

# MICHIGAN FARMER

AND LIVE STOCK JOURNAL.  
PUBLISHED WEEKLY. ESTABLISHED 1843.

The Only Weekly Agricultural, Horticultural, and Live Stock Journal in the State.

VOL. CXLVII. No. 17  
Whole Number 3911

DETROIT, MICH., SATURDAY, OCTOBER 21, 1916

50 CENTS A YEAR  
\$2 FOR 5 YEARS

THERE are two schools of thought associated with the modern country life movement. The adherents of one school contend that the problem is entirely one of economics. They say to us, "Make the farm pay and the problem will solve itself." In short, they believe that people will not be eager to leave the country if the farm makes a profit. All other things will be added when profits are certain.

The other school of thought contends that the problem is as much social as it is economic. They tell us that wealthy farmers are the first to leave the country for the city. They add also that those who have made the most money from farming have not been good conservators; they have not always left the farm in such condition that it could be used profitably by the next generation. Their final claim is for a richer and fuller social life in the country so that contentment will follow as a natural sequence.

Neither of these extreme viewpoints appears to be correct. We must all admit that farming must be made profitable, but those of us who have worked in the country must know also that mere wealth will not build up a permanent and contented rural population. Men do not live by bread alone. Men and women demand normal social contacts. A social worker once took a dependent woman from the slums of the city of New York and provided for her a home in the country. About a month later the same social worker visited the same slum district. Great was her surprise when she found her woman back in the filth of the tenement. When asked why she had not remained in the country, the woman replied, "Folks is better than stumps." This woman craved for human fellowship.

There have been suggested numerous methods for awakening and utilizing the social instincts which receive so little exercise in the country. This article is a suggestion for those leaders who wish to become a part in such a program.

The Old Testament contains some splendid agricultural advice for it was written and read by a rural people. Like all other great and permanent religious expressions, it came out of the life of a people who lived in the open. None of its advice is more pointed for the present purpose than that quoted at the head of this article. This is a command to play. It calls the people to a week's vacation following the harvest. How far these old pastoral authors anticipated our civilization! Modern cities are just now beginning to demand that people play, and many of us have not yet appreciated the deep significance of play.

Man is only at his best when he plays. It is then that he lives his elemental self. Stripped of the superficial mannerisms, tricks and habits of work and business, man expresses his real self in the game. Here there are rules to be obeyed. Here is group action. The individual must sacrifice himself for the team. The body works in harmony with the mind. And, what is best of all the spirit soars above the petty cares and jealousies of the common day.

There are four distinct results of

## Rural Recreation

By E. C. LINDEMANN,  
State Leader Michigan Boys' and Girls' Clubs

"Thou shalt observe the feast of tabernacles seven days, after thou hast gathered in thy corn and thy wine.

And thou shalt rejoice in thy feast, thou and thy son, and thy daughter, and thy manservant, and thy maidservant, and the Levite, the stranger, and the fatherless, and the widow, that are within thy gates."—Deut. 16: 13 and 14.



What Shall we Play? It's a Crime to Have People Gather and then not be Prepared to give them a Wholesome and Invigorating Experience.



A Group of Country People got together with a Group of City People to Clean up the Grounds for the County Tuberculosis Sanitarium. The noon hour was given over to a picnic lunch and to old-fashioned games. They understood each other better after that day.



Boys Learning to Tie Useful Knots. Rope-tying Contests for Boys are Becoming Popular in the Country.

properly organized play. It increases the efficiency of the body. This is a physical result. It causes the mind to react quickly. This is an intellectual result. It trains in group action. This is a social result. All of these combine to achieve the final result which is nobler character. To play fair, to obey the rules of the game, to take defeat gracefully, to follow a leader, to work for the good of the whole rather than for your individual self—these are all traits of a character which are developed naturally in normal play life.

The eternal question comes now, "What shall we play?" How often have I heard from the lips of little girls and little boys, from young men and young women gathered for a picnic or for some other purpose. Any one who has lived in the country appreciates the dearth of "things to do." No one seems to know what to do and no one is willing to take the lead. For the past year I have been making an attempt to determine how many games country boys and girls knew how to play and my conclusion thus far is that the average country boy or girl knows from one to three games. There are at least one hundred games that lend themselves admirably to country conditions.

### What is a Good Game?

All games are not good. Just as mere exercise is not play, so all game activities are not constructive. There are a few characteristics which every good game should possess.

A good game should first of all be safe. This does not mean that the game shall not be rough. For example, football is a much safer game than some others that are played more frequently. Basketball is an example of an unsafe game. It leaves no time for normal heart action and hence is dangerous. Girls should never play basketball according to college rules.

A good game is one which can be played by small numbers as well as large numbers. The game which the children of the little one-room country school learn to play must also be used at the township or the county picnic. It must be a game which can be adapted to small numbers and to large numbers.

A good game will be played by old as well as young. It is not only the children who need the tonic of play. Grown-ups would profit immeasurably if they could but remember how to play. There are many games which old can play as well as young.

A good game is one which usually requires a small amount of equipment. The smaller the amount of equipment the greater is the extent to which the players use their own bodies and minds. It is not necessary to have a gymnasium and expensive paraphernalia for the purpose of starting a community play movement. The non-equipment games are usually more permanent and more popular.

A game which combines all of the above requirements is volley ball. This requires only a 65 cent ball and a net. In place of the net a rope may be used. It can be played by four or forty. Old enjoy it as well as young. A list of twelve good group games follows:

(Continued on page 375).



# The Michigan Farmer

Established 1843.

Copyright 1916.

## The Lawrence Publishing Co.

Editors and Proprietors

39 to 45 Congress St. West, Detroit, Michigan

TELEPHONE MAIN 4525.

NEW YORK OFFICE—381 Fourth Ave.  
CHICAGO OFFICE—604 Advertising Building.  
CLEVELAND OFFICE—1011-1015 Oregon Ave., N. E.  
PHILADELPHIA OFFICE—261-263 South Third St.M. J. LAWRENCE.....President  
M. L. LAWRENCE.....Vice-President  
E. H. HOUGHTON.....Sec.-Treas.I. R. WATERBURY.....Associate  
Burt Wermuth.....Editors  
Frank A. Wilken.....  
Alta Lawson Littell.....

E. H. HOUGHTON.....Business Manager

### TERMS OF SUBSCRIPTION:

One year, 52 issues.....50 cents  
Two years, 104 issues.....1.00  
Three years, 156 issues.....\$1.25  
Five years, 260 issues.....2.00

All sent postpaid.

Canadian subscriptions 50c a year extra for postage.

### RATES OF ADVERTISING:

40 cents per line agate type measurement, or \$5.60 per  
inch (14 agate lines per inch) per insertion. No advt. in-  
serted for less than \$1.20 cash insertion. No objection  
able advertisements inserted at any price.Mem Standard Farm Papers Association and Audit  
Bureau of Circulation.Entered as second class matter at the Detroit, Michigan,  
postoffice.

DETROIT, OCTOBER 21, 1916

### CURRENT COMMENT.

In addition to the two Constitutional amendments published Amendments. and commented upon in the issue of last week, two others will be before the electors of this state for rejection or approval at the coming November election. One of these is a proposed amendment to Section 30 of Article V of the constitution to read as follows:

"Section 30. The legislature shall pass no local or special act in any case where a general act can be made applicable, and whether a general act can be made applicable shall be a judicial question. No local or special act, (excepting acts repealing local or special acts in effect January 1, nineteen hundred nine and receiving a two-thirds vote of the legislature), shall take effect until approved by a majority of the electors voting thereon in the district to be affected."

The clause enclosed in brackets is the language added to the section by this amendment. Its effect if adopted will be to permit the repeal of local or special acts passed before the present constitutional provision forbidding them was adopted without submitting the question of such repeal to the electors of the district affected. The fact that a two-thirds vote of the members of the legislature is required for such repeal appears to be a sufficient safeguard of the public interest in this matter. The intent and purpose of this amendment is so plain as to require no further comment.

The fourth and last of the amendments to be submitted at the coming election is a proposed amendment to Article XII of the constitution by adding a new section thereto to be known as Section 10 and to read as follows:

"Section 10. The legislature shall provide by general law for the incorporation and regulation of fraternal benefit societies, which societies are defined as any corporation without capital stock organized and carried on solely for the mutual benefit of its members and their beneficiaries and not for profit, and which shall make provision for the payment of death benefits. Every such society may provide for the payment of benefits in case of temporary or permanent physical disability, either as the result of disease, accident or old age, and for the payment of last sickness and funeral benefits. Any such society may at its option have a lodge system, with ritualistic form of work but neither such lodge system nor ritualistic form of work shall be compulsory.

The legislature shall also provide by general law, the terms and conditions upon which fraternal benefit societies organized under the laws of another state may do business within this state.

No fraternal benefit society, excepting those now exempted under section 29 of act 169 of the public acts of the State of Michigan of 1913, shall be authorized to incorporate or do business in this state, unless it shall have in its laws:

(a) A representative or democratic form of self-government with a provision for the recall of its officers by a

majority vote of its members voting, upon petition of not greater than 15 per cent of the membership;

(b) Provisions authorizing the initiation of, or a referendum upon any by-law, upon a petition of ten per cent of the membership, the same to be decided by a majority vote of the members voting;

(c) Provisions requiring its officers, upon demand of five or more of its subordinate organizations, to furnish to such subordinate organizations a mailing list of Michigan members for use in the exercise of the initiative, referendum or recall; Provided, that it shall be a misdemeanor and punishable by imprisonment in the county jail not to exceed ninety days for any person to make use of such mailing list for any other purpose than hereinabove stated.

No law shall be valid—

(1) Which requires a valuation or inventory of any fraternal benefit society upon any basis which will show such society to be insolvent when its assets exceed its accrued liabilities, or which shall require the collection of assessments for death benefits in excess of the actual mortality cost per one thousand dollars (\$1,000) insurance in force of the ten largest legal reserve life insurance companies of the United States of America of fifty years' experience; Provided, that any society having a mortality higher than the average mortality of the legal reserve companies aforesaid, may be required to collect assessments on the basis of its actual average death rate experience for the previous five years; or

(2) Which denies any fraternal benefit society the right to expend its funds other than mortuary funds, for the circulating of petitions or otherwise promulgating laws and constitutional amendments for its own protection; Provided, that no such funds may be used for corrupt purposes.

Existing laws of this state governing fraternal benefit societies are not invalidated except so far as inconsistent with this section.

Any fraternal benefit society authorized to do business in this state on the taking effect of this amendment, may continue to do such business only until the next meeting of its general or supreme body unless its laws shall comply in all respects with the provisions of this amendment. Societies organized under the laws of another state, not exempt under section 29 of act 169 of the public acts of the state of Michigan of 1913, may transact business in this state by complying with the provisions of this amendment as to their business in this state; Provided, that if any such society shall fail so to comply, any five hundred or more members of such society shall be entitled, upon application, to incorporate and do business under the laws of this state, as a fraternal benefit society."

This proposed amendment is almost identical to one submitted two years ago which failed of approval at the election. Like the proposed amendment two years ago this was submitted by petition of certain fraternal insurance interests not satisfied with the workings of the present fraternal insurance law which was written on the statute books in 1913.

Regardless of the merits of this proposed amendment, we see the same valid objection to its adoption which we cited at the time of its first submission two years ago, i. e., it seeks to incorporate into the fundamental law of the state provisions which are more properly a subject for legislative consideration than for constitutional declaration. It seeks to amend the article of our state constitution relating to corporations by the addition of a section which is almost if not quite as voluminous as the entire article as it now stands, and instead of simply defining the limitations within which the legislature may act regarding this question it defines the course which the legislature must take and writes a new law with regard to the conduct of fraternal insurance societies framed by interested partisans in the matter, regardless of its expediency as determined by impartial investigation such as should be given it by a legislative body.

Those who initiated this proposed amendment have had opportunity to present their case to one legislature since the enactment of the present fraternal insurance law and, within a few months will have opportunity to present it to another. It is to be presumed that their contention would receive impartial consideration at the hands of the legislature, failing which they

would have the same opportunity to initiate legislation on this subject that they improved in initiating this proposed constitutional amendment.

### Bean Market Conditions.

In a recent circular issued to members of the Michigan Bean Growers' Association, President Cook, of that organization, quotes trade communications from two large wholesale distributors of beans to show that market conditions warrant the minimum price scale fixed by the growers' organization, which is \$5 per bushel for October. He also states that arrangements have been made with two large responsible establishments for storage and an advance of 75 per cent of the estimated value of beans, so that growers who may not be so situated as to hold their beans for later marketing may be able to realize cash from them for present needs without dumping them on the market at cut prices. Every grower should, however, make an effort to finance his own share of the controlled or gradual marketing of the crop which is imperative if the growers are to make up for this short crop by getting an increased percentage of the consumer's dollar, which would otherwise be more fully absorbed by the non-producing speculator.

### HAPPENINGS OF THE WEEK.

The European War.—Along a front extending fifty miles the Italians and Austrians are now fighting for the important Austrian seaport of Trieste. This has been a chief objective of the Italian forces since they entered the war on the side of the Allies. Another object of the increased activity at this time is undoubtedly to prevent the withdrawal of Austrian forces from the Italian front to assist in the subjugation of the Roumanians who are now being hard pressed from both north and south by the central powers. The Italians have already captured new positions which increase their advantages.—Although the Roumanians made an appeal to the entente last week for assistance to prevent the Teutonic armies over-running their country, they have since gained victories along the Danube river. In Transylvania, however, the Roumanian forces continue to fall back before the Austro-Germans.—In Macedonia, Serbian troops have made a further advance along the left bank of the Cerna river, while the French have cut the railway line south of Seres.—It is stated that the action of the Allies in demanding that the Greek navy be turned over and that the Allies be given power to control and police important railways was the result of a bold plot engineered by the Germans and ready to be carried out by Greeks against the Allied fleet. The plan was to have been effected with the aid of German submarines operating in the Mediterranean.—On the western line of battle the British have captured German trenches in the Thierval region, and also near Geudecourt. The French south of the Somme have also extended their front and captured a considerable number of prisoners.

What is believed to be an important advance toward an understanding of the method of transmission of the infantile paralysis germ was announced from the Johns Hopkins Hospital at Baltimore where it has been discovered that rabbits contracted the disease through germs taken into the system by the mouth.

As a result of closing the saloons in Detroit on Sunday, the police department reports that only 12 arrests were made as compared with 67 on the previous Sunday when the city was "wide open."

Owing to the growing scarcity of wood suitable for making paper pulp, the forest products laboratory at Madison, Wisconsin, has just completed a study of methods of barking, chipping, screening and baling of chips. Tests show that certain western woods are admirably adapted for pulp manufacture and it is hoped to secure some little relief by shipping train loads of these products to the paper mills in the eastern states. In Wisconsin alone it requires 300,000 cords of wood annually to supply the paper mills.

### MICHIGAN POTATO GROWERS' ANNUAL CONVENTION.

The annual convention and show of the Michigan State Potato Association will be held at Escanaba, Mich., on Wednesday, Thursday and Friday, November 1-2-3, 1916. The printed program and premium list is now ready

for distribution and may be secured by application to C. W. Waid, Secretary of the Michigan State Potato Association, East Lansing, Mich.

Liberal cash prizes are offered in the various classes in addition to gold medals, silver cups, merchandise prizes, etc. Attention is called to the importance of field selection to secure high-class stock for exhibiting in the state potato show. Potato growers from all sections of the state will be well repaid by attending this meeting, as those who attended the annual convention last year at Grand Rapids can well attest.

### STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

of The Michigan Farmer, published Weekly at Detroit, Mich., for October 1, 1916.

State of Michigan,  
County of Wayne,

Before me a Notary Public in and for the State and county aforesaid, personally appeared E. H. Houghton, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the Michigan Farmer, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:

Publisher, Lawrence Publishing Co., Detroit Mich.

Editor, I. R. Waterbury, Detroit, Mich.

Managing Editor, M. J. Lawrence, Washington, D. C.

Business Manager, E. H. Houghton, Grosse Pointe, Mich.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock).

M. J. Lawrence, Washington, D. C.

M. L. Lawrence, Cleveland, Ohio.

P. T. Lawrence, New York City.

E. H. Houghton, Grosse Pointe, Mich.

F. H. Nance, Lakewood, Ohio.

Neff Laing, Philadelphia, Pa.

E. D. Pope, Cleveland, Ohio.

Nellie J. Lawrence, Cleveland, Ohio.

Citizens Sav. & T. Co., Cleveland, Ohio, Trustee under the will of M. W. Lawrence, (Beneficiaries, Nellie J. Lawrence, Mary Lawrence and Mortimer Lawrence).

Nellie J. Lawrence, Guardian, Cleveland, Ohio, Guardian of Gains J. Lawrence.

Mrs. G. B. Rogers, Cleveland, Ohio.

Lillian Cotton, Cleveland, Ohio.

R. M. McConville, Cleveland, Ohio.

G. J. Munsell, Detroit, Mich.

J. F. Cunningham, Lakewood, Ohio.

3. That the known bondholders, mortgagees, and other security holders owning or holding bonds, mortgages, or other securities are: (If there are none, so state).

None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is. (This information is required from daily publications only).

E. H. HOUGHTON,  
Business Manager.

Sworn to and subscribed before me  
CLARENCE E. HAMLIN.  
this Fifth Day of October, 1916.  
(My commission expires October 12, 1916).



## RURAL RECREATION.

(Continued from first page).

Head and tail tag.  
Dodge ball.  
All-up relay.  
Horse and rider.  
Over-head relay.  
Over and under relay.  
Playground base ball.  
Zig-zag relay.  
Right-face tag.  
Indian basket ball.  
Japanese crab race.  
Beater-goes-round.

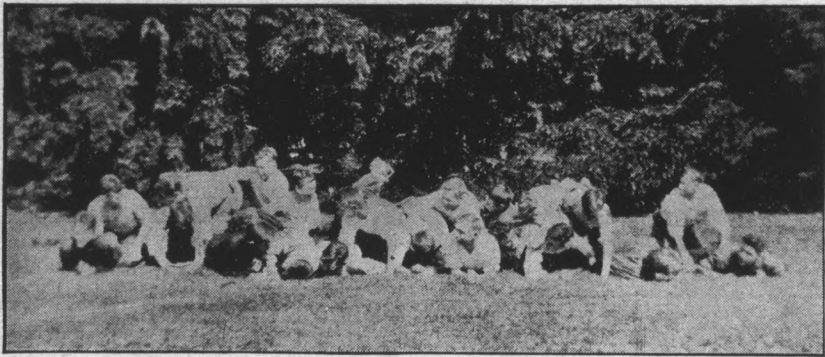
It is a good plan to master about twelve games. Teach them so that every child will know how to conduct the game if necessary. There are a number of other suggestions which should accompany instructions to play leaders. In the rural community play should be for all. The command given to the people of the Old Testament was to include all members of the family, the hired help and even the strangers within the gate. That is still good advice in the twentieth century. Rural recreation should be of the people, for the people and by the people.

Recreation alone cannot, of course,



All Up!

do everything to save the best young people for the country but it will be a big factor. There is more danger in child idleness than in child labor, but play is a natural, wholesome and necessary part of the life of every child. Deny this right and someone will pay the penalty.



All Down!

## Storing Seed Corn

THERE are two factors which influence the vitality of seed corn, and therefore the next year's stand, and these are proper selection and proper storage. Both are of equally great importance, and both must go together in order that maximum yields may be obtained. A large amount of



"All Work and no Play" may or may not make Jack a dull boy, but it is quite certain to make him want to leave the farm.

good seed corn is saved each year by the farmers of Michigan and afterward ruined by improper storage. Seed corn is most liable to injury during the first six weeks after it is stored, and therefore it should receive the best of care during this critical period. Corn, no matter what its stage of maturity, contains an excessive amount of moisture, and the problem is to get this moisture from the grain and the cob without injuring the vitality of the grain. Under certain conditions, the outside of the ear may dry out rapidly and become dry and hard, while the cob, which loses its moisture more slowly still contains a high per cent of moisture. It is this condition which indirectly causes a decrease in the vitality of the corn by increasing the chances for molding, sprouting and freezing.

As soon as the seed corn has been husked, it should be hung up in a fairly

warm, dry, well ventilated place, in such a way that the ears will not touch one another. If two ears of corn touch each other, mold may begin to grow and so injure the vitality of the corn. If hung in an artificially heated room the heat should be given at all times. Otherwise, the moisture given off by the corn remains in the air of the room and the drying out process will be retarded. Then, if the heat is applied too strongly at first, the vitality may also be injured. Therefore seed corn that has just been harvested really needs but one thing. It must have a free circulation of air at ordinary temperatures. Each ear must have access to a complete circulation of air in order that its excess moisture may evaporate rapidly enough to prevent the growth of molds and injury to the grain.

There are a number of good methods of storing seed corn. In general, select a method which does not allow the ears to touch one another, one that is cheap, one that takes up the smallest amount of space, and one that is the most handy to hold the ears for germination tests. There are several methods that should not be used; as tying up by the husks, hanging in a crate from the ceiling, or piling up in a heap near a stove pipe. There are bound to be some of the kernels injured by such methods. So, in selecting the method of storage, select one that will furnish nearly ideal conditions for rapid and thorough drying out of the ears.

Unless the threshing was done early in the season, and the grain has had time to cool off after the sweating process, do not hang the seed corn over the grain in the bins of the granary. Besides, the granary does not usually have ventilation enough for the drying out of seed corn before the cold weather comes on. Neither should the corn be stored in the attic over the living-room, unless you can get a free circulation of air through it. But, after the corn is dry an attic makes an ideal place to store the seed corn for the



## Huge Sums Spent to Make Your Tires Cost Less

You probably would be none the wiser—until the tires were worn out—if we should make the Goodyear All-Weather Tread only ordinarily thick.

But we make it double-thick, so that you get extra wear and extra mileage—thereby adding a million and a half dollars to our production costs this year.

If we should abandon the Goodyear On-Air Cure and go back to the old method of vulcanizing, we could save almost \$600,000 this year.

But your risk of blow-outs from wrinkled or buckled fabric—which you can't see—would be greatly increased.

The big blocks in the larger sizes of All-Weather No-Hook Tires give greater traction and longer life. They use more material. So does the increased size of the tires. The two total more than \$400,000 for 1916.

Cord Tires are improved, at added cost. Tubes are made thicker, at added cost.

The extra material required for Goodyear Tires and Tubes this year totals close to three millions and a half.

The additional labor is well over \$600,000 and the special equipment required for special Goodyear processes costs more than \$150,000.

Why, you ask, should The Goodyear Tire & Rubber Company put these extra millions into Goodyear Tires?

So that you may have tires better than the average.

So that you may enjoy complete tire satisfaction.

So that you will always use Goodyear Tires, after you have found that they do go farther and cost less.

So that Goodyears will continue to be the preferred tires, among close to 200 brands, with those who reckon tire cost not on price but on service and mileage

The Goodyear Tire & Rubber Company  
Akron, Ohio

GOOD YEAR TIRES  
AKRON



## Pick any Spot on the Map at Random

and You'll Find a  
Firestone Distributor

WHEREVER you are  
you can turn to a  
Firestone man and get the  
tires of Most Miles per  
Dollar.

The news of Firestone  
quality has traveled every-  
where. The demand is  
universal. The most busi-  
ness-like dealers have  
established themselves as  
Firestone men. And back-  
ing up these dealers is the  
vast Firestone Organiza-  
tion.

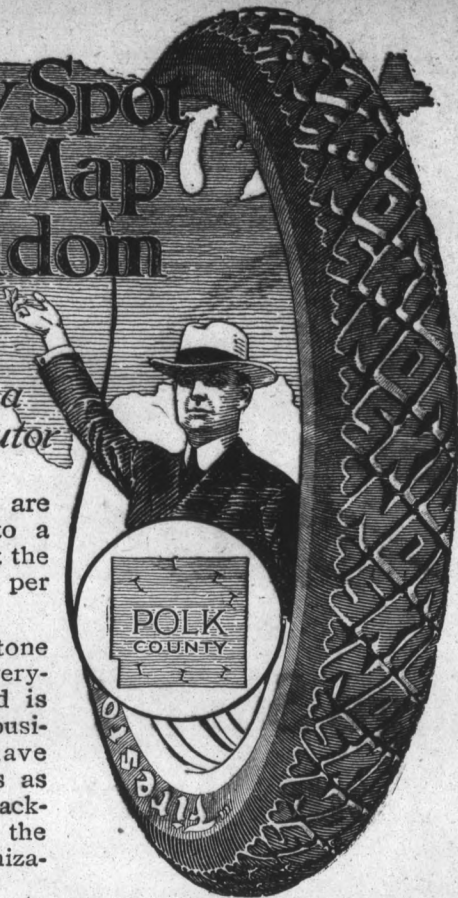
This efficiency in selling,  
and the marvelous saving methods in the Factory, added  
to the volume of sales, gives you Firestones for what  
ordinary quality costs. Don't wait to take advantage  
of these savings. See your dealer now.

**Free Offer** A Firestone Cementless Tube Patch  
Free, if you will send us your dealer's name, and the  
make of your tires. Ask also for copy of our book,  
"Mileage Talks," No. 25

FIRESTONE TIRE AND RUBBER COMPANY, AKRON, OHIO  
"America's Largest Exclusive Tire and Rim Makers"  
Branches and Dealers Everywhere

# Firestone

RED-BLACK Tires  
Side Wall Tread



## "Teach Them To Shoot"

REMINGTON  
UMC



## Remington UMC 22 Caliber Rifles

THE American father today has pretty  
much forgotten the old notion that any  
chance rifle "will do" for his boy. The  
known facts about rifles point as strongly  
to Remington UMC in the .22 calibre arm  
as in the big game rifles.

Every year, thousands of boys the country over  
are given a Remington UMC .22 Cal. Rifle and are  
taught how to use it—by their fathers. It's a good  
investment with any developing youth.

Remington UMC .22 Cal. Repeating Rifle with the  
famous Remington UMC Slide Action and Solid  
Breech—hammerless and safe. Shoots 15 Shorts,  
12 Longs or 11 Long Rifle Cartridges without re-  
loading—easily taken apart without tools.

Remington UMC .22 Cal. Autoloading  
Rifle—15 shots, handling Remington  
UMC Autoloading .22 cartridges (rim  
fire). Hammerless. Magazine in stock.  
Take-down without tools.

Clean and oil your gun with REM OIL, the combination Powder Solvent, Lubricant  
and Rust Preventative

THE REMINGTON ARMS UNION METALLIC CARTRIDGE COMPANY,  
Largest Manufacturers of Firearms and Ammunition in the World  
Woolworth Building, New York

Remington .22 Repeating Rifle Model No. 12

When Writing to advertisers please state that  
you saw their ad. in The Michigan Farmer.

winter. The best places for the early  
drying out are in closed sheds which  
are well ventilated, over the drives in  
corn cribs and in specially built seed  
houses. Never hang over animals or  
out of doors in the sun or rain.

Even after the excessive moisture  
has been dried out of the corn, it is  
still very important that it be kept in  
a dry place, away from freezing tem-  
peratures. Not only does freezing for  
a short time injure the corn, but also  
excessive moisture when not attended  
with low temperatures, also weakens  
the vitality. Therefore, the place  
where the corn is to be stored for the  
winter should be dry as well as warm,  
for if the air is full of moisture, the  
dry corn will absorb this water from  
the air and the vitality is liable to be  
greatly injured. The following data  
from an experiment here in Iowa  
shows this fact to be true. Dry corn  
was stored for the winter in a number  
of common places of storage. That  
which was stored in a dry attic germin-  
ated 93 per cent, while that which  
was stored in a damp basement away  
from freezing temperatures germinat-  
ed only 40 per cent. In this experi-  
ment, this one factor, decreased the  
vitality of the corn over 50 per cent. If  
freezing temperatures had been pres-  
ent, the vitality would have probably  
been further injured, for from another  
experiment conducted in Iowa we find  
the following: The vitality of corn  
containing 22 to 31 per cent of mois-  
ture was injured from 20 to 80 per cent  
by freezing from five to eight hours.

From the above facts we can easily  
see that the following precautions  
should be taken in the storage of seed  
corn:

1. Store in a warm, well ventilated  
place with none of the ears touching  
each other. 2. After dry, keep in a  
dry place away from freezing temper-  
atures.

Iowa.

H. W. HULBERT.

### LILLIE FARMSTEAD NOTES.

Splendid weather to do farm work.  
Beans are going into the barns and  
stacks all over the state in fine shape.  
In many sections there is insufficient  
rain for wheat and it is too hot for  
this plant. But it is doing well in most  
places. There is some danger of Hes-  
sian fly if hot, dry weather continues.

The engine broke down or we would  
have had the corn all in the silo; how-  
ever, the silo would not have been full.  
One day more will probably complete  
this job. Then we only have the pota-  
toes to dig and not until it freezes.  
They are doing fine at the present writ-  
ing, (Oct. 9), and we will have well  
developed starch in them if we can  
get two weeks more warm weather.

Besides the potatoes to harvest, all  
we have to do this fall is to plow 85  
acres, and we have a tractor and three  
three-horse teams to do the job. It  
would seem that we ought to get all  
the work done that we have planned.  
But it may get too wet or it may freeze  
up early. If we can get the plowing  
done we will have no plowing to do  
next spring, and ought to get the crops  
in on time.

It is wonderful how the alfalfa  
grows. The fourth crop is now six  
inches high and looks as fine as ever.

### Making the Price.

Some bean jobbers claim that the  
farmers are making a mistake in ask-  
ing \$5.00 for their beans. The argu-  
ment is that beans from other states  
will come into our market and affect  
the price. Also that other states will  
go to growing beans and permanently  
take the market from the Michigan  
grower. This may be true for a time.  
High prices always stimulate produc-  
tion, not only with the farmer's pro-  
ducts but with all others. But this will  
not affect the bean market as it will  
the wheat market, because beans can  
not be successfully grown over so wide  
an area as wheat. In fact, the area  
favorable to beans is comparatively

limited, and the bean grower need not  
worry so much from this cause as the  
jobber would have him think. I under-  
stand Ohio and Indiana farmers will  
try bean growing next year, also other  
localities. This may affect the market  
for a year or so, but I do not expect  
that beans will prove a success in  
those localities. The seasons are too  
dry and hot. They can grow soy beans  
but the Michigan pea bean will not  
grow as well any considerable distance  
south as they do in Michigan.

There is a shortage in the bean crop  
and why should the farmer not hold  
them for a good price? Of course, the  
jobbers would like to have the farmer  
sell cheap and as soon as possible, so  
he (the jobber) could get control of  
the crop. If he did would he think  
about the effect on the production of  
beans next year or the year after? Not  
on your life! He would hold the crop  
for just as big a price as he thought  
the consumer would pay. Why should  
the farmer not do the same thing? Hasn't he the same right? Is it not  
good business to do so? Is it squeez-  
ing the bean jobber to be sure, but  
would he show any mercy to the farm-  
er or the consumer if he had the crop  
under his control? He never did and I  
doubt if he ever will.

### Price Should be Based on Cost of Production.

I think the farmer is doing just what  
he should do in fixing the price based  
on the crop, and he should go much  
farther and fix the price, not only on  
beans but on other crops, basing the  
price on cost of production and on the  
crop. Then he should go farther still  
and limit the crop so there would not  
be an overproduction and he be com-  
pelled to sell for less than cost. Why  
not? The manufacturers get together  
and limit production. The coal barons  
don't intend to mine more coal than  
will be consumed and force the price  
down. It is not good business. The  
farmer has never done much of this  
kind of business, but he must in the  
future or he will work for nothing and  
board himself, just as he has been do-  
ing on many crops right along.

What is the use of growing so many  
potatoes next year that they will be  
worth only 15 cents per bushel? The  
potato crop can easily be overdone.  
Limit the acreage by common consent.  
Grow sugar beets in place of potatoes.  
We want more sugar. The world wants  
more sugar. We can produce it at a  
profit for less than the price today.  
Let some of the land rest rather than  
produce at a loss. I don't mean to  
grow poor crops. There is no money  
in a poor crop for anyone, but limit  
the acreage and fix the price at a rea-  
sonable figure above the average cost.  
If this should prevent the jobber from  
making such large profits it can't be  
helped. He can make uniform profits,  
which will be better than making no  
profits some of the time and excessive  
profits at other times. This policy  
would do away with "corners" and the  
like, and give the producer, the farmer,  
a square deal. But if this condition of  
things ever comes about the farmer  
must do it for himself. Nobody will  
ever do it for him. I say, good for the  
Bean Growers' Association, also for  
the Milk Producers' Association. They  
are doing the right thing.

COLON C. LILLIE.

### POTATO IMPORTATION PERMITS.

Those who contemplate importing  
ing potatoes from foreign countries in-  
to the United States should give con-  
sideration to the regulations of the  
United States Department of Agricul-  
ture regarding entry of potatoes to pre-  
vent the introduction and establish-  
ment of injurious potato diseases and  
insect pests. Copies of the regulations  
governing such importation and any  
additional information relating thereto  
may be obtained from the Federal  
Horticultural Board, United States De-  
partment of Agriculture, Washington,  
D. C.



## The Renovation of Orchards

JUST now is an excellent time to take a cursory glance at the work of reclaiming apple orchards in this section. Broadly speaking, it is a half dozen years since this task was first undertaken. Interest in the work was first aroused by a speaker at a farmers' institute held in the writer's section. At that time, many farmers were skeptical in regard to the success or value of the project. Most of the old apple orchards which then thickly dotted this part of Michigan, were yet alive, but considered practically worthless for commercial purposes. Scale had already gone far with its ravages in many of these orchards, but for the most part, the pest was unrecognized by local orchard owners. It was apparent that the trees were dying and that the quality of the fruit was deteriorating year by year. Little or no inquiry was made into the cause. Many farmers used what apples they needed for home consumption, and the remainder were left to rot in the orchards.

### The Improved Conditions.

In striking contrast to this picture, stands the one which may be seen today. These old orchards have disappeared by the wholesale, throughout entire neighborhood. Ignorance no longer exists anywhere, in regard to scale and its destructive work. Skepticism as to the practicability and value of reclaiming old apple orchards, has at last died out, before a few splendid successes. This skepticism was hard to dispel in some quarters, due to inadequate spraying methods which were in the main, unsuccessful. In these cases, some of the trees continued to die, and the quality of the fruit was not greatly enhanced. It has taken these half dozen years and some thorough work along the line of spraying and pruning to convince everybody that the reclaiming of these orchards is a commercial success.

### A Good Comparison.

In considering this phase of the subject, perhaps the most striking single proof of the adequacy of thorough spraying for scale, was exhibited in Branch county. This was an orchard that had been for years, commercially valuable. The owner was quick to grasp the scale situation, and to take steps to save his trees. The work was left to hired help to perform. When about half the trees had been thoroughly sprayed, something happened to the outfit. Business was rushing on the farm, and instead of repairing the outfit and completing the job, it was abandoned. The next season, a striking spectacle greeted the eyes of the passers-by. There stood the trees, those that had been sprayed, alive and green, and those that had been neglected, dead to the last tree. This convincing proof of the effectiveness of spraying, might still be seen, during the summer just passed, and may still be seen if the dead trees have not yet been removed. In the locality in which this orchard is located, almost no apple orchards of any age can be found. Winter apples for home consumption are purchased eagerly by the farmers, at prices they would not have believed possible before their own orchards ceased to exist.

In the writer's section, there are several excellent examples of successful pruning and spraying. The old orchards in these cases, have really been reclaimed. Today, they are financial successes. They constitute practically the only orchards of any commercial importance. It is estimated that from one of these orchards, the present year, two thousand dollars' worth of apples will be harvested. These old trees of the standard varieties, the Northern Spy, the Baldwin, the Greening, and others, have renewed their usefulness under proper management, and are producing good money for their owner. Good winter apples are scarce locally, and many are sold at

good prices, for home consumption. Success and failure mark the work of reclamation of apple orchards, as is the case in every other undertaking. The dividing line is sharply marked. Thoroughness, business methods, unre-laxed vigilance—these have spelled success. Half-way measures, haphazard methods, unwarranted expenditures—these have spelled failure. Apples Scarce in Farming Communities.

This, then, is the picture after a half dozen years. Old apple orchards by the score, dead and cut down, their places taken by fields of grain or vegetables. Scores of remnants of once vigorous and thriving aggregations of trees, the result of reclamation methods applied too late or too carelessly. A few healthy, vigorous, reclaimed orchards that are yielding excellent returns to their owners. And now and then, a new orchard springing from the wreck of the old. Under these conditions, apples in this section will not be over-abundant for years to come. The man who possesses a flourishing orchard has something he can count on with reasonable certainty, as a producer of good financial results.

Hillsdale Co.

J. A. KAISER.

### FALL ORCHARD PRACTICE.

If proper sanitary measures are taken during the autumn and early winter, much may be done to rid the orchard of diseases, insect enemies and other troubles which will go far towards securing better crops.

While this is not the season for general orchard pruning, it is the time when the grower should go through the orchard and remove all dead, diseased or broken limbs. Ragged wounds leave openings for various cankers and other diseases to get in. Broken branches should be pruned back with a smooth wound to a living side branch. Dead trees should be removed from the orchard. Branches which have died from canker or other diseases should be pruned to healthy tissue.

All cull apples should be gotten out of the orchard. Those which are suitable may be used for cider, vinegar, or evaporating purposes. Those not suitable for such use may best be fed to hogs pastured in the orchard. Any worthless, decayed apples clinging to the trees should be taken off and refuse fruit not otherwise disposed of, removed. These refuse apples contain insects such as codling moth and usually the germs of disease such as bitter rot, scab, etc. Removing them from the orchard goes a long way toward preventing a spread of these diseases next year. Young trees should have their trunks wrapped to protect from mice, rabbits, and to some degree, from borers. Perhaps the most economical wrapper is the veneer wooden wrapper which is a thin slice of wood of the character of which berry boxes are made. Wrappers 15 inches long, eight inches wide can be very cheaply secured. They should be fastened loosely around the trunk with a wire attached to the edge of the wrapper. If not thus attached, the wire ring may slip down and eventually girdle the tree. Approximately one inch of space should be allowed between the wrapper and trunk of the tree to give aeration and prevent injury to the bark. Wooden wrappers are perhaps the most economical. A still better wrapper, but more expensive, is screen wire such as is used for window screens. It may be cut into the desired size to accommodate the size of the tree. In small orchards even old newspapers, cardboard, cornstalks or other material available may be used. In addition to keeping out rodents, insects, etc., these wrappers shade the trunks of the trees, prevent absorption of heat, especially on the south side during sunny days, and therefore avoid what is called sun scald.—J. C. WHITTEN.

## Burn less Coal —and get more Comfort



A searchlight comparison as to the relative amount of coal required by the different heating methods to do an equal amount of heating work

When you honestly consider all facts and know what great savings and comforts will result from IDEAL heating, you cannot help but decide to have it.

Briefly—here is what you get:

### AMERICAN & IDEAL RADIATORS & BOILERS

A warm-all-over house. No repairs, no setting up or taking down. No labor, dust, gases, or smoke. An even, healthful heat all winter. A fuel saving that pays for the outfit. Adds big value to your home.

Thousands of farmers have found this out by installing IDEAL heating and their families now enjoy Winter better than Summer. There is such a thing as paying for IDEAL heating even if you don't have it now because in the meantime, you suffer all the ills and bills of old fashioned heating—but you can't get real comfort by only wishing for it. Why not decide now to have IDEAL heating and all the comforts and conveniences it brings to your home.

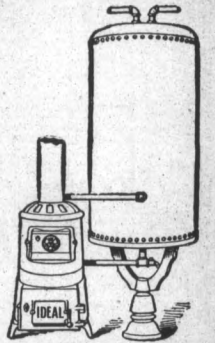
An IDEAL Boiler and AMERICAN Radiators can be put in any old or new house whether you have a cellar or not. Water system is not required as the same water is used over and over for years. IDEAL heating lasts longer than the building and frees you forever from labor, drudgery, and the dangerous effects of a cold, drafty house. Burn any local fuel.



IDEAL Boilers do not rust or wear out—no repairs.



A No. 020 IDEAL Boiler and 262 ft. of 38-in. AMERICAN Radiators, costing the owner \$185, were used to heat this farm house, at which price the goods can be bought of any reputable, competent Fitter. This did not include cost of labor, pipe, valves, freight, etc., which vary according to climatic and other conditions. The IDEAL outfit is the only feature of the house which is never worth less than you paid for it.



Our IDEAL Hot Water Supply Boilers will supply plenty of warm water for home and stock at small cost of few dollars for fuel for season.

### Get this book about Ideal Heating

Don't put it off another day. Read up and get all the information as to comfort, cost, and fuel economy that an IDEAL Boiler and AMERICAN Radiators will give you. Write today and get a copy of "Ideal Heating." Puts you under no obligation to buy.

Sold by all dealers. No exclusive agents.

AMERICAN RADIATOR COMPANY

Write to Department F-3 Chicago

## 1000% Returns From

the use of a Hercules Stump Puller. Bumper crops instead of stumps. Big money in place of taxes. \$1,200 from 40 acres the first year—\$750 in extra crops every year after. Get the catalog of the

Ask About Hand-Power Pullers. Low Price 120,000 Pounds Pull

### Hercules Triple Power Stump Puller

You can clear an acre of stumps a day. 30 days' free trial. Guaranteed 3 years. Special introductory price proposition. Write today for big free catalog. HERCULES MFG. CO., 137 25th St., Centerville, Iowa



## LIME

Pulverized lime rock for "sour" soils. Write for LOW PRICES DIRECT TO YOU and we will send sample and full particulars. Write to office nearest you. LAKE SHORE STONE COMPANY, Muskegon, Mich., and Benton Harbor, Mich.



## MORE MONEY

for tenant more money for owner, in our Active Fertilizers. Just ask nearest office for booklet. Agents wanted.

The AMERICAN AGRICULTURAL CHEMICAL COMPANY

New York, Baltimore, Buffalo, Philadelphia, Boston, Detroit, Cincinnati, Cleveland, etc.

## SAW YOUR WOOD



With a FOLDING SAWING MACHINE. 9 CORDS by ONE MAN in 10 hours. Send for Free catalog No. E 44 showing low price and latest improvements. First order secures agency. Folding Sawing Mach. Co., 161 W. Harrison St., Chicago, Ill.

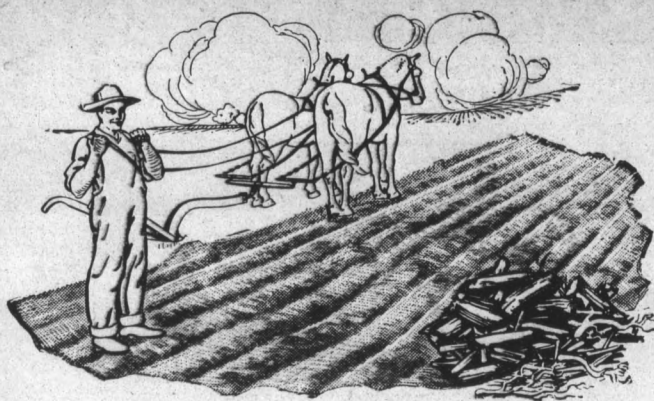


## Steel Wheels

will make your old farm wagon as good as new. Save money because they never need repairs. Write for our big free book telling all about them and how they pay. Empire Mfg. Co., Box 789 Quincy, Ill.

AGRICULTURAL LIME Northern Hydrated Limestone, also pulverized burned lime, all made from high calcium limestone. Guaranteed to be the best on the market. Your inquiries solicited. Samples furnished on request. Northern Lime Co., Petoskey, Mich.





## Waste Land Turned Into Money-Making Soil

You can't get the maximum income from your farm when stumps and boulders are eating up the profits. Every obstruction on your farm is not only an obstacle to your farm work but to your farm earnings as well.

# BURTON

## "Good Luck" Dynamite

enables you to easily, quickly and cheaply clear your farm, restoring what was once a money-wasting section of land to a rich, productive, profitable soil.

"Good Luck" Dynamite is safer to use and costs less because a smaller charge is required. It can also be used—and is being used by hundreds and hundreds of farmers—for ditching, subsoiling and tree-planting.

Our distributing facilities enable us to guarantee prompt deliveries.

Ask your dealer for Burton "Good Luck" Dynamite. If you can't locate a Burton dealer, write at once. If you have any perplexing farm clearing problems to solve, write us and we will help you.

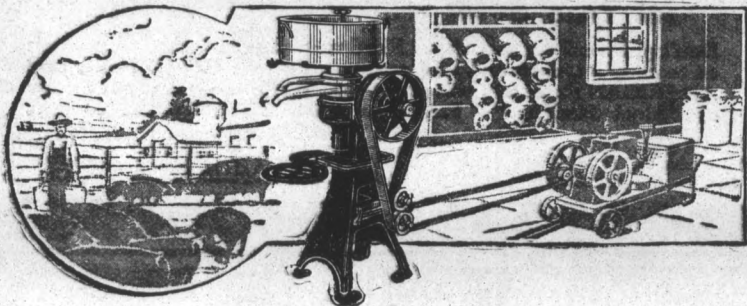


**Burton Powder Co.,**  
711 Empire Bldg., Pittsburgh, Pa.  
1617 Fisher Bldg., Chicago, Ill.



3

## Judged by Results



**S**INCE the chief value of a cream separator lies in its capacity for close skimming in actual work, the following letter from a man many of you know will make interesting reading:

"Mr. H. A. Jetmore,  
General Agent, International Harvester Company of America,  
Cedar Falls, Iowa

Dear Sir: I thought you would be interested in the results of cream separator testing in the Benson Cow Testing Association. Our separators are tested every time the herd tester comes. This practice has saved us a great deal of money, as it shows up anything wrong with the separator, and it enables prospective buyers of separators to judge accurately which separators are the cleanest skimmers.

We have a very fine lot of separators throughout the Association, but there is one kind that absolutely has proved superior to the rest, and that is the Primrose.

The skimmed milk from one of these separators has never contained more than 1/100th of 1 per cent fat, and as a rule less than half of that, and none of that make of separator has ever contained more than 3/100ths of one per cent, and that only once and for lack of speed. This is a showing not approached by any other kind.

Peder Pedersen,  
Pres., Iowa Federation of Cow Testing Associations,  
Sec., Benson Cow Testing Association."

What is said above of the Primrose applies equally well to the Lily. One skims as closely as the other. Let the experience of these successful dairy farmers guide you in your purchase of a separator. Write to us for complete information.

**International Harvester Company of America**  
(Incorporated)

CHICAGO

USA

Champion Deering McCormick Milwaukee Osborne Plano

## Stock Breeding Hints II.

By N. A. CLAPP

**I**N breeding the different kinds of stock on the farm, after the females have been secured, then the task of selecting sires should receive attention and one's best judgment used. I am aware, from the many mistakes made and repeated, that the importance of knowing the kind of sires that will give the best results, is not fully appreciated. Too many are satisfied with almost anything that is a male of the kind that can bring about an increase. I have noticed this fact many times, and that, too, among those who have had opportunities for observing the great differences between the stock from a well-bred sire of some well-known breed, and that from a sire that carries no ancestral blood lines except what has come to him through a course of haphazard, or catch by chance breeding. The indifference manifested sometimes, is enough to excite our wonder. It often shows a lack of appreciation of the kind of stock which will yield a profit over and above the cost of producing, and that which will not pay the expense and trouble incurred in breeding and raising.

The general farmers are not altogether to blame in this matter of the importance of selecting the right kind of sires. Often those who talk and write about the subject refer to the matter in general terms, which are not easily understood by the average man, and do not give definite instruction in plain and simple terms. The man who can interpret the meaning of the high-sounding terms used by some of the profound scientific writers, can have the consolation of being a benefactor.

### The Sire Half the Herd.

The general writer will say that the sire is half the herd. The statement is true as far as the blood entering into the increase or progeny is concerned, but if the ancestral line or breeding is not such as will influence the results of the crosses as much as the females composing the herd, then he comes short of being one-half of the herd. If, on the other hand, the sire is superior in breeding or ancestral influences, then he represents not only one-half in blood, but more than one-half in influence on the progeny.

I consider it my duty to mention a mistake very often made by farmers after they have ventured in the use of a pure-bred sire. After obtaining remarkable results in improving their stock they select one of their grades for a sire and thereby lose much of the benefits already secured. They overlook the fact that there is a larger percentage of the inferior blood coursing in the veins of their animals pulling backward toward the type of their inferior ancestors than there is pulling forward toward the type of the improved ancestors which were connected with them through their improved sire.

Several years ago my business led me to travel in a community in which there had been kept a Percheron stallion of great merit as an individual and as an improver of the horses in that community. I noticed that some of the good half-blood male colts had been kept for breeding purposes. In conversing with some of the patrons of the young horses, the remark was frequently made that such a horse was sired by the "old horse" and they had as soon use him because they could get the services of the young horse for one-half what was charged for the "old horse." In subsequent years these patrons of the young horses were heard to declare that the improvements made by the pure-bred sires do not last, but "soon run out." If those men had used good "horse sense" and practical judgment they would not have expected as much from the attenuated blood of the grades as they would of full, rich blood of a pure-bred sire. Practical experience also proved it.

Another mistake many are prone to make in endeavoring to up-grade is changing breeds. They select a sire from one breed and get good results and then take a sire from another "to make the cross," as they call it, and continue to change several times getting something which they call "well bred" because it carries blood selected from many breeds. Often the ridiculous practice is followed by crossing beef breeds of cattle with sires from dairy breeds, saying that they are going to combine the two or "split the difference," which they do and get something inferior to both breeds.

If one begins with one breed and secures sires from the same breed for several generations, something definite can be done and improvements made. Some excellent results have been obtained by following this method, both in up-grading the beef and dairy cattle.

### Prepotent Sires.

The habit of calling some remarkable sires "prepotent" has become fixed with some until they use it more than the results will warrant. An impressive sire would be a better term for common use. A sire that impresses his superior form and superior characteristics on his progeny is a desirable one. As a general rule a desirable sire can be selected by his conformation.

In the first place an impressive sire is well sexed; in other words, he is decidedly masculine and has no semi-feminine characteristics about him. Whether a stallion, bull, buck or boar, there is no indication of a "ewe neck" about him. Every feature indicates that he is a male. There is a majestic carriage. With the stallion and ram there is elasticity in the step. There is an air of boldness and courage in all desirable sires. Resolution and endurance as manifested by a deep and firmly set underjaw is present. This rule holds good with all sires as the arched neck and deep jaw goes with a large cerebellum, large heart and other vital organs. Great vitality must be possessed or it cannot be transmitted. In addition to great vitality he should be a high type of the breed which he represents.

### What to Expect of a Sire.

The fact should be kept in mind that the sire fixes, in a great degree, the external conformation of the progeny. I will cite the mule as an example. A stallion bred to a female ass produces a miniature horse. A pure-bred draft stallion makes a remarkable improvement in the conformation of the colt at the first cross. The same is true when a pure-bred sire of any kind is used on common stock.

It is very apparent that there are great possibilities ahead if great care and good judgment are used in the selection of sires. It is worth the while for every farmer who is a breeder of live stock, and all are to a certain extent, to study the matter carefully and become capable of discriminating between the good and the bad, the desirable and undesirable characteristics of the animals on which we must depend to not only maintain the stock kept on the farms, but to improve it and make it more profitable. The stock consumes the forage and grain crops on the farm, and on the good quality of the stock kept we must depend for the profits on our farm operations. A judicious selection of sires can be made a means by which better and more satisfactory results in general can be obtained.

A short time ago J. E. Storm, of Iowa, appeared in the Chicago stock yards with two carloads of cattle that sold for \$9.60 per 100 lbs. They returned a good profit, costing at the start when put in only \$7 per 100 lbs. Mr. Storm said there was a big crop of young pigs in his part of the country, and he added that there was a fine corn crop that was out of the way of the early frosts.

## BUY YOUR FEED IN CAR LOTS

We can save you money. Write for prices delivered to your station.

RANDOLPH, HALL & YOUNG, Owosso, Mich.

**LEARN AUCTIONEERING** at World's Original and Greatest School and become independent with no capital invested. Every branch of the business taught in 5 weeks. Write today for free catalog. **JONES' NAT'L SCHOOL OF AUCTIONEERING**, 28 N. Sacramento Blvd., Chicago, Ill. Carey M. Jones, Pres.



## Dairy.

### CONTAGIOUS ABORTION.

Contagious abortion, which it is estimated is costing cattle owners \$20,000,000 a year in dead calves and lowered milk production, the government veterinarians say, is second in importance only to tuberculosis in cattle, and rapidly is coming to the front as the most costly and serious disease which the dairy industry in the United States has to combat. Reports from many sections indicate that the disease is spreading rapidly to all parts of the country. Congress at its last session recognized the seriousness of the disease by appropriating \$50,000 to be used by the department in studying the scourge and developing methods for its control.

Abortion in cattle, which prevents the bearing of live calves and frequently causes cows to become sterile and remain dry, is caused by the bacillus abortus. This bacillus is carried from animal to animal and from herd to herd by infected bulls and cows and may be spread in herds by infected feed and water, or the discharges of aborting animals. The disease is controllable by isolation and antiseptic treatment of infected animals and by disinfection and sanitation of barns and cattle lots. The department veterinarians, however, place the greatest emphasis on preventive measures. Proper disinfection of bulls and cows will prevent its spread, and persistent antiseptic treatment of aborting cows will overcome sterility and enable the cows to produce healthy calves. The government specialists, however, know of no internal drugs that will effect quick and positive cures and state that serum treatment as yet is in an experimental stage.

The department has in preparation a Farmers' Bulletin and circulars conveying exact information designed to encourage dairymen and cattle raisers to apply these remedies and join with the department and their state experiment stations in a campaign for the control and eradication of this threatening infection.

### GOOD ALFALFA MEAL.

A chop mill is a necessity on every dairy and stock farm where many dairy cows and steers are fed. With the custom grinding which it should be able to do, such a mill would soon pay for itself. Also, in good alfalfa county a mill for grinding alfalfa meal would pay, for in feeding dairy cows, and especially young calves, alfalfa meal is one of the most nutritious foods in the roughage class which you can buy. In fact, it stands, I believe, at the head of the list, being richer in nutrition than any other forage crop. Young calves learn to eat alfalfa meal in the form of a thin, warm mash quicker than they learn to eat cured alfalfa hay, where you put a good deal of skim-milk in the mash at first, gradually decreasing the amount of milk and increasing the warm water as they learn to like the food.

Even if alfalfa is not suited to your locality, and you have to buy the baled hay from grain dealers it will still pay to have an alfalfa mill and grind your own meal, because a great deal of the meal you buy in the market is of inferior quality, made from sweepings of floors or other light, trashy hay. After it is ground its poor quality cannot be detected so well. The result is that many dairymen and stock feeders are buying very inferior alfalfa meal. At least there is always the possibility and likelihood of being defrauded if the miller is disposed to do so. The local dealer is not to blame. The fault is with the miller who grinds it. For this reason it pays to buy good No. 1 alfalfa hay and grind it yourself; cer-

tainly so if you have many young calves, pigs and chickens to feed, for these all like alfalfa meal mashes made up with some milk.

Other leguminous hays may also be ground in such a mill; the clovers, cowpea vines and peanut vines, so the mill will soon pay for itself even though alfalfa is not a sure crop in your locality. The mill will also be suitable for grinding low growth oats cut with a header, to make chops; also sorghum tops, kaffir corn unthreshed, and other grain of like nature. By grinding up your own alfalfa hay you get a grade of meal richer in nutrition than you are likely to buy from a miller who uses the sweepings of floors, as this latter will be composed largely of leaves and tiny stems, which are not as nutritious as the larger stems, where the alfalfa has been cut at the proper time and properly cured. You can prove this to be true yourself within a very few weeks by the better and slicker appearance of your cows and calves fed upon meal from your own mill, where you use good hay to begin with.

Illinois.

I. H. MOTES.

### CENTRAL MICHIGAN HOLSTEIN BREEDERS' PICNIC.

Breeders of Holstein-Friesian cattle in Clinton, Eaton and Ingham counties gathered on the Campus at the Agricultural College, East Lansing, on the afternoon of September 20. It was the seventh annual basket picnic of the Central Holstein Breeders' Association and close to 350 members with their families and friends were present. Long tables were spread under the trees on the campus where everybody ate luncheon at noon. The Agricultural College very generously supplied the dessert for the luncheon in the form of ice cream put up in a new style, individual carton. An orchestra played popular airs to enliven the gathering.

At two o'clock, President. A. B. Niles, of Grand Ledge, called the meeting to order for the consideration of more serious affairs. He introduced Prof. A. C. Anderson, who extended a cordial welcome to those present, in behalf of the College. President Kedzie then gave a brief and interesting address in which he displayed a knowledge of dairying that fully qualifies him to be enrolled among the ranks of good dairymen, regardless of the fact that he is the president of an institution teaching many branches of learning to both young men and women. President Kedzie presented a new idea when he stated that the dairy cow is the greatest known chemist because of her ability to take feed, in which human chemists could find no trace of butter-fat, and convert it into this substance for which man is totally unable to manufacture a successful substitute.

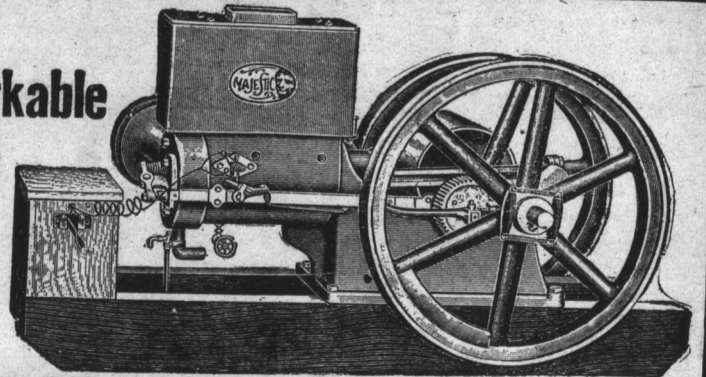
State Market Director James N. McBride spoke briefly on the work of the Michigan Milk Producers' Association. He called attention to the fact that the annual meeting of the Association would be held at the College on Tuesday, October 17, and urged all persons interested in the production of market or condenser milk to be present.

President N. P. Hull, of the Michigan Milk Producers' Association, was the closing speaker on the program. Mr. Hull was talking to his friends and neighbors and he spoke with convincing frankness of the problems confronting the milk producer, chief of which, at the present time, is that of securing a price for milk that will even equal the cost of production. Mr. Hull mentioned that the Michigan Milk Producers' Association is engaged in an attempt to induce dairymen to help themselves; to point out to them the defect and selling it for less than cost; and to encourage them to join in a united effort to secure a price that will pay them a living profit.

Ingham Co. FRED McDONNEL.

## No Money In Advance

Most  
Remarkable  
Engine  
Offer  
Ever  
Made



## A FULL YEAR TO PAY

### On Hartman's Special Farm Credit

Only HARTMAN'S, with their \$12,000,000 capital, their tremendous organization, and over two million customers are capable of such a record smashing offer as this. You can order any size or style engine you want—we will send it at once. You pay no money down; make no bank deposit; no C. O. D. We ask for no security. Everything confidential between you and Hartman's. When the engine comes, work it as though it was your own for 30 days, and if you are not fully satisfied with it in every respect—send it back at our expense, and you'll not be out one cent. If you are completely convinced that the "Majestic" is a wonderful bargain and just exactly the engine you've been waiting for, then keep it and pay us one-tenth in 30 days; or one-sixth in 60 days, giving you 10 months or a full year to pay, whichever you prefer. These liberal terms apply to all sizes and styles of

## The Great Majestic Engines

Sizes 2, 3, 5, 7, 9 and 14 H.P.

STATIONARY, HAND PORTABLE, HORSE PORTABLE

Send coupon for FREE Book and learn just what size and style is best for your requirements. Note the sensationally low bargain price put on each engine. You wouldn't believe it possible that such a high-grade engine could be sold for so little. But Hartman does it. And you are not asked to pay a cent in advance or keep the engine if you don't think it the most wonderful bargain ever offered.

The Majestic is the simplest, most durable, most powerful for its H.P. rating and most economical-to-operate gasoline engine. Not a bit like old style, over-heavy types of gasoline engines which consume enormous amounts of fuel and are, therefore expensive to operate; or like others, that are so light they literally jerk and tear themselves to pieces when running at high speed or under a heavy load.

The Majestic is the "happy medium"—neither too heavy nor too light. Has fewer number of parts—a marvel of simplicity. Perfectly balanced—just the right weight for the power it is designed to develop—no excessive friction. Has big improvements in all vital points. Convenient, compact. Gives good, efficient service without tinker or bother.

### Mail Coupon for Free Book



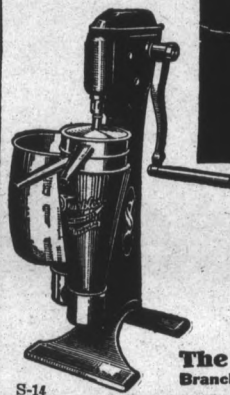
The most valuable engine book ever published. Tells about the wonderful Majestic, how made, and why it is the biggest engine value. Tells how to pick out size and style engine best suited to your needs, and explains the famous farm credit plan. Mail coupon or postal.

THE HARTMAN COMPANY  
4043-45 LaSalle St., Chicago

### Mail Coupon NOW

THE HARTMAN CO., 4043-45 LaSalle St., Chicago  
Without obligating me, send your Engine Catalog No. E-256 and particulars of Farm Credit plan.

Name.....  
Address.....  
P. O. Box.....  
or R. F. D.....  
Town.....State.....



## SHARPLES SUCTION-FEED CREAM SEPARATOR

The **only** separator with just **one** piece in the bowl—no discs—easy to clean. Furthermore the Sharples saves up to \$100 yearly over **every** other separator, because it skims clean at **any** speed. Saves cream that other separators lose at low speed (19 out of 20 operators turn too slow). Over a million Sharples users.

The Sharples Separator Co.  
Branches: Chicago San Francisco

West Chester, Pa.  
Portland Toronto

## APPLETON Husker and Shredder

Every year hundreds more farmers buy huskers, as they find the most economical, efficient way to save all the value of a corn crop is to husk the ears and make fodder of leaves and stalks. Appleton was the first successful husker. Appletons made years ago are giving good service today. Few parts, extra strong, mean long life, few repairs and sure dependability.

### GUARANTEED TO DO MORE WORK WITH LESS POWER

than any husker of equal size. Appleton husks cleanest, shells least; has most efficient corn saver. Cuts or shreds leaves and stalks while husking ears. Fodder value saved from small acreage pays its cost. Easiest, safest to operate. Works in all conditions of corn.

Free Husker Book: describes 4 sizes for engines of 4 h.p. and up. Write for it now.

Appleton Mfg. Co.,  
520 Fargo Street, Batavia, Ill.

## BOWSER FEED MILLS

Crush ear corn (with or without shucks) and grind all kinds of small grain. Handy to operate—lightest running. 10 sizes: 2 to 25 h. p. Capacity 6 to 200 bushels. Conical shape Grinders. Different from all others.

### Write for Catalog

and folder about the value of different feeds and manures.

THE B.N.P. BOWSER CO.  
South Bend, Ind. 10

## GROW HEALTHY STOCK



## Your Cow and Her Home

deserve more thought. Properly housed animals give more of better milk. This means bigger profits. Equip your barn with the fully guaranteed and patented

### Harris Stalls

and Stanchions, valued for their strength, and lasting sanitary service. Easily installed, prices reasonable. Write TO-DAY for illustrated Catalog—it's FREE.

THE HARRIS MFG. CO.  
130 Main Street, Salem, Ohio

When writing to advertisers please mention The Michigan Farmer.



## PIG FEEDING RESULTS.

I am sending you the result of a pig feeding test I made this summer. I bought seven pigs six weeks old. These pigs were not in good condition (but were not stunted) as they only weighed 92 lbs. altogether.

I placed the pigs in a pen in the barn. The pen was about 8x10 feet in size. I kept them there 60 days, and they gained 62 lbs. each during the 60 days. Then I removed them to a yard about 40x100 feet in size. There was a small amount of grass in this yard when I placed them in it. As the garden was next to the pigs I intended to pull weeds for green feed, but we had such a dry, hot summer that even the weeds did not do well, so practically these pigs did not have any pasture while they were on feed.

During the 130 days they were fed they consumed 1,100 lbs. of ground oats and shelled corn, about 20 per cent oats; 105 bushels of ears of corn and 4,000 lbs. of skim-milk from the creamery and they gained 1,218 lbs. It took 3.31 lbs. of grain and 3.20 lbs. of skim-milk to make one pound of gain. These pigs made a daily gain of 1.33 lbs. each for the 130 days. As they were only six weeks old when I commenced to feed them I think this is a big gain.

I sold these pigs the second of October for \$10 per cwt. They weighed 1,310 lbs. alive and dressed 1,006. They brought me \$131 and cost, counting ear corn at 40 cents per bushel, oats and ground feed at \$1.50 per cwt., and skim-milk at 20 cents per cwt., and \$17.50 the price I paid for the pigs, a total of \$84. At the above figures for feed, the cost per hundred was \$6.30.

In comparison here is an item I took from my books: "Sold five pigs, live weight 1,120 lbs., at \$3.50, amounts to \$39.20. (Dated Aug. 5, 1898)."

Wayne Co. J. F. BARRY.

## HOW MUCH HAY FOR HORSES?

How many pounds of hay does an average sized work horse require a day? Also, how much for a cow that gets about 40 lbs. of ensilage a day? Is it advisable to feed a horse or cow all the hay they can eat?

Kent Co. E. D.

A cow can consume more roughage than a horse in proportion to live weight, because the cow's stomach is much larger and because she remasticates this roughage at her leisure.

The horse has a comparatively small stomach and should not be fed on roughage entirely. The general rule is one pound of hay per day for each 100 pounds of live weight, and in addition one pound of grain per day for each 100 pounds of live weight. This is for horses doing full work. If horses do not have to work much, as in winter, the roughage can be increased and the grain diminished somewhat.

It is not advisable to feed a horse all the hay he can eat, but it is advisable to feed a cow all she will eat without waste. A cow giving milk should have a certain amount of grain, say one pound of grain per day for each pound of butter-fat produced in a week, and besides all the roughage, hay and silage, she will eat.

COLON C. LILLIE.

## LIVE STOCK NEWS.

A few days ago J. W. Frazier, of Illinois, was on the Chicago market with the tail-end portion of his choice yearling cattle he is preparing for the International Live Stock Exposition. They consisted of Texas-bred Herefords, numbering 20 head, and averaging in weight 974 lbs. They sold readily for \$10.85 per 100 lbs.

A short time ago a Chicago dealer sorted up a carload of fancy Shorthorn stocker calves for J. T. Meyers, of Ohio, the calves coming from all parts of the yards and costing different prices, the entire lot averaging \$8.25 per 100 lbs. They averaged 50c higher than the best fleshy feeders were selling for, but experienced cattlemen regarded them as well worth their cost.

26 Extra Features  
73 New Conceptions

**Mitchell**  
MID-YEAR  
MODEL

20% Extra Value  
Due to Factory Efficiency

## \$6.62 Per 1000 Miles

### Bate-Built Mitchells Have Run 200,000 Miles

Two Bate-built Mitchells have already exceeded 200,000 miles each. One has to its credit 218,734 miles. Seven have averaged 175,000 miles each.

Think of 200,000 miles. That is forty years of ordinary service. And at \$1325 a Mitchell which did that would cost \$6.62 per thousand miles.

### Mr. Bate's Lifetime Car

John W. Bate has aimed in the Mitchell to give you a lifetime car. The Mid-Year Mitchell is his 17th model with this aim in view. It is the final result of 700 improvements.

Part by part he worked for perfection. To every part he has given at least 50 per cent over-strength. Castings are almost eliminated. There are 440 parts which are drop forged or steel stamped.

Chrome-Vanadium steel, costing up to 15 cents per pound, is used to meet major strains. The Bate cantilever springs are so strong that not one has ever broken.

The Mid-Year Mitchell, with its 127-inch wheel-base, weighs under 3000 pounds. It runs from 16 to 22 miles on a gallon of gasoline. Yet the high-grade materials make it the wonder-car in endurance.

### 20% Extra Value

A car of this grade has never before been sold at the Mitchell price. In addition, the Mitchell has 26 extra features—things which other

cars omit. We include them all in the Mitchell without extra price, though they cost us this season over \$2,000,000.

In the Mid-Year Mitchell you get a 22-coat finish. You get French-finished leather. You get 73 new conceptions, all added within a year. You get all the best new ideas which our designers found in 257 of the latest European and American models.

Compared with other cars in this class, you get, we believe, at least 20 per cent extra value. And that is all due to our factory economies, worked out here by John W. Bate.

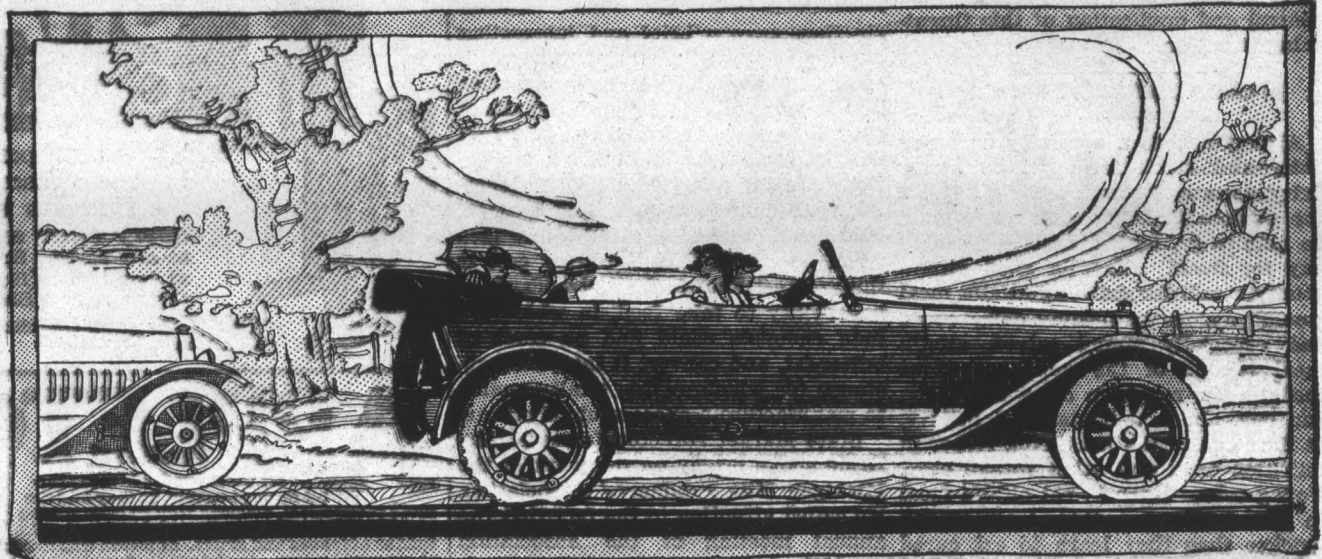
This efficiency engineer designed all our new buildings. He equipped them with 2000 up-to-date machines. The result is a model plant, where our factory cost has been reduced one-half. That is the reason for the Mitchell extra values.

You will want these extras in your car. You will want this strength and endurance. You will want these new ideas and touches. Go and see what they mean to you, at your nearest Mitchell dealer's. If you do not know him, ask us for his name.

He will show you a list of great engineers—men of nation-wide fame—who bought the Mitchell for their personal cars. You will gladly take their judgment on the best-built car. (124)

Mitchell Motors Company, Inc.  
Racine, Wis., U. S. A.

**\$1325 F. o. b. Racine**  
For 5-Passenger Touring Car  
or 3-Passenger Roadster  
7-Passenger Body, \$35 Extra  
Equipped with Demountable Top Only.  
\$300 Extra  
High-speed economical Six—48 horsepower—  
127-inch wheelbase. Complete equipment, including 26 extra features.



**PROSPERITY IN CANADA**—\$900,000,000 in new wealth added in 1915. Enormous crops and low taxation make farmers rich. Wheat average, 36.16 bushels per acre in Alberta, 28.75 bushels per acre in Saskatchewan, 28.50 bushels per acre in Manitoba. Taxes average \$24 and will not exceed \$35 per quarter section, includes all taxes; no taxes on improvements. Free schools and full religious liberty, good climate. Get your farm home from the Canadian Pacific Railway. 20 years to pay. Good land from \$11 to \$30 per acre; irrigated lands from \$35, and the government guarantees your land and water titles. Balance, after first payment, extended over nineteen years, with interest at 6%; privileges of paying in full any time. Before final payment becomes due your farm should have paid for itself. We will lend you up to \$2,000 in improvements in certain districts, with no security other than the land itself. Particulars on request. Ready-made farms for sale. Special easy terms. Loans for livestock. In defined districts, after one year's occupation, under certain conditions, we advance cattle, sheep and hogs to farmers up to a value of \$1,000. We want you; we can afford to help you. We own the land; we want the land cultivated. Our interests are mutual. Buy direct and get your farm home from the CANADIAN PACIFIC RAILWAY. Send for free book. J. S. Dennis, Assistant to the President, Canadian Pacific Railway, 125 Ninth Ave., Calgary, Alberta, Canada.

### Farms and Farm Lands For Sale

#### Widow's 238 Acre Farm

With Pr. Horses, 14 Cows, Bull,

Hens, cream separator, wagons, harnesses, tools, machinery, 60 tons hay, grain, corn, potatoes, vegetables, apples, etc., etc. On good road to live city of 60,000. 2 story 10 rm house in good repair; 2 barns, one 68 ft. other 44 ft.; granary, hog and chicken houses. Widow sacrifices all for \$5,500, easy terms. It is your chance to secure a big money-making farm with harvested crops, full equipment and immediate income. Possession today. Full details page 10, "Strout's Fence and Plenty Catalogue," just out. Filled with farm bargains in a dozen states. E. A. STROUT FARM AGENCY, Dept. 101, 150 Nassau St., New York.

#### New Farms Ready To Cultivate

And to live on. New house and barn, well, fencing, etc.; one fresh high-grade cow, two blooded pigs, dozen chickens. Crop plan and help of our farm experts will guide you. By your success and shipments our profits will be measured. Fine climate, long growing season; big yields grains, grasses, clovers, fruits, vegetables; splendid live stock section. 25 acres, \$2,100; 50 acres, \$2,750; 100 acres, \$4,100; part of each farm just cleared, improved as above. Easy terms. Write today for full particulars. B. L. Hammer, General Development Agent, Seaboard Air Line Railway Company, 201 Royster Bldg., Norfolk, Va.

**160 Acres,** level clay loam, no waste, pastured with creek, timber, modern dwelling, basement barn, good repair, \$20,000 acre, terms. Gleason, The Farm Man, Greenville, Mich.

**Fine Dairy Farm For Sale**—160 acres, cultivated, close to city in Michigan, stone roads, school, etc. Modern Dairy barn equipped with milking machine, cows, horses and other farm stock. Farm tools and equipment. Three houses, milk house, barn, shed, etc. Milk routes and wagons. Price and terms reasonable, rare bargain. Address Box 5187, In Care Michigan Farmer.

### New Land,

In Gladwin and Midland Counties, Michigan. Well located. Low prices and easy terms. Staffeld Bros. (owners), 15 Meritt Bldg., Saginaw, (westside), Mich.

**Duval County, Florida** invites your closest investigation. Fine opportunities for farmer, stock grower or poultryman. Good fertile lands can be bought cheaply in any size tract. Hard surfaced roads abound. Good schools. Excellent market. Big creamery and packing plant. Delightful climate. Year round work on the farm. Official information can be obtained by writing to Publicity Department, Duval County Commissioners, Jacksonville, Fla.

**Special Offer:** 40 acres gently sloping, rolling clay loam farm 5 acres cleared, small frame house, barn 30x40 ft. driven well, fine water. Bargain at \$200. I have other bargains, write me at once your needs. U. G. REYNOLDS, Gladwin, Mich.

**ROSS LAND CO.**  
Michigan Farm Dealers  
1002 Penobscot Bldg., Detroit.

**MONEY TO LOAN** On improved farms anywhere in West Half of Michigan. R. E. JENNINGS, Paw Paw, Mich.



# Magazine Section

LITERATURE  
POETRY  
HISTORY and  
INFORMATION

**MICHIGAN FARMER**  
AND *LIVE STOCK* JOURNAL  
PUBLISHED WEEKLY. ESTABLISHED 1843.

The FARM BOY  
and GIRL  
SCIENTIFIC and  
MECHANICAL

This Magazine Section forms a part of our paper every week. Every article is written especially for it, and does not appear elsewhere

IT is an absolute injustice to expect a state capitol to be stable and dependable and be subject to such a constitutional provision as the following: "The seat of government for this state shall be at Detroit, or at such other place or places as may be prescribed by law, until the year eighteen hundred forty-seven, when it shall be permanently located by the legislature."

Could any capitol thus located be other than fickle, vacillating and a habitual flirt? Even at the time she made her appearance in Detroit, our respected capitol was suspected of hav-

## Moving Our State Capitol

By MARY L. DANN

ing smiled over her fan at "Detroit influence, much to the disgust of her ardent suitors, the interior villages. From that day there grew and strengthened a grim determination among the prominent men of the state to remove the capitol from Detroit to one of the prosperous interior towns.

As the year 1847 drew near, when the capitol was to be permanently located by the legislature, the anti-De-

troit feeling grew stronger and more bitter and outspoken. It was even darkly hinted that Detroit's social set dominated important legislation to an extent that was menacing. It was insinuated that a single "quail party" had been known to change the oppos-

ers of a measure to promoters of it. The bill providing for the location of the capitol was introduced January 6, 1847, and, after second reading, refer-

red to a committee of the whole and from thence to a special committee. The bill reported by this special committee was the same as the bill eventually passed, except that the place of location was left blank, and there was a provision that the necessary buildings should be provided by the county and given rent free to the state. The committee was united as to the form of the bill, but a chasm as deep as that separating Lazarus from Dives yawned between them when it came to deciding as to the proper place for its location. They scolded like fishwives and even indulged in a few personal-

## WORLD EVENTS IN PICTURES



Sisters Each Give \$3,000 to Red Cross Fund.



First Woman Foot Ball Coach and Her Winning Team.



Cross Country Campaigners Find Milk the Best Tonic.



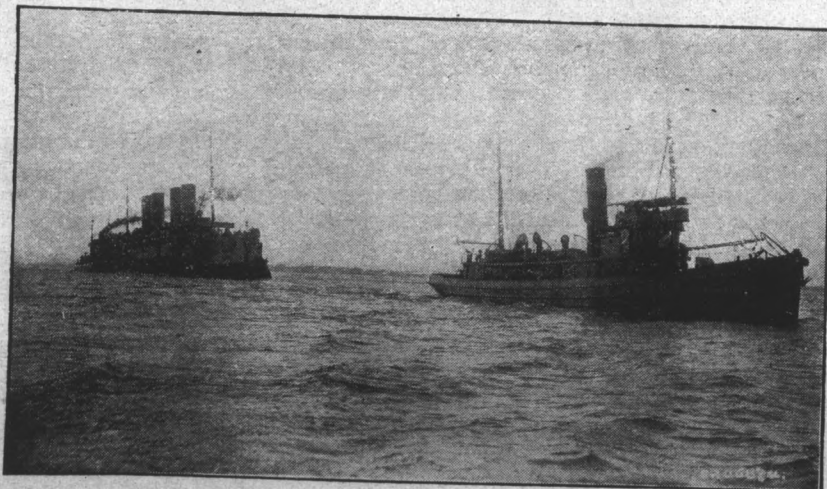
Wife of British Commander-in-Chief Practices Red Cross Work.



Well Trained French Cavalrymen whose Duties in Present War are Limited.



Great Crowds Attended the World Series Base Ball Games.



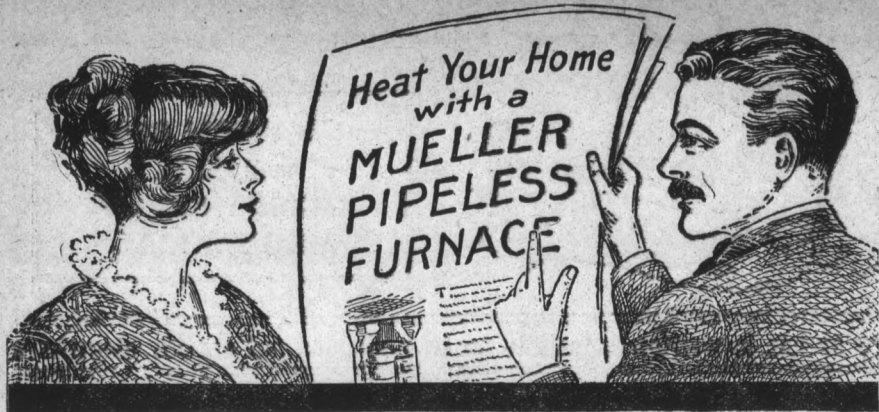
Interned German Steamer Convoyed from Newport to Philadelphia.



Belgian Soldiers Preparing Barbwire Entanglements to Impede the Enemy.

Copyright by Underwood & Underwood, New York





## Ask the Woman of the House

**WHO**, more than the woman of the household, will appreciate the comfort, cleanliness and coziness of a home heated by a *Mueller Pipeless Furnace*—the release from the dirt, drudgery and danger of the uncertain, air-contaminating stove or heater?

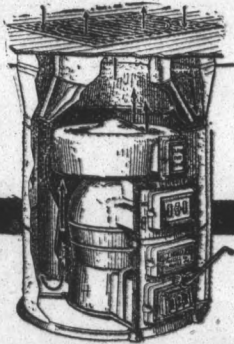
A *Mueller Pipeless* in your home means more uniform heat than stoves, purer air and better health. It costs less than a pipe furnace, is easily and cheaply installed in any house, old or new, without the muss, fuss and expense of pipes or flues.

The *Mueller Pipeless* heats your whole house, upstairs and down, from one register. Keeps you warm in the coldest weather. Burns coal, coke or wood. An all-round better heating system than stoves, at lower cost.

Nearly 60 years of successful furnace building back of the *Mueller Pipeless*. It is scientifically and substantially built of solid cast iron and will last a lifetime.

# MUELLER PIPELESS FURNACE

Write for free book on heating. Gives you all the facts about pipeless heating and the *MUELLER PIPELESS FURNACE*, full details of construction and pictures of installation. Shows how easily it can be applied to any home, old or new—how to know a good pipeless furnace or a poor one—what to look out for and what to avoid. Booklet sent free.



**L. J. MUELLER FURNACE COMPANY**  
195 REED STREET MILWAUKEE, WIS.

As we are makers of heating systems of all kinds since 1857—regular hot air pipe furnaces, steam or hot water boilers and vapor heating systems—we are in a position to give you honest advice on your heating requirements.

## Automobile Tires—BIG BARGAINS

Buy by Mail—Save 40%

You save money by buying from one of the largest Eastern tire houses. We buy surplus stock from high-grade tire manufacturers at big reductions and sell to you at one small profit. These tires are Firsts—only the serial number buffed, so you get same quality, same mileage—and look what you save—

FORD SIZES			
Plain Non-Skid Tubes			
30x3	\$6.25	\$6.95	\$2.00
30x3-1/2	7.95	8.95	2.35
Larger Sizes			
28x3	\$5.80	\$6.20	\$1.00
31x3-1/2	8.45	9.25	2.50

PAY AFTER EXAMINATION

We send C. O. D. subject to your inspection—You don't pay until you've seen the tires. In ordering state whether Clincher, Q. D., or S. S. 2 per cent discount if you prefer to send cash with order. (Our financial responsibility is assured by reliable bank references.)

SEND YOUR ORDER TODAY. We cannot guarantee against a raise in prices, due to threatened rubber shortage.

Philadelphia Motor Tire Co., Philadelphia, Pa.  
240 N. Broad St.

**Don't Do It!**

Don't waste your grain. Don't throw it over the fence, for the stock to lose one-fifth of it. Everyone knows that

**A Letz Grinder Saves 20%**

Grinds all grain and forage crops—cob corn with or without husk, alfalfa, clover, millet seed, even oat hulls—fine as dust in one grinding. One set of Letz self-sharpening, self-aligning, silent running plates grinds 1000 to 3000 bushels. Outwear 3 to 5 sets ordinary plates. Saving in plates soon pays for grinder. Ten days free trial. Feeding Book free.

**LETZ MANUFACTURING COMPANY**  
210 East Street CROWN POINT, INDIANA

**WANTED—AN IDEA.** Who can think of simple ideas they may bring you wealth. Write for "Needed Inventions" and "How to get Your Patent and Your Money." **RANDOLPH & CO., PATENT ATTORNEYS, DEPT. 67, WASHINGTON, D. C.**

**PATENTS That Protect and Pay** Send sketch or Model for search **BOOKS AND ADVICE FREE** **Watson E. Coleman, Patent Lawyer, Washington, D. C.** Mention the Michigan Farmer when writing Advertisers

## Ditching

Proper drainage means bigger crops—better farms. Make every acre pay more by ditching with

**The Martin** FARM DITCHER ROAD GRADER. It makes terraces; builds levees; grades roads. All steel. Reversible—throws dirt either side. Adjustable for narrow or wide cut. Try one 10 days FREE. **OWENSBORO DITCHER & GRADER CO., Inc., Box 310, Owensboro, Ky.** Branches—Kansas City—Denver

## Terracing

**PATENTS PROMPTLY OBTAINED**

Bought, sold, Patent Attorneys. Mechanical Engineers. 35 years experience. Unexcelled reputation. Book free, how to properly patent and turn ideas into cash. Send us your patent business before it's spoiled. "American Patent Market." Connections all countries. Main office: Carlson & Son, Dispatch Bldg., St. Paul, Minn.

ties. Their hats were in the ring and the battle was on. Some contended that the odor of sanctity hung heavily about Marshall, Calhoun County, and that there the capitol should be. Others urged that Marshall was so far south as to be in dangerous proximity to southern slavery promoters. Marshall declared that all to the north of them was a tenantless, abandoned wilderness. "Interior influence" flung at Detroit the challenge that no honest poor man could become governor, if the capitol should be retained at Detroit, because upon his munificent salary of fifteen hundred dollars per year, he could not afford the frippery necessary to a participation in the gay, gaudy life of Detroit's voluptuous four hundred; while on the other hand, if the capitol was located at one of the simpler interior villages, any poor but ambitious man could brush up his beaver, shake the horse hairs from his best homespun, tallow up his shoes and make a brave showing at the capitol city. The Detroiters allowed that the Marshallites were "snails" and the Marshallites said the Detroiters were "snippy." The war waxed merry and the disinterested onlookers laughed gleefully.

The bill had its ups and downs and nearly every village of the interior had its name presented, among them Lyons, Jackson, Battle Creek and Eaton Rapids. At one time it was agreed by a vote of thirty to thirty-eight to insert "Lyons in the County of Ionia," but by a skillful bit of parliamentary gerrymandering, Lyons was stricken out and the bill was again before the house. During the lengthy deadlock there was no end of bantering and buffoonery among the delegates.

The situation was humorous indeed, when it is realized that masterful plays and manipulations were going on before the face and eyes of an un-

seeing public. It is now generally believed that the upheaving force that lifted the capitol from Detroit to Lansing was a real estate deal in which Detroit's own citizens were largely interested. Certain Detroiters owned a tract of land in the vicinity of Corunna and believing they had the necessary strength to land the capitol at that place, were as active as hornets in the promotion of its removal from Detroit. However, they reckoned without their host. There were other parties equally active for its removal, but they were very quiet as to where it should go. Their landed interests were all in Lansing township. So while the name of nearly every village and town in Central Michigan had its name presented, the real fight, in the still water below the surface, was between Corunna and what is now Lansing. The Lansing faction was divided among themselves for a time, as a part of the promoters owned land on one side of the school section on which the capitol was eventually located, and the opposing faction had land on the other side. However, these opposing parties agreed among themselves to the locating of the capitol on the section between them, they pulled together and were too strong for the Detroit-Corunna crowd and secured its location where it now is. By working with New York parties who had large landed holdings in the vicinity of Lansing and who knew that the locating of the capitol at that place meant a fortune for them, they formed a powerful lobby, who engaged in booming the Lansing proposition.

It is stated that the proposal to fill the blank with "in the township of Lansing," was considered a great joke and no debate was had upon it, the question being put at once and carried, even the Wayne delegation voting for it. The joke proved to be on them, for

(Continued on page 385).

## The Flood By ZONA GALE

(First installment last week).

She spoke up, like them little women do sometimes that you ain't ever looked upon as particularly special when it comes to taking a stand.

"Why, yes," she says. "They ain't a woman in the village that would stand that kind of dealing, if they only knew. And we," she adds tranquil, "could see to that."

Silas give the date-word he was making a throw over on to the sugar barrel, and made a wild gesture with a handful of toothpicks.

"Women," he says, "dum women. If it wasn't for you women swarming over the world like different kinds of—of—of—noxious insects, it would be a regular paradise."

"Sure it would," I says logical, "because there wouldn't be a man in it to mess it up."

Silas had just opened his mouth to reply, when all of a sudden, like a letter in your box, somebody come and stood in the doorway—a man, and called out something, short and sharp and ending in "Come on—all of you," and disappeared out again, and we heard him running down the street. Then we say two-three more go running by the door, and we heard some shouting. And Silas, that must have guessed at what they said, he started off behind them, dragging on his sear-sucker coat and holding his soft felt hat in his mouth, it not seeming to occur to him that he could set it on his head till he was ready to use it.

"What's the matter?" I says to Mis' Holcomb. "They must be getting excited because nothing ever happens here. They ain't nothing else to get excited over that I can think of."

Then we see more men come running, and their boots clumped down on the loose board walk with that special clump and thud that boots gets to 'em when they're running with bad news, or hurrying for help.

"What is it?" I says, getting to the door. And I see men begin to come out of the stores and get in knots and groups that you can tell mean trouble of some kind, just as plain as you can tell that some portraits of total strangers is the portraits of somebody that's dead. They look dead. And them groups looked trouble. And then I see Timothy Toplady come tearing down the road in his spring wagon, with his horses' check reins all dragging and him lashing out at 'em as he stood up in the box. Then I run right out in the road and yelled at him.

"Timothy," I says, "what's the matter? What's happened?"

He drew up his horses, and threw out his hand, beckoning angular.

"Come on," he says, "get in here—get in quick."

Then he looked back over his shoulder and see Mis' Merriman that had come out to her gate with Mis' Sykes, and they was both out on the street, looking, and he beckoned, wild, to them; and they come running.

"Quick" says Timothy. "The dam's broke. They've just telephoned everybody. The Flats'll be flooded. Come on and help them women load their things."

I don't remember any of us saying a thing. We just clomb in over the back-board of Timothy's wagon, him reaching down to help us, courteous, and we set down on the bottom of the wagon—Mis' Holcomb and Mis' Sykes, them two enemies, and Mis' Merriman and me—and we headed for the Flats.

I remember, on the ride down there, seeing the street get thick with folks—in a minute the street was black, with everybody, all hurrying toward what was the matter, and all veering out and swarming into the road—somehow, folks always flows over into the road when anything happens. And men and women kept coming out of houses, and calling to know what was



the matter, and everybody shouted it back at them so's they couldn't understand, but they come out and joined in and run anyway. And over and over, as he drove, Timothy kept shouting to us how he had just been hitching up when the news come, and how his wagon was a new one and had ought to be able to cart off five or six loads at a trip.

"It can't hurt Friendship Village proper," I remember his saying over and over too, "that's built high and dry. But the whole Flats'll be flooded out of any resemblance to what they have been before."

"Friendship Village proper," I says over to myself, when we got to the top of Elephant Hill that let us look over the Pump pasture and away across the Flats, lying idle and not really counted in the town till it come to the tax list. There was dozens of little houses—the Marshalls and the Betts's and the Rickers's and the Hennings and the Doles and the Haskitts, and I donno who all. All our washings was done down there—or at least the washings was of them that didn't do them themselves. The garden truck of them that didn't have gardens, the home-grown vegetables for Silas's store, the hired girls' homes of them that had hired girls, the rag man, the scissors grinder, Lowry that canes chairs and was always trying to sell us tomato plants—you know how that part of a town is populationed? And then there was a few that worked in Silas's factory, and an outlaying milkman or two—and so on. "Friendship Village proper," I says over and looked down and wondered why the Flats was improper enough to be classed in—laying down there in the morning sun, with nice, neat little dooryards and nice, neat little wreaths of smoke coming up out of their chimneys—and the whole Mad river loose and going to swirl down on it and lap it up, exactly as hungry for it as if it had been Friendship Village "proper."

They was running out of their little houses, up towards us, coming with whatever they had, with children, with baskets between 'em, with little animals, with bed-quilts tied and filled with stuff. Some few we see was busy loading their things up on to the second floor, but most of 'em didn't have any second floors, so they was either running up the hill or getting a few things on to the roof. It wasn't a big river—we none of us or of them was afraid of any loss of life or of houses being tipped over or like that. But we knew there'd be two-three feet of water over their ground floors by noon.

"Land, land," says Mis' Sykes, that's our best housekeeper, "and I s'pose it's so late lots of 'em had their spring cleaning done."

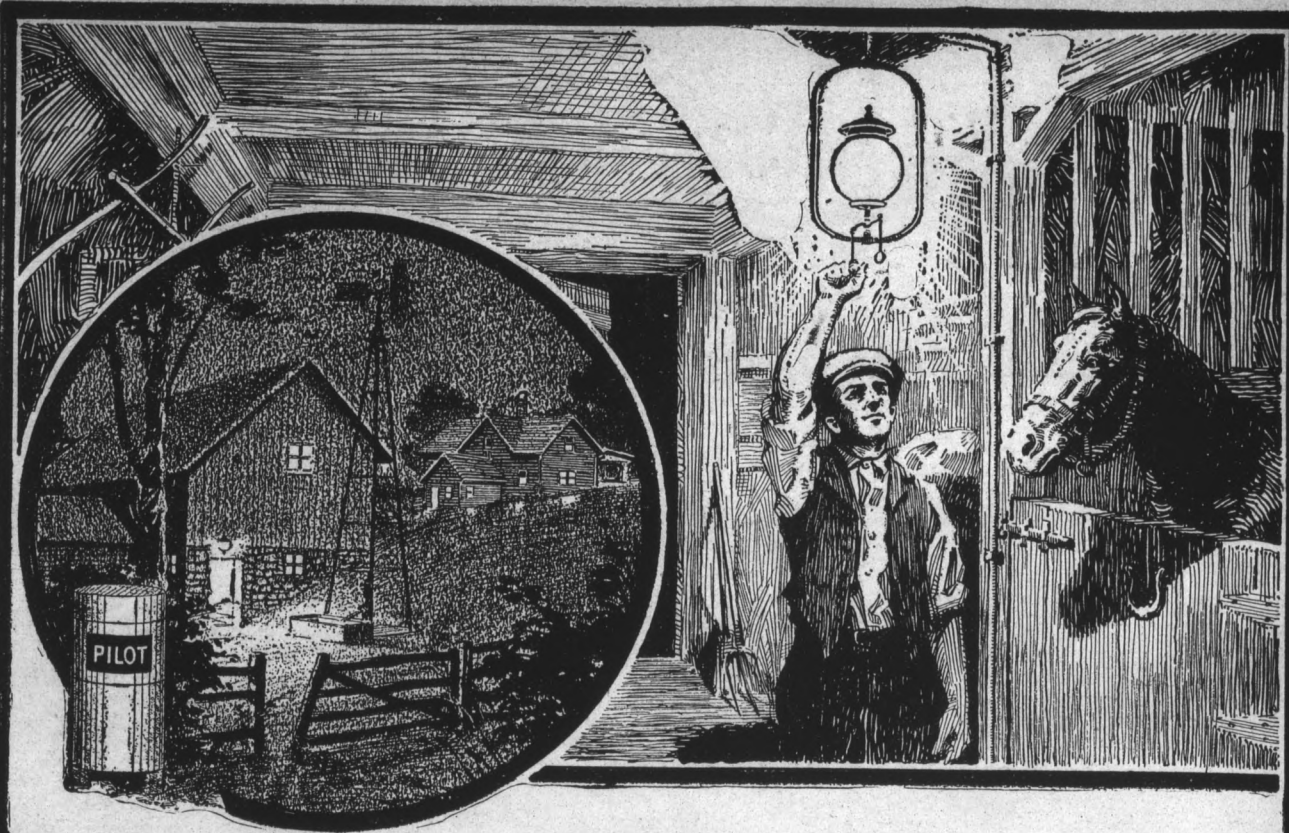
"I was thinkin' of that," says Mis' Holcomb, her enemy.

"But then it being so late most of 'em has got their winter vegetables et out of their sullars," says Mis. Merriman, trying to hunt out the bright side.

"That's true as fate, Mis' Merriman," I remember I says, agreeing with her fervent.

And us two pairs of feuds talked about it, together, until we got down into the Flats and begun helping 'em load.

We filled up the wagon with what they had ready, tied up and boxed up and in baskets or thrown in loose, and Timothy started back with the first load, Mis' Haskitt calling after him pitiful to be careful not to stomp on her best black dress that she'd started off with in her arms, and then trusted to the wagon and gone back to get some more. Timothy was going to take 'em up to the top of Elephant Hill and dump 'em there by appointment, and come back for another load, everybody sorting out their own out of the pile later, as best they could. While he was gone we done things up for folks like wild and I donno but like mad, and had a regular mountain of 'em out on the walk when he come driving



## Some Farmers Still Use Oil Lanterns to Light Their Barns

Of course — back in the old days — 30 years ago — you couldn't get anything better. But—these last few years have so changed living conditions that up-to-date farm families won't be satisfied any longer—with poor light.

The modern farmer is quick to see the value of good light—its safety and the convenience it brings him and his family. There are now hundreds of thousands of farmers who have chosen the

## Pilot-Carbide-Outdoor Lighting and Cooking Plants

for it gives them not only all the fine, bright, inexpensive light they can use—but cooking fuel as well.

This wonderful machine stands out of doors—on top of the ground, anywhere. It has totally changed the old-fashioned methods of barn and house lighting.

**You can now flood your barn with safe brilliant light—instantly. No matches needed. No dangerous lanterns to tip over or upset.**

Think what this means to you! Think how much better and quicker you can work, with plenty of good bright light in place of a smoky, dim oil lantern.

You will find the barn lighting feature alone worth the entire investment for the PILOT. And its use in the house, as well,

means added happiness—safety—comfort and convenience for your whole family.

Just because your father and grandfather used oil lamps and lanterns is no reason why you should, any longer, put up with their danger and poor light. Light the modern way, the safe way, with the PILOT.

Find out today about this modern light plant. You owe it to yourself. You owe it to your good wife and to your children. You can well afford the little it will cost.

Write for our illustrated catalogs and descriptive booklets giving all the facts.

**A. R. GRAHAM, Supervisor**  
810 Mason St., FLINT, MICH.

**OXWELD ACETYLENE COMPANY, CHICAGO**  
Largest Makers of Private Lighting and Cooking Plants in the World.

# Studebaker

Has Been Continuously Making

## WAGONS—BUGGIES—HARNESS

for Every Farm Use Since 1852

**SEE THE STUDEBAKER DEALER**

When Writing to advertisers please state that you saw their ad. in The Michigan Farmer.

## Seeds Wanted

Soy Beans, Cow Peas, Field Peas, Vetch, Sweet Clover, Alfalfa. **Edw. E. EVANS, West Branch, Michigan.**

## CLOVER SEED WANTED

Red, Mammoth and Alsike also Timothy and Alsike mixed. Send samples and prices to **O. M. SCOTT & SONS CO., 16 Sixth St., Marysville, Ohio.**

**WE WANT VETCH.** SEND US SAMPLES. **YOUNG-RANDOLPH SEED CO., Owosso, Mich.**

**Northern Grown Hairy Vetch Seed.** **DORR D. BUELL, Elmira, Michigan.**

**Potatoes For Sale** In local shipments of 5 bu. or more. Write for prices to **Faye H. Webster, Dighton, Michigan.**



"It's not so important that WE are for Mr. Wilson—  
MR. WILSON is FOR US."

# President Wilson's Record of Service

—To the Farmer—To the Country—To Humanity

## Demands Your Support

WE have never had a man in the White House who so thoroughly represented ALL the people of this country as the man who is there today. Representing no interest of special privilege, he has the interest of ALL at heart. He has been steadily and steadfastly "on the job" for us. Even now when the Republicans are doing all in their power to befog the issue, criticize and misrepresent his actions, impugn his motives—he has gone steadily on, giving his time to the duties of his office rather than campaigning for re-election.

President Wilson does not ask for a vindication of his administration by re-election to office. He does not ask for four more years for personal satisfaction—but the country demands it, because the country needs him.

He stands on his record and his record is clean—a record of service—a record of deeds, not words. Space is too limited to give it in full but as an illustration, look at this record of service to you, the farmer. Then remember that the same keen insight into conditions—the same rare courage that has achieved this bettering of conditions for you—has guided the administration's legislation for the benefit of the whole country and humanity. Here is the record:

### President Wilson Has Maintained Peace With Honor

No greater service was ever rendered to any country by any man in any time. This alone warrants your support of him. But this is not all. On the record of his administration's service to you, see what has been accomplished. In brief, here is the record:

- 1—Appreciation of the importance of agriculture has been shown through greatly and intelligently increased appropriations for its support.
- 2—Greatly increased provision has been made, through the enactment of the Co-operative Agricultural Extension Act, for conveying agricultural information to farmers.
- 3—Through the Office of Markets and Rural Organization, systematic provision has, for the first time, been made toward the solution of problems in that important half of agriculture which concerns distribution, marketing, rural finance and rural organization. The appropriations for this office, including those for enforcing new laws designed to promote better marketing, have been increased to \$1,200,000.
- 4—The United States Grain Standards Act will secure uniformity in the grading of grain and enable the farmer to obtain fairer prices for his product.
- 5—The United States Warehouse Act will enable the Department of Agriculture to license bonded warehouses in various states. It will lead to better storage facilities for staple crops and make possible the issuance of reliable warehouse receipts which will be easily negotiable.
- 6—The Federal Aid Road Act will conduce to the establishment of better highways and better marketing.
- 7—The Federal Reserve Act benefits the farmer by guaranteeing better banking, safeguarding the credit structure of the country and preventing panics, making larger provision for loans through national banks on farm mortgages and by giving farm paper a maturity period of six months.

#### The Federal Farm Loan Act

- 8—It was essential, however, that banking machinery be devised which would reach intimately into the rural districts, that it should operate on terms suited to the farmers' needs, and should be under sympathetic management. The need was for machinery which would introduce business methods into farm finance, bring order out of chaos, reduce the cost of handling farm loans, place upon the market mortgages which would be a safe investment for private funds, attract into agricultural operations a fair share of the capital of the nation, and lead to a reduction of interest. These needs and these ideals have been met by the enactment of the Federal Farm Loan Act.

So much for legislation. This is not all, but it is enough to indicate what has been accomplished. Now consider what just one recent act of President Wilson has done for the farmer.

### Preventing Nation-Wide Railroad Strike Saved Millions!

Despite the perverted arguments of opposition spell binders and fact twisters, the cold figures show that President Wilson's work in preventing a nation-wide railroad strike saved tens of millions of dollars for the farmer, without injustice to any class.

Take the value of the 1915 crop of apples, peaches and potatoes (comparatively perishable crops). The 1916 figures will greatly exceed them. Had the strike lasted only a week, shipments would have been thrown off schedule for a month or more—and at a minimum, 33% per cent of these crops would have been ruined. In the States of Washington, Oregon, California, Idaho, Montana, Utah, Colorado, Kansas and Missouri alone the value of 1915 Apples, Peaches and Potatoes was \$82,875,380. A railroad stoppage of one week would have meant a dead loss to FARMERS of at least \$27,000,000.

The Republican Party buncoed and bamboozled the farmer—that Wall street and allied interests might be benefited. The Wilson administration has fought the farmer's battles for him. The 1915 value of farm crops and livestock products amounted to \$10,500,000,000, as against \$9,300,000,000 in 1912—a gain of \$1,200,000,000, notwithstanding Republican prediction that Democratic administration would ruin the farmer and the prices of his products.

### The Farmer Is Too Sensible to Exchange the Substance for the Shadow

Too Wise To Give Up Prosperity for Promises. That's why the Farmer Will Vote to Retain President Wilson

This advertisement is published  
and paid for by the  
Democratic National Committee,  
42nd Street Building, New York

back; but when we got that all loaded on, out come Mis' Ben Dole, running with a whole clothes bars full of new ironed clothes and begged Timothy to set 'em right up on top of the load, just as they was, and representing as they did two dollars' worth of washing and ironing for her, besides the value of the clothes that mustn't be lost. And Timothy took 'em on for her and drove off balancing 'em with one hand and all the clothes blowing gentle in the breeze.

I looked over to Mis' Holcomb, all frantic as she was, and it was so she looked at me.

"That was Ben Dole's wife that Timothy done that for," I says, "to be sure we meant the same thing. 'Just as if he hadn't never harmed her husband's cement plant.'"

"I know," says Mis' Holcomb. "Don't that beat the very day to a froth?" and she went on emptying Mis' Dole's bureau drawers into a bed-spread.

By the time the fourth load or so had gone on, and the other wagons that had come was working the same way, the water was seeping along the lower road, down past the wood-yard. More than one as saying we'd ought to begin to make tracks for the high ground, because likely when it come, it'd come with a rush. And some of us had stepped out on the street and was asking Silas, that you kind of turn to in emergency, because he's the only one that don't turn to anybody else, whether we hadn't better go, when down the street we see a man come tearing like mad.

"My land," I says, "it's Bitty Marshall. He wasn't home. And where's his wife? I ain't laid eyes on her."

None of us had seen her that morning. And us that stood together broke into a run, and it was Silas and Mis' Merriman and me that run together, and rushed together up the stairs of Bitty's little grocery, to where he lived, and into the back room. And there set Bessie Marshall in the back room, putting her baby to sleep as tranquil as the blue sky and not knowing a word of what was going on, and by the window was Bitty's old mother, shell-ing pop-corn.

I never see anybody work like Silas worked them next few minutes. If he'd been a horse and a giant made one he couldn't have got more quick, necessary things out of the way. And we done what we could, and it wasn't any time at all till we was going down the stairs carrying what few things they'd most need for the next few days. And when we stepped out in the street, the water was an inch or more all over where we stood, and when we'd got six steps from the house and Bitty had gone ahead shouting to the wagon, Bessie Marshall looked up at Silas real pitiful.

"Oh, Mr. Sykes," she says, "there's a coop of little chickens and their mother by the back door. Couldn't we take 'em?"

"Sure," says Silas, and when the wagon come he made it wait for us, and when the Marshalls and the baby and Mis' Merriman was seated in it, and me, he come running with the coopful of little yellow scraps, and we was the last wagon to leave the Flats and to get up to Elephant Hill again.

"But, oh," says Mis' Merriman, "it seems like us women could do such a little bit of rescuing. Oh, when it's a flood or a fire or a runaway, I do most question Providence as to, why we wasn't all born men."

You know how it is, when a great big thing comes catastrophing down on you, it just eats up the edges of the thing you think with, and leaves you with nothing but the wish-bone of your brain operating, kind of flabby. But when we got up on top of Elephant Hill, where was everybody—folks from the Flats, and a good deal of what they owned put into a pile, and the folks from Friendship "proper" come to watch—there was Mis' Timothy Toplady already planning what to do, short off. Mis' Toplady can always connect up what's in her head with what's out-

side of it and—what's rarer still—with what's lacking outside of it.

"These folks has got to be fed," she says, "for the days of the high water. Bed and breakfast of course we can manage among us, but the other two meals is sure going to be some of a trick. So be Silas would leave us have post office hall free, we could order the stuff sent in right there, and all turn in and cook it."

"Oh, my," says Mis' Holcomb, soft, to me, "he'll never do that. He'll say it'll set a precedent, and what he does for one he'll have to do for all. It's a real handy dodge."

"Well," says Mis' Merriman, "leave him set a precedent for himself for floods. We won't expect it off him other."

"I ain't never yet seen him," I says, "carrying a chicken coop without he meant to sell chickens. Mebbe he's got a change of heart. Let's ask him," I says, and adds low to Mis' Toplady that I'd asked Silas for so many things that he wouldn't give or do that I could almost do it automatic, and I'd as lives ask him again as not.

It wasn't but a minute till him and Timothy come by, each estimating how fast the river would raise. And I spoke up right then.

"Silas," I says, "had you thought how we're going to feed these folks till the water goes down?"

I fully expected him to snarl out something like he usually does, about us women being frantic to assume responsibility. Instead of that he looked down at us thoughtful.

"Well," says he, "that's just what I've been studying on some. And I was thinking that if you women would cook the stuff, us men would chip in and buy the material. And wouldn't it be some easier to cook it all in one place? I could let you have the post office hall, if you say so."

"Why, Silas," I says, "Silas . . ." And I couldn't say another word. And it was the rest of 'em let him know that we'd do it. And when they'd gone one,

"Do you think Timothy sensed that?" says Mis' Toplady, meditative.

"I donno," says I, "but I can see to it that he does."

"I was only thinking," says she, "that we've got seven dozen fresh eggs in the house, and we're getting six quarts of milk a day now . . ."

"I'll recall 'em," says I, "to his mind."

But when I'd run ahead and caught up with 'em, and mentioned eggs and milk suggestive, in them quantities,

"Sure," says Timothy, "I just been telling Silas he could count on 'em."

And that was a wonderful thing, for we one and all knew Timothy Toplady as one of them decanter men that the glass stopper can't hardly be got out. But it wasn't the most wonderful—for Silas spoke up fervent—ferventer than I'd ever known him to speak:

"They can have anything we've got, Calliope," he says, "in our stores or our homes. Make 'em know that," he says.

It didn't take me one secunt to pull Silas aside.

"Silas," I says, "oh, Silas—is what you just said true? Because if it's true—won't you let Bitty keep his store?"

He looked down at me, frowning a little. One of the little yellow chicks in the coop got out between the bars just then, and was just falling on its nose when he caught it—I s'pose bill is more biologic, but it don't sound so dangerous—and he was tucking it back in, gentle, with its mother, while he answered me, testy:

"Lord, Calliope," he says, "a flood's a flood. Can't you keep things separate?"

"No, sir," I says, "I can't. Nor I don't believe the Lord can either."

(Concluded next week.)

We are learning that no one can see all of truth, that our doubting neighbor may be as honest as we are, that as many causes tend to make men think differently as alike, and we are also learning that the main thing is to cast out Satan.—T. T. Munger.



## MOVING OUR STATE CAPITOL.

(Continued from page 382).

the bill was immediately sent to the senate. Panic seized all the aspiring villages and lobbying began in dead earnest. Every tactic known to the wary politician was resorted to in order that the bill might be amended and returned to the house for the usual "killing off" but all to no avail. The bill passed the senate, was presented to the governor, who signed it, and it became a law.

Mr. Levi Bishop in his memoirs, says that when the fact became known that the capitol was really to be located at Lansing, there went up from Detroit a loud and prolonged wail to this import: "What, shall we take the capitol from a large and beautiful city and stick it down in the mud on the banks of the Grand River, amid choking miasma, where the howl of wolves and the hissing of massasaugas and groans of bullfrogs resound to the hammer of the woodpecker and the solitary note of the nightingale?" Mr. Bishop further states that one disgusted member offered a new section to the bill as follows: "The sum of one hundred dollars is hereby appropriated out of the five mill tax to erect guideboards to direct members of the next legislature to the seat of government in the state of Michigan."

A supplemental act provided for the appointment by the governor of three commissioners to select a site, and Rev. F. C. Blades, of Detroit, an early circuit rider of Genesee county, tells of his meeting with one of these commissioners and of the driving of the first stake for the capitol. Rev. Blades states that his circuit took him into Ingham county, and having learned that the capitol of the state was to be located somewhere in the wilds of Lansing Township, and being directed by one of the hands working at Page's Mill, he made his way to the section designated as the capitol site. The spot was a beautiful knoll in a dense wilderness and Rev. Blades thought it a crime to mar the silence and destroy so much natural beauty with a babbling town. As he stood there, a man emerged from the wilderness who proved to be Mr. Glen, one of the commissioners for the location of the capitol. The surprise was mutual. Mr. Glen stated he was looking for a point to locate his capitol, and Rev. Blades said he was looking for a congregation to listen to the mellow music of his voice. They both agreed that the prospects were much better for finding Mr. Glen's point than Rev. Blades' congregation. However, Mr. Glen volunteered to produce the congregation if Mr. Blades would find and select the point, which he did, and drove a stake on the exact ground where our capitol now stands. Mr. Glen kept his word by calling together the Page Mill hands and their families, to whom Mr. Blades talked for half an hour, and this, in all probability, was the first sermon ever preached in the city of Lansing.

The naming of the capitol city was attended with much hilarity. Among the proposed titles were Bushbridge, Thornbush, Kinderhook and the like. One conscienceless soul even proposed naming it Pewanogowink. The bill as it went before the house carried the tuneful title of "Aloda," and so it passed the house, but the matter-of-fact senate changed it to Michigan and Michigan it became. However, this petulant and audacious youngster was not satisfied with this unassuming name and immediately set about to change it. Like most ingrates who fly in the face of providence and their progenitors, it narrowly escaped the calamity of being dubbed "Okema" before it was finally awarded the decent, civilized name of Lansing, which it has since retained.

When a man can trust his own heart and those of his friends, tomorrow is as good as today.—Stevenson.

Discipline no less than concentration is a cure for a weak will.—Clarke.



## When Your Battery Needs a Drink

A little thing like drinking water for a storage battery may not seem important, but—

If you use water which contains minerals, these minerals will be deposited on the battery plates and cause serious damage.

Pure water is what your battery must have. That means either distilled or rain water.

The soft, pure water that used to flow from a shingle roof into the old rain barrel was all right.

But in these days of metal and slate roofs and metal gutters, the best plan is to use *distilled water*. It costs little and is absolutely safe.

### Other Things You Should Know

Look up the nearest Willard Service Station and get acquainted with the storage battery expert in charge. He'll gladly give you valuable hints on keeping out of battery troubles—and if you do need repairs or other help, he's the man to go to for his one biggest job is to give satisfaction to Willard owners.

Ask about our special free service to new Willard owners.

## Willard Storage Battery Company

Cleveland, Ohio

NEW YORK: 228-230 W. 58th St. SAN FRANCISCO: 1433 Bush St.  
CHICAGO: 2524-34 So. Wabash Ave. MINNEAPOLIS: 36-38-40 So. 10th St.  
ATLANTA: 8-10 East Cain St. INDIANAPOLIS: 316-318 North Illinois St.  
DETROIT: 736-38-40 Woodward Ave.

### SOUTHWESTERN DISTRIBUTORS:

Willard Storage Battery Company of Texas, Dallas, Texas.

Direct Factory Representatives in Philadelphia, Boston, Kansas City, Omaha, Seattle.  
Service Stations in all Principal Cities in the United States and Canada.

Willard Storage Batteries are for sale by car dealers, garages, and all Willard Service Stations and Factory Branches.

# Willard STORAGE BATTERY

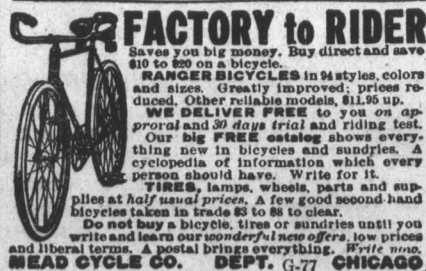


## HOOSIER Stoves Ranges FREE Heaters

To try in your own home 30 days free, no matter where you live. Show your friends. Send it back at our expense if you do not want to keep it. Hundreds of thousands in daily use. Perfect bakers, efficient heaters, made of high grade material, beautifully finished, smooth design, guaranteed for years by our Two Million Dollar Bond.

Ask your dealer to show you "HOOSIER" Stoves and Ranges. Write for our big free book showing photographs describing large assortment of sizes and designs of cast and steel ranges, cast cooks, soft and hard coal heaters and base burners to select from, explaining our free trial offer. Send postal today. Write name and address plainly. No obligations.

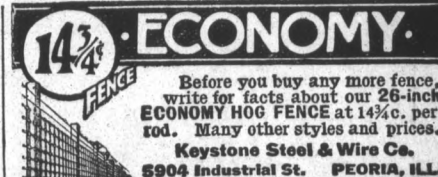
HOOSIER STOVE COMPANY  
131 State St. MARION, INDIANA



**FACTORY to RIDER**  
Saves you big money. Buy direct and save \$10 to \$20 on a bicycle.  
RANGER BICYCLES in 4 styles, colors and sizes. Greatly improved; prices reduced. Other reliable models, \$11.50 up.  
WE DELIVER FREE to you on approval and 30 days trial and riding test. Our big FREE catalog shows everything new in bicycles and sundries. A cyclopedia of information which every person should have. Write for it.  
TIRES, lamps, wheels, parts and supplies at half usual prices. A few good second hand bicycles taken in trade \$3 to \$8 to clear.  
Do not buy a bicycle, tires or sundries until you write and learn our wonderful new offers, low prices and liberal terms. A postal brings everything. Write now.  
MEAD CYCLE CO. DEPT. G-77 CHICAGO



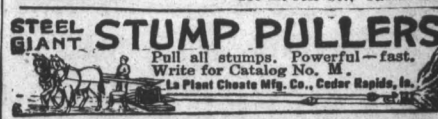
**FREE**  
Wonderful Money Saving Fence Book. Over 150 Styles. Gates-Steel Posts-Barb Wire. 13¢ Per Rod Up.  
DIRECT FROM FACTORY-FREIGHT PAID  
All heavy DOUBLE GALVANIZED WIRES. 13¢ per rod up. Get free Book and Sample to test.  
THE BROWN FENCE & WIRE CO.,  
Dept. 40 Cleveland, Ohio



**14 3/4" ECONOMY.**  
Before you buy any more fence, write for facts about our 26-inch ECONOMY HOG FENCE at 14 3/4¢ per rod. Many other styles and prices.  
Keystone Steel & Wire Co.  
5904 Industrial St. PEORIA, ILL.



**"Best" Hand Lantern**  
A powerful portable lamp, giving a 300 candle power pure white light. Just what the farmer, dairyman, stockman, etc. needs. Safe—Reliable—Economical—Absolutely Rain, Storm and Bug proof. Burns either gasoline or kerosene. Light in weight. Agents wanted. Big Profits. Write for Catalog. THE BEST LIGHT CO.  
280 E. 5th St., Canton, O.



**STEEL STUMP PULLERS**  
Pull all stumps. Powerful—fast. Write for Catalog No. M.  
Le Plant Cheate Mfg. Co., Cedar Rapids, Ia.

When writing to advertiser please mention The Michigan Farmer.



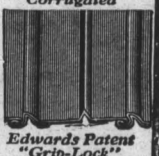
## Lowest Prices Ever Made on World's Best ROOFING Freight Paid

We sell direct to you and save you all middlemen's profits. We ship everything—roofing, siding, ceiling, wall boards, etc.—Freight Prepaid. We cannot quote you our low factory prices here, but send for our Big Roofing Book and see for yourself that our prices are lowest ever quoted.

**"Reo" Metal Shingles** cost less, yet outlast three ordinary roofs. Need no painting or repairs. Rot—fire—weather—rust-proof. Insurance cost is less—guaranteed against lightning.

**Edwards Exclusive Tightcote Process** makes Edwards Metal Shingles, Metal Spanish Tile, Reo Cluster Shingles, Grip-Lock Roofing and other Roofings, Ceiling, Siding, etc., absolutely rust-proof. Not a pin point of space exposed to weather.

**Our Patent Interlocking Device** prevents warping, buckling or breaking. Protects nail holes—nails are driven through under layer; not exposed to weather. No special tools required. Easy to lay.



**\$69.50 and up**  
Lowest prices on Ready-Made Fire-Proof Steel Garages. Set up anywhere. Send postal for Garage Book showing styles, sizes.

**Edwards Products Stand the Galvanizing Test!**  
No other galvanizing can compare with it. Bending, hammering or lightning won't cause it to flake, peel or crack.

**Get FREE Book** and you'll find that our prices are lowest ever made for World's Best Roofing. Coupon brings Free Samples, Prices and Book. Ask for Book No. 1067.

**The Edwards Mfg. Co.**  
1017-1067 Pike St., Cincinnati, O.  
Please send FREE Samples, Freight Paid prices and World's Greatest Roofing Book No. 1067.

Name.....  
Address.....  
Largest Makers of Sheet Metal Products in the World

## Vaseline Carbolated Petroleum Jelly

A safe, convenient antiseptic for home use in dressing cuts, bruises, sores, insect and animal bites.

Sold at drug and general stores everywhere.

Write for illustrated booklet describing the various "Vaseline" Preparations and their many uses. Mailed free on request, together with "Vaseline" Poster Stamps.



**CHESEBROUGH MFG. CO.**  
(Consolidated)  
33 State Street, New York City

## More Light Than 20 Lamps



that burn kerosene, and less trouble and far more economical than any other. No wicks to trim, no chimneys to clean, no greasy oil to handle. No batteries or engines to fuss with. No smoke, no soot, no odor. Nothing to get out of order.

### The Coleman AIR-O-LITE

Is a beautifully shaped and finished portable table lamp that makes and burns its own gas. Gives 300 candle power at only one-third of a cent per hour. Absolutely safe. Won't explode and no danger if tipped over. Ask your dealer or write for catalog showing many beautiful styles.

**The Coleman Lamp Co.**  
106 Summit St., Toledo, Ohio  
Wichita, Kas., St. Paul, Minn.,  
Dallas, Tex., Chicago, Ill.

Buy Your **COFFEE** WHOLESALE IN 5-LB LOTS  
Get the BEST and SAVE 10 cts per pound.  
WE PAY POST, EXPRESS or FREIGHT  
IF YOU LOVE GOOD COFFEE SEND FOR PRICE LIST  
**JEVNE COFFEE CO.** (Est. 1881) Coffee Specialists  
Dept. 7, 2855-57 W. Madison St., CHICAGO.

## Woman and Her Needs

### The Terrible Tyranny of Weakness

FASHIONS in women change almost as frequently as fashions in clothes. For instance, the clinging vine type is now quite passe, although not altogether obsolete. It still flourishes in some parts, where a woman has not awakened to the fact that helpless femininity is no longer popular with either women or men. Indeed, if our fathers and grandfathers told the truth, I believe we would find that this style never was popular with men. I am firmly convinced that those dear old gentlemen endured, rather than enjoyed, the clinging vine and sturdy oak style of living. Small wonder that some of them as a sort of compensation became despots. Better this than to be smothered by the clinging arms of the vine.

However, as I said, the clinging vine is no longer popular, which is a big score in favor of suffrage. The women who demanded equal rights were clever enough to know that if they were to be man's equals in civic privileges they must show themselves his equal in every way. Hence has arisen the independent woman, capable of standing squarely on her own feet and directing her own affairs with discretion. Most women we meet nowadays are of this saner sort, though, as I said, there still linger a few specimens of the old school, women who rule by weakness. It may be husband, it may be son, who is the victim. But by the terrible tyranny of weakness he is reduced to a vassal state, more pitiable than even the antis picture poor man if women should get the vote.

A man died recently in the prime of life, but he was glad to die and everyone who knew him well realized it. There was much to live for, friends, a good profession, a little fame, but—there was the tyrant. In this case it was his mother. All his life he had been in bondage to her whims because she chose to pose as helpless. Although possessed of two good strong legs and a normal brain this mother would not go out alone. She must always be accompanied by her son. To such an extreme did the mother carry her tyranny that she would not even go shopping alone. The son had to let business go when she felt like making a tour of the stores and patiently trail after her from ribbon counter to underwear department, conscious meanwhile of the amused glances of shoppers who watched him helping match samples.

Of course he never married. How could he when his mother had to have his help in everything? Someone had to unbutton her shoes, she was too delicate to bend, someone must see that her brushes and combs and negligees were laid out, and as there was no one else who would do it, Hiram was the victim.

They lived four miles from Hiram's work, in an old house which took 15 tons of coal to heat and had a 50-foot stretch of walk to clean of snow every winter. Hiram wanted to take a small flat down town near his office, but mother could never bear to live in a building with so many people who might be all right or might not. There would have been no furnace to care for nor walks to clean, and work would have been just ten minutes away for Hiram instead of 60, but mother was delicate and couldn't be crossed.

Hiram was a social being and wanted company. Mother couldn't stand it to meet strangers and her old friends got on her nerves. This was because they weren't impressed by her weakness and quite openly hinted that Hiram was a fool and she was a selfish thing. So she snubbed the old friends

and refused to make new, until she and Hiram had the house alone.

Mother's weakness over-reached itself at last. Hiram came home one night, an hour's ride on a poorly heated car, in a hard snowstorm. Next morning he had a cold, the furnace fire was out and the walks had to be cleaned. On the second the doctor said it was pneumonia and five days later they took him out to Elmwood.

Friends wondered what mother would ever do. Some prophesied that she would follow Hiram in a month. She didn't. She moved downtown into one of the detested apartment houses, took three boarders, went to market every morning at four o'clock in summer and six in winter, and harried the hucksters into giving her rock-bottom prices. She does all the work for her enlarged family and shows none of the symptoms of that delicate health she enjoyed for years.

I could enumerate several wives who have lived much the same sort of life. While husband was living they were unable to walk a block, there must always be a carriage or taxi to take them about. They were too weak to bother about finances, so they simply bought what they wanted, had it charged, and left the bills for husband to untangle and settle, if he could, at the end of the month. Every attempt on his part to get them to co-operate was squelched by a fainting fit or a week in bed with nurses and doctors to pay for, until finally the husband surrendered to the tyranny of weakness and became the patient slave.

But when time widowed these women, their weakness dropped off at the funeral. When there was not a wage earner to provide carriages they suddenly discovered they could walk for miles. And their financial education blossomed sufficiently for them to go forth and earn their own living. In fact, they showed a positively uncanny knowledge of the purchasing power of a dollar, and pinched each one until the eagle screamed.

Many a man is living in bondage today because he can not fight weakness, real or assumed. A wife who would demand submission and insist upon getting it, he might defy. But he can not stand up against tears and headaches, when reinforced by hysterics and fainting spells. Even a look of resignation brings him to his knees. He is persuaded that his wife is delicate, and needs unusual care and he must humor her. Thus her weakness, real or assumed, becomes her strength and she rules absolutely.

And it is tyranny impossible to escape from. Chafe against it as he may, the idea that "we who are strong ought to bear the burdens of the weak," is so inbred that he never thinks of rebelling. St. Paul really should have written another verse setting forth the duty of the weak towards the strong. They certainly need advise.

DEBORAH.

### HOW TO KEEP CANNAS, DAHLIAS AND GLADIOLAS.

Cannas, dahlias and gladiolas are all classed as tender perennials, that is, plants that live and bloom year after year but are not able to withstand the cold winters. Freezing of the root or bulb destroys them. These plants may be allowed to grow until the first heavy frost comes, killing the crops. Attention should then be given them right away.

For cannas and dahlias the tops should be removed about six inches from the roots, the roots dug, and the loose soil shaken out. They may be

## Suppose You Spend Your Winter in Sunny California

See the land where you can  
farm 365 days in the year

Enjoy an outing there, while things are frozen up at home. Look around and study California farming conditions. Visit many localities, learn their good points, and pick out the place that suits you best, when ready to move west.

California has what you want—a year-round growing season—a climate where stock can be raised without costly shelter—good prices for your produce—good roads—ideal living conditions.

The heart of California is the San Joaquin Valley—50 to 90 miles wide, 400 miles in length. Rimmed by mountains, with streams that irrigate millions of rich acres. Room for four times present population. You can raise nearly everything, from alfalfa to wheat, apricots to oranges. Dairying and live stock, vineyards and orchards, are making money for their owner.

Go just for the outing, if nothing else. More than any other class, farmers need vacations. You will enjoy the trip over the Santa Fe. You will see Indian pueblos and petrified forests; the Grand Canyon, too, as a short side trip. Fred Harvey meals on the way. Go economically in a tourist sleeper; personally conducted excursions three times a week. Reduced fares, with nine months' return limit.

San Diego Exposition closes December 31st. Go soon enough to see it.

Drop us a postal to-day for California land books. Ask any questions you wish about land and living conditions. We are glad to furnish the fullest possible information. Tell us what you want.

C. L. Seagraves, Industrial Commissioner  
Atchison, Topeka & Santa Fe Ry.  
2207 Railway Exchange, Chicago

### We Make Your Coat From The Green Hide

Complete—including tanning, and manufacturing—send us your cattle, horse, bear, wolf or other skins. Be prepared for cold weather—by having us make up your own special orders in—

#### Men's or Ladies' Coats, Furs, Robes

Take advantage of our 36 years of fur experience and of our Reasonable Prices. Write now for Price List of custom tanning.

**FREE** Complete Catalogue of Coats, Robes, Furs. We guarantee satisfaction or your money back—Write today.

**Reading Robe & Tanning Co.**  
102 East Street, Reading, Mich.

## LET US TAN YOUR HIDE.

Cattle or Horse hide, Calif. Dog, Deer or any kind of skin with hair or fur on. We tan and finish them right; make them into coats (for men and women), robes, rugs or gloves when ordered. Your fur goods will cost you less than to buy them, and be worth more. Our illustrated catalog gives a lot of information which every stock raiser should have, but we never send out this valuable book except upon request. It tells how to take off and care for hides; how and when we pay the freight both ways; about our safe dyeing process which is a tremendous advantage to the customer, especially on horse hides and calf skins; about the fur goods and game trophies we sell, taxidermy, etc. If you want a copy send us your correct address.

**The Crosby Frisian Fur Company,**  
671 Lyell Ave., Rochester, N. Y.

## NOW

is the time to have that  
**Fur Coat, Fur Lined Coat and Robe**

fixed up for the coming season. You run no risk in sending your work to

**The Blissfield Robe & Tanning Co.**  
Blissfield, Michigan  
Free price list for the asking.



allowed to dry a few hours in the sun and then placed in permanent storage. To keep perfectly, they should be cool and dry. Any place in which potatoes will keep will be ideal for them.

For gladiolas it is not necessary to wait for a frost which kills the crops. Just as soon as the crops are dry the plants may be dug and allowed to lay in the sun to cure for a few days. When the stalk is dry, it should be cut off within an inch of the corm. The thoroughly dry corms are then placed in flat trays anywhere out of the reach of frost. The same place that cannas and dahlias are stored will be satisfactory.

#### SHORT CUTS TO HOUSEKEEPING.

To bake potatoes quickly put them on an asbestos mat, on top of the stove; cover with a pan. Cooked in this way they are very palatable.—M. A. P.

Ground cloves is the best thing to use to drive ants away. They leave as soon as they smell the cloves.—Mrs. J. J. O'C.

In canning fruit, one needs something to remove the hot fruit jar from the stove to the table. If the hands are used, there is danger of severely burning them. A can holder that was purchased from the store, when put on the can was so tight that it broke the can into fragments. A durable and practical one can be made from cloth. Take a strip of old or new bed ticking one-quarter of a yard wide and one-half yard long. Hem on the machine, fold twice, and when it is wanted, draw it quickly around the center of the hot jar, allowing the ends to extend beyond the glass to an equal length. Fold one over another as for a four-in-hand, but do not tie it. Twist one over the other, and the can may be carried to the table with safety and ease.—Z. I. D.

#### MICHIGAN FARMER PATTERNS.

Our latest Fashion Book, containing illustrations of over 1,000 designs of ladies', misses' and children's garments in current fashions, also newest embroidery designs, and articles which give valuable hints to the home dress-maker, will be sent to any address upon receipt of ten cents.



No. 7934—Ladies' Waist. Cut in sizes 36 to 42 inches, bust measure. Light and dark materials are used in making this waist.

No. 8001—Ladies' Dress. Cut in sizes 36 to 42 inches bust measure. The blouse of this dress has body and sleeves in one and the skirt is cut in three gores.

No. 7985—Girls' Dress. Cut in sizes 6, 8 and 10 years. The dress is cut in one piece and has a guimpe.

# PAIGE

The Standard of Value and Quality

## We Can Deliver Your Fleetwood—Now

It is probably no exaggeration to say that the Paige Fleetwood "Six-38" is the most popular light six on the American market.

Up to the present time it has been absolutely impossible for us to supply the demand. Many purchasers have been obliged to wait thirty, sixty and even ninety days for their cars. And each month the "waiting list" has been growing.

But now our greatly increased production is helping the situation. Paige Dealers are now prepared to make prompt deliveries. There is a much coveted "Fleetwood" ready for YOU—if you will only take advantage of the opportunity.

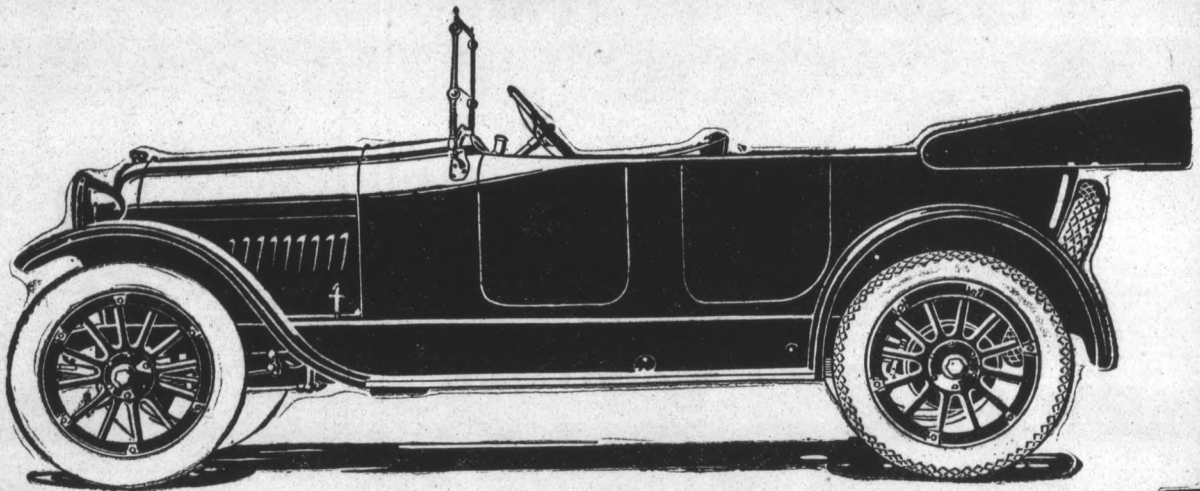
Remember, we have repeatedly challenged any motor car manufacturer in the United States to produce a car of equal weight and power that will show gasoline, oil and repair records within 20 per cent of "Fleetwood" records.

It is a beautiful car—a wonderfully luxurious car. But—over and above all else—it is a strictly RELIABLE car. It is a true Paige every inch of it.

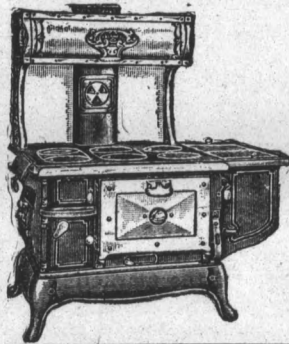
So, why not see the Paige Dealer at once. Place your order just as soon as you possibly can. Don't wait until it is too late to secure prompt delivery.

FAIRFIELD "SIX-46" SEVEN-PASSENGER \$1375 F. O. B. DETROIT  
FLEETWOOD "SIX-38" FIVE-PASSENGER \$1090 F. O. B. DETROIT

PAIGE-DETROIT MOTOR CAR COMPANY  
220 MCKINSTRY AVENUE, DETROIT, MICHIGAN



Write  
for this  
new Stove  
Book



#### Get Money-Saving Wholesale Prices

SEE the newest designs—illustrated in beautiful colors. Ranges with white enameled splashers, oven door fronts. New style mission design heaters, etc. Highest quality—direct from manufacturers at money-saving prices.

#### Cash or Easy Payments

We Pay the Freight and ship within 24 hours. 30 days' trial —360 days' approval test. \$100,000 Bank Bond Guarantee. Mail postal or letter today.

Ask for Catalog No. 113

Kalamazoo Stove Co., Mfrs., Kalamazoo, Mich.

A Kalamazoo Direct to You We make Stoves and Ranges, Gas Ranges, Pipe Furnaces and White Enameled Metal Kitchen Cabinets and Tables. We have 3 catalogs. Please tell us which you want.



Only \$2 Down  
One Year to Pay!

**\$24** Buys the New Butterfly Jr. No. 2. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 95 quarts per hour. Made also in four larger sizes up to 51-2 shown here. Earns its own cost and more by what it saves in cream. Postal brings Free catalog, folder and "direct-from-factory" offer. Buy from the manufacturer and save money. **ALBAUGH-DOVER CO.** (12) 2165 Marshall Blvd. CHICAGO No. 654

**15** 95 AMERICAN Upward CREAM SEPARATOR Sent on Trial. Fully Guaranteed. Easy running, easily cleaned. Skims warm or cold milk. Bowl a sanitary marvel. Whether dairy is large or small obtain handsome catalog. Address, **AMERICAN SEPARATOR CO., Box 5061, Bainbridge, V. N.**

Try This New Way To Churn

**30 DAYS FREE!**

Send Us No Money In Advance

The New Improved Challenge brings butter in 3 to 7 minutes. Operates easily. Gets ALL (not part) of the butter fat. Try it 30 days WITHOUT MONEY risk. \$500 REWARD OFFERED. Write today for FREE BOOK "New Science of Butter Making" Valuable information. Send post card.

THE MASON MFG. CO. Dept. M. CANTON, OHIO



## APOLLO BEST BLOOM Galvanized Sheets

Unequaled for Culverts, Flumes, Tanks, Roofing and Siding. APOLLO Sheets made from KEYSTONE Copper Steel are the highest quality Galvanized Sheets manufactured.

Through the use of Apollo Products, you may have farm buildings that are neat, easy to construct and reasonable in cost. Formed in all standard patterns. APOLLO-KEYSTONE Copper Steel Galvanized Sheets are the most durable, rust-resistant sheets obtainable for Roofing, Siding, Gutters, Culverts, Tanks, Flumes, Cisterns, Silos and all forms of exposed sheet metal work. Look for the stencil—APOLLO on steel sheets of regular analysis; with the KEYSTONE added when Copper Steel is used. Send for free "Better Buildings" booklet.

AMERICAN SHEET AND TIN PLATE COMPANY, Frick Bldg., Pittsburgh, Pa.



## AGENTS WANTED

to represent a reliable concern canvassing among farmers in your own neighborhood or elsewhere. No experience necessary. Liberal pay and supplies furnished free to right parties. Reference required. Address,

ADVERTISER, CARE THE MICHIGAN FARMER, Detroit, Michigan

When writing to advertisers please mention the Michigan Farmer.





SERGE SPECIALS  
 "5130" Blue, \$16.50  
 "4130" Blue, \$20.00  
 "3130" Gray, \$20.00

—the Clothcraft Gray Serge Special—fall weight. The neat, good looking models, the handsome tone and splendid quality of the serge, the good fit and comfortable "feel" of the suit will make you wonder if the price is really right. For the Clothcraft Gray Serge Special—3130—costs only \$20.00.

## THE CLOTHCRAFT STORE IN YOUR TOWN

Clothcraft Clothes for Men and Young Men, Ready-to-Wear, \$12.50 to \$25.00

Made by The Joseph & Feiss Co., Cleveland

For your winter's comfort get a

## Summit Knit-Nek Vest

Designed especially for the man who must be outdoors during the cold, windy days of winter.

You simply can't get cold in one of these strong, light weight, cold-proof garments.

Made to keep you warm where you need it most—at the throat and the wrists.

You can see how effectively the patented Knit-Nek fits around the throat, keeping out the cold and wind.

The wool wristlets do the same to your arms.

The leather lined body and leather sleeves are great cold resisting features.

Why not get one of these comfortable garments?

Write today for our interesting style book and give your dealer's name.

GUITERMAN BROS., Maker

191 E. 4th St., St. Paul, Minn.



## ARROW COLLARS

The exquisite finish given by the domestic laundry which is found in Arrow Collars is made possible by the evenness and fineness of the fabric

15c each  
6 for 90c

Atlanta, 2½ in.  
Whitby, 1½ in.

CLUETT, PEABODY & CO., Inc., TROY, N. Y.

When Writing to advertisers please mention The Michigan Farmer.

# Farm Commerce.

## Privately Owned City Market

THE Bay City public market is open to the extent that it is public to the extent that it is open to all so long as they obey the rules and regulations laid down for its operation. The market site belongs to a private corporation, also the buildings standing thereon. Furthermore the market is operated by the company owning the property. There is no municipal regulation whatever, there is not even an ordinance to back up the market promoters in their efforts to perform a public function that needs performing.

About eight years ago there was an agitation for a public market and the city aldermen showed an interest in the proposed project. However, the land selected for a market site was far to one side of the business center. It was the opinion of a wholesale pro-

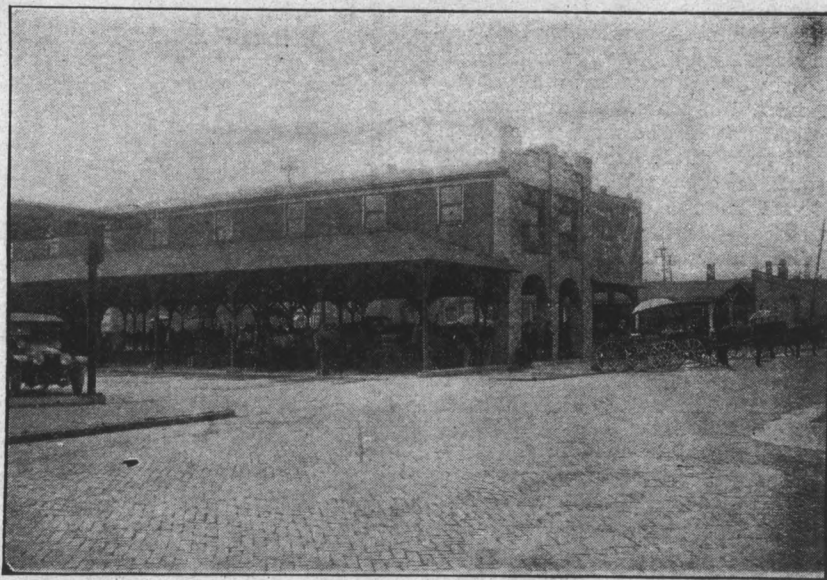
duce dealer that a public market to be of the most value should be near the commercial center and the wholesale section. Therefore he promoted a market company, bought land in the heart of the city, erected a shed, and proceeded to establish a market. The enterprise was a success. One end of the shed was enclosed and fitted up for two stores, one of these was rented for a butcher shop, the other for a restaurant. The space above the market shed was finished as a roller skating rink. A market master was employed who directed the marketing operations in the morning hours of each day and was manager of the skating rink evenings. As most of the marketing was done in the summer time and most of the skating in the winter this arrangement worked finely.

The project was a success. The gross income for the first year was in round figures \$10,000. This amount not only paid all expenses, but left a surplus for improvements or dividends. A second shed was erected as the number of farmers and hucksters using the market crowded the original building. The market began performing a real and desirable function, and it continues to do so. However, roller skating is not as much of a fad as a few years ago and the income from strictly marketing operations is not enough to pay expenses, make repairs and pay interest on the investment. It may be that it will prove best one of these days for the city to buy the property to insure that the market is maintained.

On the morning when the above view was secured there were 75 rigs at the market, including growers, hucksters, grocery men and buyers who came in autos. The growers with produce to sell numbered 35. They had

vegetables, berries, apples, pears, and dairy products. The buyers were the hucksters, grocery men and the consumers who were on hand with market baskets. Business was brisk and most of the growers were able to sell entirely out. Growers are charged fifteen cents a morning for the right to be on the market. Six growers rent stalls by the year, paying a nominal fee. The market master makes the rules and regulations by which order is maintained and fair play secured. Furthermore he is responsible for the enforcement of the rules. Considering that he has no city ordinance back of him the orderly market is an excellent testimonial to his genius.

James S. Fowles is the market master. Although he has never taken a



By Tact the Manager of this Privately Owned Market is able to keep order and Conduct the Business with General Satisfaction.

course in the science and art of marketing, his activity clearly proves that he thoroughly comprehends the basic principles of trade. He closely watches the dealings of all those on the market and when he sees anything that savors of sharp practices he invents a way for bringing about fair play. He watches the peddlers to see that they do not buy up all there is of any one commodity and corner the market. He keeps an eye on the measures being used to be sure that consumers are not getting short measure; he preserves the peace when there is a violent difference of opinion; he encourages timid growers and suggests ways by which they can increase their trade; he strives diligently to promote marketing. He studies outside conditions and points out opportunities whereby products that are a drug on the Bay City market may be shipped to other points where they are scarce. For instance, when tomatoes were worth but 25 cents a bushel at Bay City he encouraged a buyer to take the entire stock on the market and ship it to Alpena where it was sold at 85 cents a bushel. He encourages activity.

The wholesale produce dealers who own the capital stock of the market company have found it an advantage to have the market near their section of the city as they can buy on the market each morning such produce as they may need to complete the orders they have from distant points to which they are constantly shipping. All things considered, the market is working satisfactorily. If the city owned the property ordinances could be passed to accomplish those things which are now accomplished by a high order of tact.

Ingham Co. R. H. ELSWORTH.



## Crop and Market Notes.

## Michigan.

Mecosta Co., Oct. 13.—Oats were nearly a normal crop. Clover seed prospects are fairly good. Potatoes about half a crop, while beans probably will average 60 per cent of a normal yield. Corn is light and there was a fair cucumber crop. The usual amount of fall grains were sown. Butter 28@30c; eggs 30c; potatoes \$1; cattle 5c; hogs 10c; wheat \$1.47@1.52; beans \$4.75.

Cheboygan Co., Oct. 10.—Beans will yield eight to ten bushels in this county. Acreage of fall grains will be above the average. The usual amount of stock is being fed. No clover seed has been hulled yet. Buckwheat will be about half a crop. Apples 60c per bushel; wheat \$1.32; oats 50c; navy beans \$6@7; potatoes \$1.25; butter fat 36c; hogs 8@10c.

Gladwin Co., Oct. 7.—Beans are all pulled, some late planted being hit hard with frost. Silos are filled. Potato crop is short. The outlook for clover seed is good with the acreage quite large. Due to the shortage of pasture, there is considerable live stock for sale. Only a small acreage of wheat was sown here on account of the dry soil. The rye acreage, however, is above normal. Bean threshing has just started. Beans are quoted at \$4.50; wheat \$1.40; rye \$1.08; potatoes \$1.40; hogs 9c; lambs 8c.

Livingston Co., Oct. 10.—Owing to the dry weather, corn, potatoes and beans will be light crops. Potatoes are now being shipped in at \$1.60 per bu. Bean threshing has started and the quality of the legume is high. The dry season has cut down the acreage of wheat sown. The shortage of the corn crop will reduce the acreage of fall crops. Wheat \$1.50; beans \$4.50; rye \$1.17; butter 32c; eggs 28c; milk \$1.90 per cwt.

St. Clair Co., Oct. 12.—Wheat seedling is practically completed and a large acreage has been put in. Corn and potatoes are both inferior crops, farmers being obliged to import potatoes for their own use at \$1.25 per bushel. The bean acreage here was small, but the quality of the crop is good. Clover hulling has not started. Short pasturage and a scarcity of corn is forcing farmers to sell live stock. Apples are scarce, as is also the case with pears. Wheat \$1.45; oats 50c; beans \$4.50; milk \$1.45 per cwt; butter-fat 32c; apples \$1 per bushel.

Delta Co., Oct. 8.—The usual amount of fall grains are being sown. Late potatoes and corn have ripened in good shape. Potatoes are a fair crop on high land, but inferior on the flats. The yield of cabbage will be light and fruits about half a crop. Potatoes \$1 @1.15; apples 90c@1; cabbage 3c a pound; hay \$10@12 a ton; eggs 35@40c; butter-fat 33c.

## Ohio.

Hancock Co., Oct. 14.—Corn yield will make a fair average. Potatoes are poor, many carloads are being shipped in with the price at about \$1.50 per bushel. Clover seed is fair. The usual acreage of fall grains being put in. Not as much feeding stock on hand as usual. Apples are scarce and peaches plentiful. Wheat \$1.48; butter-fat 35c; hogs \$8.75 per cwt.

## Indiana.

Davies Co., Oct. 13.—Corn crop is better than the average. Potatoes are almost a failure. There is a little clover seed and plenty of cowpeas. The acreage of wheat and rye sown is large. Feeding stock very scarce. There are a few apples, no peaches and plenty of pears. Apples \$1 per bushel; wheat \$1.50; corn 60c; potatoes \$1.50; butter fat 36c; plenty of feeding stuff for sale.

## Illinois.

Marion Co., Oct. 11.—Potatoes are a light crop. There are practically no beans nor clover seed. A smaller acreage of fall grains was sown than usual. Not as much stock on hand for feeding purposes as we usually have. Peaches \$1.25@1.50; wheat \$1.50; old corn 90c; new corn 75c; potatoes \$1.50; butter-fat 35c; cattle \$5@7. The farmers have lost some young cattle from blackleg.

## Wisconsin.

Waushara Co., Oct. 10.—The yield of corn and potatoes is below normal. Clover seed promises well. The usual amount of rye was sown but scarcely and wheat went in. Apples and other fruits were poor. Wheat \$1.20; rye \$1.12; oats 45c; beans \$5; potatoes \$1.

## New Jersey.

Morris Co., Oct. 13.—Corn is a very good crop. Potatoes are fair while peaches, apples and pears yielded below the average. Farm help is very scarce. Seeding has just been finished. Buckwheat half a crop. Wheat \$1.35; buckwheat \$1; potatoes \$1.50; onions \$1.40; eggs 40c; butter 35c.

# Another Letter from the President of Fairbanks, Morse & Co. to every Farmer in the United States

Subject: 1,000-lb Scale \$14.85  
500-lb Scale \$12.50

Here's another big surprise for you - Every farmer knows about that.

It's as big, if not bigger, than was the "2" Engine. It's almost sensational - a genuine FAIRBANKS Scale at the remarkably low price of \$14.85 for the 1,000-lb capacity, and \$12.50 for the 500-lb.

If this scale were not a FAIRBANKS, backed by all the years of FAIRBANKS reputation, a thinking man would hardly believe that it was a good scale because of the low price. But you know that Fairbanks, Morse & Co. have built their business on QUALITY products.

Every Bureau of Weights and Measures passes FAIRBANKS scales as "Correct". It is truthfully said - "If it's weighed on a FAIRBANKS there's no argument" - because it has Steel Bearings and Arrow-tip Beam. Yes - and a lot of other exclusive quality points. This scale has wide wheels and an extra large platform.

I am writing this because I personally am proud of this latest achievement of our organization. Go see it at your dealer's. You will be amazed. You'll hardly go through another day without adding this sturdy, reliable "watch dog of weights" to your farm equipment.

Cordially yours,  
C. H. Morse

President.  
FAIRBANKS, MORSE & CO.,  
CHICAGO

"If it's weighed on a FAIRBANKS there's no argument."



## GO TO YOUR LOCAL DEALER

see the scale and you'll buy it. A reputable dealer selling a reputable scale certainly is a strong combination.

If you don't know the local Fairbanks - Morse dealer, write us.

Fairbanks, Morse & Co.  
CHICAGO

### O. I. C. & Chester White

Strictly Big Type. April boars large enough for service, also have May boars, that are good ones. Can furnish in pairs not akin. Have been breeding the big type for 15 years. The kind that fill the pork barrel. Newman's Stock Farm, Marlette, Mich. R. 1.

O. I. C's. 14 choice young boars ready for service, 3 sows to farrow in Oct., and open gilts. Cloverleaf Stock Farm, Monroe, Mich., R. No. 1.

O. I. C. Serviceable boars of the big type at reduced prices for the next thirty days. G. F. ANDREWS, Dansville, Michigan.

O. I. C. Year old boar 2nd prize winner at Grand Rapids fair also spring gilts and boars ready for service. A. J. Barker, Belmont, Mich. R. R. 1.

FOR SALE. Thoroughbred O. I. C. Swine, sows bred, gilts and boars. O. D. Somerville, Grass Lake, Mich. R. 2.

O. I. C. or Chester White Swine, both sex, not of kin. Write for catalog and prices. E. B. MILLET, Fowlerville, Michigan.

Large Strain P. C. - Two nice fall boars left, a few gilts to farrow in Aug., Sept. and Oct., get one of these sows with pigs by side. H. O. SWARTZ, Schoolcraft, Michigan.

### AT HALF PRICE

Genuine big type Poland China Hogs, Bred Sows, Spring Pigs. Boars ready for service. Special, the best big type fall yearling boar in Michigan. Also registered Percheron Stallions and Mares. J. C. BUTLER, Portland, Mich., Bell Phone.

Big Type Poland Chinas Spring boars, at reasonable prices. Order soon to save express. A. A. WOOD & SON, Saline, Michigan.

FOR SALE: Poland China boars ready for service. A few high scoring Black Minorca cockerels, will make large birds. Satisfaction Guaranteed. R. W. Mills, Saline, Mich.

Large Type P. C. Largest in Mich. Young boars ready for service. Off Mar. and April farrow, from large litters, weighing up to 275 lbs. Come and see, expenses paid if not as represented. W. E. Livingston, Parma, Mich.

### BIG TYPE POLAND CHINAS

All ages. Our herd sire was Champion and Grand Champion at the State Fair last fall. Our sows are great big stretchy, splendid individuals with best breeding. Pigs from such matings will please you. HILLCREST FARM, Kalamazoo, Michigan.

For Sale: Poland Chinas. either sex, all ages. Something good at a low price. F. D. Long, R. F. D. No. 8, Grand Rapids, Mich.

Large type P. C. Sows and gilts all retained for my Feb. Sale. A few choice Spring boars ready to ship. W. J. HAGESHAW, Augusta, Michigan.

BIG TYPE POLAND CHINA Spring boars that will please you, priced right. G. W. HOLTON, Route 11, Kalamazoo Michigan.

For Big Type P. C. Spring Boars and Gilts bred for April farrow. Write or call on Armstrong Bros., R. 3, Fowlerville, Mich.

WALNUT ALLEY HERD, Big type Poland Chinas headed by Hadley Desmores No. 24925 and Smothe Jumbo Jr. No. 24981. Sows represent blood of two A wonders. Pigs of either sex ready. A. D. Gregory, Ionia, Mich.

Big Boned Poland China boars shipped C. O. D. call or write for photo, weights, pedigree and price. E. R. Leonard, St. Louis, Michigan.

BIG Type P. C. Three extra good yearling boars, good 1600 lb. prospect. Sired by Big Type King our 1000 lb. boar. Spring pigs either sex. Special three Mouw bred boar pigs. W. Brewbaker & Son, Elsie, Mich.

For Sale Big Type Poland China Spring Boars ready for service, best breeding at prices you can afford to pay. Pedigrees furnished. M. E. HESS, Lone Cedar Farm, R. 2, Pontiac, Mich.

Large Stiled Poland China spring and fall pigs right to quick buyers. Robert Neve, Pierson, Mich.

Poland Chinas. Big and medium type from growthy stock and large litters. They have good bone and length, well quartered. L. W. Barnes and Son, Byron, Mich.

GROWTHY THE DISEASE PROLIFIC "MULEFOOT" RESIST- PROFITABLE HOG ING

FOUNDATION STOCK FROM BEST BLOOD OF BREED

THE CAHILL FARMS KALAMAZOO - - - MICHIGAN

Hampshire Swine. Bred Sows and gilts for August and sex both. FLOYD MYERS, R. No. 9, Decatur, Ind.

HAMPSHIRE Boars, sows, gilts and pigs. Choice stock. A. R. BACON & SON, Sheridan, Michigan.

Hampshire Hogs Only a few spring boars left. \$5 each. Taking orders for bred gilts. John W. Snyder, R. 4, St. Johns, Mich.

Halladays' Hampshire Swine Both sexes, all ages. Prices reasonable. O. H. Halladay & Son, Clinton, Mich.

Yorkshires For Sale Boars from large early farrowed litters. Waterman & Waterman, Meadowland Farm, Ann Arbor, Mich.

## SHEEP.

### SHROPSHIRE

I will be at the State Fair with 20 field rams. All are for sale and are a better bunch than has been seen in Detroit in recent years. KOPPE-KOPPE Farms, Kinderhook, Mich.

### INGLESIDE FARM

Offers Twenty registered Shropshire Ewes being bred to a prize winning ram.

H. E. POWELL, IONIA, MICH.

### SHROPSHIRE

A few choice Rams. Dan Bookher, R. 4, Ewart, Mich.

Am offering a few large ram lambs at reasonable prices. C. J. THOMPSON, Rockford, Michigan.

Oxford Sheep: 20 Rams, 20 Ewes. EARL C. MCCARTY, Bad Axe, Michigan.

OXFORD DOWN RAMS AND EWES O. M. YORK, Millington, Michigan.

Oxford Down Sheep No more for sale. M. F. GANSLEY, Lennon, Michigan.

Registered Oxford Down Rams For Sale. Direct all mail to Olmsted and J. Spangs, Muir, Michigan.

The Great Ohio flock of Merinos and Delaines, good size, oily fleeces, heavy shears, priced to sell. Write wants. S. H. Sanders, Ashland, Ohio.

FOR SALE Registered American Delaine Sheep both sex. F. H. CONLEY, Maple Rapids, Michigan.

For Sale Registered Hampshire Rams, young ewes and ewe lambs, also, Shire Stallion Bredling Harold 9754 S H S B. C. W. Styles, R. 3, Owosso, Mich.

Leicesters - Yearling and ram lambs from Champion flock of Thumb of Mich. Also select Berkshire swine. Elmhurst Stock Farm, Almont, Mich.

## HORSES

Percherons, Holsteins, Angus, Shropshires, Durocs. DORR D. BUELL, Elmira, Michigan.

FOR SALE - Registered Percheron Stallions, Mares and Fillies at reasonable prices. Inspection invited. F. L. KING & SON, Charlotte, Mich.

The Fairfield Stock Farm, Percheron and Belgian horses, Shorthorn cattle and Oxford Down sheep. H. B. Peters, Garland, Mich.

Registered Percherons. Stallions from one to 2 year old mares. Priced to sell. Inspection invited. L. C. HUNT, EATON RAPIDS, MICH.



# Markets.

## GRAINS AND SEEDS.

October 17, 1916.

**Wheat.**—Wheat prices have fluctuated around last week's basis. The trade is in a position where prices respond rapidly to any heavy buying or selling. Liverpool reports that stocks and shipments in transit are altogether inadequate to meet the expectant demands of the British Isles and western Europe. The Dutch government and Great Britain are said to have purchased 1,250,000 bushels in America on Monday. Other foreign purchases are also reported, while millers in this country are anxiously taking wheat on every slight decline in the market. The confidence of these experts in the future strength of the trade should give farmers courage to hold their wheat for sale only on an advancing market. The United States visible supply showed an increase of 1,066,000 bushels for the past week. Argentine weather conditions are very unfavorable to the development of the wheat plant. One year ago No. 2 red wheat was quoted on the Detroit market at \$1.17½ per bushel. Last week's prices were:

	No. 2	No. 1	Dec.
Wednesday	1.58	1.53	1.62
Thursday	1.58	1.53	1.62
Friday	1.58½	1.53½	1.62
Saturday	1.58	1.53	1.61
Monday	1.58½	1.53½	1.61½
Tuesday	1.63½	1.58½	1.66½

Chicago.—December wheat \$1.63½; May \$1.64½; July \$1.40½.

**Corn.**—The improved corn prices of last week are still prevailing, notwithstanding the appearance of new corn upon the market. Exporters are already seeking the grain, both at seaboard points and in Chicago. The United States visible supply shows a decrease of 744,000 bushels. One year ago No. 3 corn was quoted at 67½c per bushel. Last week's Detroit quotations were:

	No. 3	No. 3
	Mixed.	Yellow.
Wednesday	90	92
Thursday	90	92
Friday	90½	92½
Saturday	90½	92½
Monday	90½	92½
Tuesday	91	93

Chicago.—December corn 78½c per bushel; May 79½c.

**Oats.**—Oat values have declined. A visible supply of 42,000,000 bushels is reported to be an October record for this grain. Foreigners are buying. The local market is quiet and easy. The United States visible supply shows an increase of 1,666,000 bushels. Standard oats a year ago were quoted at 42c a bushel. Last week's Detroit quotations were:

	Standard.	No. 3
		White.
Wednesday	51	50
Thursday	51	50
Friday	50½	49½
Saturday	50	49
Monday	49½	48½
Tuesday	50	49

Chicago.—December oats 48½c per bushel; May 51½c.

**Rye.**—Rye was in active demand at the opening this week with the price up 2c, cash No. 2 now being \$1.27 per bushel.

**Beans.**—This trade is firm with transactions limited by reason of the scarcity of offerings. The local board of trade quotes immediate and prompt shipment at \$5; October delivery at \$4.95. At Chicago there is a fair demand and small supplies, with Michigan pea beans, hand-picked, quoted at \$5.40; red kidneys \$5.75.

**Seeds.**—Trade is active and firm, prime red clover \$9.85; alsike \$10; timothy \$2.40; alfalfa \$9@10.

## DAIRY AND POULTRY PRODUCTS.

**Butter.**—The market continues firm with an advance of ½c for creamery and 2@3c for lower grades. Creamery extra 34½c; do. firsts 33c; dairy 30c; packing stock 27c.

**Elgin.**—The price is unchanged but the feeling is easier and the tendency toward lower prices. Prices, based on sales, 34½c.

Chicago.—The feeling is easy but prices are unchanged. Lower prices are looked for. Creamery extras are quoted at 34½c; extra firsts 33½@34c; firsts 32½@33c.

**Eggs.**—The tone continues firm at unchanged prices. Firsts 33c; current receipts 30c.

Chicago.—The trade is a little slower than last week but prices are unchanged except for storage which is 1c lower. Firsts 30½@31c; ordinary firsts 28½@30c; at mark, cases included 22@29½c per dozen; firsts, storage paid 29@

29½c per dozen.

**Poultry.**—The market is quiet with no advances except for hens and geese. Live broilers 18@18½c; No. 1 hens 17½@18c; others 16@17c; ducks 16@17c; geese 14@15c; turkeys 24@25c.

## FLOUR AND FEEDS.

**Flour.**—Jobbing lots in one-eighth paper sacks are selling on the Detroit market per 196 lbs., as follows: Best patent \$8.40; seconds \$8.20; straight \$8; spring patent \$8.90; rye flour \$7.40 per bbl.

**Feed.**—In 100-lb. sacks, jobbing lots are: Bran \$26.50; standard middlings \$28; fine middlings \$35; cracked corn \$36; coarse corn meal \$30; corn and oat chop \$34 per ton.

**Hay.**—In carlots at Detroit: No. 1 timothy \$14@15; standard timothy \$13.50@14; No. 2 timothy \$12@13; light mixed \$13.50@14; No. 1 mixed \$11@12; No. 1 clover \$10@11.

**Straw.**—Rye straw \$8.50@9; wheat and oat straw \$7.50@8 per ton in carlots.

## FRUITS AND VEGETABLES.

**Apples.**—Market is firm and prices unchanged. Barreled stock \$3.50@4 for fancy; choice \$2@2.75; No. 2, 50 @ \$1 per bushel. At Chicago a steady feeling prevails for fancy stock which sells for \$2.50@4.75 per bbl; No. 2 stock \$1.50@2.

**Grapes.**—Niagaras sell for 16c per pony basket; Concord at 21@22c per 8-lb. basket. At Chicago most of the offerings are in bulk. The few baskets that are coming sell at 23@24c per 8-lb. basket. Concord; in ton lots Concord sell for \$50@55.

**Potatoes.**—At Detroit potatoes in carlots bring \$1.40@1.50 for round and \$1.25@1.35 for long. No Michigan potatoes are quoted at Chicago but others bring from \$1.20@1.35 per bushel.

## GRAND RAPIDS.

Potatoes are selling in a small way here around \$1.20, while the price at buying stations outside is close to the \$1 mark, some stations reporting sales at \$1.05 last week. Dealers say that these prices are too high and cannot be maintained. Eggs are quoted at 32c and dairy butter stays at 26c. No. 2 red wheat is quoted at \$1.50 and other grains remain unchanged. Hay is worth \$10@12.

## DETROIT EASTERN MARKET.

With the exception of apples, prices are holding firm on the Detroit Eastern Market. As regards this fruit farmers are marketing the inferior grades which, with the large quantities of bulk offerings coming in by rail tend to keep prices down. Culls are selling from 50@75c; No. 2, 75c@1; fancy stock of high quality brings as high as \$2; potatoes scarce at \$1.50@1.75; cabbage \$1.40@1.70; carrots 75c@1.10; onions \$1.50@1.75; lettuce 50c@1; celery 35c per large bunch; eggs about 43c per dozen; loose hay is moving slowly at \$17@19 per ton.

## LIVE STOCK MARKETS.

### Buffalo.

October 16, 1916.

(Special Report of Dunning & Stevens, New York Central Stock Yards, Buffalo, N. Y.)

Receipts here today as follows: Cattle 240 cars; hogs 125 d. d.; sheep 50 d. d.; calves 1400 head.

With 240 cars of cattle here today, the good shipping cattle were very scarce, and also good butcher cattle, which sold strong, but the medium and common grades were very plentiful and the trade was very slow on these classes and the bulk of them sold at about steady, but in some cases they looked a shade easier. We look for a liberal run of cattle next Monday and a good trade on the best kinds, but a slow trade on the medium grades.

We had another liberal supply of hogs today, about 125 double decks, big runs all over the west, and with a weak feeling at all other markets our prices slumped 30 to 40c below Saturday's best time, owing chiefly to the poor quality and an absence of hogs carrying weight. Bulk of the sales were around \$9.90, with a few selected decks up to \$10.15, and the general run of pigs \$9. Roughs \$9; stags \$7 @8. About everything sold at the close and prospects are no lower for the next few days.

With a light run of lambs today our market opened active and 15c higher than the close of last week, and we look for steady to strong prices the balance of the week.

We quote: Best lambs \$10.60@10.75; cull to common \$9@10.25; yearlings \$7@9; bucks \$5.50@6.50; ewes \$7.25@7.50; cull sheep \$3.50@5.50; wethers \$7.75@8; top veals \$12@12.25; heavy \$8@9; common and light \$10@11.50; grassers \$5.50@5.75.

## Chicago.

October 16, 1916.

Cattle, Hogs, Sheep.  
Receipts today. 28,000 48,000 32,000  
Same day 1915. 13,487 23,471 18,088  
Last week. 71,320 148,364 111,809  
Same wk 1915. 59,590 94,874 69,904

This week opens with large live stock receipts, with cattle largely ordinary in quality and prices on the downgrade, the better class excepted. Hogs started off much lower, with an early \$9.90 top, but later the demand was so much better that prices ruled higher, the best bringing \$10. Hogs received last week averaged 213 lbs. About half of the lamb receipts were reported on the feeder order, and there was a big demand, buyers being unusually numerous. Prices were higher, with choice feeding lambs bringing \$9.90, while choice killers brought \$10.40. Shipments from here last week aggregated 53,419 sheep and lambs, being largely feeders.

Cattle weakened during the latter part of last week, as is so often the case after the packers get stocked up earlier in the week, and the previous advance and activity gave place to a slower trade and reduced prices. The week as a whole was a good one for sellers of fat cattle, with choice to fancy weighty steers selling at \$11@11.40 and a good showing of cattle of that class on Wednesday. Steers entitled to be termed good sold at \$10 and upward, with a medium class taken at \$9 and upward, while sales ranged all the way down to \$5@8.10 for grassers, with short-fed lots purchased at \$8.15@8.95. A large share of the steers crossed the scales at \$8@11, with a desirable class of yearling steers going at \$9.50 and upward, the best yearlings selling up to \$11@11.35. Butcher stuff had a good outlet so far as fat lots were concerned, with cows taken at \$5.10@8 and heifers at \$4.50@9, and now and then sales took place of a fancy little yearling heifer anywhere up to \$10. Cutters brought \$4.65@5, canners \$3.50@4.60 and bulls \$4.50@8. Calves were purchased at a lower scale of prices, with the common to good heavy calves taken at \$4.50@9 and light vealers selling at \$10@11.75. Stockers and feeders were in fairly active demand for shipment to the surrounding country, prices covering a wide range, with sales at \$4.90@8 for inferior to prime offerings. Western range cattle arrived freely and had a good outlet, with steers selling at \$6.50@9.50. Looking ahead, it may be said that general conditions strongly favor owners of choice corn-fed cattle, as the country's supply of these is unusually small, but grass cattle will undoubtedly be plentiful for the remainder of the season, with prices probably comparatively low.

Hogs have experienced some rather unexpected good advances recently, the previous slump in prices having caused a falling off at times in country shipments to this and other markets; and the opinion was expressed in some quarters that the lowest prices of the season had been seen and that the market will be in better shape from now on, although a return to the high time of the year is not looked for. Last year the highest prices were paid in the week ending October 16, when the average price was \$8.50 per cwt., and by the third week of November the average price was \$6.40. Eastern shippers continue to operate sparingly, taking the choicer class of swine, with heavy hogs in growing demand. Late in the week hogs became plentier, and the week's receipts were larger than a week earlier. After the best hogs sold at \$10.35, there was a break that left quotations on Saturday at \$10@10.15 for the best butcher weights, while rough heavy packers sold down to \$9.25@9.50.

Lambs of the best class were in especially good demand last week, and city butchers paid a liberal premium over the prices ruling for merely good lots. Range flocks comprise the great bulk of the offerings, and the percentage of feeders has become quite large of late, with a good outlet at the reduced prices. Sheep form a small share of the receipts. Decidedly fewer lambs and sheep were marketed than a week earlier, and this stood in the way of serious breaks in prices. Lambs closed at \$7.75@10.35; yearlings at \$7.25@8.75; wethers at \$7@8.25; ewes at \$3.50@7.50; bucks at \$4.50@6. Feeders bought range lambs at \$8.75@9.85; yearlings at \$7.25@8.40; wethers at \$6.50@7.50; ewes at \$5@6.25. Breeding ewes brought \$6.25@10.

## INTERNATIONAL ENTRIES CLOSE NOVEMBER 1.

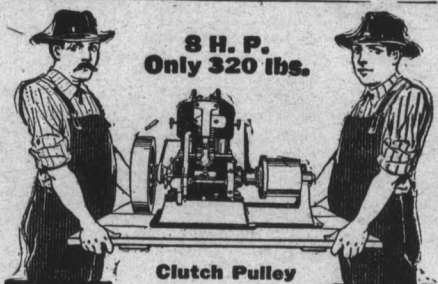
Secretary Heide of the International Live Stock Exposition is addressing a plea to stock breeders and feeders throughout the country to make exhibits at this year's International. In view of the fact that a South American delegation will be present at this year's

show, it is important that the exhibits at the International be representative of the country's great live stock industry. Breeders and feeders are advised that entries for the International close on November 1.

## A CORRECTION IN LIVE STOCK AWARDS.

An exhibitor at the State Fair has called attention to an inaccuracy in the official list of championship awards as published in the Michigan Farmer. A revised list of the championship awards in the Guernsey cattle class as submitted by the secretary of the State Fair follows:

Senior champion bull, Village Farms, Grass Lake, Mich., on Walbridges Glenwood Boy, 13823. Junior champion bull, Village Farms, on Prides Hambro, 35933. Female senior champion, John Ebels, Holland, Mich., on Imp. Lizette of Butternut Hill. Female junior champion, Village Farms on Village Daisy. Bull grand champion, Village Farms on Walbridges Glenwood Boy.



## Pick It Up and Walk Off

Did you ever see any other 8 H. P. Engine two men could carry? Cushman engines are the lightest weight farm engines in the world—easy to move around and put to work anywhere. No longer necessary to put up with old-style, back-breaking, heavy weight engines, with their violent explosions and their fast and slow speeds. The Cushman weighs only about one-fifth as much, per horsepower, but with its modern design, accurate balance and Throttle Governor, it runs much more steadily and quietly.

## Cushman Light Weight Engines

40 to 60 lbs. Per Horsepower  
The 4 H. P. weighs only 190 lbs. Mounted on iron truck, as shown below, it may be pulled around anywhere. Besides doing all other work, it may be attached to moving machines in the field, such as grain and corn binders, potato diggers, etc., driving the operating part and leaving the horses nothing to do but pull the machine out of gear. 8 H. P. 2-cyl. weighs only 320 pounds. Sizes up to 20 H. P. Not cheap engines, but cheap in the long run. Book free.

CUSHMAN MOTOR WORKS  
826 North 21st Street  
Lincoln, Nebraska

## HOT STOCK FEED

Cook your feed and you save feed. It costs less than raw and keeps your animals in a healthier condition. Tastes better, is bigger in bulk, more digestible and more nourishing.

## "Farmer's Favorite"

### Feed Cooker and Boiler

means more meat and fat, more milk and eggs. It prevents hog cholera. Use it to take the chill off water in winter, heating water for scalding hogs and poultry, rendering lard and tallow, sterilizing dairy utensils, heating water on wash day, etc. Set up anywhere. 25 to 100 gal. capacity—four sizes between. 30 days free trial. Guaranteed to the limit. Free catalog.

Lewis Mfg. Co.,  
64-78 Owego St., Cortland, N. Y.

## DO YOUR OWN SHREDDING

with a  
**ROSENTHAL**  
Corn Husker  
and Shredder

Most economical and satisfactory way of handling your corn crop. No delay, no extra help. Do it in your own spare time. Two sizes for individual use, 6 to 15 h. p. Also make three larger sizes for custom work. Over 20 years in the field. Write for catalog and Free Farmers Account Book. State h. p. of your engine.

**SOLD ON TRIAL YOU TAKE NO RISK**  
ROSENTHAL CORN HUSKER CO. Box 2 Milwaukee, Wis.  
Also Makers of Feed Cutters and Silo Fillers

## EASIEST RUNNING MILL MADE

Kelly Duplex Mills require 25% less power, does much, or more, work as any other mill of equal size. Grind ear corn, shelled corn, oats, wheat, kafir corn, cotton seed, corn in shucks, sheaf oats or any kind of grain. For speed and complete grinding the

## KELLY DUPLEX

Has No Superior

Easily operated. Never chokes. 7 sizes. Fully guaranteed. Any power. Especially adapted for gasoline engines.

Duplex Mill & Mfg. Co., Box 306 Springfield, Ohio





## THIS IS THE LAST EDITION.

The first edition is sent to those who have not expressed a desire for the latest markets. The late market edition will be sent on request at any time.

## DETROIT LIVE STOCK MARKET.

Thursday's Market.  
October 19, 1916.  
Cattle.

Receipts 2973. In all departments at the local yards this week the receipts were large and the quality generally on the common order. The weather was bad and railroad service fair.

The cattle trade on Tuesday was 10 @15c lower than last week; on Wednesday it was fully 25@35c lower on everything but bulls and canner cows, which held about steady and on Thursday it was decidedly dull at the decline on everything. Quite a number of stocker and feeder buyers were on hand but they wanted them cheap. The quality was very common, there being only 23 head in the yards good enough to bring over \$7.60, which was the extreme stock. Milch cows were also dull and the quality generally common. Prices averaged as follows: Best heavy steers \$7.50; best handy weight butcher steers \$6.25@7; mixed steers and heifers \$5.50@6.25; handy light butchers \$5.25@5.75; light butchers \$4.75@5.25; best cows \$5.25@5.75; butcher cows \$4.50@5; common cows \$4.25@4.50; canners \$3.50@4.25; best heavy bulls \$5.50@6; bologna bulls \$5 @5.50; stock bulls \$4@4.50; feeders \$6@6.50; stockers \$4.50@6; milkers and springers \$4@7.5.

Bishop, B. & H. sold Parker, W. & Co. 7 cows av 880 at \$4.25, 15 canners av 798 at \$4.10, 6 do av 933 at \$4.10, 1 cow wgh 1200 at \$5.50, 27 do av 884 at \$4.25, 10 do av 956 at \$4.25, 5 do av 988 at \$4.15; to Applebaum 7 butchers av 671 at \$4.90, 3 do av 450 at \$4.25; to Garber 3 cows av 1066 at \$4.60, 2 do av 1060 at \$5.60; to Watts 15 butchers av 933 at \$6.75; to Mason B. Co. 2 steers av 1125 at \$7.25; to Kull 4 butchers av 862 at \$5.25; to Mason B. Co. 14 do av 927 at \$6.50, 18 do av 663 at \$5; to Rattkowsky 4 cows av 795 at \$5; to Resnick 16 butchers av 832 at \$5.25, 2 cows av 1085 at \$5; to Golden 10 butchers av 892 at \$5.25; to Thompson 19 steers av 1020 at \$7.55, 3 cows av 1200 at \$5.25, 5 butchers av 916 at \$6.65, 2 cows av 1035 at \$4.75; to Nagle P. Co. 23 steers av 1106 at \$7.60; to Parker, W. & Co. 3 cows av 1057 at \$4.25, 4 do av 910 at \$4.20, 5 do av 986 at \$4.25, 2 bulls av 1015 at \$5.25, 22 butchers av 800 at \$5; to Hammond, S. & Co. 6 cows av 908 at \$4, 12 do av 900 at \$4, 16 do av 930 at \$4.25; to Sullivan P. Co. 4 do av 965 at \$4.75, 4 do av 875 at \$5.75; to Cooper 21 feeders av 844 at \$6.25; to Bordine 10 do av 916 at \$6.50; to Newton B. Co. 5 cows av 1080 at \$4.90, 3 steers av 1100 at \$7.10, 4 butchers av 917 at \$5.85; to Rattkowsky 7 cows av 1130 at \$5.15.

## Veal Calves.

Receipts 1180. The veal calf trade was dull and fully \$1 lower than they were a week ago and in some cases even lower. Heavy and common grades were extremely dull at \$4.50@6.50, the bulk of the good ones bringing \$10@11 with an occasional extra fancy one at \$11.25@11.50. The close was very dull at the decline.

Sandel, S. B. & G. sold Kull 1 wgh 140 at \$12.50, 2 av 140 at \$11.50, 2 av 150 at \$11.50; to Rattkowsky 4 av 150 at \$8, 4 av 215 at \$9.25; to Mich. B. Co. 8 av 150 at \$11.75, 8 av 140 at \$12; to Nagle P. Co. 1 wgh 160 at \$12.25, 12 av 150 at \$11.75, 1 wgh 140 at \$11.75, 5 av 150 at \$11.50.

## Sheep and Lambs.

Receipts 10,400. The run of sheep and lambs was large and the quality fair. Early in the week a few choice lambs brought \$10.15 but on Wednesday the bulk of the choice went at \$10 and sheep ruled about 15@25c lower, the very best selling at \$6.50. The close was fairly active as follows: Best lambs \$10; fair lambs \$9@9.75; light to common lambs \$6.50@8.50; fair to good sheep \$6@6.50; culls and common \$4@5.

Erwin, S. & J. sold Sullivan P. Co. 80 lambs av 75 at \$9.75; to Nagle P. Co. 13 av 85 at \$9.50, 4 sheep av 95 at \$5.50; Mich. B. Co. 160 lambs av 80 at \$10, 35 do av 60 at \$8.50.

Haley & M. sold Parker, W. & Co. 76 lambs av 80 at \$10.15, 3 sheep av 100 at \$6; to Thompson 32 lambs av 55 at \$8.50; to Nagle P. Co. 140 do av 75 at \$9.60, 31 do av 70 at \$9.50, 83 do av 75 at \$9.85.

## Hogs.

Receipts 13,800. In the hog department the trade on Wednesday and Thursday was active at an advance of 25c per cwt, from Tuesday's quotations. Pigs brought \$8.75@9.25; yorkers \$9.50@9.65; prime heavy grades \$9.70@9.75. Thursday's prices ruled steady.

## Veterinary.

CONDUCTED BY W. C. FAIR, V. S.

**Cow Gives Bloody Milk.**—I would like to know if there is any help for a cow that gives bloody milk, as I have a two-year-old heifer which came fresh last spring but commenced giving bloody milk some three weeks ago. The first part of the milk taken from udder seems to be free from blood, but after she is half milked I frequently notice a red streak in it and becoming nearly clear blood at last. J. S., Sandusky, Mich.—Cow of this kind that gives bloody milk has generally injured her udder in some manner and if you keep her in stable, bed her well and milk her cautiously. Rough milking and bruising udder is the common exciting causes of them giving bloody milk. Dissolve ¼ lb. acetate of lead in three quarts of cold water and wet quarter of udder that bloody milk comes from three times a day.

**Diseased Molar Tooth.**—I have a horse that has nasal discharge from right nostril and right eye. Considerable yellow mucus and corruption comes from the right nostril, but the left is clean. This is a chronic trouble and I would like to know how to cure him. E. A., Swartz Creek, Mich.—If you will examine his mouth you will perhaps find the fourth molar tooth diseased which, when extracted your horse will gradually get better. Give 1 dr. of ground sulphate of iron at a dose in feed three times a day. Dissolve a tablespoonful of salt in three or four pints of clean boiled water and wash out nostril cautiously twice a day.

**Forage Poisoning.**—Recently I have lost two or three sheep, but they did not appear to show many symptoms of sickness, but would lay down on the hot ground in the hot sun and die. When I turned them over to bury them a greenish fluid oozed from the mouth which had a very offensive odor. These sheep were running on new ground pasture and there was plenty of clear swamp water, I thought perhaps that the water they drank might be causing their sickness, and I offered them fresh well water to drink, but they refused it. These sheep are in fair condition and seem to be well filled every day. G. B., Sand Lake, Mich.—Doubtless the quality of food or water that your sheep eat or drink is causing their death. If it is possible to remove the cause, you will perhaps be able to prevent any further trouble. However, it is possible that they die the result of heat prostration, or acute indigestion. As soon as you discover another sick one remove it to a cool shaded place and give 2 ozs. of hot black coffee every four hours. Also give 15 grs. hyposulphite of soda at a dose two or three times a day. Change their food and water supply.

**Periodic Ophthalmia.**—Every week I read the veterinary department and paste the veterinary column in my scrap book for future reference. I have a black mare about eight years old, good worker and healthy, but she is troubled with sore eyes. A portion of the time both eyes are affected and covered with a white coating, but later on her eyes partially clear and remain well for a few weeks until she has another attack. I have tried several eye remedies which are recommended for moon blindness, but none of them have helped her. J. S. C., Cutcheon, Mich.—Your mare is incurable and the very best you can do is perhaps to postpone loss of vision. Kindly understand it is an easy matter to make her worse by applying irritating eye washes, working her into a heated state, keeping her in a filthy stable or subjecting her to bright light, or feeding her high on stimulating food. Dissolve 40 grs. of boric acid, 40 grs. of borate of soda in a quarter of a pint of clean boiled water and apply to eyes only when they are sore, twice a day. Give her 2 drs. of Donovan's solution of arsenic at a dose three times a day.

**Indigestion.**—I have a Jersey cow that came fresh two days ago, she is in good condition, seems to be all right in every particular, but she is only giving about a teacupful of milk at a milking. This is her third calf; she has no apparent udder trouble and is running in good clover pasture. H. L. F., Mt. Pleasant, Mich.—It is possible that your cow is not digesting and assimilating food properly, or her udder is semi-functionless. Hand-rubbing her udder two or three times a day, milking her three or four times daily and giving her 1 oz. of cooking soda, 1 oz. of powdered charcoal and 1 oz. ground gentian at a dose in feed twice a day will perhaps help her. If she is disinclined to take exercise she should be walked twice daily.



## Get "Better Farming" Free—Worth Dollars to You

Every farmer interested in increasing the productivity of his soil should have this big illustrated book. In its 74 pages it tells how to reduce labor costs, how to get cheaper plant food and how to protect crops from drought and flooding by using

### Atlas Farm Powder

THE SAFEST EXPLOSIVE

The Original Farm Powder

Clearing land is quick, easy and cheap with Atlas Farm Powder—made especially for farm work. No expensive

tools are needed. Just punch a hole under the stump or boulder, load it, light a fuse, and the work is done!

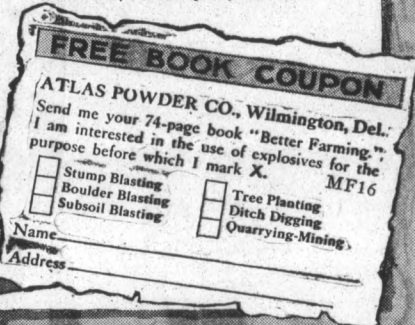
You can blast deep ditches at half the cost of hand digging. You can break up the subsoil and liberate rich plant food, you can make holes for planting fruit trees—with Atlas Farm Powder. Dealers near you will supply your needs.

## Mail the Coupon Now

and learn how to do many kinds of farm improvement work with the cheapest and best farm hand—Atlas Farm Powder, the improved farm explosive.

## ATLAS POWDER COMPANY

General Offices: Wilmington, Del.  
Sales Offices: Birmingham, Boston, Houghton, Joplin, Knoxville, Kansas City, New Orleans, New York, Philadelphia, St. Louis



## LOOK at the LOCK

and you WILL SEE WHY "SQUARE DEAL" Fence is the best fence to buy. Before you buy another rod of fencing, see for yourself why the SQUARE DEAL LOCK makes this the favorite field and stock fence of discriminating farmers everywhere. See how firmly it double grips the one-piece stay wires to the way strand wires without cutting, breaking or slipping—how it combines soft strength with remarkable flexibility—how its self-draining shape prevents rust—how it makes

## Square Deal Fence

especially strong where others are weak. See the one-piece stay wires that prevent sagging, bagging and buckling—save posts, time and trouble. See the way strand wires that give springiness, elasticity and life, keeping SQUARE DEAL FENCE tight and trim the year 'round. We want to send you our FREE catalog telling all about SQUARE DEAL FENCE. Land owners write for it NOW—TODAY and we also will send you FREE and postpaid if you have not sent for one before a regular 50c edition of ROPP'S NEW LIGHTNING CALCULATOR—160 pages of money, time and labor-saving ideas—the GREATEST book of its kind ever published. WRITE.

Keystone Steel & Wire Co.  
2525 Industrial St., Peoria Ill.

## SAW WOOD 6 Times Faster

You will be surprised at the work you can do with this strong, well-built moderate-priced machine.

## IRELAND Wood Sawing Machine

Table mounted on grooved rolls. Almost self-feeding with even heaviest logs. Cut is down—not against operator. Many other exclusive advantages. Write for circulars—also our drug saw machines, saw and shingle mills, hoists, etc.

Ireland Machine & Foundry Co., 33 State St., Norwich, N. Y.

## Quaker City Feed Mills

Grind corn and cobs; feed, table meal and alfalfa. On the market 50 years. Hand and power. 23 styles. \$3.50 to \$40. FREE TRIAL. Write for catalog and farm machinery bargain book.

THE A. W. STRAUB CO.  
Dept. O-3727-3731 Filbert St., Philadelphia  
Dept. 1-3761-3763 S. Ashland Ave., Chicago

Rosen Rye \$175 bu. In New Sacks  
F. O. B. Adrian. R. P. Clement, Adrian, Michigan.

## KEROSENE ENGINES

OTTAWA LATEST DESIGN  
Durable, Powerful, Reliable, Massive. Built to last; to do hard, heavy work. Uses Cheapest Fuel. Pull ¼ to ¾ horse-power more than rated. 3 Months Trial. Easy Terms. Sizes 1½ to 22 H.P. Easy to start. No Cranking. No batteries. 10 Year Guarantee. Most practical engine ever built. Engine book free. A Postal brings it.

THE OTTAWA MANUFACTURING CO.,  
1367 King Street, OTTAWA, KANSAS.

## Cream Wanted

## Send Us Your Cream

We pay 4c over Elgin quotation for Butter Fat. Weights and Tests Guaranteed, Prompt Payments. Write for shipping Tags to,

## O. A. ELLIS' CREAMERY

Ford Market Building,  
HIGHLAND PARK, MICHIGAN.

## RUFUS B. HOLMES CO.

High and Ropelle Sts. Detroit, Mich.

## Commission Merchants

Poultry, Live or Dressed, Dressed Hogs, Calves, Sheep and Eggs. Reference, Peninsular Savings Bank, Sullivan Packing Co. Shipments Solicited. Satisfaction Guaranteed.

Farmers: We are now paying from three to nine cts. above the highest Official Detroit Market Quotation for eggs, shipped to us by express. Write us for information. It will pay you. AMERICAN BUTTER & CHEESE CO., Detroit, Mich.

**HAY** Ship To The Old Reliable House  
Daniel McCaffrey's Sons Co.,  
623-625 Wabash Bldg., Pittsburgh Pa.

**HAY** More Money if you Consign to THE  
E. L. RICHMOND CO. Detroit.  
21 years in business. Reference  
your Bank.

## SEND NO MONEY

Lame and Blemished Horses Cured  
Just write full particulars of case, and whichever is best, either a bottle of All-Go-Sound (not a Blisters), price \$2.00, or Harlow's Blisters, price \$1.50, will be sent, postpaid, on 30 days' trial, with the understanding that if satisfied, you remit. If not satisfied charge will be cancelled. Other horse remedies. Write to-day.  
W. F. HARLOW, Dept. 10 Detroit, Mich.

I will condition a Horse or Cow in twelve days.  
Put flesh on its bones. Give it life and vigor. Can add 50% to looks and value. Satisfaction guaranteed or no pay. Send postal for free offer.

P. M. FAUST, BRYN MAWR, PA.

Wanted Agents to sell Farmers' Account Books, Quick Seller Big Profits. Exclusive Territory. Address L. L. Syphers, Fort Wayne, Indiana

Mention The Michigan Farmer When Writing Advertisers



## Hanes Saves Half Your Underwear Money

When you spend a dollar and a quarter for a suit of Hanes Underwear you save that much. For there's a big \$2 worth of warmth and wear and comfort in the clean, soft cotton. Think, only 65c a single garment or \$1.25 for union suits, despite the high prices of materials.

65c per Garment **HANES** \$1.25 per Union Suit  
ELASTIC KNIT UNDERWEAR

Hanes Union Suits have a comfortable Closed Crotch that stays closed; Elastic Shoulders with Improved Lap Seams which "give" with every motion; a snug-fitting Collarett which always keeps the wind out of the neck; Improved Cuffs at wrist and ankle which hug close and do not stretch out of shape; and every button is a good Pearl Button sewed on for keeps.

Hanes Separate Garments have Double Gussets to double the wear; a Comfortable, Staunch Waistband; Improved Cuffs which hug the wrists and won't flare out; a snug Elastic Collarett which never gaps; Elastic Shoulders with Improved Lap Seams which "give" with every motion.

Pre-shrinking keeps all Hanes Underwear elastic and true to size and shape. Seams are unbreakable where the wear is greatest. Give 'em the toughest wear you know how.

That's a lot of underwear for 65c or \$1.25—a whole lot more than you ever got before. Hanes is honest all the way through—no frills—just common-sense underwear for hard-working, big-muscled, thrifty men.

Don't waste money—buy Hanes and save money. See a Hanes dealer. If you don't know one, write us.

P. H. HANES KNITTING COMPANY  
Winston-Salem, N. C.



## Milk and Public Health

By FLOYD W. ROBISON

FOR general food purposes the type of fermentation which is preferred in milk is what is known as lactic acid fermentation, that fermentation which develops the souring of milk. It is well to remember that practically all bacterial fermentations are the result of the growth and activity of micro-organisms which get into the milk after it has been removed from the udder of the cow. Milk as it is contained in the udder of the cow is practically sterile and if the first few streams of milk are rejected, the subsequent milk will be found to be almost entirely free from any germs whatsoever. If, therefore, after a period of time this milk finally turns sour it is to be conceded at once that this souring is caused by the entrance of germs of the lactic acid type which have gotten into the milk after it was removed from the udder of the cow.

### The Souring Change the Most Desirable Change.

We say the souring change is the change which is most desired. By this we mean that in considering milk from its standpoint of a beverage it is desired that these so-called friendly bacteria should have the ascendancy in the fermentations which occur in the milk. There is a very decided associative action of bacteria in milk. Many different types which find entrance into the milk exert their influence upon the product just exactly as we may expect many forces drawing in different directions to exert their effort in composite upon the object.

However, the fermentation which dominates the milk finally, is the type of fermentation which, because of the abundance and virility of the organisms present, gets control of the milk at the start. So we say that milk turns sour and is therefore unfit for food. We mean by this that because it is sour it is no longer acceptable as a liquid food and we do not mean that its value for all food purposes is destroyed simply because it has become sour.

### Souring is an Index of Care in Production and Marketing.

Practically speaking, the souring of milk, if it occurs within a short period of time, is one of our best indicators that sufficient care was not taken in the handling of the milk from the time of milking. Knowing that the organisms which promote souring must have entered the milk after its delivery from the udder of the cow we may easily appreciate that if lactic organisms can get into the milk other organisms have exactly the same opportunity. Consequently when souring occurs quickly we know that these opportunities for contamination of the milk have been very great, and we may therefore expect to find not only an abundance of various types of bacteria present but we may also expect to find actual solid material which has gotten into the milk. So we say that the souring of milk is a fairly good index of the general quality of that milk as far as cleanliness is concerned.

### It is Necessary to Control the Kind of Fermentation.

Now in the manufacture of butter these points have been very clearly seen, for unless the bacteria which caused souring greatly predominate in the milk, by the time they have reproduced themselves sufficiently to fully ripen the milk, there will be found abundant evidence of the activity of other types of organisms as well. Many of these other types of organisms are types which produce very undesirable conditions indeed. Some of them produce bitter flavors; some produce slimy and ropy conditions; and some are pigmented, which cause abnormal colors, all of which associated together are apt to have very undesirable effects upon the quality, and particularly the keeping quality, of the butter which is made therefrom.

### What Pasteurization Accomplishes.

In the manufacture of butter it has been discovered that it is almost imperative that the type of fermentation going on in milk should be very rigidly controlled. This would not be necessary if the milk were produced with great precaution in regard to cleanliness, but in average milk in which the bacterial flora is an exceedingly miscellaneous one it is almost impossible to develop a desirable fermentation without resorting to some special expedient. The expedient most commonly used in creameries therefore is the effect of pasteurization or sterilization of the milk. Careful pasteurization of the milk destroys a very large proportion of the miscellaneous bacteria present. The milk is therefore left in a rather inactive condition as far as bacterial life is concerned. The next step following pasteurization therefore is the addition of a good active culture of the lactic acid organism. This bacteria being introduced into a practically sterile media now has the opportunity of continuing its life work uninterruptedly and unaffected by the activity of other types of germs. Consequently the fermentation proceeds along a single line and the end products of the activity of the lactic acid organisms, that is, the production of lactic acid particularly, develops a very desirable ripening of the milk. The flavor is clean and desirable and leaves in the butter a fresh, clean taste with no opportunity for the development of evil flavors or odors.

### Most Creameries Know too Little About Pasteurization.

A good deal of the milk produced in the larger creameries now is pasteurized and a culture added before making into butter. Unfortunately comparatively few creameries seem to know what pasteurization really means and much of the so-called pasteurization is pasteurization in name only. Many creameries who deliver milk into the retail milk supply say their product is pasteurized, when as a matter of fact it is pasteurized in name only and there are no really effective safeguards that the public may feel sure that the milk is sufficiently and safely pasteurized.

One of our main objections to pasteurization of milk as compulsory in cities is that a city really has no right, in our judgment, to compel pasteurization of milk and thus give the consumers the assurance of safety which pasteurization is supposed to give unless they have adequate inspection means at their command to compel effective pasteurization, pasteurization that really pasteurizes.

This is one of the lines in which science—bacteriology and chemistry—has been able to make of decidedly commercial importance, for pasteurization effectively carried out will not only safeguard the public from a standpoint of disease due to milk, but it also constitutes a decided commercial saving to the producers and distributors.

Paul Shinn, of Chicago, who visited South Charleston, Ohio, recently, said there are fewer cattle on feed than for many years.

John P. Honeycutt, of Illinois, widely known as a singularly successful grower of early maturing corn, was showing his friends in the Chicago Stock Yards the other day fine ears of his Honeycutt Red Dent corn which he raised this season. Planted on the tenth day of June, it was gathered just 96 days later in complete maturity, the early frost failing to work any damage.

Horses were marketed freely and had a good demand at unchanged prices, with artillery horses especially wanted by foreign buyers at \$160@200. Inferior horses were slow at \$50@75, with drivers salable at \$100@200, waggoners and expressers at \$160@200 and weighty drafters at \$240@285. A load of horses classed as loggers cost \$150@200, and pairs of rugged chunks for city use sold at \$440@500.

**FREE** My Big New Buggy Book

**SPLIT HICKORY**

Just drop me a postal and I will mail you my big new catalog showing 150 stunning styles of Split Hickory Vehicles. Famous for beauty, lightness, strength, and long service. I give

**30 FREE Road Test** and 2 years guarantee. Now I have split the price to save you \$20 to \$40 on your new rig. Catalog explains how. Write for big free book today. Address

**THE OHIO CARRIAGE MFG. CO.**  
H. C. Phelps, Pres.  
Columbus, Ohio  
(Station 60)

Catalog shows 150 other styles from **\$39.25** up

## High Quality Farm Land In the South

**GOOD**, fertile land that will grow all the crops you are familiar with in the North, and many more besides. Here is a wonderful opportunity to get away from the bitter winters, the short growing season and the frequent droughts of northern states. We offer you a new home in a mild climate of generous rainfall, where live stock thrives and vegetable growth continues the year 'round. Well drained, gently rolling upland, in the "Ozone Belt" of the southwestern Louisiana Highlands, "the land of perpetual growth."

## \$22 An Acre Until November 2 Easy Terms

After that date the price will be \$25 per acre. Climate, soil, shipping facilities, market—all combine here to make this the ideal locality for dairying, cattle feeding, hog and sheep raising. All-the-year pasturage; two and three crops a year on the same ground. Beef, pork and mutton can be produced far more cheaply than in any northern state. **You can grow**

Corn.....40 to 70 bu. per acre.  
Oats.....40 to 50 bu. per acre.  
Corn Silage.....12 to 20 tons per acre.  
Cane.....10 to 20 tons per acre.

Send for our big sixty-four page illustrated book—**"Where Soil and Climate are Never Idle."** It's free, absolutely without obligation. With it comes a map of Louisiana in full colors; plat of land; and our latest Bulletin—all free to you. Send today and learn about the wonderful development now going on in this region. A postal brings it.

**Long-Bell**  
FARM LAND CORPORATION  
Directly affiliated with The Long-Bell Lumber Co.  
429 R. A. Long Bldg. Kansas City, Mo.

**HONEY** 5 lb. pail finest extracted honey, by parcel post, for 75c.  
**M. H. HUNT & SON, LANSING, MICH.**

**PAINT** 75c PER Gallon

**ORDER DIRECT FROM FACTORY**

We will send you as many gallons as you want of the best quality red or brown **BARN PAINT**

upon receipt of remittance. We are paint specialists and can supply you with paint for any purpose. Tell us your wants and let us quote you low prices. We can save you money by shipping direct from our factory. Satisfaction guaranteed.

All paint shipped F. O. B. Jersey City

**AMALGAMATED PAINT CO.**  
Factory: 371 WAYNE ST., JERSEY CITY, N. J.

**AGENTS WANTED**

for safe and dependable 400 c. p. Akron Gas Lantern. Clear, brilliant, white light, 50 times stronger than oil; double mantle, mica globes, won't blow out or break. Smokeless, odorless, beautiful, economical.

**AKRON LIGHTING SYSTEMS**

and portable lamps excel in simplicity, quality and latest improvements. Write for agency terms and our Handy Demonstration Outfit.

**AKRON GAS LAMP CO.**  
635 South High St. Akron, Ohio

**Free Catalog** in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

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



## Money In Duck Raising

THE last census showed that there were in 1910, 2,906,525 ducks in the United States, valued at \$1,567,164, a decrease in number of nearly 40 per cent as compared with 1900. Ducks were reported on only 7.9 per cent of the farms in the country and are most numerous in the following states, arranged according to their production: Iowa, Illinois, New York, Pennsylvania, Missouri, Tennessee, Indiana, Kansas, Oklahoma, Arkansas, and Ohio, the number ranging from about 225,000 in Iowa to 106,000 in Ohio. New York is the only one of these states which shows an increase in the number of ducks, while all the others show a marked decrease. Long Island, N. Y., contains a number of large commercial duck farms which apparently are quite successful. Michigan is not prominent in the production of ducks, being about twentieth in the list of states. The decrease in this state is large, dropping from 191,863 in 1900, to 54,723 in 1910.

### Intensive Duck Farming Profitable.

Intensive duck farming on a large scale has been more successful than intensive chicken raising, since Pekin ducks, especially, stand confinement well, are more easily brooded and are less subject to disease than chickens. The demand for table ducks at good prices is largely limited to the large cities and is not nearly as general as is the demand for chickens or fowls. The demand, however, appears to be gradually increasing, but this lack of wide market materially influences the establishment and growth of duck farms. The market conditions should be studied carefully before a large investment is made in ducks. A prejudice against duck flesh and eggs exists in many places, caused probably by eating the common or "puddle" duck, which has been allowed to roam in places where filthy conditions existed.

### Ducks on the General Farm.

Ducks can be raised with success and at a profit on general farms, says Alfred R. Lee, a poultry specialist of the Department of Agriculture, but they do not appear to be as well adapted as a source of income to average farm conditions as fowls, although they serve to add variety, both of meat and of eggs, for the farmer's table. If the demand for ducks, and especially for duck eggs, increases, breeds of ducks which are good layers should be profitable on farms, particularly where there is good pasture land containing a stream or any running water. Farmers rarely give the necessary care to their ducklings, either in feeding or in marketing, to be able to cater to the trade in fancy green ducks.

### The Essentials of a Good Location.

Duck farms are usually located on light, sandy soil, generally on sloping land, where the droppings will leach freely into the soil, so that the land keeps sweet and clean. The farm should have good shipping facilities to aid both in shipping products and in buying supplies. The arrangement of the buildings should be planned to economize labor and allow for future increase of the equipment. The incubator cellar should be convenient to the brooder house, the brooder house to the growing house and pens, and these buildings to the killing house. The pens in the houses, the outside yards, and the arrangement of the buildings should be planned so that the ducks may be easily driven from house to house if desired. The feed room or house should be centrally located. Convenient watering arrangements are essential where large numbers of ducks are kept, as they require a large amount of drinking water. While ducks may be kept successfully under very intensive conditions, it is advisable to allow considerable yard space. Double yards, which may be rotated and planted to quick-growing crops, such as oats, wheat, and rye,

are good for intensive duck farms. Duck Ponds.

It is advisable to have a pond or stream for the breeding ducks, as they usually give better fertility under these conditions, although on some successful duck farms the ducks are always kept on dry land. The young ducks on some farms which have a pond are not allowed to go into the water except to bathe and clean their feathers just before marketing. Other growers, however, allow the green ducks free access to ponds or streams until they are marketed.

There are 11 standard breeds of ducks which may be divided into three classes: (1) the meat class, including the Pekin, Aylesbury, Muscovy, Rouen, Cayuga, Buff and Swedish; (2) the egg class, which includes the Indian Runner; and (3) the ornamental class, composed of the Call, the Crested White, and the Black East India. The common "puddle" duck is kept on many farms in the middle west, and south and is generally of small size, a poor layer and an undesirable type of market duck. Excepting the Muscovy, all of our economic breeds of ducks are said to have originated from the Mallard, or common wild ducks.

### TUBERCULOSIS.

I have a flock of old hens about a year old and this spring they started a new disease. They first start to limp and then they won't eat. After suffering from four weeks to three months they finally die. I have opened them and found their liver and intestines all full of yellow chunks about the size of a pea down to a pin head. I feed them corn twice a day all the year around, and during the winter I feed them green stuff and wild buckwheat, rye, oats and wheat boiled; during the summer they do not get this. They get their fresh water every day, summer and winter. All the setting hens are most affected.

Osceola Co.

SUBSCRIBER.

It is somewhat difficult to determine exactly, from the written description, the disease that is affecting your hens, but we feel quite sure in saying that it is tuberculosis which is a disease having as a prominent symptom the characteristic cheesy nodules on the liver and intestines.

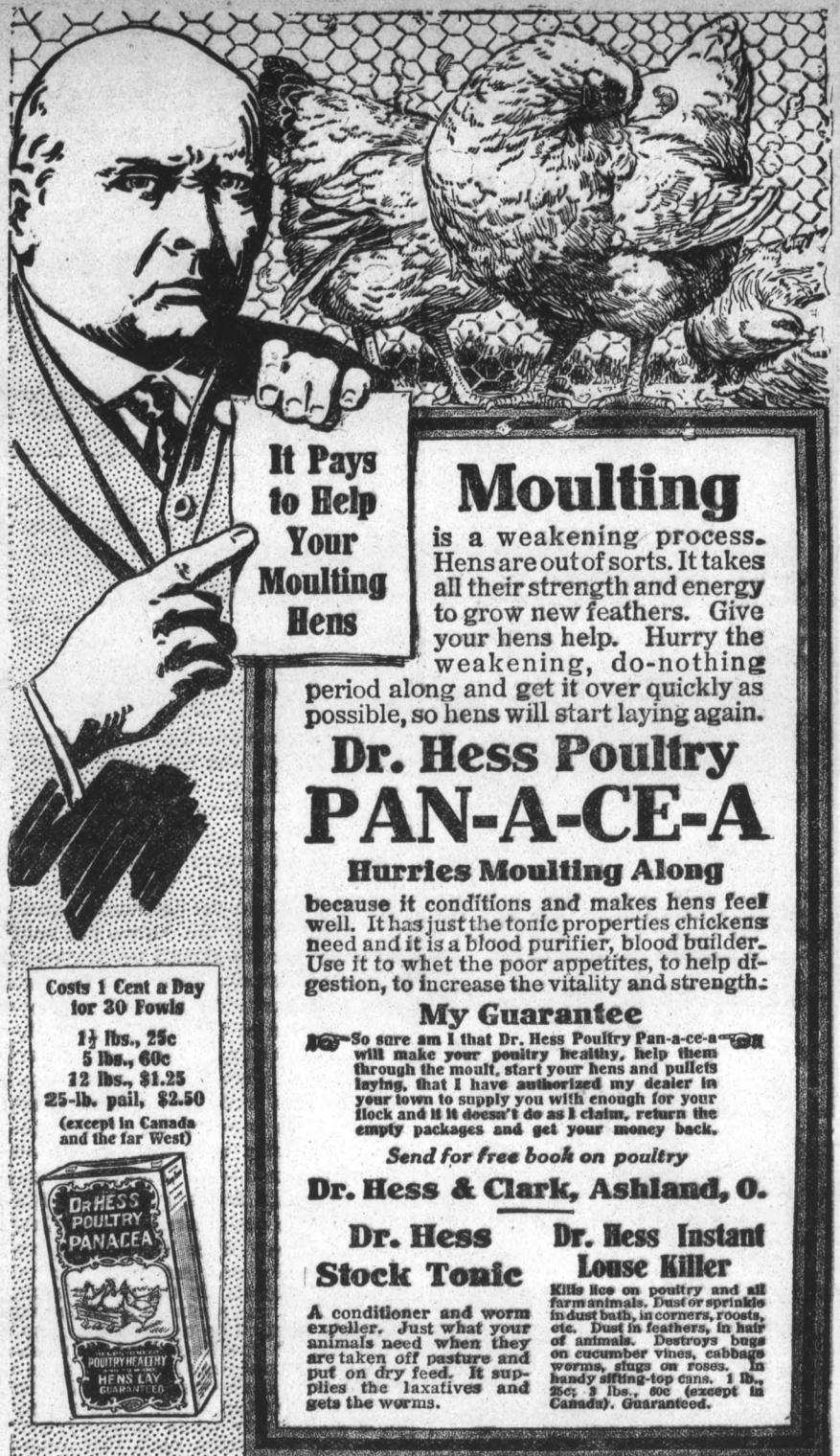
This disease more often attacks the abdominal viscera than the lungs, in fact, only about one out of five birds are found to have lesions in the lungs. As with human tuberculosis it is very difficult to recognize the disease in its early stages and even the advanced stages present variable symptoms.

Among the most prominent advanced symptoms are emaciation, weakness, lameness and ruffled feathers. The comb will be pale and the eye bright, and usually the appetite good. Often there is diarrhea. The lameness is caused by tubercular affection of the joints.

Post mortem symptoms give more certain indications and the yellowish-white cheesy nodules or tubercles on the liver, intestines and liver are almost certain indications of the disease.

While the disease is a bacterial one it is encouraged by unsanitary surroundings and improper ventilation of the coop. As with all bacterial diseases vigorous hens which are kept under sanitary surroundings, and in properly ventilated coops, and are fed properly, do not take the disease readily. The trouble is spread by contact with diseased birds and through the droppings. It is not transmitted through the egg.

The trouble is practically incurable as when it is advanced to the stage where it can be diagnosed it is not affected by treatment. Under these circumstances it would be advisable to kill off the entire flock and thoroughly disinfect the runs and coops, and then start anew. If the coops are not arranged so that there is ventilation without draft they should be remodeled as the damp, foul air which the chickens have to breathe is one of the chief causes of tuberculosis.



**It Pays to Help Your Moulting Hens**

**Moulting** is a weakening process. Hens are out of sorts. It takes all their strength and energy to grow new feathers. Give your hens help. Hurry the weakening, do-nothing period along and get it over quickly as possible, so hens will start laying again.

**Dr. Hess Poultry PAN-A-CE-A**

**Hurries Moulting Along** because it conditions and makes hens feel well. It has just the tonic properties chickens need and it is a blood purifier, blood builder. Use it to whet the poor appetites, to help digestion, to increase the vitality and strength.

**My Guarantee**  
So sure am I that Dr. Hess Poultry Pan-a-ce-a will make your poultry healthy, help them through the moult, start your hens and pullets laying, that I have authorized my dealer in your town to supply you with enough for your flock and if it doesn't do as I claim, return the empty packages and get your money back.

Send for free book on poultry

**Dr. Hess & Clark, Ashland, O.**

**Dr. Hess Stock Tonic**  
A conditioner and worm expeller. Just what your animals need when they are taken off pasture and put on dry feed. It supplies the laxatives and gets the worms.

**Dr. Hess Instant Louse Killer**  
Kills lice on poultry and all farm animals. Dust or sprinkle in dust bath, in corners, roosts, etc. Dust in feathers, in hair of animals. Destroys bugs on cucumber vines, cabbage worms, slugs on roses. In handy sifting-top cans. 1 lb., 25c; 5 lbs., 60c (except in Canada). Guaranteed.

**Costs 1 Cent a Day for 30 Fowls**  
1 1/2 lbs., 25c  
5 lbs., 60c  
12 lbs., \$1.25  
25-lb. pail, \$2.50  
(except in Canada and the far West)

**Dr. Hess Poultry PANACEA**

**BOOK ON DOG DISEASES And How to Feed**  
Mailed free to any address by the Author  
**H. CLAY GLOVER CO., Inc.**  
118 West 31st Street, New York

**Crown Bone Cutter**  
EASIEST, Fastest, Feed fresh cut bone and get more eggs, higher fertility. Also dry Bone, Grain, Fertilizer and Shell Mills. All Sizes. Hand and Power. Write to-day for Free illus. Catalog. **WILSON BROS., Dept. 30 Easton, Pa.**

### POULTRY.

**Barred Rocks** Parks 200 egg strain. Cockerels for sale. Circular Free. **Fred Astling, Constantine, Mich.**

**BREEDING COCKERELS** White, Brown, R. I. Reds, Barred Rocks, PULLETS—White, Buff, Black. Prices reasonable. **Sunnybrook Poultry Farms, Hillsdale, Michigan.**

**Barred Rock** Cockerels, Cocks and Hens. Four pullets laid 950 eggs in one year. **W. C. Coffman, R. 3, Benton Harbor, Michigan.**

**Bargains** For a short time in White Rocks, Pekin Ducks, Toulouse Geese and White African Guinea. **H. V. Hostetler, R. 1, St. Johns, Mich.**

**GET YOUR ORDER IN EARLY FOR** Cockerels from Cousins Northern King Strain Barred Rocks. Write David W. Cousins, North Port, Mich.

**Buff Leghorns** Exclusively. Now is the time to buy pure bred stock at a big reduction in price. **Dr. William A. Smith, Petersburg, Michigan.**

**JOHN'S Big Beautiful Barred Rocks** are all hatched, developed quick, good layers, each \$3; pair \$5; sold on approval. Circulars, photos. **John Norton, Clare, Mich.**

**FERRIS WHITE LEGHORNS**  
Best winter layers. 5000 pullets, hens and breeding males at low prices. Trapped to lay 200 eggs or more. Shipped C. O. D. and on approval. Chicks and Eggs. Catalog explains all. Send postal.  
**Geo. B. Ferris, 934 Union, Grand Rapids, Mich.**

**FOR SALE** Pure bred S. O. Buff Leghorns and white Plymouth Rock cock-erels. **Kietzien & Webster, Bath, Mich.**

**Fowler's Buff Rocks** Cockerels from \$2 to \$5; hens \$1.50 to \$3. White Holland Turkeys, young toms \$5; hens \$3. **R. E. FOWLER, Hartford, Mich. R. 3.**

**FINE White Rock Cockerels** for sale. \$2.50 each until Nov. 30. Also a few hens and a cock (12 birds). Write Mrs. Elsie M. Robinson, Petersburg, Michigan.

**Pine Crest, S. C. White Orpingtons.** Winners again at the State Fair. Young and old stock for sale. Buy the best. **MRS. WILLIS ROUGH, Pine Crest Farm, Royal Oak, Michigan.**

**RHODE ISLAND REDS and PLYMOUTH ROCKS.** Males 5 to 12 lbs. according to age \$2 to \$3; P. R. white weight 5 to 10 lbs., eggs 15 for \$1.00; 100, \$5; 120, \$6. Mammoth Bronze Tom Turkeys, 8 to 38 lbs. according to age \$6 to \$25, 10 eggs \$3. **A. E. Cranton, Vassar, Mich.**

**RED COCKERELS, Both Combs.** Dark red will improve the color of your flock. Write for price list. **Interlakes Farm, Box 39, Lawrence, Michigan.**

**Single Comb Rhode Island** Red Cockerels. Rich, Dark Red and Strong. **JENNIE BUELL, Ann Arbor, R. 8, Michigan.**

**S. S. Hamburg Eggs** reduced prices, balance of season. Free delivery. **Laghorn hens \$1.00, Belgian Hare Bucks \$5.00 with Pedigree. RIVERVIEW FARM, Vassar, Mich.**

**SILVER GOLDEN AND WHITE WYANDOTTES.** Eggs from all matings, 150 per 15, \$2.50 per 30 until July 1st. **C. W. Browning, R. 2, Portland, Mich.**

**White Wyandotte** Cocks & Cockerels, Eggs \$1, \$2, \$3, per 15, \$4 per 50, \$7 per 100. **DAVID RAY, 202 Forest Ave., Ypsilanti, Michigan.**

**White Wyandotte** Cockerels from fine stock and A 1 layers. \$2 and \$3 each. Farm raised. **A. FRANKLIN SMITH, Ann Arbor, Michigan.**

**White China Geese & M. Pekin Ducks**  
**CLAUDIA BETTS, Hillsdale, Mich.**

### FERRETS

**3000 FERRETS FOR SALE**  
Price list free. **C. J. DEMICK, Rochester, Ohio.**

**2000 Ferrets** They hustle rats and rabbits. Price list and booklet mailed free. **N. E. KNAPP, Rochester, Ohio.**

**Ferrets For Sale. Fine Stock.** Catalog and price list free. Write at once. **C. M. Sackett, Dept. M, Ashland, O.**

**White and Brown Ferrets For Sale. Price list free**  
**C. D. MURRAY, New London, Ohio.**

### DOGS

**Fox Hounds of all ages,** Skunk and Rabbit dogs. **W. E. LECKY, Holmesville, Ohio.**

**Bright, Clean,** Intelligent Collie puppies from heel driving parents. Females \$5. Males \$8. **G. A. WIGENT, Watervliet, Michigan.**



# DUPONT

## RED CROSS FARM POWDER



**The Original and Largest Selling Farm Explosive**

Why use expensive high speed dynamites when this slower, safer farm powder will save you from \$3 to \$5 per hundred pounds and for most farm uses do better work?

### BIG BOOK FREE

As pioneers and leaders in developing farming with explosives our booklet gives the latest, most reliable and best illustrated instructions. Write for **HAND BOOK OF EXPLOSIVES No. 100-F**

### DEALERS WANTED

We want live dealers in towns still open. Get the orders resulting from our **continuous heavy advertising**. You need not carry nor handle stock. State jobber's name or bank reference when writing.

**E. I. du Pont de Nemours & Company**

Established 1802

World's largest makers of farm explosives

Wilmington, Delaware

## Get the Top Fur Prices From

your furs—ship to Funsten! Men and boys make big money trapping. You can, too. It's easy to trap raccoon, muskrat, fox, etc. We teach how. John Haugstead of Wankon, Iowa, caught sixteen fine skunk in one hole with a Funsten Perfect Smoker. Price \$1.50. Parcel Post \$0.30 extra. Emil Theis of Boone, Texas, caught in one setting fourteen animals in eight days with Funsten Animal Bait. Price \$1.00. Three books in one FREE. Trapper's Guide, Supply Catalog, Game Laws. Tells how to make money on fur and when and where to trap; preparing skins for shipment. Write today. Funsten Bros. & Co. 1209 Funsten Bldg. St. Louis, Mo.

**Funsten**

## TAYLOR PAYS MORE FOR FURS

Trapping pays big if you sell where you get the most money. St. Louis is world's greatest fur market and F.C. TAYLOR FUR CO. is oldest and largest house here. It will pay you to join the happy family of Taylor shippers.

### TRAPPERS WRITE FOR THIS FREE BOOK

Our catalog-Booklet entitled "Opportunities for pleasure and profit in trapping" is different: you will say so when you get your copy. It's FREE if you mail a postal to-day. Our trappers supply department will help you get started. Write Today.

**SHIP YOUR FURS TO F.C. TAYLOR FUR CO.**  
240 FUR EXCHANGE BLDG. ST. LOUIS, MO.

### FREE TO TRAPPERS

Get started right this season and make more money. Send your name today for RUMBAUGH'S MARKET REPORTS now ready to mail. They quote latest market prices. Furs from northern states are my specialty and I'll pay the most money for them. Correct grading means more money for you. I guarantee my grades or return your furs. Write today. W. R. RUMBAUGH, 205 Court Ave., Des Moines, Ia.

### Free Baits For Trappers

**\$1.00 Bottle Free**

Write today and get yours early, mentioning animals trapped. Don't delay for we have only a few thousand bottles to send Fur Shippers.

Bach Fur Co., Dept. 44 Chicago

**"ROUGH ON RATS"** ends RATS, MICE, Bugs. Don't Die in the House. Unbeatable Exterminator. Ends Prairie Dogs, Gophers, Ground Hogs, Chipmunks, Weasels, Squirrels, Crows, Hawks, etc. The Recognized Standard Exterminator at Drug & Country Stores. Economy Size 25c. 50c. Small 15c. Used the World Over. Used by U. S. Gov't. Rough on Rats Never Fails. Refuse ALL Substitutes.

Mention the Michigan Farmer when writing Advertisers.

## Farmers' Clubs

### OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—R. J. Robb, Mason.  
Vice-president—C. B. Scully, Almont.  
Secretary and Treasurer—Mrs. J. J. Brown, Howell.  
Directors—Alfred Allen, Mason; C. T. Hainline, Alma; W. K. Crafts, Grass Lake; Edward Burke, St. Johns; Mrs. C. J. Reed, Spring Arbor; Roy E. Moore, Bellevue.

Address all communications relative to the organization of new Clubs to Mrs. J. S. Brown, Howell, Mich.

### Associational Motto:

"The skillful hand with cultured mind is the farmer's most valuable asset."

### Associational Sentiment:

"The Farmer: He garners from the soil the primal wealth of nations."

### CLUB DISCUSSIONS.

The October Meeting of the Howell Farmers' Club was held at Locust Hill Farm with Mr. and Mrs. Howard Reed. The first to appear on the main part of the program was Mrs. Roy Latson who read a selection entitled, "Marketing Farm Produce." The substance of this reading and the discussion upon it was, that not all the blame for unsatisfactory results should be heaped upon the commission men, that the farmers were partly to blame because of the condition of their shipments when reaching the city, in not being properly graded, and that it was quite expensive to hire such work done there; while others were of the opinion that the commission men were doing well out of the business. Another suggestion was that farmers should have their private customers and ship direct by parcel post. Miss Mary Howe read a very timely and interesting article upon the subject, "Is the Soil Wearing Out?" This was a situation of German methods applied to agriculture, also a deploring of the fact that American farmers had not reached that degree of efficiency in their operations. The soil is the asset of the nations and will produce abundantly when properly handled. The discussion upon this subject was quite interesting, some believing that we were not yet prepared to apply those methods, while another was of the opinion that American citizens were too heterogeneous to be organized into such a solid mass; and another said the American farmers were slow to endorse the principle of co-operation but that they would have to learn it by degrees, the same as a child creeps before he learns to walk. After a short recess the attention of the Club was given to the question box which contained ten questions, which were discussed with interest. The program included a number of good musical and literary numbers. The president appointed the regular committees and the Club adjourned to meet with Mr. and Mrs. Wm. Joy, Thursday, November 2.—Mrs. R. R. Smith, Cor. Sec.

The September meeting of the Conway Union Farmers' Club was held at the home of Mr. and Mrs. W. E. Stow. The first question was, "Which is the most satisfactory insurance company for the average farmer, and how much insurance should he carry?" H. C. Benjamin would recommend a company which insures only buildings that are rodged, none under \$200 value. Good thing to take inventory of household goods. Discussion led by J. B. Fuller. Insure good buildings, rodged; have inspector test rods as to the proper rodging; company that insures only good buildings best company to insure with; not wise to carry too large an insurance. Glenn Burkhart thought one ought to carry all the insurance possible. G. L. Adams thought men must investigate mutual companies before entering. Everything must be specified on policy and in building in which it is insured. "The Modern Housewife." Mrs. Ora Holmes said the modern housewife has many new conveniences, and by proper arrangement of these in her home a greater part of the drudgery of housework is done away with. Among such labor-saving articles Mrs. Holmes mentioned the power washer, electric iron, gasoline and kerosene stove, fireless cooker, vacuum sweeper, dustless dusters, etc.

—Francis Stowe, Cor. Sec.

## Grange.

Our Motto:—"The farmer is of more consequence than the farm, and should be first improved."

### STATE GRANGE OFFICERS.

Master—John C. Ketcham, Hastings.  
Overseer—C. H. Bramble, Tecumseh.  
Lecturer—Dora H. Stockman, Lansing.  
Secretary—Jennie Buell, Ann Arbor.  
Treasurer—Frank Coward, Bronson.  
Executive Committee—C. S. Bartlett, Pontiac; Geo. B. Horton, Fruit Ridge; J. W. Hutchins, Hanover; W. F. Taylor, Shelby; Wm. H. Welsh, Sault Ste. Marie; N. P. Hull, Dimondale; Burr Lincoln, Harbor Beach.

### AMONG THE LIVE GRANGES.

The Annual Convention of Granges of Allegan county met in the Allegan Grange Hall, Tuesday forenoon, Oct. 3, for the election of six delegates to the Michigan State Grange meeting in Lansing, December 12. The meeting was called to order by D. G. Clack, master of Allegan County Grange. Delegates were present from twelve of the seventeen Granges in the county. The county was divided into three districts. The delegates from each district then proceeded to elect state delegates from their respective districts as follows: Eastern district, Mr. and Mrs. McVean, of Gunplain Grange. Central district, Mr. and Mrs. John White, of Allegan Grange. Western district, Mr. Johnson and sister, Clyde Grange. The convention unanimously adopted a resolution in favor of state-wide prohibition, and instructed the secretary of the convention to furnish a copy of the resolution to each of the Allegan papers for publication.

Delegates to the State Grange convention to be held in Lansing December 12 were chosen Tuesday by Kent county Grange No. 18 as follows: First district, Mr. and Mrs. Earl Brewer, of Carlisle Grange; second district, Mr. and Mrs. Chas. Ammerman, Rockford Grange; third district, Mr. and Mrs. Allen S. Bennett, Vergennes Grange; fourth district, Mr. and Mrs. Gardner, Wolven, Courtland Grange. Delegates from Pomona Grange will be elected later.

John C. Ketcham, master of State Grange, was the principal speaker at the joint meeting of Pomona and Evans Grange to be held October 13. A program of entertainment and discussions will occupy the day. Some of the speakers were Mrs. Mary E. Bodwell, Rev. Judson P. Durham, of Kent City, H. G. Smith, county agriculturist, and Evans Beckwith of Sparta.

County Adviser A. Bentall gave an interesting address at an open meeting of the Grange Saturday night, September 23. He advocated the use of lime, soy beans, plowing down green crops to help add humus to the soil. Mr. Bentall is very enthusiastic in his work and gave a lot of good advice which we trust will be given a trial.

Mecosta County Pomona Grange held its annual meeting at Big Rapids, October 3. The meeting was called at 10:30. The subordinate Granges of the county were well represented, 28 delegates being present. Bro. Corbett, of Capital Grange, near Lansing, was introduced. Being one of the leaders of the dry campaign, he gave the Grange a very cordial invitation to attend a meeting and free banquet given by the ladies of the First Methodist church, in the basement at 11:30. The Grange accepted the invitation and marched in a body to the church, where they did ample justice to the fine dinner, and will long remember the ladies that so cheerfully served it. The meeting was both pleasant and instructive. The Grange was called to order again at 2:00 p. m. Delegates were then elected to be sent to the Michigan State Grange to be held in Lansing in December. Mr. and Mrs. John Kotke from the northern district; Mr. and Mrs. Allen Edgerly from the southern district; Mr. Hyatt and Miss Waldron as Pomona delegates. The following officers were elected for the coming year: Master, John Kotke; overseer, Loyd Lardner; lecturer, Mrs. V. R. Wilson; steward, E. Schoellkopf; asst. steward, Eugene Lardner; lady asst. steward, Mrs. Eugene Lardner; chaplain, Mrs. John Kotke; secretary and treasurer, Clarence Rood; gatekeeper, Fred Sherman. Many interesting discussions came up and some fine selections of music were given, and one more pleasant day was closed in Pomona Grange history.



### Waterproof

As sure as you find rain and leaky boats, so sure you need shells that you know won't soak nor swell.

By one of three easy tests with free sample shells you can prove that The Black Shells are waterproof.

**US BLACK SHELLS**  
Smokeless and Black Powders

For the three free shells and a booklet describing how to make the waterproofing and other tests, just do as follows: On the margin of this advertisement write your name and address, also that of your ammunition dealer, tear it out and send it to us. We will send you an order on your dealer for shells from his stock and for booklet of directions.

**UNITED STATES CARTRIDGE CO.**  
2607 Trinity Building, New York City

## THE BEST LINIMENT

OR PAIN KILLER FOR THE HUMAN BODY

Gombault's

## Caustic Balsam

IT HAS NO EQUAL

For —It is penetrating, soothing and healing, and for all Old Sores, Bruises, or Wounds, Felons, Exterior Cancers, Boils, Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.

Perfectly Safe and Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Strains, Lumbago, Diphtheria, Sore Lungs, Rheumatism and all Stiff Joints.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

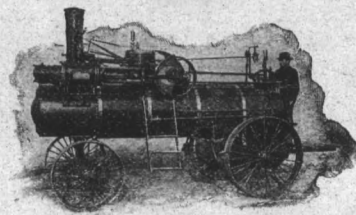
### REMOVES THE SORENESS—STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than \$120.00 paid in doctor's bills." OTTO A. BEYER.

Price \$1.50 per bottle. Sold by druggists, or sent by express prepaid. Write for Booklet R. The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

## COOK YOUR FEED

Steam, The Dependable Power



REBUILT and SECOND-HAND ENGINES, every standard make, that have been taken in trade for New Port Huron Machines. Many sizes and kinds give YOU a large assortment to select from. Prices according to quality—every one a good bargain. For Hulling Clover, Threshing, running Ensilage Cutters, Grinding Feed, Sawing Stove Wood, HEATING, and for COOKING FEED, they are just what YOU NEED. Use ANY KIND OF FUEL. Also have Rebuilt and Second-Hand Grain Threshers, Corn Huskers and Shellers, Clover Hullers, Silo Fillers and Portable Saw Mills. If YOU don't want to invest in a new machine here is YOUR OPPORTUNITY to get a good one at small cost. They're all fixed up right (not given a lick and a promise.) Ask for our REBUILT machinery list sent FREE.

**Port Huron Engine & Thresher Co.**  
Port Huron, Michigan.

## Raw Furs

We pay highest prices for raw furs, remit promptly and pay all express and postage. We give you an absolutely fair sort. Write today for price list.

**Miller & Fineberg**

Dept. D, 25 Jefferson Ave., Detroit, Mich.

When Writing to Advertisers Please Mention The Michigan Farmer.



## BREEDERS' DIRECTORY.

Change of Copy or Cancellations must reach us  
Ten Days before date of publication.

## CATTLE.

**We Offer a Few Special Bargains**  
In S. C. White Leghorn cockerels, Rambouillet rams, Hampshire pigs (either sex) and Holstein bulls. A good chance for a small investment to reap the benefit of a large expenditure of capital and years of expert breeding.

Flanders Farm, Orchard Lake, Mich.

## Aberdeen Angus Bulls For Sale

12 head of choice young bulls old enough for service. All sons of Black Monarch 3rd. Grand Champion Bull Michigan State Fair 1914, 1915 and 1916. Black Monarch 3rd has been sold to W. E. Scripps, Wildwood Farms, for the record price of the breed in Michigan, \$1200. U. L. Clark, Hunters Creek, Mich. Sidney Smith, Mgr.

## ABERDEEN-ANGUS

HERD ESTABLISHED IN 1900.  
TROYAN-ERICAS and BLACKBIRDS only.  
Also breeders of Percheron, Hackney and Saddle Horses.  
WOODCOTE STOCK FARM, Ionia, Mich.

**AYRSHIRES**—One of the foremost dairy breeds. The most economical milk producers. Calves for sale. White Leghorn cockerels. Duroc Jersey swine. Michigan School for the Deaf, Flint, Michigan.

**AYRSHIRES** for sale, two registered cows seven and eight years old, two heifer calves 9 months old. Cheap if taken at once. This will not appear again. M. M. GRAY, 1508 Western Ave., Toledo, Ohio.

**Reg. Guernsey Bulls**, serviceable age, great grand sons of Gov. Chene, also grade Guernsey and Jersey heifers 6 wks old \$20 each. Avondale Stock Farm, Wayne, Mich.

**Guernsey Bulls** of service age and calves from choice. Adv. reg. breeding. T. V. HICKS, Route 1, Battle Creek, Mich.

MILO D. CAMPBELL CHAS. J. ANGEVINE

## BEACH FARM GUERNSEYS

Average yearly production 4223 lbs. of fat, three fourths of them making their records as two year olds. By the use of a pure bred sire, a big improvement can soon be attained if the right selection is made. The breeding of the Beach Farm Herd is as good as can be found, and we guarantee them to be free from contagious diseases and to be satisfactory in every way or money refunded. Write and let us tell you about them.

## CAMPBELL &amp; ANGEVINE,

Coldwater, Michigan.

**GUERNSEYS—REGISTERED BULL CALVES**  
Containing blood of world champions.  
HICKS' GUERNSEY FARM, Saginaw, W. S., Mich.

**Guernseys**—Yearling Gr. Son, Pauline Spotswood, 746 lbs. fat. Also May Rose Heifer just freshen, with heifer calf, you can own them both—cheap. J. M. Williams, North Adams, Mich.

**FOR SALE** Registered Guernsey Bull, 4 year old also 3 yearlings the best yet. Cheap. John Ebels, Holland, R. 10, Box 129, Michigan.

**GUERNSEYS**—Bred heifers, mature cows, bull calves from a long line of Adv. Reg. ancestors with large record. G. A. WIGENT, Watervliet, Michigan.

**For Sale:** Registered Guernsey Bulls old enough for service, and bull calves from advanced registered cows. L. J. Byers, Coldwater, Mich.

## CLUNY STOCK Farm Holsteins

**JUST THREE** yearling sons of Crown Pontiac Korndyke, No. 48,712, whose first ten tested daughters to freshen produced at an average age of 4 yrs. 4 mos. 20 days; Butter, 21,215 lbs., Milk 398.1 lbs.

No. 1. Dam's 7 day record: Butter 29,521 lbs., Milk 667.9 lbs.

No. 2. Dam's 7 day record: Butter, 24,620 lbs., Milk, 50.43 lbs., at 4 yrs. 7 mos. 11 days.

No. 3. Dam's 7 day record: Butter, 25,386 lbs., Milk, 448.7 lbs. No. 3 is the granddam of No. 2.

These young sires combine heavy Milk and Butter production with size and quality. All are light in color and splendidly marked. Come and see them or write for pedigrees and prices.

R. B. McPherson, Howell, Michigan

## Do You Want A Bull?

Ready For Service.

From a grand daughter of The King of the Pontiacs. Sired by a bull that is more than a half brother to the Champion Holstein Cow of the World, and whose dam is a 30 lb. 6 1/2 % fat daughter of Pontiac Argie Korndyke who has more 30 lb. daughters than any other living bull. If you do write for pedigree.

EDWIN S. LEWIS, Marshall, Mich.

## HOLSTEIN BULLS FOR SALE

3 of them 1 year old in Nov. By 31 lb. sire. Dams above 21 lbs. as heifers. Price \$100. Younger bulls by son of Johanna McKinley Segis \$50. up.

BLISSVELDT FARMS, Jenison, Michigan.

30 lb. bull for sale, 2 years old, by a son of King of Pontiacs. Dam sold for \$1000 in Detroit sale.

Ferd. J. Lange, Sebawing, Mich.

## "TOPNOTCH" Holsteins

By careful retention, for many years, of largest producing females, and use of superior sires, a breeding herd of wonderful quality has been established. We are selling young bulls of this "TOP NOTCH" quality, of serviceable age, at moderate prices. Information, pedigrees, etc., on application. McPHERSON FARMS CO., Howell, Michigan.

## HOLSTIENS

Herd No. 1. Five cows, one two year old bull.  
Herd No. 2. Five yearling heifers, one yearling bull.  
Herd No. 3. Five heifer calves and one bull.  
Bulls ready for service and 6 to eight months old bulls. Prices will please you. If interested, write as soon as you read this. L. E. CONNELL, Fayette, Ohio.

The Howell Sales Co., of Livingston County,  
3rd. Annual Sale

At Sale Pavilion on the Fair Grounds at Howell, Mich.

OCTOBER 24th., 1916.

## 100 Head of Registered Holsteins

The consignment to this sale come from the representative herds of Livingston County. The offerings will consist almost exclusively of females of good ages. Among them is a daughter of a 30 lb four yr. old that sold in the Detroit Sale for \$1100. Many of the females have good A. R. O. records or are from good A. R. O. dams and are bred to bulls from high record dams. The bulls are from dams with records up to 28 1/2 lbs. and from 30 lb. sires. A good chance to get foundation stock. All stock over six months of age tuberculin tested. Remember the date. Catalog Oct. 10th.

KELLEY & MACK, AUCTIONEERS

JAY B. TOOLEY, SEC.

## 28 Head Registered and High Grade Holstien Friesian Cattle

To be sold at

Public Auction, October 31, 1916

This herd of cattle consists of 28 pure bred and grade females, 1 yearling registered bull, a grandson of the "King of the Pontiacs" and one registered bull calf. The females are of good breeding and excellent milking qualities. All farm implements, including one 8 h. p. gasoline engine and one Wilder Whirlwind No. D. Silo Filler. Sale starts at 10 a. m. Sale will be held at the farm, located 5 miles North of Monroe, Monroe Co., Mich., on Detroit, Monroe and Toledo Electric line. One mile East of Stoney Creek stop. This 102 acre Dairy Farm for sale. R. G. VIVIAN, R. R. No. 4, Monroe, Michigan.

## Duroc Jersey Herd Boars

Special Offering of High Class Fall Boar Pigs. Breeding and Individuality good enough for breeders who appreciate the best.

Also some good farmer's boars. This is the best lot of fall pigs we have ever had to offer. A cordial invitation is extended to visit the farm and inspect the stock. If you wish one of the best young Jersey bulls in Michigan we have him for sale. For further particulars, address,

Brookwater Farm, Swine Dept., Ann Arbor, Mich.

**REGISTERED** Holstein cows, heifers and heifer calves priced to sell, also bulls ready for service. B. B. REAVEY, AKRON, MICHIGAN.

**CHOICE HOLSTEIN BULLS**—all from A. R. O. dams. Entire herd on Semi. of test for yearly work. Jr. 2-yr. old just finished year's record of over 15,000 lbs. milk, over 1000 lbs. butter record in mature class. Cherry Creek Stock Farm, M. E. Parmelle, Prop., Hilliards, Mich.

**Reg. Holstein Bull Calf**, 2 nearest dams average 90 lb. milk per day Pontiac Korndyke and Hengerveld DeKol breeding. Prices right. John A. Rinke, Warren, Mich.

**Holstein Calves**, 10 heifers, and 2 bulls 15-16ths pure. 8 weeks old, beautifully marked, \$20.00 each, crated for shipment anywhere. Edgewood Farm, Whitewater, Wis.

**Holstein Friesian Cattle**  
A. R. O. herd tuberculin tested, headed by grandson of King Segis Pontiac.

PEACELAND STOCK FARM, Three Rivers, Mich.

Chas. Peters, Herdsman, C. L. Brody, Owner, Port Huron

**ONLY \$25 DELIVERED:** Handsome Holstein bull calf, 7-8 weeks, 15-16 pure bred. Sire, 25 lb. butter bull. Dam extra good cow, 7-8 pure. ROUGEMONT FARMS, Detroit.

**Registered Holsteins.** 30 lb. breeding. Satisfaction guaranteed. W. B. Jones and J. F. Lutz, Cohoctah, Mich.

## MICHIGAN HOLSTIENS

4 to 12 Mo. World record sire. High testing dams—from \$99 up to \$299. Let us send you one on trial. You should not buy until you get our book.

**Long Beach Farm,**  
AUGUSTA, (Kalamazoo Co.) MICH.

**EXTRA GOOD**  
**Holstein Bulls For Sale**

I have some from A. R. O. dams with records of from 16 to 22 lbs. with the best milk producing blood in them that can be had. These are from 4 to 7 months old and I will make a cheap price to move them. Also have a few females for sale. Let me know what you want.

**Bigelow's Holstein Farms,**  
BREEDSVILLE, - - MICHIGAN

**REG. HOLSTIENS:** Herd headed by Albina Bonte R. Butler Boy No. 98124. Dam's record at 6 yrs. butter 28.53 lbs. milk 619.4. Yearly record at 2 1/2 yrs. butter 802 lbs. milk 1822 lbs. W. B. READER, Howell, Mich.

**Bull Calves**  
From A. R. O. Dams, Sired by "Maplecrest Korndyke Hengerveld," whose Dam, "Maplecrest Pontiac Flora Hartog," is one of the four 1200 pound daughters of "Pontiac Argie Korndyke."

Write us about these Calves, and our Berkshires

And we will quote prices that will move them.

Swigartdale Farm, Petersburg, Mich.

**Registered Holstein** yearling heifer. Dam, a 25.80 lb. Pontiac Butler Boy. Sire, a grandson of Hengerveld DeKol out of 25.97 lb. dam. Nice individual, best of breeding. \$150 delivered, safe arrival guaranteed. Write for pedigree. Robert W. Fay, Mason, Michigan.

**Exceptional Opportunity:** Two registered heifers by 25 lb. butter bull, out of excellent A. R. O. Cows. \$150 each. Rougemont Farms, Detroit, Mich.

**NOTICE:** You can buy of us for \$35 a fine Registered Holstein bull calf, well bred, 90% white, also one ready for service 90% white. Cheap. Write. W. C. Hendee & Son, Pinckney, Mich.

**HEREFORDS** 12 Bull Calves 10 Heifer Calves ALLEN BROS., FAW FAW, MICH.

**Closing Out Sale of**  
**Jersey Cattle and Duroc Hogs**

At Cassopolis, Mich., on Oct. 24, 1916; 15 head of Jersey Cattle, large producing cows, headed by a Roycroft Bull of Superior breeding. 17 head of Duroc hogs, the big boned kind.

SEND FOR CATALOGUE  
F. A. Lamb & Son, Cassopolis, Mich.

**Illie Farmstead Jersey Cattle.** Bull calves from R. L. of M. Cows, also heifer calves and several bred heifers for sale. Colon C. Illie, Coopersville, Mich.

**Jersey Bulls for Sale** from high-producing dams, with testing Assoc. records, also on semi-official test. O. B. Wehner, R. 6, Allegan, Mich.

**Maple Lane** R. of M. JERSEY HERD offers for sale, tuberculin tested cows, heifers, bulls, and bull calves backed by several generations of R. of M. breeding. IRVIN FOX, Allegan, Michigan.

**REGISTERED JERSEY BULLS FOR SALE**  
1 yearling, and Bull calves from 8 to 10 months old. Also 3 cows. Write your wants. SMITH-PARKER, R. D. No. 4, Howell, Michigan.

**Maple Hill Farm Registered Jersey Cattle for Sale**  
Both sexes. The kind that pay at the stall. J. R. Worthington, R. No. 7, Lansing, Michigan.

**The Wildwood Farm**  
Jersey Cattle, Majesty Blood. We have Bulls for sale from Register of Merit cows of good type. Write your wants. Alvin Balden, Capac, Michigan.

**FOR SALE:** Choice registered Jersey bull calf born Dec. 24th, 1915. Dam a 700 lb. a year butter cow, moderate price, easy terms. C. S. Bassett, Kalamazoo, Mich.

**BIDWELL SHORTHORNS**  
For "Beef and Milk"  
Registered bulls, Scotch-topped roans, reds and whites for sale. Farm at N.Y.O. Depot; also D. T. & L. R. Y.  
Address G. R. Schrader Mgr. BIDWELL STOCK FARM Box B, Tecumseh, Mich.

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

**DAIRY BRED** Shorthorns of best Bates strains, young bull 8 months old for sale, price \$150. J. B. HUMMELL, MASON, MICHIGAN.

**Shorthorn AND POLLED DURHAMS FOR SALE.**  
Have red roan and white. Have over 100 head in herd. C. Carlson, Leroy, Mich.

**Shorthorns**—Dairy or beef bred. Breeding stock all ages for sale at farmers prices. C. W. Crum Secy. Cont. Mich. Shorthorn Breeders' Assn., McBride, Mich.

**Milking** Shorthorns, roan 3 year old, Bates bred herd bull \$250. Young bulls and heifers. DAVIDSON & HALL, TE CUMSEH, MICHIGAN.

**SHORTHORNS FOR SALE**  
8 Bulls, also females. W. B. McQuillan, Howell, Mich.

**FOR Sale—Reg. Short Horn Bulls by Maxwalton**  
F. Monarch 2nd, a son of Avondale, from 11 to 13 mos. old John Schmidt, Reed City, R. No. 5, Michigan.

**Shorthorns For Sale.** Young bulls \$100. Bred cows. Write W. J. BELL, ROSE CITY, MICHIGAN.

**Claradale Milking Shorthorns** Two fine bulls ready for service at reduced prices for quick sale, finest pedigree, \$125.00 to \$150.00. F. W. Johnson and Sons, Custer, Mason Co., Mich.

**For Sale—** 100 head Shorthorn feeder steers 2 years old, nearly all dehorned. All native cattle. George Hinchman, Hastings, Mich.

**HOGS.**

**Our Berkshires**

Have just arrived home from the Fairs, where we won twelve champions, thirty-one firsts, twenty-seven seconds, five thirds and two fourths, a total of seventy-seven premiums.

**Some of The Winners Are for Sale**

and we also have plenty of others, consisting of a few choice fall boars and gilts and spring pigs of both sexes.

**They are Priced to Sell**  
as we need the room for fall litters.

Swigartdale Farm, Petersburg, Mich.

**Berkshires** of best breeding, of various ages, either sex, all registered stock, no akin, special reduced price. Write your wants quick. Mitchell's Lakeside Farms, R. 2, Bloomington, Mich.

**The Very Finest Berkshire Pigs Cheap**  
C. S. BARTLETT, Proprietor, Pontiac, Michigan

**Berkshire** Boars and gilts. May farrowed, large growthy fellows. Also a litter just ready to wean. A. A. PATTULLO, R. 4, Deckerville, Mich.

**BERKSHIRE SOW** and yearling gilt bred to farrow early in September. Boars ready for service. Also open gilts. Chase Stock Farm, R. 1, Marlette, Mich.

**ROYALTON Bred Berkshires;** Fine lot of September R. pigs, both sexes. Will ship when 6 weeks old, with registry papers, for \$7. All sired by Paramount Lee. Satisfaction guaranteed. D. F. Valentine, Supt. Temperance, Mich.

## DUROC JERSEYS

A choice lot of spring pigs, both sex, pairs and trios, not akin. Prices reasonable. Send for pedigree. THE JENNING'S FARMS, R. F. D. 1, Bailey, Mich.

**J. W. KEENEY, Erie, Mich.** Males, good ones for Dec. Swine. D. M. & T. local from Monroe or Toledo, Keeney Shop.

**Duroc Jersey Special.** Pigs 8 wks. old \$12 each. Trio for \$35, no kin. Reg. and Del. anywhere in state for next 10 days. J. Robert Hicks, St. Johns, Michigan.

**Duroc Jersey Boars** Two June 1915; 12 April 1916. Write for description. I guarantee satisfaction. J. H. Banghart, East Lansing, Mich.

**Duroc Jerseys.** Some yearling & Spring boars good enough to head your herd. Will sell Eureka Cherry King 67145. Ask about him. W. C. Taylor, Milan, Mich.

**For Sale,** Duroc Jerseys, choice breeding spring pigs either sex. Prices right. John McNicoll, Station A, R. 4, Bay City, Mich.

**DUROC JERSEYS:** A nice bunch of Spring Gilts, also 3 good Spring Boars old enough for service. Wm. W. Kennedy, R. 3, Grass Lake, Mich.

**Duroc Jersey Boars** of the large, smooth big boned type. E. D. Heydenberk, Wayland, Michigan.

**Duroc** Jerseys Big Type Boars with breeding and individuality that is hard to beat, bred from prize winning stock, prices reasonable, satisfaction guaranteed. F. J. DRODT, R. 1, Monroe, Michigan.

**Duroc** Stock hogs. Spring gilts, tried Sows, August Pigs. Percheron Stud Cotts. E. J. ALDRICH, Tekonsha, Mich. R. 1, Bell Phone.

**Dobson's Durocs** Combined, size, quality, breeding. Hard boars, spring boars, spring sows for sale. Orlo L. Dobson, Quincy, Michigan.

**DUROC Jerseys.** Spring boars from the most noted sires of the breed. Jo Orion II, Perfect Top Col., Oakland Ohio Chief, Principle IV & Model Pal. Newton Barnhart, St. Johns, Mich.

**2 Boars** Duroc Jersey Red, Registered, 6 months old, ready for service, \$25 each. Start a good sire for your herd. Jose Lake Fruit Farm, South Branch, Mich.

**Durocs** Fall yearlings, boars and gilts, (weight 200 lb. \$30 to \$35. Some good spring stuff at \$25, weight 175 lb. H. G. KEESLER, Cassopolis, Michigan.

**Duroc Jerseys** If you want fall pigs don't forget to write to S. C. STAHLMAN, Shepherd, Michigan.

**Big Type Boars!**  
ready for service Bred Gilts—Fall Pigs. Registered in buyers name, shipped O. O. D. Prices very reasonable. J. Carl Jewett, Mason, Mich.

**O. I. C's** ready for service Bred Gilts—Fall Pigs. Registered in buyers name, shipped O. O. D. Prices very reasonable. J. Carl Jewett, Mason, Mich.

**O. I. C. Swine**—A nice lot of spring pigs. Write your wants. Meadow View Stock Farm, Holland, Michigan. R. R. No. 5.

**O. I. C.** Serviceable Boars shipped O. O. D. Registered in purchaser's name. H. W. MANN, Dansville, Mich.

**Raise Chester Whites?**  
Like This  
the original big producers

**I HAVE** started thousands of breeders on the road to success. I can help you. I want to place one hog from my great herd in every community where I am not already represented by these fine early developers—ready for market at 7 months old. Write for my plan—More Money from Hogs. G. S. BENJAMIN, R. F. D. 10, Portland, Michigan.

**CHESTER WHITE** March pigs either sex. Booking orders for Sept. 1 pigs, 2 year old sows farrowed 9 pigs Sept. 5. Herd boar is 2 yr. old. Ship C. O. D. W. A. Searcy, Mt. Pleasant, Mich. R. 4.

**CHESTER WHITES** Some splendid March boars for sale, also all pigs. F. W. ALEXANDER, Vassar, Mich.

**Registered O. I. C. Swine**  
Stock For Sale—All Ages  
Correspondence Solicited, Visitors Always Welcome

**Brightside Farm**  
Grand Lodge, Mich.

**400 Big Type O. I. C. and Chester White Pigs**  
From Feb. Mar. and Apr. farrow sired by the five best boars in the state. School Master 52707 who won more champions, defeated more champions than any boar show 1915. Also 2nd sire to our undefeated breeders young herd at 7 state fairs, Allen junior champion at Wis. State fair 1914, and Captain Jim 33161, under 6 months boar and Junior champion at every state fair show 1915. Then we have Le Dix model 2015, first in class at State City, Iowa, 1914. Get our catalogue, its free. We Register Free! Guarantee satisfaction in every way.

**ROLLING VIEW STOCK FARM,** Cass City, Mich.

**O. I. C's** Spring boars ready for service. Gilts good ones. Satisfaction. Guaranteed. A. R. GRAHAM, Flint, Michigan.

**O. I. C. Stock all Sold**  
JULIAN P. CLAXTON, Swartz Creek, Mich.

**O. I. C. SWINE:** If you are interested in O. I. C's, let me start you with a choice pair or trio, not akin, or a gilt, due to farrow about September first. A. J. GORDEN, R. No. 2, Dorr, Mich.

**O. I. C.** Choice Spring gilts not bred and spring boars. Out of Prize winning stock. Write for low prices. A. V. HATT, Grass Lake, Mich.

**O. I. C.** Swine and Reg. Holsteins, few boar pigs of either sex, not akin. May farrow at a reasonable price, quality considered. ELMER E. SMITH, Redford, Michigan.

**O. I. C. HOGS**  
Fine April Gilts and Males. Pairs no relation. At a bargain if taken at once. J. R. Way, Three Rivers, Mich.

**O. I. C's.** 4 last fall boars big growthy ones, also last spring pigs either sex, not akin. Farm 1/2 mile West of depot. Otto B. Schulze, - - Nashville, Michigan

**Breeders' Directory—Continued on page 389**



# A Whale for Work

## Willys KNIGHT

*Sleeve-Valve Motor*

- ☛ When it comes to pulling long hard hills with twisting, turning country roads—
- ☛ When it comes down to real work, day in and day out, month after month, year after year—
- ☛ The Willys-Knight is the one type of motor that can stand up and deliver—never weakening but getting stronger all the time.
- ☛ It's the sleeve-valve motor—the Willys-Knight motor—a whale for work—and always at it.
- ☛ Carbon doesn't hurt it—valves can't get out of adjustment—so you say good-bye to the two chief causes of motor layups, when you get a Willys-Knight.
- ☛ It will pile up thousands upon thousands of miles more running than you can get out of any other type of motor.
- ☛ And the last miles will be better than the first.
- ☛ The motor almost never needs go to the shop—
- ☛ That's a vital advantage to the man who doesn't live on a paved street next door to the garage.
- ☛ Besides all the tremendous advantages of the Willys-Knight motor for everyday work in any kind of weather on every kind of road, the Willys-Knight has everything else you could ask in a strictly up-to-date motor car.
- ☛ Style—beauty—
- ☛ Comfort—conveniences.
- ☛ Is there any doubt in your mind about what car belongs on the farm? There's only one answer—
- ☛ It's the Willys-Knight—the beautiful car with the work-motor.
- ☛ See the Overland dealer—he'll show you the simple mechanical reasons for the greater power, durability and economy of the Willys-Knight motor.
- ☛ Get right down to business with him—go to the bottom of this motor question—get a Willys-Knight and know the satisfaction no other motor car can give you.

*Catalogue on request. Please address Department 443.*

**The Willys-Overland Company, Toledo, Ohio**

**"Made in U. S. A."**