.—D. D. S.

Cass County—potatoes, 1-4 short of last year, just fair; corn, about the same as last year; oats, large acreage and looking good; fruit, we have a short crop this year, very nice what there is, apples are a short crop. Farmers are having trouble to get help this year. Some crops have not been planted on account of short help, farmers are changing work this year in order to get their work done. Threshing just commencing, wheat turning out just fair, about 20 bu. per acre.

Genesee.—About same acreage of potatoes as last year, but not very good; too dry. Not as many beans planted as last year; not looking very good as the dry weather is hurting them. About same acreage of corn; very uneven; lots of poor fields. A large acreage of sugar beets; looking good. Large acreage of oats; good. Not much fruit. Labor scarce and hard to find.

Clinton.—Acreage of potatoes as compared with 1917, 60%; beans, 90%; corn, 100%; sugar beets, more than 1917; oats 100%. Not so much fruit as in 1917; too much frost and drouth. Farmers are getting along very well with help they can get from boys and students. Hay very light.

Sanilac.—There seems to be more potatoes planted than usual; nearly as

many beans and lots of corn but all of these are suffering greatly from the dry weather. Nearly as many sugar beets as last year. There were not so many in Custer township as usual but there are some good looking stands of beets. There was a large acreage of oats sown this year and is looking pretty good on the flat lands, but it will be hard to tell how it will turn out on account of the dry weather. Seems to be lots of early apples but not so many late ones. There seems to be help enough in Custer township, but as to the whole county, cannot say. Everyone in every farmer's family has to do all they can.

Monroe.—More potatoes around here than last year but not so good. Not many beans raised but good. More corn than in 1917 and better, but it is very dry. I don't think sugar beets ever were so good; more than 1917. Oats good and a large acreage. Not much fruit but a few apples. We need rain very badly. This last draft or call of the 21's will pull hard on the farmer. Right around here there isn't much help hired but I myself have 160 acres and expect my man to go in August.

Saginaw.—Acreage about same as last year; conditions 90%; need rain. Acreage of beans larger than last year, conditions 75%. Too cold nights for good growth. Corn acreage less than last year. Conditions 75%. Very uneven partly from poor seed and big rain. More sugar beets than last year. Conditions 85%. A few pieces not properly cared for from lack of help. Acreage of oats larger than last year, conditions 95%; a good crop, beginning to ripen. Apples 90%; plums and pears very few.

Tuscola.—Beans not so much as last year but look good. Corn looks like a good crop. Sugar beets look good but need rain very badly. A good fair crop of oats are expected. There are quite a lot of apples. I don't know what to say about labor, there is none to be had except the boys from town and they are not what we need.

Eaton.—About half the acreage of potatoes; looking good. Three-fourths of a crop of beans, looking fine. Rather more corn, doing fine. About the same for sugar beets but they look fine. 25% more oats than last year; good crop. Berries a short crop; fair crop of apples.

Tuscola.—About the same acreage of potatoes and about the same condition. Acreage of beans 70%; present condition 25% better. 10% larger acreage of corn, condition 100% if it will get ripe as about half of the seed was bought through a local elevator. 15% larger acreage of sugar beets; condition 25% poorer on account of black rot and late sowing. Oats are about the same acreage; 30% better. 50% more barley, a No. 1 crop. Help is scarce, wages from \$2 to \$3 a day but on account of fine weather conditions farmers are getting along very well.

Genesee.—Half a crop of beans; 75% crop of corn; 100% of oats and barley. Fruit is no good. Help hard to get at \$3.50 a day.

Midland.—Acreage of potatoes about the same, condition a little better. Beans 25% less condition 25% better. Acreage of corn about the same, condition some better, not a very good stand in places. About 15% more sugar beets, condition about the same. The same acreage of oats, condition a little better. Prospects look good for fruit. Barley about the same as to acreage and condition. I can't say that any farmer has experienced any great difficulty in securing extra help. The harvesting is coming along just fine. Haying is nearly all done and up in fine shape. I don't think any crop has suffered much on account of labor shortage. Most of the farmers are putting in just a few extra hours and getting their work done just the same, although long hours make some of us look a little gaunt, we will come thru O. K. The weather has been greatly in the farmer's favor this season and helps out considerable in getting the work done.

Clare.—About the same acreage of potatoes, good. Same for beans, condition good. Corn, 25% less. Sugar beets less, condition fair. Oats, 25% more, condition good. Apples in abundance. Help scarce but crops will not suffer much.

(EDITOR'S NOTE) More of these reports will be published in a later issue.

for all the farmers of Michigan.

MICHIGAN BUSINESS FARMING

A Farm, Home and Market Weekly Owned and Edited in Michigan

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"We Came, We Saw, We Conquered"

WHAT TRUE American heart does not quicken with pride and gladness as the news comes over the wires that the American troops are driving the Prussians back to their borderland!

The tide of battle is turning. For four long, weary hopeless years the French and English have fought a stubborn but losing fight; step by step the Huns have pushed their way across Belgium and laid in ruins the fair provinces of France. All the cruel devices of torture and terror that the devilish minds of the Hun militarists could conceive to bring the civilian population to their knees and destroy the morale of the French people have been brought into play.

But the reign of terror is passing. The Hun has met his match. The Yankee has shown a courage and a skill and a determination equal to his own. Victory is turning to defeat. The retreat back to the Rhine has begun.

Oh, we are glad for the mothers and children of France and for the little peoples of Belgium, and for civilized mankind everywhere that the American soldier has been true to the traditions of his forefathers and has not faltered in the face of peril.

We are glad for the war-worn soldiers of France and England. They have faced terrible odds; they have tasted defeat more than victory; they have gone thru the dark charnel house of dread and doubt. Little to be wondered that they have weakened under the terrific onslaughts of the Prussian hordes. Little to be wondered that they might have shrunk back in hopeless surrender, despairing of breaking the Hun's tightening hold upon western France. But like the wine that rushes the blood, the American troops have revived the courage and the hopes of the allied soldiers, and shoulder to shoulder, they go forward in a solid phalanx, unafraid and confident now of ultimate victory.

We are glad for the President and the people of the United States that men with whom they have entrusted the nation's honor have so gloriously vindicated the confidence placed in them. We are glad that they have proven their right to be called the defenders of democracy.

And lastly, we are glad for the principles of right and justice. German might has had its day. Hate and greed are being vanquished. Love and righteousness shall yet rule a world made free of despots and military masters.

Standardization of wages.

IT IS NOW proposed to standardize wages. In other words, every worker in the United States shall receive the same wage for the same hours as every other man performing the same kind of labor. "Congress," we are told, "thru the taxes on excess profits, the war industries board, thru its price-fixing; the president, thru the veto of \$2.40 wheat,

have prepared the way for standardization of wages. Additional methods of keeping down the cost of living are being investigated at this time."

Standardization of wages would help agriculture providing agriculture has a say in fixing the scale. Farmers in Michigan are paying unreasonable and unheard of wages for farm hands. With the growing scarcity of farm help, there is no limit on what farmers may be called upon to pay unless some check is put upon labor's demand.

The wages that farmers are compelled to pay are way out of proportion to the wages paid for common labor in the cities, and in many instances the help is not of the most desirable. Wages in cities like Detroit run from \$2.50 to \$3.00 a day, and there are many farming sections in Michigan where a farm hand cannot be had for less than \$3 to \$4. Farmers are paying \$7 a day for man and team, whereas municipalities are able to hire the same labor for \$5.50 to \$6.00 a day.

We believe labor as well as capital should be justly compensated, but we do not believe that either should take advantage of an abnormal condition to profiteer. The only way to effectually control wage scales with justice to all is by a universal wage standard which may be increased or lowered over the entire country as a conference of the interested parties may from time to time direct.

Why Your Farm Help was Taken

FARMERS cannot understand why one branch of the government urged him to plant a large acreage last spring, only to have another branch of the government take the men needed for cultivating and harvesting these crops. Some light is shed upon the subject by Provost Marshal General Crowder's reply to the coal mine operators who appealed to him to defer calling coal miners.

"Do you realize," said Mr. Crowder, "that my job is to raise an army that will win the war? Do you know that General Pershing is urgently asking for more men to stem the German horde that is slowly battering its way to the gates of Paris? Do you realize that right now American boys are fighting for their very lives against heavy odds on the bloody fields of France? I want to help you and I realize your position in this matter, but I must first of all listen to the call of those across the seas who need our men, and need them more than they ever needed anything in all this world * * * Upon my shoulders to a large extent rests the responsibility of victory or defeat. The Army comes first—everything else comes after."

While we realize that Mr. Crowder's task is one of first magnitude and importance, we cannot overlook the fact that thousands of young farmers were induced last spring to buy machinery and rent land for the purpose of helping out the nation's food production, upon the absolute promise that they would be left on the farm until after the crops were harvested. Not of their own promptings, but upon the appeal of the government and its agents, these men have gone into debt to buy tools, seed and labor; they have spent the best part of the summer caring for their crops and now they must leave them to the tender mercies of the weather and the neighbors.

They have appealed to us to intervene; we have appealed to Colonel Bersey, the adjutant general; Col. Bersey has appealed to the Provost Marshal General, but without avail. Mr. Crowder cannot issue blanket instructions to leave farmers until after harvest, and at the same time secure the men who are needed overseas. And, of course, there can be no exception in individual cases.

Adjutant General Bersey calls our attention to the fact that he has omitted all farming districts in making up the next quota of 1,000 men who are called to entrain for Fort Thomas, Kentucky, during the five-day period beginning August 5th. All of these men will be called from the city of Detroit.

Until Mr. Baker and Congress decide to extend the draft age limits, Provost Marshall General Crowder must fill up the ranks with miners who are needed in the mines; workers who are needed in the factories; and farmers who are needed on the farms. There is no appeal from this decision.

Helping or Hindering the Farmer

SOMEbody HAS SAID—we think it was Jason Woodman, former member of the state board of agriculture—that the agricultural college is purely an educational institution and not supposed to mix in the farmers' marketing troubles. The college is perfectly regular. It will not break any precious traditions nor establish any precedents, and its value to the farmer will continue to be a matter of speculation.

It's an age-old theory that education for the farmer should be confined to the production of crops. That is a matter of rote and rule, to be taught from the books and the experiments of the laboratory. But the marketing for a profit of the crops produced thus scientifically always has been and is now subject to influences over which the productionists have had no control because they feared to venture forth into the mysterious realm of farm products distribution. To disturb the traditional, the complex, system of marketing farm products was to invite economic disaster, and no mind has been big enough and no heart strong enough to plunge the present wasteful and absurd marketing system into the revolution which would purge it of its weaknesses.

Even farm papers and farmers themselves have subscribed to the idea that the farmers' business was to produce, and that it was somebody else's business to market. There are farm papers content to travel along the same worn pathway and afraid to give the farmer a new idea lest he forsake the old, which actually, tho covertly oppose all agitation for a better marketing system. They think they are keeping the farmer out of trouble by bidding him stay by the plow handles and let those whose talents and experience fit them for the job, peddle the goods that the farmer has produced. But in reality they are his worst enemies, for they hinder the approach of the great reformation that must and will come in the nation's system of distribution.

Mankind never grows too old or too wise to learn. Farmers who have schooled themselves in the newer methods of farming have drawn many dividends from their knowledge. But since we know by experience that overproduction may send the prices of farm products so low as to wipe out all profits regardless of the economies practised in producing the crop, we have come to know that increased production may mean decreased profits, because of our present inability to distribute the surplus evenly and cheaply thruout the centers of consumption.

Every instrumentality for the advancement of agriculture should bend its present efforts to a study and a solution of the tremendous problems now blocking the road from the producer to the consumer.

The Bean Market

THE BEAN MARKET is looking up. One of the largest operators in the state advises us that he has had more orders the past two weeks than for several months, and believes the market will continue firm and possibly higher.

Farmers who have been holding their beans are getting a bit worried. But there was no hope for any improvement in the navy bean situation until the big crop of pintos that had been bumped onto the eastern markets was out of the way. These have been pretty well cleaned up, hence the growing demand for navies.

We again caution farmers not to hold their beans for a price beyond what will pay them a fair profit, for it is speculation pure and simple to do so. If the market advances, and it looks now as tho it will, farmers should watch it carefully and sell when the prices offered insure a sufficient profit. The new crop will not be on the market for over sixty days, so there is plenty of time in which to "sit tight and look cheerful."

EDITORIALS BY OUR READERS

(This is an open forum where our readers may express their views on topics of general interest. Statements appearing in this column will not necessarily indicate our own editorial opinion. Farmers are invited to use this column.)

Farmer's Automobile a Necessity

I note your comment on the automobile proposition. The farm automobile classified as a pleasure car is most surely a misnomer. I have yet to know a single farmer who uses his car for pleasure only. One of the strong points in favor of the auto on the farm is the time saving it means to the farmer in his business—and the saving of his horses too, for other farm work, not mention the large amount of marketing of their produce which many farmers do with their autos. Of course he and his family get occasional pleasure rides, when they can find the time, but the same is true of many other cars owned and used by city men in the business. I am very glad you are taking this matter up with the Washington officials, for to classify the farmers' automobile as a pleasure car seems to me to be wholly unjust—George A. Waterman, Washtenaw County.

Where It Started!

It is often interesting, and at the same time, highly instructive to think about how many of the great fortunes of today were founded "in the good old days." How many a bosom, heaving with pride at the ancestral wealth, has been made to collapse in shame and unbelief at the sudden revelation of just where that wealth came from and how many fortunes are being founded today on the grief and fears of a nation? In a book recently written on American slavery (not the wage slavery of the white man, but the chattelism of the negro before the Civil war) the author points out how many families first started their fortunes from profits off human flesh and blood. Indeed, Dr. Oelrich Bonnel Phillips is rude enough to give in his work the names of more than one family in a state like Rhode Island, for instance, who can trace their wealth back to traffic in the blacks. Many of their names are still high in the society lists of today. Now, a little more than a half century later, we view these facts with a certain horror, yet if we, as a nation, were consistent, with how much more horror would we view the more numerous fortunes that are being founded upon the slavery of the white man. Is slavery any the less slavery because the power above is wielded by economic pressure rather than a visible whip? Is slave driving any less reprehensible because its motive power proceeds from a gentleman in dress suit rather than from a Simon Legree? How many an innocent white slave of today reads the history of black slavery and pities his black brothers of days gone by, when he might well reserve a little of that pity for his own plight and better now; first of all there is more education, and knowledge is the social dynamite that will blow away the unjust institutions that capitalism has consecrated.

The workers are becoming more conscious of their power. They are receding from the position that they had no country to fight for; they have a country to fight for, and they love that country so mighty well that they intend to win it and own it. Because they are doing the work of keeping it going in the first place. Once the shackles of the mind are shaken off the shackles of the body fly away too. There will come a day when the people of the future—and it is so far away?—will look with horror at the way modern fortunes were made.—S. H. S. Harrietta.

"He Who Steals My Purse Steals Trash."

So said the bard of Avon when he complained at having his reputation sullied and La Follette may well join him in that statement. On page 2 of this issue we are printing an article from La Follette's Magazine showing that, as we stated months ago, the Wisconsin senator, was being unjustly condemned. A great many of our readers took issue with us, claiming we were supporting a traitor, but not so, we only refused to condemn a man before a fair trial was given him and because we know the jackals that were interested in crucifying him. Why should La Follette, of French descent, and a constant hater of imperialism, suddenly become pro-German? We could see no reason therefor, but remembering how the senator, when governor of Wisconsin, made the railroads pay a proper tax, put an income tax through, and in the U. S. senate worked and voted for proper child legislation, for the seamen's bill and for excess profit taxes, we could see why the railroads, the steamboat lines, the big manufacturers and capitalists generally had a grievance against him, not because he was pro-German, but because he was pro-American, and insisted that they carry their share of the war's burdens, and so the daily press was ordered to destroy him and all but succeeded, as the people, as usual, are ready to cry "Hosanna" one day and "Crucify him" the next. But is it not about time that we reserve our judgment until we can at least have investigated the people who are back of the accusations made? Further to show how damnably rotten our daily press works, bear in mind that while everyone published the false charges against the senator only a

half dozen were big and manly enough to retract and apologize when they saw that they were wrong. Also remember that the very charges made by La Follette against big business have since been substantiated by the Federal Trades Commission and form the backbone of the president's demand for higher income and excess profit taxes. Let this case prove a lesson to you to be more careful before passing judgment on a fellowman.—Organized Farmer.

(Editor's Note: The article referred to was published by the New York Evening Post, and is as follows):

"The Associated Press has handsomely and promptly admitted its grievous fault in misreporting Senator La Follette. Whereas he said in his St. Paul speech that 'we had grievances' against Germany, and was so reported the next day in the St. Paul newspapers, someone slipped the fatal word 'no' into the sentence in the Associated Press report and made it read: 'We have no grievances.' Whether this was done maliciously or accidentally will probably never be known, but the fact remains that irreparable injury was done to the senator, and that a large part of the outcry against him was due to this misstatement in the one thousand newspapers which are served by the Associated Press. Senator La Follette declared at the time that the press had misquoted him, but the matter was never brought



The American's Creed

I BELIEVE in the United States of America as a government of the people, by the people, for the people, whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign Nation of many sovereign States, a perfect Union, one and inseparable; established upon those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes. I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies.

This Creed, prepared by William Tyler Page, a descendant of President Tyler and also one of the signers of the Declaration of Independence, won the thousand-dollar prize offered by the city of Baltimore for "the best summary of the political faith of America." April 3, 1918, in the presence of members of the Senate and House of Representatives "The American's Creed" was formally accepted in the name of the United States Government by the Speaker of the House.

to the attention of the Associated Press until Mr. Gilbert E. Roe, his attorney, stated the fact before the senate committee of inquiry on Tuesday. Why the senator delayed so long is a mystery; but the serious wrong done by the error needs no expatiating. No amount of apology can undo it. The thought that unintentionally so extreme an injustice may be done to a public man is one to sober all responsible journalism."

To Dodge the Doctor

Worry is about as deadly a poison as arsenic, if less rapid in its action. Put worry on your list of things to be avoided.

Add to the same list anger, envy, jealousy, hatred, and indecision.

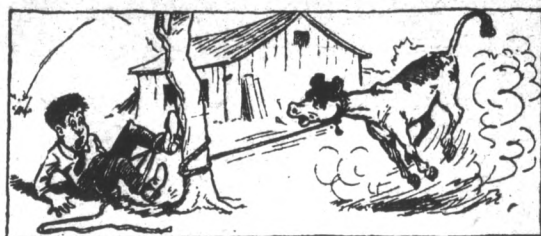
As someone has well said, indecision and doubt are poison to the nerves.

Keep your head cool and your feet dry. If your feet do get wet, keep moving until you have a chance to change your socks and shoes. Never sit still with wet feet.

Also make it a point to wear comfortable shoes. Tight shoes and high heels bring more money to the doctor than to the shoemaker.

Overeating invites colds, colds invite more serious diseases, and these invite the medical man.

SENSE AND NONSENSE



City boy: "Perhaps it would be easier to bring the barn and put it around the calf."

The farmer broke his wagon
When his horse began to buck;
But he was most resourceful
And used his garden truck.

A redbreast robin is said to kill on an average about 800 flies a day. A sparrow is said to destroy at least a hundred and fifty worms and caterpillars in a day.

Officer (in disgust to not over-bright beginner)—"Is that your 'right face'?"
Embarrassed rookie—"Well I can't help it. I was born with it."—Judge.

They had plighted their troth and were talking things over. They both decided to be quite unlike other married couples—fearing and long-suffering and patient with each other.

"No!" said the man. "I shall never be like other husbands who get cross and bang things around if the coffee is cold!"

"If you ever did," said the girl sweetly, "I would make it hot for you!"

And the man wondered what she meant!

In every business there are a lot of things to be lubricated—not only goods, but a little of the right kind of lubricating ointment applied to people at the proper time and occasion helps business. It is a great art to know just when to use a lubricant. Then, of course, all of us have heard of the "greased plank that tilts outward," that has been carefully lubricated in advance. Some of the boys who hide behind the stairs and "roast" the boss, sometimes unexpectedly step on this well greased plank. When they land on the outside of the institution they sit up and take notice. Then they are sorry. They see things differently. But the moral of this page is to keep your tools, your machinery and your business well oiled so it will run smoothly, with as little rattling around or noise as possible.—Gimlet.

Let us then stand by our constitution as it is, and by our country as it is, one, united, and entire; let it be a truth engraven on our hearts; let it be borne on the flag under which we rally in every exigency, that we have one country, one constitution, one destiny.—Daniel Webster.

A Pittsburg paper has been gathering a list of synonyms for human whiskers which will make a valuable addendum to Roget's Thesaurus. But its list isn't half completed. All our contemporary can think of is: Spinach, grass, flax, flora, sedge, foliage, downpour, geranium, cold slaw, curtains, portiers, plush, alfalfa, jungle, feather duster, shrubbery, ambush, fringe, screen, hedge, angoras, moss, Lake Mahonks, and bush.

Allow us to add lambrequins, timothy, soup strainers, ensilage, underbrush, turkey feathers, and daubers. And if we had more time we could think of more synonyms, all in more or less common sense. Have our readers any that we have missed?—Cleveland Plain Dealer.

Mr. and Mrs. Ernest Ford are the proud possessors of a 9-lb. Ford, which arrived a few days ago in fine condition and was accepted at once. It has all of the attachments that the other Fords have.

There was an old man from Milo,

Who said, "I don't need any silo!

For farming don't pay, so I'll just stick to hay—"

P. S.—He was buried without any stylo.

IS IT ONE ON YOU, TOO?

—Cuba Times.
If she had to stand on her head.
We know that she'd get at it somehow.
This poem she's already read.
Now we'll wager ten cents to a farthing.
If she gets the last kind of a show.
But you bet she'll find out anyhow.
It's something she ought not to know.
If there's anything worries a woman.





THE FARM HOME

A Department for the Woman and Children of the Farm



The Eternal Question, "Does the Farm Woman Want to Vote?"

IT IS A real pleasure for me to publish a letter from our old friend, Anne Campbell Stark, whose talents as a writer have taken her to broader fields. Mrs. Stark was born in the country and lived there as a girl, but the past few years she has spent in the city. She has had ample opportunity to compare urban and rural life and she is never happier than when she gets back on the farm for a few weeks' visit among the folks that used to trot her on their knees, or the younger ones with whom she played. Mrs. Stark has just returned from such a visit, and I am sure you will all be interested in what she has to say about it.

Such friendly, hear-to-heart letters I have received the past week from my readers! I seem almost as well acquainted with those who have written as though I had sat on their front porch and talked with them for hours. And that is really my big ambition, to meet the women of the farms, to talk with them about the scores of things in which they are interested. Would you be surprised some day if I drove up to your dooryard and invited myself in for a chat? Well, if I ever do such a thing, I'll try to come on a day when you're not busy, and I know you'll make me welcome. Shall I bring the children?

There's one subject in which I know you are interested and should be discussed in these columns. That is equal suffrage. You know the voters of Michigan are soon to have an opportunity to vote on this question. Mr. Grant Slocum, one of our editors, has been appointed chairman of the state-wide federation to support the amendment and every effort will be made to carry it.

I would really like to know what the farm women think about woman suffrage. Do you want to vote? Would you vote if you had the privilege? Do you think that woman's place is in the home, and nowhere else? I wish you'd write me what your opinions are on this topic. It's been pretty much discussed, I know, but there's always something new to say, and I don't know that the farm women have ever thought much about it.

Affectionately, PENELOPE.

How Farm Women are Doing their "Bit"

DEAR PENELOPE:—I have just returned from a visit to the farm where I was born, and I know if the woman who looked out of the window and saw nothing but flat country every day, had gone with me, she would have received help and inspiration from the women whom I met. The memory of the scene from my aunt's window has stayed with me since I returned home, and when I am tired from the incessant turmoil of the city, I sit down and visualize it again.

My aunt says, "One never tires of the country." And when I feasted on the green fields, the feathery trees, and the golden sunsets, I agreed with her. My aunt does not need a beautiful painting on her walls. She looks out of the big window in her dining room and sees a grass-grown field, in which the white mare and her little colt are grazing. On the other side of the fence a lazy stream winds its way, its banks overgrown with low-hanging bushes. Afar off is the road to town, where the automobiles, tokens of the prosperity of the farmers about, whiz by.

The beauty of the nights, with the big sky, filled with stars, the stillness of it, the promise of peace in it, the ever-brooding beauty and quiet of the country—how can one tire of it?

I tell you, the folks down there where I was born haven't time to tire of it. They are too busy thinking of the boys "over there." I, myself, had to let the loveliness of it sink into me. I certainly didn't have time to stand and gaze afar off, and think about it! There was too much to do! The Red Cross unit of the place where I was born meets every other Friday afternoon. But that doesn't mean that is all the work they do! Every woman works at home. She knits, makes triangular slings, petticoats, and I don't know what all. The president of the Red Cross unit read to us the list of things that were required by the women of that county and the little group of women who gathered in the town hall that day got their heads together earnestly, and figured out just how much they could do. And they were mighty generous in assuming their full share of the quota, I can tell you.

Communications for this page should be addressed to Penelope, Farm Home Department, Mt. Clemens, Mich.

There are no slackers in the little place where I was born.

There are dances in the townhall every other Thursday night, too, and the proceeds go to the Red Cross. And there are few who stay at home. Even the hired man, who works all day in the fields, "shakes a willing foot" at the Red Cross dances. One dollar is charged each man. The ladies are free, and no charge is made for the babies! They are all accommodated nicely on the long table in the townhall, where the obliging ones go to sleep, and the naughty ones, who are just bound their mothers won't dance a single set, blink and stare just as long as they can, but surrender at last to blessed rest.

There is always some one who can chord on the organ, and if the hired musician doesn't come, Mrs. C., who is the mother of lovely twins, can play the fiddle as well as the next one. And she does it, too. It's for a good cause, and, anyway, being a mother of twins rather increases one's capacity for enjoyment, doesn't it? Though it isn't as much fun to play the fiddle for other folks to dance as it is to dance oneself!

One mother of a 16-year-old sat and held one of the babies most of the evening. She doesn't dance, but she wants her daughter to have all

The Giant Flower

FROM the far fields of Picardy,
Across the miles of land and sea,
Borne on the flying winds along,
I seem to hear a mighty song—
A mighty song a crash of song!
It is the clear stupendous cry
Sent from the souls of men who die.
Through all the thunders of the fray
It pierces like an arrow ray,
Life's own eternal harmony,
From death's red fields, in Picardy.

BUT on the fields of Picardy
The march of death goes royally;
Through highways of supreme despair,
With huddled forms tossed here and there,
The standards of immortal life
Float proudly over waves of strife,
Bearing the spirit's recompense—
Where, standing to that high defense,
A living wall of destiny,
Men hold the lines, in Picardy.

O SACRED fields of Picardy,
O dread tumultuous Calvary,
Through your incredible stress appears
A vision of the golden years
When from this seed, in God's own hour,
Shall spring at last the giant flower—
Rose of the world, serene and free,
Sown on the fields of Picardy—
The red scarred fields of Picardy.
—MARY COUTHOUY SMITH in the New York Tribune.

the fun she can, and she wouldn't miss one of the Red Cross dances for the world. I think it is splendid the way folks in the place where I was born are waking up to the fact that young people simply must be amused. They know in order to keep them on the farms, they must have the enjoyment which is as necessary to the human being as to romp and play is a part of the kitten's development.

And Saturday night in town! When to shop is a secondary consideration, and one saunters about the busy village streets visiting all one's friends who have come from miles around! How much more fun it is than to shop in the city! There you never meet anyone you know, and the very crowds make you homesick.

The automobile, too, is doing so much to unite the farms with the villages. And it is only the old-fashioned farmer who makes his wife work in the field nowadays.

"There is nothing which gives me such an uplifted, peaceful, at-one-with-God feeling as the country," said my aunt. "I like the city for a little while, but somehow it seems to crowd down on me, and stifle me." And I agree with her, and to the woman who gazed out of her window and saw nothing but the flat, uneventful, monotonous country, I would say:

Learn to know the country, and to love it, and to appreciate it. Compare your farm with the farms of France, and devastated Belgium, and instead of thinking so much, and worrying so

much, get busy! Fill every spare moment with writing and doing for the boys "over there!"

Do you know there is a cookie jar at the Army and Navy Club, in Detroit, that they just can't keep filled up? The hungry soldiers and sailors are like so many youngsters in their fondness for cookies. Why not write them and offer to send them a batch of cookies a week or a month. And knit, knit, knit, and sew and work, and use barley flour, and don't waste a single thing! Make yourself felt in your community. Do your bit for your God, your country, your family and your neighbors, and you'll soon forget to complain about the monotony of your days, so filled with blessed service for others will they be!

I know that's how the folks in the place where I was born are doing. And they love the country, where one has time to live, and love, and think, and be kind.—Anne Campbell Stark

Recipe for Canning Chicken

DEAR PENELOPE:—In one of your issues you ask for a recipe for canning chicken. Season the chicken well while it is cooking. Take out every bit of the bone, leaving meat in as large pieces as will go into the can. Have the liquid boiled down enough so when cold it will be jelly. Fill up the cans with the meat to within two inches of top. Cover with boiling liquid that has been strained thru wire strainer to overflowing. Seal. If tops of covers are previously boiled it will keep if kept in a cool dark place.

May I send my recipe for canned corn? Gather the corn, husk and silk and throw ears into boiling water about 4 or 5 minutes just to set the milk. Take out, shear off the cobb and to 9 quarts of corn add one cup of sugar, one cup of salt and cook like any fruit and can leaving two inches at top for juice. In winter take out what corn you want to use for a meal. Place in a colander and slowly pour a couple of quarts of water over it. Let drain 5 minutes and you have a dish fit for a king. The juice on the corn is too salt to use but the corn is just right to season the milk that it is cooked in. Have canned corn for years and never lose a can.

When canning season comes around I boil, for 10 or 15 minutes, two or three dozen can covers at a time. Then they just need heating same as cans. This kills any germs that may be hidden under the porcelain. Neither fruit nor meat will keep good if not well covered with juice.—M. C., Thompsonville.

Wanted—Directions for Knitting Mittens

MY DEAR PENELOPE:—I see that the time has been extended for giving the dish dryers, and as I have a few spare moments this morning I will try for one. I take four cloth sacks, rip them and sew them together so they are in a square. And I make an inch hem around them on the outside, and work a cross stitch around the hem, and on the seams in the middle with red thread. This I use to spread over the dishes on the dining room table. I find it saves many steps, as I can leave the dishes on the table, and feel they are free from dust or dirt, and I also feel it is a good way to use up some of the flour sacks. I also rip them up and hem them and use them to dry the dishes with. Sometimes I get an exceptionally nice flour sack, then I hem them and cross stitch the hem with red thread, and this I use on the dining table as a centerpiece for everyday use. It helps keep the tablecloth clean, also makes a big improvement in the looks of the table. In the summer I put my oil stove out on my back porch (which I have screened in), and as the wind sometimes blows in so it bothers the burners when in use. I have my clothesbars by the stove and hang an old sheet on them, and find it a big help. It also acts as a screen, and others cannot see what you are doing. I have what I call a potato chopper to use for cutting up boiled potatoes when I want to fry them. It is just a baking powder can with the bottom cut out, and a wooden handle cut to fit in the top of the can and tacked in. There are two holes cut in the top at each side of the can to let out the steam and let in air. I put the potatoes in the frying pan, then chop them up. I think, Penelope will think this letter long enough. So I will bring it to a close by saying I think the Farm Home the best page in the Business Farming for women, although I read nearly every article in the paper. I wish every woman and girl would learn to knit so they can knit for the soldiers. I would like to see directions for knitting mittens for men.—Mrs. W. H. B., R. 1, Paw Paw, Mich.

Some Splendid Ideas

DEAR PENELOPE:—I saw in M. B. F. that you wanted us to write and tell about our conveniences. At first thought I should not have said that I had any but on second thought I concluded that I had some that everyone else did not. In the first place I have a very good husband, which I count above all else in making life easier and pleasanter for me. We help each other. He does the heavy lifting in the house and I do little things out of doors which are not hard but take time. I have a regular weekly program which gives me Thursday as a kind of off day when I do some of the many odd jobs for which there is no time on other days.

A double wall pocket behind the kitchen door holds my wrapping paper and paper bags while another in the cellar way between the joists is large enough to hold the flour sacks. I have a shelf behind the kitchen stove where we throw gloves and mittens in the winter time, and hooks screwed near the wall on the under side to hang spiders and skillets on. A shelf in the sink cupboard holds all my cleaners, such as soap, borax, etc., while another one above the sink holds all necessary toilet articles.

At cigar stores they will give tobacco pails holding about two quarts which I use for lard and hang in the cellarway. I also have two granite dinner pails which besides using as part of a double boiler are very handy for many other things. As all our rain water has to be drawn and one has to go under the house to do it, my husband always gets it for me and I am very saving of it. If my dish water is not so very dirty—and it usually isn't for dishes for two—I even save it to mop with. We hope to have our pump fixed soon. We were married only last fall and the house had been vacant for ten years so there were some things that with the hard winter and busy spring, did not get done. I am just as saving of well water as that has to be pumped by hand.

We have a woodbox that fills from the outside. I would never have one inside.

Just a hint about an easy way to make flower beds. Have your ground spaded early in the spring; let the hens scratch in it a while if they want to; in other words work it well to get rid of the weeds and plant it. Then place a piece of poultry netting over the plot and weight it down and after the flowers are well up it will not show very much. I like the looks of it much better than a fence of the same material and I'll guarantee that the hens will not scratch it up.

I would like to thank personally the sisters whose letters on conveniences have appeared in the paper. Some of the conveniences I have already

made or put into practice which I shall not bother to write you about as you have already read them.

—Mrs. G. B. H., Homer.

Food Administration Recipes

Home made sauces from home grown fruits and vegetables are first aids in serving cold meats and stretching the roasts. Every well stored pantry should have its shelf of relishes; chutney to serve with chicken, corn relish with fish, cucumber

HAVE YOU MET HER?



—Orr in Chicago Tribune.

catsup with steak, spiced grapes or currants with cold meats.

APPLE CATSUP

1 quart applesauce, 1 teaspoon ginger, 1 teaspoon cinnamon, 1 teaspoon cloves, 1 teaspoon pepper, 1 teaspoon mustard, 1 teaspoon onion extract, 2 teaspoons salt, 1 pint vinegar. Simmer slowly until thick, bottle and seal. A similar catsup can be made from plums or

grapes, and spiced to taste. Sorghum or molasses may be added if a sweet sauce is liked.

CUCUMBER CATSUP

One dozen large cucumbers, 1 quart of vinegar, 1 tablespoon of salt, ¼ teaspoon of cayenne. Gather cucumbers before the sun strikes them and keep cool until used. Peel and grate the cucumbers and drain off the water. Heat vinegar and spices to boiling point; pour at once over the grated cucumber, bottle and seal. Cucumbers bottled in this way retain their freshness and make a particularly good sauce for steak.

SPICED CURRANTS

5 quarts of currants, 1 pint of vinegar, 1½ pounds of sugar, 1½ pounds corn syrup, 1 teaspoon cloves, 1 teaspoon cinnamon, 1 teaspoon allspice. Cook ingredients together one hour, and seal in jars.

INDIAN CHUTNEY

Two dozen ripe tomatoes, medium sized chopped, 6 onions, medium, chopped, 3 red peppers, chopped, 3 green peppers, chopped, dozen tart apples, chopped, 1 pound seedless raisins, 1 cup celery, cut fine, 2 quarts of vinegar, 1½ cups of sugar, 1½ cups corn syrup, salt. Combine ingredients and cook until all are soft and the chutney is thick. Put into hot sterile jars, and seal them.

CORN RELISH

Five pints sweet corn, cut from cob, 3 green sweet peppers, 2 red sweet peppers, 4 pints vinegar, 4 pints finely chopped cabbage, ½ pound of sugar, ½ pound of corn syrup, ¼ pound of mustard, 2 tablespoons salt. Seed and chop peppers. Mix ingredients together, and cook until corn is soft, about 25 minutes. Seal air-tight in hot, clean jars. Serve with fish.

Items of Interest to Women

Hudson Red Cross has issued a call for kid gloves and bits of leather for aviators' jackets.

In its annual report the Calumet Laurium Committee announces the completion of 1,370 sweaters, 452 mufflers, 462 wristlets, 1,247 pairs of socks and 319 helmets. This includes 500 pairs of socks sent to local companies in France to supply copper country men with Company A. Engineers. Comfort kits have also been supplied to many men.

Miss Alice Kolb is one of the young women who secured a satisfactory war job through the employment department of the woman's committee Council of National Defense, when the draft took away many men. The employment bureau advertised for women chemists. Miss Kolb answered. She is now assistant chemist and metallurgical analyst for the I. R. Hunt Company, in the Insurance Exchange Building.

According to Mrs. Lilla S. Walter, head of the state employment bureau for women, there is still a great shortage of good stenographers, as the demand from Washington is increasing. "For other positions," said Mrs. Walter, "We seem to have more women than we need. Every mother, sister, and distant cousin of a soldier wants a war job."

Dear Penelope:—I read every word of your page and get so much good from it.—Mrs. Albert Miller, Good Hart, Mich.

The Kodak on the Farm

OFTE AS I work the memories of other days come pressing upon me, and I cannot resist the temptation to sit idly for a moment meditating upon the days and the dear ones who have gone before. On such occasions as these I invariably dig out the old family album. The pictures of the folks I used to know, some of whom have gone to the great beyond, and some of whom have moved to other parts, light up the whole curtain of the past in vivid colors, and I smile or drop a tear as I think of the scenes of which they once formed a part.

It was truly an event when any member of the family went to town to get his or her picture "took", and it caused quite a stir in the neighborhood when the photographer came out one day, and with much focusing and squinting and shifting from one position to another, secured a "foggy" exposure of the farm house, the general outlines of which bore a striking resemblance to the great Cheops pyramids of our history books.

But it's easier now to make a picture of the farm and the farm folks, and we don't have to call upon the city photographer either. The "snap-shot" camera, or the Kodak, has made it possible for anyone to "snap" a far superior likeness of objects about the farm than the old-time camera could secure under the most favorable conditions. I am glad to know that so many of my readers own kodaks, and I am happy to receive the pictures they take of their children and pets. As space permits, I hope to publish all pictures received, and would like to have all my readers who have good, clear prints send them to me for this purpose.

PENELOPE



Ethel Profit, her aunt and youngest brother, all of Fairgrove. Wonder which one is "aunt."



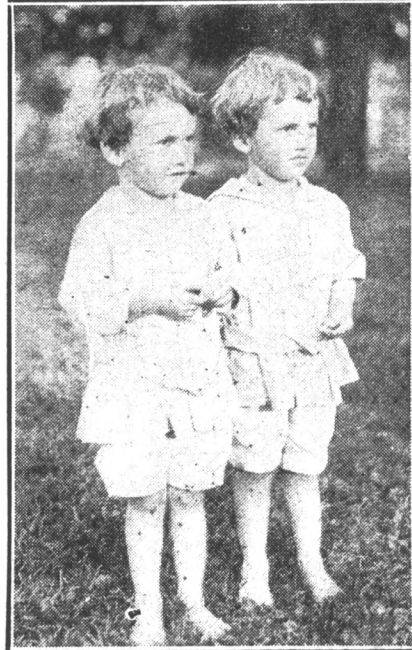
The young sheep breeder, Raymond, 5-year-old son of Mr. and Mrs. John Kender of Howell, feeding his pet lamb.



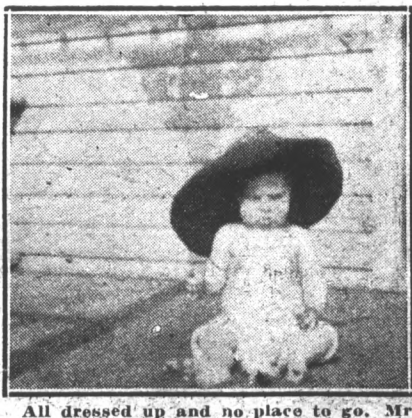
"We're jes' as bashful as we can be." True friends on the Leonard Farm, St. Louis.



Clarissa Pearl Begerow and her dolly, Lake Odessa. But which is Clarissa and which is her dolly?



Peas in a pod. Twin sons of Mr. and Mrs. C. Allen Bryant of Inlay City.



All dressed up and no place to go. Mr. and Mrs. J. H. Afey of Capac are his proud parents.



An Hour With Our Boys and Girls

DEAR CHILDREN: At last, the Doo Dads! You have waited very patiently, my dears, a long time for the Doo Dads and I hope you will not feel disappointed. They're very funny little folk and I can't begin to tell you here all the interesting times they have in the Wonderland of Doo. But Mr. Arch Dale, the man who draws them and writes stories about them, will let them visit us once a month so you'll soon get acquainted with all the little Doo Dads. I want you to write and tell me how you like the Doo Dads, and whether you would like to see them again.

As I promised last week I am publishing this week, the prize winning "Thrift Stamp" letters, together with the names of the boys and girls who wrote them. Did I say "boys and girls?" Well, that's a mistake. It can't be that any boys are saving their money to buy Thrift stamps because not a single boy wrote me. How about, it, boys? Aren't you good patriots enough to help your Uncle Sammy by buying Thrift stamps and telling us how you did it so other boys can follow your example?

I want to thank Elmer Uilmer of Buckley for his poem, "Save and Buy Thrift Stamps," and I am going to send him a thrift stamp for being thoughtful enough to send us this poem.

Your Aunt Penelope wanted to hear from some of you boys, and she hopes you'll yet write her a letter about your Thrift stamps. But the girls have done nobly. They are helping to win the war, and I am going to send their names and letters to Mr. McAdoo so he will know what splendid patriots we have among the boys and girls of Michigan.

The winners of the Thrift stamps are: Bernice Schneider, Lake Odessa; Nora Wilson, Bellaire; Cora E. Mitchell, Clare; Edith Arbuckle, Gladwin; Grace Sherburn, Scottville; Blanche Ward, Boone.

Quite a number of the boys and girls have sent me pictures which they have drawn themselves. Lack of space prevents me from printing all of these, but I will show you some of them at least. The bird whose picture you see here was drawn by Elise Snowden.

If you will read May Couthie's letter on the next page you will note that she wants a name for a little mare colt, and I think it would be nice for you all to help her out.

There are many little ways that you have never thought of in which you can help father and mother, and I am going to mention some of them. I hope you will try to follow out the sug-



—Drawn by Elise Snowden

The Doo Dads go a-hunting in the Wonderland of Doo

The Doo Dads are out on a hunting expedition—all but Flannel Feet, the Cop, and he is fishing. They are not after big game, however, but are giving most of their attention to frogs and insects. It isn't very often that the Cop is caught napping, but he was so comfortable in the shade of that big mushroom that he dozed off. That young Doo Dad thought it was a good chance to play a trick on him. He is fastening a hook to another young Doo Dad, who is so much interested in catching a water beetle that he hasn't noted what is going on. The young rascal will give a tug on the line and Flannel Feet will think it is a big fish that he has caught. Percy Haw Haw, the Dude, was flirting with a young Doo Doll. They were playing "Love me—love me not" with a flower when Smiles, the Clown, stirred up that big nest of ants, which immediately attacked the gallant little gentleman. The twins are in trouble! That big insect was on Poly's head when Roly made a sweep at it with his net. The insect was too quick, however, and got away, and the net swept down over Roly's head. Those young fellows on the knoll are trying to capture that snake. See how one is holding a mouse over the hole to tempt it to come out. It is coming

out, alright, but not where they expected. Unless the Doo Dad with the fork succeeds in pinning the snake down it will swallow that other little fellow up. Those two Doo Dads on the branch thought it would be fine to catch the two little birdies but just as they were crawling out to them the mother bird got back. She is attacking the little fellow who holds the net and he wishes he had left her birdies alone. Old Doc Sawbones, for a wonder, thinks that there is no danger of anyone getting hurt this time, and so he has joined in the sport. He is catching caterpillars in his net while that venturesome little fellow in the tree throws salt on their tails. Here is Sleepy Sam, the Hobo, snoozing away soundly as usual. He must have been sleeping a long time for that big spider has spun a web over him. He must be sleeping soundly, too, for he doesn't notice the mosquitoes which are buzzing around him. That little fellow was having a fine time splashing around in the water when that terrible looking thing bit him on the toe. See how he is calling for help. The Doo Dads are so interested, however, that they do not notice him. When the Doo Dads come home for supper they will have a great time of it relating their adventures on their big hunting trip.

gestions. I would be glad to have you tell us about them.

I want a lot more letters from the children who are saving and earning to buy thrift stamps, and for every letter published giving your experience, I will give a stamp book with one thrift stamp. So get busy, boys and girls, and write that letter. With love from your AUNT PENELOPE.

How I Can Help

I can sell old iron to make money for the Red Cross.

I can help my grandma so she can knit a sweater for my brother when he goes to camp.

I can get in my wood without having to be told.

I can ask my parents not to buy me an expensive Christmas present.

I can save my clothes by not letting them get torn.

I can be careful not to tear my clothes so my mother will not have to patch and can knit.

I can care for a pen of chickens to conserve the beef and pork supply.

I can stop using "bean shooters."

I can sell old brass, copper and zinc.

I can save money to go through school so I can take the place of someone who has gone to war.

I can send Bibles, paper and envelopes to soldiers.

I can do mother's work so she can knit.

I can hold yarn for mother while she winds it into a ball.

I can get along without cats and dogs. They eat too much.

I can make scrap-books of funny pictures and stories for the soldiers.

I can kill rats and mice because they eat grains.

I can save my shoes by not skating on the soles of them.

I can pray God every night that we may win this war.

I can write cheerful letters to relatives in the army.

I can get along without scuffling my feet (save shoes).

I can collect tin foil for it is very valuable.

I can teach others to be thrifty who do not know how.



Prize Winning Thrift Stamp Letters

Dear Aunt Penelope:—I am a girl 13 years of age and live on an 80-acre farm in the western part of Michigan. I passed the eighth grade this year and will be in the ninth next year. My parents take the M. B. F. and like it very well, but the part I like best is the children's department. I am helping to win this war by washing dishes, feeding chickens, helping in the fields, doing housework, and doing all sorts of little things that I can. I have two brothers and one sister. The Fourth of July father asked me if I wanted some firecrackers and other fireworks. I said I would take mine in Thrift Stamps, because the soldiers need the powder and the money from my Thrift Stamps would help, too. So father gave me a dollar. I do enjoy earning and saving money to buy Thrift Stamps. It seems as if I am determined to help "Democracy" along and I am going to all I can. I often pass the candy store but I don't go in, because I am saving my money to buy Thrift Stamps. Nowadays our family has lots of brown bread and johnny cake. I am getting so I like brown bread as well, almost better, than I used to like white bread. Johnny cake is my favorite, too. I would just as soon as not have johnny cake and butter for dinner, as well as ice cream and lemonade. I have been studying for a time for a good name for our page, and I like the topic of "Do Your Bit." I have one War Savings Stamp and eight Thrift Stamps. I want to have my eight Thrift Stamps changed into a War Savings Stamp by January if I have to pick potato bugs at a penny a quart. I haven't written before to you, Auntie, but I think I have made up for it. Yours truly—Bernice Schneider, Lake Odessa, Mich.

Dear Aunt Penelope:—I am a girl 12 years old. I have two brothers. Francis is 14 years old and Elmo is 8 months old. I help my mother in the house because our house burned last year. Everything burned, even our cats, dogs and birds. I saw in the M. B. F. that we children could name the page. I think that "Aunt Penelope's Little Farmers" would be a nice name for it. I cut the cow out but did not get around to send it to you. Our cattle's names are Baby, Nigger, Rose, Daisy Lea, Cherry, Birdy, Beauty, Roney, Brindle, Goldie, White Foot, Brownie, Constance, Star, Darkie, Coal Black, Jimmy, Buck, Polly and Ladybird. We have a registered Jersey master. His name is Constance Jubilee Lad. We also have four horses. Their names are Storm, Dan Patch, Topsy and Ginger. We have two dogs. Their names are Guard and Buster. I am trying to help my country. I have a War Saving Stamp and I am raising Belgian hares. I have a large garden. I am going to pick blackberries and raspberries to can and am going to pick huckleberries to sell. I am going to save my money and buy potatoes for next year, and when I sell the potatoes I am going to buy War Savings Stamps. I sold arbutus and bought War Savings Stamps. I am going to buy a sheep next year. I am going to sell strawberries, rhubarb and green onions next year. This is all for today.—Cora Nephew, Lovells, Crawford County, Mich.

Dear Aunt Penelope:—I have been reading some of the other letters in the M. B. F. and thought I would write. I am a little girl 8 years old. I have gone to school two years and will be in the fourth grade next year. I began in the chart class and passed into the third grade and I passed this year into the fourth. We have four cows. Their

names are Spot, Jersey, Nig and Baby. I am learning to milk. The last time I milked I got four quarts. We have a little calf. We call it Patsy. It is black. It is three weeks old. I have a little brother. His name is Eugene. He will be a year old the 6th of July. I help mamma and papa lots. I have a half mile to go after the mail. When papa is working in the field I have to take him water. Eugene and I are buying Thrift Stamps. We each have two War Savings Stamps and we have started on another book apiece. I think "Little Helpers' Corner" would be a nice name for our page, because we are trying to help our Uncle Sam all we can by helping our mother and father raise the crops.—From Blanche Ward, Boon, Mich.

Dear Aunt Penelope:—I am 11 years old and in the sixth grade. I have five sisters and four brothers. My oldest brother will be 18 in August. My youngest sister is 1 year and 1 month old. I live two miles and a half from school. I have three brothers and three sisters that go besides myself. We sometimes drive or walk. I have many pets. I have two cats, but no dog. The cats' names are Tom and Nigger. Well, I saw in the paper that you wanted a name for the children's page. Well, I think a good name for it would be "Children's Cozy Corner." The way I am going to help mother is by helping in the house and in the garden. We have quite a number of strawberries. We live near a resort. Mamma said that we could have five cents for delivering and picking them. I sold 1 do not know how many, but I have \$1.32 and am going to put it all in Thrift Stamps. Papa rents another farm besides ours. He is farming 160 acres. We will not have very many cherries this year. But the apple trees are just loaded with apples. We did not have very many apples last year. Well, I will have to close now. But will write again.—Nora Wilson, Bellaire, Mich.

My Dear Aunt Penelope:—As I saw in the M. B. F. that you wanted all of us children to write you a letter telling you how we are saving or planning to save our money for Thrift Stamps, so I thought I would take the pleasure to write a few lines. I am now saving all of my spare money that I am earning to buy Thrift Stamps and am planning to work during my vacation of school. I have 28 pets, which are rabbits, and when they get large enough I am going to sell them and buy Thrift Stamps. I think it would be a very good idea for all boys and girls to save their money and invest in Thrift Stamps, and I know we all want to offer just as much help as we possibly can to help our dear Uncle Sammie, who is trying to win this war and "can the Kaiser," which we all hope and know he can do. You asked us to suggest a name for our page. I think "The Happy Hour with Aunt Penelope" would be nice.—Cora E. Mitchell, Claire, Mich.

Dear Penelope:—I have not written to you before, so I thought I would write this time. I am in the fifth grade and 11 years old. I have four brothers and one sister. I have a war garden and a patch of potatoes. I am going to buy Thrift Stamps with the money. I wash the dishes every day. I get 40¢ every month to buy Thrift Stamps. I cut thistles in the field and sweep the floors in the house. I have a War Savings Stamp and I am going to try to get enough Thrift Stamps for another one. I will have to close for it is time for dinner.—Grace Sherburn, Scottville, Mich.

Interesting Letters from Our Boys and Girls

Dear Aunt Penelope:—I did not get the cow cut out but if you don't care I will name her. I think a pretty name for her would be Daisy Lee. We have a 280-acre farm. We have 15 head of cattle, and five horses; each of the five people in our family bought a \$5 W. S. S. Our school did not close until the 28th day of June, so you see my sister and I did not have time to plant a garden. But mother planted a large one and we help her nearly all the time in it. This spring mother gave me a setting hen and 14 eggs. I set the hen and I have six little chickens and I have a little pullet and two old hens. This fall I am going to sell one of them. I have a large cow and calf. The cow's name is Pansy and the calf's name is Duke. I like to live on the farm. I would like to have our page named "Aunt Penelope and Her Children" on it. I would like to have continued stories, letters and puzzles and cutouts. Well, I have written enough for the first time. I wish some of the children would write to me. Twelve years, sixth grade.—Helen E. H. Gehrig, Vanderbilt, Mich. R. F. D. 1.

Aunt Penelope:—I am 13 years of age and live on a farm. I have been reading your letter in the paper every week, but neglected writing. I try to help Uncle Sam all I can, so I suggest "Uncle Sam's Children" as a name for our page, as I think we all ought to help Uncle Sam that we may be proud to be called Uncle Sam's children. There are many amusements that we could write for our page, such as puzzles, jokes, stories, tricks, experiences and many others. I have been to Red Cross meetings a few times and intend to go more as it has just begun this spring around here. I have only one sister and we are patiently waiting for the "Doo Dads," but when they appear they will be all the more funny. Let's stand together and make a good success from our page.—Catherine Pasch, Farwell, Mich., R. F. D. No. 1.

Dear Aunt Penelope:—My parents take the M. B. F. I have been reading the letters that the children wrote, so I thought that I would write, too. I think "Uncle Sam's Little Helpers" would be a nice name for our corner. We live on a 100-acre farm. I have just two broth-

ers. We have 39 head of cattle, 8 of them are cows. I am 9 years old and am in the fourth grade at school. I help my mamma in the house a lot. I like to ride horseback.—Edith Arbuckle, Gladwin, Mich. R. F. D. No. 4.

Dear Aunt Penelope:—I am a boy 13 years old and live on a farm of 40 acres. We take the M. B. F. We like it very much. We have lived here three years last April. We have about 10 more acres to clear yet and then we will have it all cleared. We live three miles southeast of Buckley. I am in the seventh grade and have 1½ miles to go to school. We have one cow and two heifers, their names are Rose, Pansy and Bonnie. I have been working on the farm this summer. We have two hogs and have 100 little chicks. I have nine little chicks. I have a war garden. I know a good name for the children's page. It is "Children's Cozy Corner." I drew a bird for you. It is a rose-breasted grosbeak. I hope to win a Thrift Stamp. I like to read verses and give riddles and draw. I have one acre of potatoes in it. I frosted Saturday. It hurt our corn. We have been having sand storms here. Here is a verse I made up.

SAVE AND BUY THRIFT STAMPS
Save and buy Thrift and War Savings Stamps.
And they will send bullets into Bill's camp;
And they will make him drop his guns and lance.
Every Thrift Stamp that you buy
Makes more of the Kaiser's men die.
And take out Liberty Loans,
And the Allies will get Bill's flesh and bones.
And for the Allies we must save the wheat
So the Allies will have plenty to eat.
Because we don't want Bill's men to beat.
Save and buy stamps.
We should buy stamps in this dreadful din,
And the Allies will be sure to win.
Every War Savings that you buy
Soaks the Kaiser in the eye.
We must have our meat and wheat
So the Allies will have plenty to eat.
When the Kaiser gets beat
The guns will cease to roar.

And our boys will come home from the opposite shore.
When the war is won.
We will see what the War Savings has done.
We will see our soldiers come marching down the street
And those that bought War Savings will be glad.
And those that didn't will be sad.
So you had better buy War Savings and be glad.
—From Elmer Ullmer, Buckley, Mich.

Dear Aunt Penelope:—I think I like experience letters. I pick strawberries for mamma and pick potato bugs and help do chores for papa. I am sending you one of my pictures. That is my sled in front of me. The tree I am standing up against is a Catalpa tree; the bush is a lilac bush. Those are oak trees back of me. The clothes line is just back of the Catalpa tree. That was in the winter time. My sister Mabel took my picture. There are a lot of hills around our house so in the winter I take my sled and slide down them. Down south of our barn is always a big pond. When it is frozen I go round it. Sometimes I take my sled on top of a hill and slide down onto the pond. It is a lot of fun. We chopped places for the cows to drink around the edge of it. There is a little creek by our house and when the water is warm I go wading in it. There is a gravel pit in a field of ours. They get gravel out of it for the road. Once in a while Mabel and I go fishing in the creek in papa's boat.—Fern Dennis, Greenville, Age ten years.

Dear Aunt Penelope:—I am a girl 11 years of age. I live on a farm with my grandpa and grandma. I have two brothers and one sister. I read in the M. B. F. that you would like some boy or girl to suggest a name for our page. I think this would be a nice name for it: My Reader's Page. To help win this great war I am going to save my pennies and buy Thrift stamps. I have relatives in the war—two cousins and a stepfather. One cousin is in France and my stepfather is about to sail across the great sea. My grandpa has two cows, three horses, two colts, one dog, two ducks, one cat, and a lot of chickens. We live on a farm of 83 acres. It is 5½ miles from town. Well, I will have to close as I can't think of any more.—Thelma L. Frear, Mason, Mich.

Dear Aunt Penelope:—I saw in the M. B. F. that you wanted every one to write to you that hadn't yet, so I thought that I would enclose a picture I drew with a short letter, also a name for our page. "The Children's Circle." I think would be a nice one.

I am a tall girl of 12 years, with red hair, and freckled face, and in the seventh and eighth grade at school.

I live on a 60-acre farm. We have five cows, eight calves and two horses. The horses' names are Billy and Dick. The cows are named Daisy, Molly, Rexy, Minnie and Dolly. We have a little kitten. She is yellow and white. Her name is Creamy but we call her Keemy. She is very playful.—Elise Margaret Snowden, Spruce, Mich. R. F. D. No. 1.

Summer Styles

No. 8905—Child's Underwear Set cut in sizes ½, 1, 2, 4, 6, 8, 10 and 12 years. A girderette petticoat is so cool and comfortable for little girls. The weight hangs from the shoulders, and does away with all bands and buttons. This pattern is equally as suitable for the six months baby as the little girl of 10 or 12 years.

The closed drawers are simply gathered to straight bands. One can easily run elastic into the waist band and use them for bloomers. For the younger child these are very handy since they need so many more pairs of drawers than waists. The hot summer days my little girls wear simply a band, bloomers and dress made in one-piece slip-on style.

No. 8924—Girl's Dress. Cut in sizes 6, 8, 10, 12 and 14 years. The panel effect is here shown in most becoming style for young girls. The panel front of the skirt is cut in one with the front of the waist, making the dress very simple in construction. The remainder of the skirt is one piece, gathered to the waist and joining to the panel at the front.

The fancy shaped collar and buttons are the only trimming required and give the most ordinary dresses a very dressy effect. The surplice effect shown in crossing of the collar ends makes sister's dress look just like mother's.

No. 8915—Ladies' Blouse, quaint in style and so "comfy" is this simple afternoon blouse of dotted swiss with a deep fichu of embroidered mull. Deep cuffs edged with narrow valenciennes lace, finish the long full sleeves and the same edge and insertion are used to form a small vest if desired. Anything in this draped fichu effect is very popular this year, both in blouses and dress waists. This pattern is cut in sizes 36, 38, 40, and 42 inches bust measure.

No. 8917—Ladies' Dress. Cut in sizes 36, 38, 40, 42 and 44 inches bust measure. Another conservation pattern, easily used to remodel an old garment or combining two different materials.

A panel hangs from the neck to below the waist line in front and fits into the belt in back. These panels and the lower section of the skirt are of contrasting material. The square sailor collar finishes the neck and a wide crush belt is shown at the normal waist line. The closing is at the left side front.

No. 8921—Ladies' Two Gored Skirt. Cut in sizes 24, 26, 28, 30, 32, 34, and 36 inches waist measure. The back gore extends well over the hips to the front and is much wider than the front. The latter is curved from the waist line to hip at each side and two small inset pockets add a tailored effect. This style is exceptionally good in wash materials as the bias seams are so nearly straight towards the lower edge. The wide crush belts are shown on almost all the late summer skirts and dresses.

No. 8901—Home Work Suit. Cap and apron cut in sizes 36, 40 and 44 inches bust measure. The cap is just the plain dutch style, a large circular piece shirr-

ed onto a straight turned back fore-piece. This cap always fits the head snugly when desired and yet a becoming style for morning wear. The one-piece apron is cut to fit plain in front and gathered to the belt at the back. Two large hip pockets hang from the belt and will be found most convenient on cleaning days to slip thing into as one picks up the scattered odds and ends thruout the house.

Dear Aunt Penelope:—I was very glad to see your letter in the Michigan Business Farming. I love to write letters. I live on a ninety-acre farm. We have six cows and four heifer calves, which father is raising for cows. Their names are Buttercup, Molly, Daisy, Fanny, Bell, Rhona, Topsey and Snowball. Daisy is the cow I call my own. She is so gentle, it just seems that she would like to talk to me.

I am ten years old and I am in the sixth grade. Besides myself I have three brothers and three sisters, two of them are out working. My smallest sister is five years old, she is the baby of the family, she has six pretty curls. We all think much of her. Her name is Dorothy.—May Couthie, Fremont, Mich.

Dear Aunt Penelope:—I have cut out the puzzle of the cow, but I will have to think a little before I find a good name for it. I think Bluebell is a pretty name. We have six cows. The breed of our cows are Jersey and Holstein. My father and my brother milk them. My brother's name is Maynard. I am glad that we live on a farm because we can have all the milk and cream we want to make butter with. We got two cows that are tame. I can not think of any more to say.—Catherine E. V. Cotcher, Pontiac, Mich.

Dear Penelope:—I am naming the cow Beauty. On this farm we have nine cows. Our cows are Holstein and commons.

I am 12 years old, I help my parents hoe now and pull weeds.

Our cows' names are Bossy, Dolly, Spotty, Flory, Nancy, Julia, Rosy, Nellie and Fanny. All of our cows are big and fat. Some give 12 quarts of milk, but some are milked from fall and they give less.—Mary Navidonske, Standish, Mich.

My Dear Penelope:—I am interested in your part, and the page you are going to start. I may be too old to join it, but will write one letter.

I am 13 years old, and when school begins next year I will be in the eighth grade. I like to work outdoors and help raise food for the soldiers. I also have chickens.

I have two brothers younger than I am, who work on the farm.—Gladys B. Fisk, Hartford, Mich.

Dear Aunt Penelope:—I have put the cow puzzle together and I think that Blossom would be a good name for her. We have three cows—two Jerseys, their names are Belle and Queen, and one Holstein her name is Daisy. I have to go after the cows every night. I am only eight years old and will soon be big enough to milk the cows.—Alger Hubbard, Bellaire, Mich.

Dear Aunt Penelope:—I am sending the cut-out puzzle. I think Clover is a nice name for the cow. We have three Jersey cows.

I help mamma by wiping the dishes, feeding the little chickens and then we hoe in the garden.—Earl L. Kennedy, Central Lake, Mich.

ed onto a straight turned back fore-piece. This cap always fits the head snugly when desired and yet a becoming style for morning wear. The one-piece apron is cut to fit plain in front and gathered to the belt at the back. Two large hip pockets hang from the belt and will be found most convenient on cleaning days to slip thing into as one picks up the scattered odds and ends thruout the house.



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I think M. B. F. is a live paper, and should have the hearty co-operation of every enthusiastic farmer.—Arthur Grubbs, Wexford county.

Received a copy of your paper. Like the remarks concerning the markets especially the bean situation.—Port Coville, Alcona county.

Michigan Business Farming gives the farmer more good advice than any farm paper I ever read.—Wm. Gooch, Tuscola county.

I like your paper very much; it is surely something the Michigan farmers have been needing.—Allen Bookwalter, Osceola county.

I enclose one dollar for my subscription. The Michigan Business Farming is the greatest little paper I ever saw.—S. K., Montcalm county.

I think your paper hits the nail right on the head.—Paul Lehmann, Newaygo county.

We think it a fine paper. Couldn't do without it.—B. A. Worthing, Gratiot county.

The paper is just what the farmers should have had a long time ago.—R. D. Miller, Isabella county.

Keep the ball rolling; do not sell out; we farmers need you.—F. L. Disbro, Montcalm county.

The Business Farming is just what every farmer ought to have.—W. J. Gillispin, Branch county.

The paper is fine and I admire the work you are doing.—C. Frank Coven, Eaton county.

We greatly appreciate the steps of the M. B. F. toward the good of the farmer.—Anton Balint, Iscola county.

Am very much pleased with the M. B. F.—Henry Yost, Calhoun county.

We think it is the best farm paper we ever had.—Wm. M. Easton, Jackson Co.

I think every farmer should take M. B. F.—William W. Karnitz, Gratiot Co.

I think your farm paper is the very best printed.—Gale Caswell, Mecosta Co.

Every business farmer should take this paper.—E. C. Koch, Berrien county.

Enclosed please find \$1.00 for your paper, its a dandy.—W. T. Edgar, Gratiot county.

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Enclose a dollar bill herewith or () mark

I will send \$1 by Nov. 1, 1918 () which

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RENEWALS—If you are a subscriber, look on the front cover at your yellow address label, if it reads any date before August 18, clip it out, pin to this coupon a dollar bill and send it in right away so you will not miss any important issues. If renewal mark an X here ()

TEST VALUE OF BORDEAUX MIXTURE

As a result of the present high price of copper sulphate, the principal active ingredient in Bordeaux mixture, many farmers who are compelled to combat such diseases as late-blight of potato, black-rot of grape, and bitter-rot and blotch of apple are asking the United States Department of Agriculture, "What can we use as a substitute for Bordeaux mixture?" There is no substitute, according to specialists of the department—Bordeaux mixture is the only reliable preventive for such diseases.

Every package of commercial Bordeaux mixture carries a label on which is given its content of copper. This is usually given in percentage, and by multiplying this percentage by 3.93 the result gives the amount of crystallized copper-sulphate, the bulletin explains. If the percentage is given in terms of copper oxid, multiply by 3.14; if in copper hydroxide, multiply by 2.56. In order to calculate the copper sulphate when diluted ready for application, multiply the number of pounds of the concentrated Bordeaux mixture to be added to 50 gallons of water by the percentage of copper sulphate.

Physical properties, such as adhesiveness, texture, spreading quality, and rate of settling, also are important factors in determining the efficiency of Bordeaux mixtures. A preparation containing a large amount of copper, but coarse and granular in texture, with poor spreading and sticking qualities, can not be expected to give good results in cases where a good fungicide is required. To test the physical properties, dilute the mixture and place a small quantity in a glass tube, and watch the speed with which the solids settle to the bottom. If the copper is held in suspension for a great length of time the physical properties of the mixture may be regarded as good.

In order to reduce the cost of spray material some growers are using a weaker mixture than is commonly advised for the various diseases which require Bordeaux treatment. When the disease attacks are mild, a Bordeaux mixture containing considerably less copper sulphate than is commonly advised may give very good control, provided its physical properties are good and it is thoroughly applied, the bulletin states.

When infection is severe, weak mixtures should be avoided, for the resultant loss when they are used may much more than offset the amount saved by using the proper strength. Spraying is a question of insurance and the grower must decide whether he wishes to insure his crop wholly or only partially by the use of Bordeaux mixture containing sufficient copper.

MAKE NOTE OF THE HEBREW HOLIDAYS

Hebrew holidays of interest to the trade and especially the live poultry trade for the Hebrew year 5679 which commences Sept. 7, 1918, and extends to Sept. 24, 1919, are given below, together with the live poultry most in demand and the probable best market days:

New Year's—Sept. 7-8, 1918. Best market days: Sept. 2 to 5. Live poultry most in demand: Fowls, turkeys, ducks and geese.

Day of Atonement—Sept. 16, 1918. Best market days: Sept. 9 to 14. All prime live poultry wanted, especially spring chickens and roosters.

Feast of Tabernacles—Sept. 21-22, 1918. Best market days: Sept. 17 to 19. Kinds most in demand: Fowls, ducks and fat geese especially.

Feast of Law—Sept. 28-29, 1918. Best market days: Sept. 23 to 26. Kinds most in demand: Prime quality of all kinds wanted.

Purim—March 16, 1919. Best market days: March 11 to 14. Kinds most in demand: Fowls and prime hen turkeys.

Passover—April 15-16, 1919. Best market days: April 8 to 12. Kinds most in demand: Turkeys, heavy fowls, fat ducks and geese.

Last Passover—April 21, 1919. Best market days: April 15 to 19. Prime quality of all kinds wanted.

Feast of Weeks—June 4, 1919. Best market days: May 28 to June 2. Good fowls especially wanted.

I think the paper is just what we need.—R. J. Hackstra, Montcalm county.

Michigan Business Farming is a fine paper for the farmer and I cannot let it go.—Arthur W. Stephenson, Midland Co.

Like your paper very much. It is the best farm paper in the world, I believe.—Mrs. Orval Walker, Clare county.

Your paper is the best farm paper I have ever seen and I wish you may be successful in the work you have started for the farmers, as they need some one to stand by them for they fail entirely when it comes to standing firm for their rights as a whole.—James Cowil, Huron county.

Any good banker in Michigan will loan any good farmer money with which to buy a silo—if you find a banker who won't, send us his name, we're looking for his kind.

Want a Silo? Put Us to Work.

We have pledged this weekly to encourage the building of 500 silos in Michigan during the next two months.

This means that we will aid in every possible way any reader of this weekly who wants to build a silo and

—we can help!

If you have no silo or if you need another, fill out this coupon and get it into the next mail—there is no obligation for you to buy now or later—but we will help you all we can in getting the best price and the earliest possible delivery and erection of the silo on your farm in time for this fall's use.

If necessary we will help you get the necessary funds through your local banker by pointing out to him the patriotism of aiding in this necessary war conservation measure.

We would also like to know of any new silos being erected by our readers, the kind, capacity, etc., also to have letters from you who are silo boosters; let's make this a big successful drive that will place a silo on every Michigan farm!

Use this coupon, the obligation and expense are ours, you promise nothing.

MICHIGAN BUSINESS FARMING,
Mt. Clemens, Mich.,

I would like to build a silo this year, and would be glad to have you help me in getting information, prices, etc., altho it is understood that I assume no obligation in asking for and receiving this service, which you gladly render your readers free!

Signed: _____

P. O. _____ R. F. D. _____

County _____ State _____

County Crop Reports

Grand Traverse (Northeast)—Everything looks fairly well except corn and beans. Corn is backward on account of so much cool north wind and beans all look yellow. Hay is good in most places. Rye winter killed some and oats on high lands are not good; wheat looks fair. Everyone is busy even women and girls; help is scarce and some cattle and hogs are being sold. Eggs are 35c per dozen; butter is 30c; butterfat is 43c. A farmer had his barn struck by lightning a short time ago; lost quite a lot in it.—C. L. B., Williamsburg, July 15.

Branch (North Central)—Farmers cutting grain and hay and tending corn. Weather fine days, cool nights. Soil in fine condition for growing crops. Farmers selling some stock; not holding anything. Prices at Union City, July 18: Wheat, \$2.08; oats, 65c; hay, 10@15; new potatoes, 1.50; butter, 36; butterfat, 42; eggs, 37; sheep, 9@10; lambs, 16; hogs, 16.50; beef steers, 9; beef cows, 7; veal calves 16.50; wool, 60@67.—F. S., Union City, July 19.

Kalamazoo—Farmers are cutting their grain, most of the wheat is very poor. Rye and barley are good, oats are extra good. The corn is fair; we got a nice rain last night. The hay crop is the lightest it has ever been except some few fields. The soil is in good condition now with plenty of moisture to help the corn and potatoes for the present. There will be quite a lot of stock sold this fall on account of short hay crop and high price. No grain going to market at present as most people are short of feed.—F. H. H., Climax, July 16.

Saginaw (South Central)—Labor putting in long hours, the weather is extra good so they have accomplished a lot of work. Haying is about done. The wheat harvest will be short as it is only about half a crop. Oats are beginning to turn and are good. Potatoes are looking good but will soon need a rain. Beans are a good stand but they look as if they had the fever and ague, the bottom leaves are yellow and I think they had a chill these cold nights we have had.—G. L., St. Charles, July 20.

Sanilac (Central)—Most of the farmers are into their hay, which is in general rather light. Most of the new seeding is good but the old meadows are rather light. Early planted potatoes are looking pretty good; there are some new potatoes among the farmers, and there is some garden stuff fit to use so that will help out the food question. There was one of the neighbor's sons drowned at Camp Custer last Saturday while in bathing. He got in a hole and never came up. A diver got him and he is being brought home today, the 25th. His name was John Falconer. Oats and barley are looking good so far as to the length of the straw on the flat land, on the highland are not so long in the straw but we need some rain at this time and some cool weather for the oats and barley are all out in head.—A. B. Sandusky, July 23.

Lapeer (Southeast)—Farmers are very busy finishing up their haying and cutting rye and spring wheat. Some fields are quite ripe and some are real green yet. Oats and barley are turning fast as it is quite dry. We need a good rain or the late potatoes will be a short crop here. Prices at Imlay City, July 20: Wheat, \$1.95@2.05; oats, 65@70; hay, timothy, 12; light mixed, 10; beans, \$6.50@8.50; hens, 18; springers, 20@25; butter, 41; butterfat, 43; eggs, 37; sheep, 5@8; lambs, 9@13; hogs, 13@16.50; beef steers, 9@10; beef cows, 5@7; veal calves, 14; wool, 67.—C. A. B., Imlay City, July 20.

Arenac (East)—Well, I'm glad to state to my neighbors that this week has been a fine growing week and with some showers has made the farmers smile. Corn, beans, peas, potatoes and in fact all crops are good excepting hay which is light. Auction sales good. We expect to black both the Kaiser's eyes.—W. B. R., Twining, July 19.

Vanburen (East Central)—The golden grain is being put into shocks. The rain Tuesday night and Wednesday

revived everything. Corn is looking good. Marsh grass is being cut. Roadwork is being done. Grapes are looking good where not hit by the frost; some rot is showing in places. The Welch Juice Company has bought property in Lawton and contracted for 2,000 tons of grapes at \$55, or the market price. Raspberries have held price at \$4.00 per crate but are about gone.—V. T. G., Mattawan, July 20.

Genesee (Southeast)—The majority of farmers have finished haying and the rest will probably do so in a few days. Some farmers are cutting grain and others are cultivating corn and beans. The weather has been hot for the last few days; no rain for several days and the crops need it badly. Most farmers have their hay in good condition this year due to the dry weather we had for haying. Wheat, rye and barley are ripening very fast and most farmers will start at their grain next week. Corn and beans are looking good. Buckwheat is growing very slow on account of dry weather. Prices at Flint, July 17: Wheat, \$2.17; red wheat, 2.19; corn, 1.70; oats, 82; rye 1.50; hay, 12@16; beans, 8 cwt; red kidney beans, 9 cwt; potatoes, 60; Cabbage, 3.00@3.25 bbl; cucumbers, \$1.00 dozen; hens, 25; springers, 32@40; ducks, 28@30; geese, 18@19; turkeys, 24@25; creamery butter, 41; dairy butter, 40; eggs, 42; sheep, 9@10; lambs, 14@15; beef steers, 8@10; beef cows, 4.50@8; veal calves, 9@11; wool, 65.—C. W. S., Fenton, July 18.

Monroe—Farmers are short of help but the weather is favorable, and if such continues hay, wheat and oats will be harvested in good shape. The wheat threshing commenced and is yielding from 12½ to 35 bushels per acre. Early potatoes are mostly a failure and the late planted ones will be unless we get rain. I do not think that Monroe county ever suffered so much drought.—E. W. H., July 22.

St. Clair—All grain, potatoes, beans and corn are suffering for rain; unless we get rain within a few days the late potatoes will be a failure. Corn is also starting to show the lack of rain, and I do not believe the rye, wheat and oats will fill properly with this continued hot weather and no rain.

Jackson (South)—Weather dry and hot. Wheat and rye nearly harvested. Corn looking good but rain needed. Huckleberries are selling for \$8 per bushel at the marsh. Blackberries are ripe but not very plentiful owing to hard winter. Threshing out of the field to start this week. Not a promising yield of wheat looked for. Some farmers have been offered \$3.75 a bu. for beans. There seems to be no demand for them at present. Good demand for fruit which is scarce. Dry weather damaged raspberries.—G. S., Hanover, July 20.

Crawford—Potatoes are looking good. Garden truck of all kinds is doing very well. Farmers are cut-

ting their hay; new seeding is good, old seeding is poor. Farmers are doing their own work as there is no help to be had outside of their own families. Some pieces of corn are looking good; and some is spotted, that is short in places and big corn in the same field, and it is not in tassel yet. Early sowed oats are looking the best; later sowed oats went in when it was very dry and did not get the start.—D. F. S., Frederick, July 22.

Southeast Livingston and northeast Washtenaw—Shortage of labor in this vicinity has not been felt as many of the young men were left on the farms for the present. Another reason is that we haven't had a rainy day for two months so farmers have lost no time and no extra work on account of rain. The hay in this locality is about two-fifths of average crop; some farmers harvested their hay with no help at all doing all the work alone.

no danger of rain so one had plenty of time to do his work. Bean cultivating did not interfere as a rule because beans did not come up for two or three weeks on account of lack of moisture. Many fields have not been cultivated at all and some on clay land have not come up. The outlook for both potatoes and corn is very, very discouraging unless rain comes immediately.—G. C., Rushton, July 22.

Ogemaw—We had a heavy rain on June 30; none since, we need rain bad for potatoes and beans. Oats are headed and looking good; must have rain soon to fill well. Rye and barley are pretty well advanced; will be fair. Early planted potatoes are setting. Labor is scarce. Hay was a short crop but weather was so dry it was secured in good condition. Some of the boys that were exempted until fall are being called now so it will make help still more scarce.—W. N.

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For Sale, 5000 lbs. sand vetch, test about 98 and 100%. Sample free on request. 16c per lb. Sacks free. John E. Ogden, Manistee, Mich., R.R. 2 Box 123.



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WHY SOME FARMERS PROSPER; OTHERS DON'T

(Continued from page 4)

of soil was required to grow as much as 100 acres of the entire township would produce. The live stock farms required only 91 acres to produce the same amount of crops. Here is a difference of 32 per cent in the fertility of the average farms in each group. The average number of live stock upon the best paying farms in thirteen representative counties in Indiana has been found to be 25 per cent greater than the average of the entire number of farms.

From all angles that can be viewed, it is seen that the largest profits both in the past and in the future, will be found in pursuing some form of live stock farming. When the live stock farming system is adopted upon any farm in the Corn Belt States, immediately there should arise the question of the maximum profit from that system. All live stock men do not make money. Through wrong methods of management it is very easy to lose considerable money. **The Silo Factor in Profitable Live Stock Farming.**

One of the most important aids in establishing a profitable live stock system is the silo. Upon practically all live stock farms that possess animals suitable for the utilization of corn silage, the silo has a very important part to play. The farmers who have been depending upon the sale of milk products or beef and mutton and who have been operating upon a rather extensive scale have seen the economy of the silo and are provided with from one to a dozen "corn canneries." The average farmer in Indiana has not invested to any great extent in the silo. This average man is the one whose income is made from several sources. He sells annually a colt or two, ten to fifty hogs, a few calves, perhaps a dozen lambs, some wheat and a part of his corn crop. If he is located upon a cream or milk route, he will often be milking from three to five cows. If his farm has considerable pasture land and is remote from a milk or cream station, he will be selling the produce from a small herd of beef cows and from a small flock of ewes.

Many of these men have never considered purchasing a silo. A few now possess one. It is often felt that the farm is not large enough to support sufficient live stock to warrant the use of a silo. Often there is a timidity about venturing into the live stock business, because of lack of knowledge or because some neighbor has gone broke when stocking-up heavily. Sometimes there is an aversion to doing much work in the winter, the person feeling that winter is his holiday. In some cases, the lack of enough silos in a community to make silo filling a possibility is the limiting factor.

After a careful consideration of their farms, the past profits and future prospects, many of these farmers will find that it will be to their ultimate profit to purchase a silo this year and begin the use of silage.

The silo will provide more feed for live stock than the majority of the non-owners will believe. When it is considered that the average forty bushel corn crop will make eight tons of a palatable succulent feed, that is keenly relished by live stock, the economy of the silo can be understood. As an illustration of the increased live stock capacity of a farm when equipped with a silo, it has been found, using eight years' cattle feeding data from the Purdue Experiment Station, that the acres needed to grow the feed needed to feed a two-year-old steer for 150 days could be decreased from 20 to 40 per cent by the use of silage in the ration. In feeding a car load of twenty steers, it required approximately 38 3/4 acres to grow the feed needed for 150 days when corn, oil meal, oat straw and stover was fed. When corn and clover hay was fed, it required 35 acres, and when corn, cottonseed meal, clover hay and silage was fed only 24 acres were used.

Many farmers feed a few heifers, calves or common steers each fall and winter. If these cattle had the advantage of consuming corn silage they would return a greater profit to the feeder. The average profit per bushel of corn fed to two-year-old steers at Purdue Experiment Station when silage was used in the ration was 38 cents. When the silage was removed from the ration, leaving corn, cottonseed meal and clover hay as the ration, the profit dropped off 22 cents per bushel. The average profit per steer in all of the silage lots at the experiment station for the last eight years has been \$15.24. Where the silage was removed, the profit has been but \$8.85. The extra profit of \$6.39 per steer can represent what a silo will do in feeding one steer for 150 days.

Upon many farms, the farm cows are wintered upon a dry ration of corn, corn stover and hay. The owner expects them to return milk for family use to pay for the feed. The addition of from twenty to forty pounds of silage with a protein concentrate to balance the ration will return much more milk and a greater profit. The farm bull with the dry cows and heifers can be more cheaply taken through the winter by the use of considerable amounts of corn silage added to oat straw or hay. The reader is referred to the leaflets upon "The Silo and the Beef Cattle Breeder" and "The Silo and the Cattle Feeder" for a more extended discussion of the silo and cattle.

The small flock of ewes will relish the addition of silage to the ration. With corn silage and clover or alfalfa hay the flock can be carried through the winter at the minimum expense with good results upon the ewes and their subsequent offspring. The leaflet, "The Silo and the Sheepman," will give the reader a comprehensive idea of the important part silage plays in producing the maximum profits in sheep husbandry.

The average farm possesses some brood sows. One of the troubles experienced in securing the best results with sows is the tendency for hogs to become constipated in winter when forced to subsist upon dry concentrated feeds. The use of small amounts of silage will tend to prevent this trouble. It should be remembered that silage is very watery and bulky. Small pigs have small stomachs and cannot handle silage to best advantage. Matured hogs are best adapted for use of silage. These will pick over and eat considerable amounts of silage each day.

Silage has been accused of killing many horses and mules, but in the last few years, when silage in horse feeding has become more common, more care is being expended in feeding the silage and not as many bad results have been reported. Many farmers use from ten to twenty pounds of silage daily for their horses and mules. Recently some men have been feeding mules with silage added to the ration with good success. Hard working horses cannot use the amounts that can be safely used with horses that are being boarded through the winter. Care should always be taken that no moldy or rotten silage is offered to the horses and mules.

It only requires the daily removal of from 300 to 500 pounds of silage from the top of a ten foot silo to keep the silage in good condition. Many farms that do not now possess a silo maintain more than enough live stock to consume this amount during the winter. It is a very interesting fact that as a general rule the farms possessing a silo in any community, return the largest net income. The average farms possessing silos in six representative counties in Indiana returned an annual net income of \$577.00. The farms in the same communities that did not have a silo returned only \$259.00.

The silos assisted in returning two times more annual net income. The moral is plain. **BE A LIVE STOCK FARMER. GET A SILO. YOU CAN NOT AFFORD TO DO WITHOUT ONE.**

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IT IS BUILT OF REDWOOD—nature's best silo material. Standard construction is used throughout and this silo is nailed up solid as in the standard form of house construction.

IT IS SO RIGID that no cables are necessary. It is solidly rooted to the foundation.

NO SILO WAS EVER CONSTRUCTED MORE PLEASING IN APPEARANCE. It has perfectly smooth, even walls, both inside and outside. Considering the quality of this silo, the price is so low that it will astonish you. These silos are being erected in many parts of the state and are now recognized as a remarkable step forward in silo construction.

THE LIBERTY SILO MAKES THE McCLURE COMPANY BUILDERS OF THE MOST COMPLETE LINE OF SILOS MANUFACTURED IN THE UNITED STATES TODAY—A SILO TO MEET EVERY NEED AND CONDITION.

THE REPUTATION OF THE McCLURE COMPANY has been built around the success of the Saginaw Steel Built and Saginaw Leader SILOS—types of silo construction proved by years of service.

REMEMBER, THE LIBERTY SILO is a product of The McClure Company, old, successful manufacturers. They know silo construction and the Liberty Silo is constructed along sound engineering principles. Material prices are continually advancing.

Write us today for silo information. Ask for circular No. 186, or wire or phone at our expense.

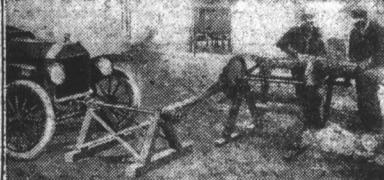
THE McCLURE COMPANY
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Factories at Saginaw, Michigan and Cairo, Illinois



Use Your Ford!

to GRIND YOUR FEED
FILL YOUR SILO
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PUMP YOUR WATER
ELEVATE YOUR GRAIN



Ward Work-a-Ford

Gives you a 12 h. p. engine for less than the cost of a 2 h. p. Ford builds the best engine in the world—it will outlast the car—and you might as well save your money and use it to do all your farm work. No wear on tires or transmission. Hooks up in 3 minutes. No permanent attachment to car. Cannot injure car or engine.

Friction Clutch Pulley on end of shaft. Ward Governor, run by a belt, gives perfect control. Money back if not satisfied. Ask for circular and special price.

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C.E. BROOKS, 463-B State St., Marshall, Mich.

BROOKS' APPLIANCE the modern scientific invention the wonderful new discovery that relieves rupture will be sent on trial. No obnoxious springs or pads. Has automatic Air Cushions. Binds and draws the broken parts together as you would a broken limb. No salves. No lies. Durable, cheap. Sent on trial to prove it. Protected by U. S. patents. Catalog and measure blanks mailed free. Send name and address today.

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Reduces Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from Bruises or Strains; stops Spavin Lameness, allays pain. Does not blister, remove the hair or lay up the horse. \$2.50 a bottle at druggists or delivered. Book 1 R free.

ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. \$1.25 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by W. F. YOUNG, P. O. F. 163 Temple St., Springfield, Mass.

CASH PAID

for old watches, jewelry, Diamonds, old false teeth, etc. Send us what you have and receive check by return mail. If offer is not satisfactory we will return goods at our expense.

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Corner State and Griswold Streets
DETROIT MICHIGAN

CORN HARVESTER Self Gathering for cutting Corn, Cane and Kafir Corn. Cuts and throws in piles on harvester. Man and horse cuts and shocks equal to a Corn Binder. Sold in every state. Price only \$25 with fodder binder. The only self gathering corn harvester on the market that is giving universal satisfaction. — Dexter L. Woodward, Sandy Creek, N. Y. writes: "3 years ago I purchased your Corn Harvester. Would not take 4 times the price of the machine if I could not get another one." Clarence F. Huggins, Spearmore, Okla. "Works 5 times better than I expected. Saved \$40 in labor this fall." Roy Apple, Farmersville, Ohio: "I have used a corn shucker, corn binder and 2 rowed machines, but your machine beats them all and takes less time of any machine I have ever used." John F. Haug, Mayfield, Oklahoma. "Your Harvester gave good satisfaction while using filling our Silo." K. F. Ruegitz, Otis, Colo. "Just received a letter from my father saying he received the corn binder and he is cutting corn and cane now. Says it works fine and that I can sell lots of them next year." Write for free catalog showing picture of harvester at work and testimonials.

PROCESS MFG. CO., Salina, Kansas.

Co-operative Buying — Flour Mill, Feed, Grain, Develer! Carlot Quotations Furnished.

Saves Money.

GRAIN GROWERS GRAIN CO. Minneapolis, Minn.

PAINT WHOLESALE PRICES—guaranteed five years. Eighteen Colors. Freight allowed. ACME LUMBER COMPANY, 3003 Woodward, Paint Dept., Detroit, Michigan.

FOR SALE—240 acre dairy farm fully equipped with milk route, fifty gallons daily, for particulars write owner, H. M. Nave, R. 2, Lakeview, Mich.

LAND SUITABLE FOR stock farms for sale in Ogemaw Co., on easy terms. Very productive and well located. Harry O. Sheldon, Alger, Mich.

FARMS FOR SALE—In Arenac county. Geo. L. Smith, Sterling, Michigan.

WANTED: BOY to work on farm at once. Orla Eager, Howell, Mich.

LIVE STOCK ON THE FARM

POULTRY, SHEEP AND SWINE DAIRYING BEEF PRODUCTION BREEDING PROBLEMS

WHY EGG DEALERS SHOULD CANDLE EGGS

Buying eggs during the summer is a gamble. Bad eggs are sure to find their way into the egg basket and as long as they continue to find sale the farmer will continue to bring them in. In some cases there is deliberate intention to slip them past the groceryman. In others, it is because of carelessness and ignorance. Such buying is unfair to the conscientious farmer who is honest and careful. It is necessary for the price of eggs to be less in order to make allowances for the bad eggs for which the dealer has no sale. Buying on a "loss off" basis and paying for only those which are good permits higher prices at the point of production. It is thus seen that candling eggs by the dealer works in a just manner for the producer. But there is another reason. Egg dealers state that as soon as they commence candling, the number of bad eggs decrease. In other words the farmer takes better care of his eggs as soon as he finds no sale for the bad eggs. This probably is the most important reason why the dealer should candle. Other reasons are that he is unable to ship bad eggs in interstate business without violating the pure food and drug act. From an economic standpoint, it is useless expense to buy egg cases, utilize shipping space and pay transportation charges on worthless products. The sooner all dealers realize that the only safe practice is to candle eggs as they are bought, the sooner will there be a marked improvement in the quality of eggs brought in by the farmer. In this day of careful food conservation, egg dealers should co-operate in a campaign to reduce these losses. It is patriotic.

THE VALUE OF SKIMMILK FOR FEEDING PURPOSES

What is the value of skimmilk for calves and pigs, as compared with other feeds at present prices? Will it pay me to sell butterfat and feed the milk, or will it be better to sell the whole milk at retail at 10 cents a quart—the work of bottling, etc. to be considered? Subscriber.

For growing pigs between 50 and 200 pounds in weight we consider skimmilk as worth about 50 cents per cwt. under present conditions. This is assuming that corn is around \$1.50 to \$1.75 per bushel, and tankage \$100. a ton. For newly-weaned pigs or suckling sows, we believe it has a value greater than this. For calves, during the first six weeks of their existence, skimmilk is almost essential, and we would give it a value at that time of close to a dollar per cwt. For calves between the ages of two and four months, we would give a value, under present conditions, of around 60 or 70 cents per cwt. This is a rough estimate, and we do not know of any exact experiments.

Generally speaking, it does not pay the average farmer to retail milk. Retailing milk is a business in itself, which is almost as complex as farming. It is complicated with questions of bottle losses, bad debts, surplus milk, shortage of milk, sour milk, and a number of other things. Ordinarily, it costs just about as much to get milk to the consumer as it does to produce it. When milk sells retail at 10 cents a quart, the chances are that it costs just about 5 cents per quart to produce it and 5 cents to distribute it. But in spite of all the troubles of milk distribution, there is an occasional farmer so situated as to make his greatest profits by selling milk at retail rather than selling the butterfat to a creamery. At the present time, milk is selling a little closer to its real value than is butterfat, and in many localities the selling of whole milk is much

more attractive than the selling of butterfat.

LEGUME BACTERIA NOT NUMEROUS IN MANURE

From a review of some of the popular articles on inoculation, the farmer would undoubtedly be led to believe that the legume bacteria are found in manure from alfalfa in much the same way as they occur in certain soils. The following quotations are typical.

"Alfalfa has been grown so long, the soil is so thoroughly inoculated with the bacteria from the manure made from alfalfa hay fed to horses, cattle and hogs. . . . Excellent stands have been secured where alfalfa hay has been fed in large quantities to stock and the manure spread on the ground." These statements suggest the possibility that legume bacteria occur on the plant tissue, are taken into the digestive tract of the animal, and later may be found in the feces.

Through curiosity the writer has made a study of the behavior of alfalfa bacteria in the digestive tract of the cow. In connection with certain feeding experiments at the Wisconsin Station opportunity was afforded to carry on this work. Water suspensions of alfalfa bacteria containing billions of the micro-organisms were poured on the roughage and this fed to the cows. All manure supplies were caught in pails free of the alfalfa bacteria. Prior to the feeding of the cultures of bacteria the manure of these cows was tested for the presence of alfalfa bacteria. In every case these control samples failed to show the presence of the alfalfa organism. For one week before and during the experiment the cows were fed on alfalfa hay and corn stover moistened with the culture of legume bacteria. Ten gram composite samples were taken from the excrement of each day and from this a water suspension prepared. The manure water mixture was used to inoculate triplicate plots of alfalfa seedlings in sterilized soil. Eight weeks after inoculation, these alfalfa plants were removed carefully and the roots examined for nodules. In every case except one, no doubt a contamination, the plants treated in this way failed to show nodules, while the checks inoculated with some of the culture before it passed thru the cow showed numerous nodules. In addition to the pot tests, mannito agar plates were poured repeatedly from this manure suspension, but in no case could the identity of the alfalfa organism be proven.

In view of the reaction of certain portions of the digestive tract and of the fermentation processes taking place, it is not surprising that the alfalfa organism is killed in passage through the animal. At least the results of previous study would indicate

that perhaps the acid reaction in the stomach accounts for the absence of nodules when alfalfa manure is used to inoculate soil.

These results do not indicate that manure as made on the farm is free of legume bacteria. In fact the feeding of legumes from a well inoculated field will most probably cause a slight distribution of the nodule organism. Small particles of soil and bacteria may be carried with the hay and thus become mixed with the manure without tract. No doubt these soil particles found on the hay serve to distribute the legume bacteria. However, it is unlikely that the alfalfa bacteria and other legume bacteria actually pass through the digestive tract of cows and are present in the manure in active form.—E. B. Fred, Wisconsin College of Agriculture.

PLENTY OF SHADE FOR LATE HATCHED CHICKS

One reason why late hatched chicks fail to thrive is because of failure to keep them well supplied with shade. Chicks that are compelled to remain in a close hot coop in the heat of summer because of no other protection are not getting the best possible conditions. The air under shade trees is fresher and cooler; there is less danger from mites and they are closer to green food and insect life. Now is the time to prepare for the protection of the chicks during the hot days which are to follow. If summer shade is not provided by trees and bushes, the next best thing to do is to plant patches of sunflowers or corn. It is of course necessary to keep the chicks away from it until it gets a fair start. After the plants have grown to a sufficient height chickens can run in them with practically no injury to the crop. In fact there is no objection to growing a crop of chickens and corn on the same piece of ground. This can be easily done by erecting temporary fences and confining the chicks to a portion of the yard or it may mean the removal of the chickens to new yards more suitable for summer growth. On the farm this latter method can usually be employed. Many deaths can be avoided late by foresight in providing comfortable quarters. Not only will the chicks make better growth but the hens will lay more eggs.

The Michigan Business Farming is certainly a paper every one ought to have. —Gottlieb Huber, Washtenaw county.

Like your paper fine. Think it the best paper for the farmer I ever read. —Alva Hutchinson, Iosco county.

The Michigan Business Farming is the best paper in Michigan for the farmer that I know of. Long may it live and prosper in its labors for the farmers. —A. R. Benjamin, Mason county.

Enclosed find \$2 for my subscription. Yours is the best paper we ever had and we feel fortunate for the opportunity of being one to pledge our subscription last year when you got started with your paper. Trusting M. B. F. will reach all farm homes in Michigan and everywhere. I remain.—John M. DeJonge, Ottawa Co.



Horses at work on farm of E. W. Obienis, Thompsonville. Looks like Subscriber Obienis needs a tractor.

CATTLE

HOLSTEIN-FRIESIAN

HOLSTEIN BULL

A strictly high class 29 lb. Holstein Bull, Daisycrest King Princess, 228347, born January 27, 1917, is offered for sale. Sire, King Zerna Alcartra Pontiac; grandsire, King Segis Pontiac Alcartra, the \$50,000 bull. Dam, Princess Pauline Rufine 2nd. This yearling promises to be one of the finest quality bulls in the state. If you are interested, will you please write for description and photograph? Also other and younger bulls.

Bred cows and heifers, and calves from a herd of 50 high class Holsteins. We will send you photos and descriptions which will present these animals accurately. If you want Holsteins, will you please write us?

Duroc Jerseys and Hampshires
We offer a number of fine young spring boars and sow pigs, both Duroc Jerseys and Hampshires, from particularly well bred stock. Write to us for description and prices. Each animal is guaranteed.

BLOOMINGDALE FARMS
Bloomington, Michigan

'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.

E. L. SALISBURY

SHEPHERD, MICH.
Breeder of purebred

Holstein-Friesian Cattle

Young bulls for sale from A. F. O. Cows with creditable records.

Bull Calves

sired by a son of Friend Hengerveld De Kol Butter Boy and by a son of King Segis De Kol Korndyke, from A. R. O. dams with records of 18.25 as Jr. two year old to 28.25 at full age. Prices reasonable breeding considered.

WALNUT GROVE STOCK FARM
W. W. Wyckoff, Napoleon, Mich.

REGISTERED HOLSTEIN BULL 6 months old, grandson of Hengerveld De Kol, sired by Johan Hengerveld Lad who has 61 A. R. O. daughters. Dam is an 18 lb. 3 yr. old granddaughter of King Segis who has a sister that recently made 33 lbs. butter in 7 days as a 4 yr. old. This calf is light in color, well grown and a splendid individual. Price \$100. Write for photo and pedigree. L. C. Ketzler, Flint, Michigan.

We want these Registered Holstein Bulls to head Grade Herds.

Korndyke Clothilde of Serridella, Born June 24, 1917. Price \$100
Korndyke Ormsby of Serridella, Born Sept. 19, 1917. Price \$85
Prices f. o. b. Oscoda, Mich.
SERRIDELLA FARMS
Oscoda, Michigan

MUSOLFF BROS.' HOLSTEINS

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

HICKORY GROVE STOCK FARM
Offers for immediate sale 12 daughters of King Hengerveld Palmyra Fayne bred to Mutual Pontiac Lad. All of the cows in this herd are strong in the blood of Maplecrest and Pontiac Aggie Korndyke. We can always furnish carloads of pure bred and grade cows.
D. Owen Taft, Route 1, Oak Grove, Mich.

WOLVERINE STOCK FARM

Breeders of Holstein-Friesian Cattle, Battle Creek, Michigan. Senior Herd Sire, Judge Walker Pieterse whose first five dams are 30 lb. cows. Young bulls for sale, from daughters of King Korndyke Hengerveld Ormsby.

CHOICE REGISTERED STOCK

PERCHERONS,
HOLSTEINS,
SHROPSHIRE,
ANGUS.
DUROCS.

DORR D. BUELL, ELMIRA, MICH.
R. F. D. No. 1



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Holstein Heifers

The cows and bulls advertised have been sold. I have 6 or 8 registered Holstein heifers from heavy producing dams, 3 mos. to 2 years old at \$125 apiece.

ROBIN CARR
FOWLERVILLE, MICHIGAN

HOLSTEIN BULL CALVES

Sires dams average 37.76 lbs. butter 7 das. 145.93 lbs. 30 das. testing 5.52% fat. Dams good A. R. backing. Calves nice straight fellows ¾ white. Price \$65.00 each while they last. Herd tuberculosis tested annually.
Boardman Farms, Jackson, Michigan.

Holstein-Friesian Cattle

Under the present labor conditions I feel the necessity of reducing my herd. Would sell a few bred females or a few to freshen this spring. These cows are all with calf to a 30-pound bull. **J. Fred Smith, Byron, Michigan**

Sunny Plains STOCK FARM offers 1 young bull (old enough for light service in a short time). Dam's record as a senior 3 year old 22.48 butter 538 milk. Sired by a grandson of Pontiac Korndyke. Price \$100. F. O. B. Fowlerville. Also a pair of large rangy grade Percheron geldings, 4 and 5 years old. Phone 58F15, Arwin Killinger, Fowlerville, Mich.

YEARLING DAUGHTER of Maplecrest De Kol Hortoy whose dam is a 30-lb. cow, 30 days, 120 lbs., a son of Friend Hengerveld De Kol Butter Boy, four daughters with year records over 1,000 lbs. Dam—Young Hazel De Kol, 7 day record 494.8 lbs. milk, 19.67 lbs. butter. Heifer well marked, good individual, price \$200. **Howbert Stock Farm, Eau Claire, Mich**

LAST BULL advertised sold. Here is another Reg. Holstein bull 9 months old. M. A. C. bred sire. Dam 18.76 lbs. of butter, 406 lbs. of milk. A. R. O. at 3 yrs. old. She has a 30 lb. sister. Price \$85. **C. L. Hukett & Son, Okemos, Mich.**

FOR SALE—Registered Holstein Show Bull, service age; Pontiac Korndyke breeding. Price right. **John A. Rinke, Warren, Michigan.**

One Car-load Registered Holsteins

Yearlings sired by 30 pound bull and from heavy-producing cows. Also some choice Duroc open gilts.
J. Hubert Brown, Byron, Michigan



100 REGISTERED HOLSTEINS 100
A herd of high producing females from the breed's best families. Herd headed by Dutchland Colantha Winana Lad 114067, Senior and Grand Champion Bull at Michigan State Fair 1917. Junior sire, Maplecrest Application Pontiac 132652 a 35.16 son of Friend Hengerveld De Kol Butter Boy and whose dam and ¾ sister hold 6th and 7th highest yearly butter records. Sons of these great sires up to 15 months old for sale. Prices and pedigrees on application.
R. BRUCE McPHERSON, HOWELL, MICH.

Watch this paper for Announcement of Robert R. Pointer & Son —SALE—

I know there are a whole lot of you folks who want to see this weekly in every one of the 200,000 farm homes in this state.

You know what it would mean to have every farmer in the state back of the movements we have started in the farmers' interests.

Many of you have written asking how you could help us and this is to tell you, **FOR MARKETING IS NOT MANY WEEKS OFF AND EVERY GOOD FARMER IN MICHIGAN OUGHT TO HAVE HIS NAME ON OUR LIST.**

This year Andrew T. Dirr, owner of the Maplecrest Holstein Farms at Lake Odessa, wrote that he made just \$750 by following our market advice!

Yet every name you add to our list gives us an opportunity to better our paper—its service and its strength—

—will you do this?

Ask your next door neighbor or call your best friend on the phone and ask him if he reads Michigan Business Farming, tell him to send us the dollar or tell us he will send it this fall after harvest and we'll start the weekly going to his mail-box every week.

This is the favor we ask of every man or woman who believes in MBF!

Of course, if you can act as agent for us and accept new and renewal subscriptions we will gladly pay you a cash commission on every one you secure.

We are helping you fight your battles, help us fight ours!

—Geo. M. Slocum, Publisher.

SHORTHORN

FOR SALE, pure bred Shorthorns and O. I. C. pigs. Five young bulls, 7 to 9 months. \$125 to \$150 each. Ray Warner, R. No. 3, Almont, Michigan.

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

GUERNSEY

FOR SALE

Two Registered Guernsey Bulls. 7 months old.

R. B. JACKSON
"RUDGATE FARM"
BIRMINGHAM, MICHIGAN

GUERNSEYS WE HAVE A FEW Heifers and cows for sale, also a number of well bred young bulls—write for breeding. Village Farms, Grass Lake, Michigan.

HEREFORD

Herefords 8 bull calves Prince Donald and Farmer Breeding. **ALLEN BROS., Paw Paw, Mich.**

HARWOOD HEREFORDS

Yearling bulls and a few heifers from choice bred cows
Jay Harwood, R. No. 3, Ionia, Mich.

HORSES

SHETLAND PONIES

SHETLAND PONIES For Sale. Write for description and prices **Mark B. Curdy Howell, Mich.**

HOGS

O. I. C.

Bred Gilts and Serviceable Boars

J. Carl Jewett, Mason, Mich.

LARGE TYPE O. I. C.

Spring pigs pairs and trios. Gilts bred for fall farrow, at prices that will please.
CLOVER LEAF STOCK FARM
Monroe, Mich.

DUROC

PEACH HILL FARM, Registered Duroc Jersey bred gilts, spring pigs and service boars.

INWOOD BROS.
Romeo, Michigan.

FOR SALE Duroc Jerseys, both sex. Marcs 5 and 6 and 7. long, big bone, large litters. Price right. Close out males cheap. All purebred, fine individuals. Am in market for registered Holstein bull 6 to 12 months old. **B. F. Kies, Hillsdale, Mich.**

50 DUROC SOWS AND GILTS for fall litters bred to Orions Fancy King 83857, the biggest pig of his age ever shown at the International. 1 mile northeast of town. Visitors welcome 7 days in week. **Newton Barnhart, St. John, Michigan**

For Sale Registered Duroc Jersey Swine. Yearling and spring boars of quality, also bred sow, Aug. and Sept. farrow. Spring gilts. Write for pedigree and prices. Satisfaction guaranteed. **L. J. Underhill, Sa'en, Mich.**

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BIG TYPE P. C. FALL SOWS bred for July and August farrow. Weigh 250 lbs. Spring pigs. Call or write **E. R. Leonard, St. Louis, Michigan.**

HAMPSHIRE

REGISTERED HAMPSHIRE PIGS now ready. A bargain in boar pigs. **John W. Snyder, R. No. 4, St. Johns, Mich.**

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SHROPSHIRE.—Some fine yearling Rams and Ram Lambs, one 3 yr. old. Farmers' price, Dan Booher, R. No. 4, Ewart, Michigan.

FOR AUGUST DELIVERY 50 Registered Shropshire Yearling ewes and 30 Registered Yearling Rams of extra quality and breeding. Flock established 1890. **C. Lemen, Dexter, Michigan.**

POULTRY

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Silver Laced, Golden and White Wyandottes of quality. Breeding stock after Oct. 1st. Engage it early. **Clarence Browning, R. 2, Portland, Mich.**

LEGHORN

30,000 Fine, strong, vigorous chicks for June and July delivery. White Leghorns now at \$10 a 100; \$5 for 50. Finest stock in the country. Prompt shipment by mail. We guarantee safe arrival and satisfaction. Order direct. Catalog. **Holland Hatchery, Holland, Mich., R. 7.**

WE HAVE THEM

If you want Leghorns that will pay for their feed a dozen times over, write us. We have eggs for Hatching and Breeding Stock, hens and pullets only.

HILL CREST POULTRY FARM,
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PROFITABLE BUFF LEGHORNS—We have twenty pens of especially mated Single Comb Buffs that are not only mated for exhibition but, above all, for profitable egg production. Eggs at very reasonable price. Our list will interest you—please ask for it. **Village Farms, Grass Lake, Michigan.**

CHICKS

BABY CHICKS

YOUNG'S Strain Heavy Laying Single Comb White Leghorns.

50 chicks\$4.95
100 chicks 9.85

By mail prepaid.

Order direct from ad. Immediate shipments.

WOLVERINE CHICKERY

711 Delaware St. S.E.
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CHICKS

We ship thousands each season, different varieties, booklet and testimonials, stamp appreciated. **Freeport Hatchery, Box 10, Freeport, Michigan.**

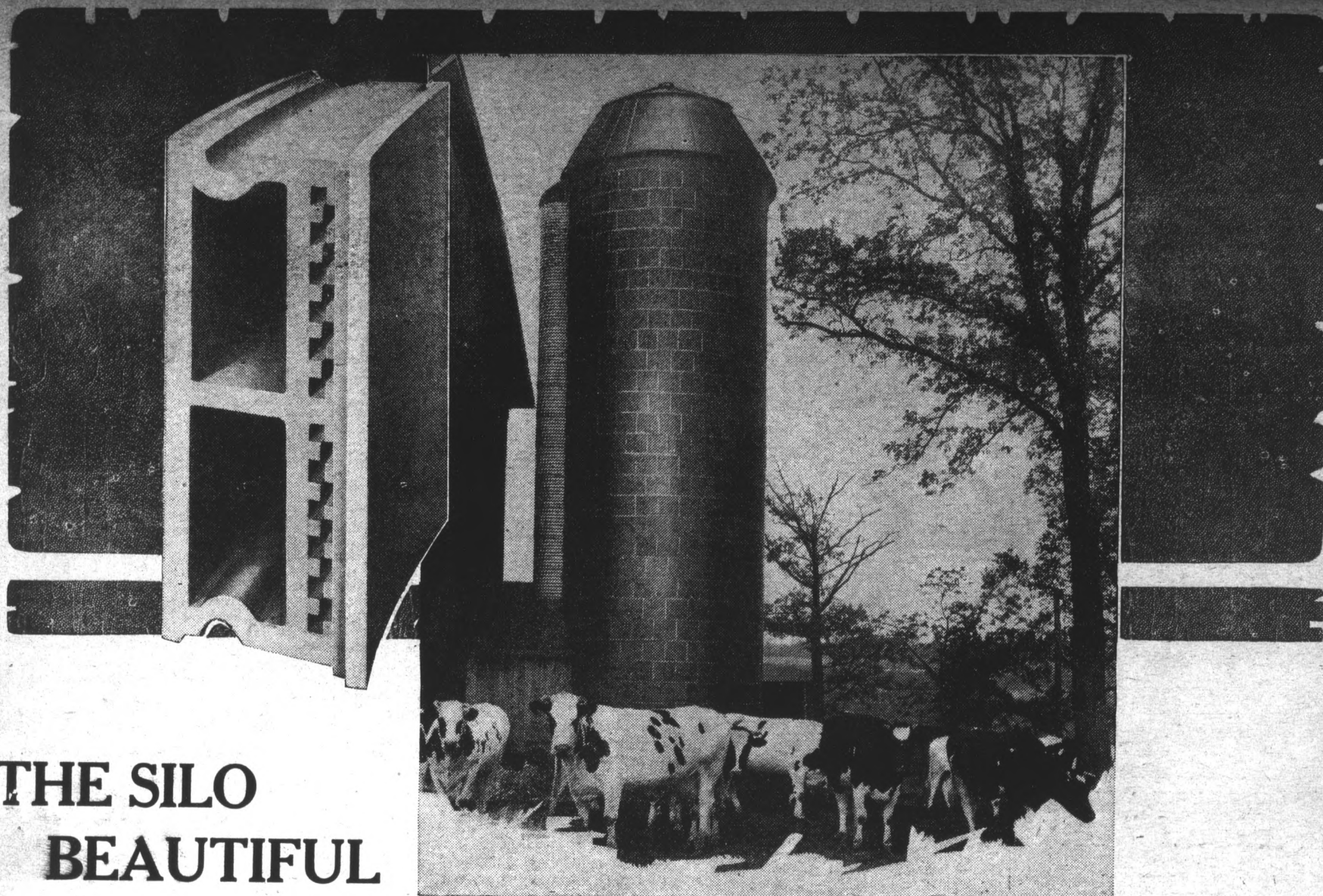
H. LCHING EGGS

PLYMOUTH ROCK

Barred Rock Eggs From strain with records to 290 e. s per year. \$2.00 per 15 Prepaid by parcel post. Circular free. **Fred Astling, Constantine, Michigan.**

ORPINGTON

For Sale One pen Sumatras. Ten birds \$20. Chicago Coliseum winners. Some fine females in black and Buff Orpingtons at \$5 each. **James A. Daley, Mohawk, Mich.**



THE SILO BEAUTIFUL THAT LASTS FOR AGES

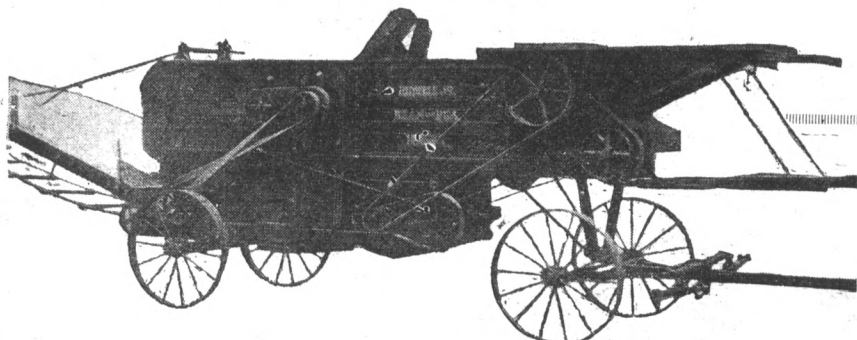
You might as well own a silo that will beautify your farm and last as long as you live to run it. It costs no more, but is worth more in good appearance year after year—and in saving upkeep cost. You get this durable construction in the

LANSING VITRIFIED TILE SILO

This silo is built of material that lasts for centuries. Never needs painting—no hoops to tighten—withstands summer heat and winter cold like Father Time.

But more than good material, you get a better formed block in the Lansing Tile Silo. The blocks are made to get a more solid grip in the cement binder. One block is braced against the other—and each row of blocks is reinforced above and below with twisted steel. This steel lays in an extra thick layer of cement with only a thin line of cement exposed between the blocks. Note the extended shoulders on the upper and lower edges of the block. These shoulders cover up most of the cement and make a stronger and more beautiful wall. This means less chance of frost—a smooth wall inside with better settling of silage which means better food for stock. Also note the fluting on the end of the block which prevents the block from slipping. Lansing blocks are all the same shade too, which adds to the beauty of the finished job.

The door construction is also made extra strong. Twisted steel rods run up through the cement which fills the first partition of each door block. This gives you a solid column of cement in the blocks on each side of the doorway. No silo could be stronger.



BIDWELL BEAN THRESHERS

Save the beans for the Allies.

The Bidwell is the standard for all bean and pea threshers. It has been on the market for thirty-five years. Made in three sizes, from six to sixteen horse power. A self feeder, wind stacker, and recleaner can be attached.

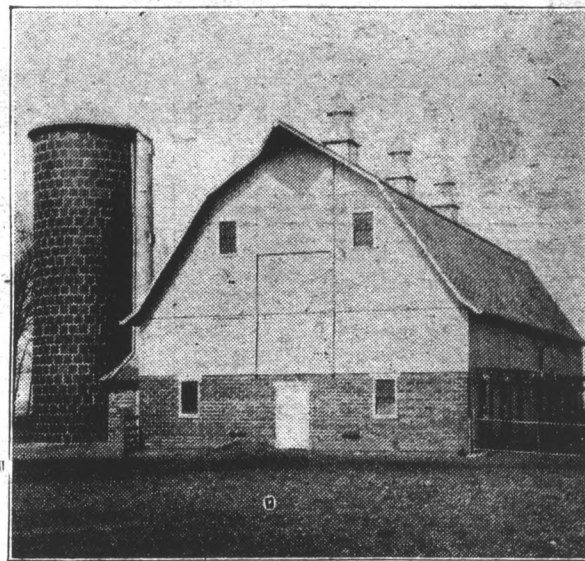
We carry a full line of machines and repairs. Have some second hand and re-built machines on hand.

Write for catalog and state size of power to be used.

ELLIS CHAMPION GRAIN THRESHERS

The thresher for gas power. Made in four sizes; requires two to ten horse power. Been on the market 55 years and used in all grain growing countries. Sold mounted or unmounted with hand feed or self feeder, no carrier, or with plain carrier or wind stacker.

It will thresh and clean your small grain equal to the largest machines and with bean attachment it takes care of all your threshing.



ORDER AT ONCE

Don't wait until the last minute and be caught without a silo this fall. Place your order NOW and avoid delay in the rush season. You need a silo more than ever this season. You must produce your own cheap feed for stock. The silo is the only answer to your problem. Send for our catalog—and order at once.

J. M. PRESTON COMPANY

Dept. 404, LANSING, MICH.