

# MICHIGAN FARMER

AND  
*LIVE STOCK*  
PUBLISHED WEEKLY.

*JOURNAL*  
ESTABLISHED 1843.

VOL. CLVIII, No. 3  
Whole Number 4184

DETROIT, MICH., SATURDAY, JANUARY 21, 1922

ONE YEAR \$1.00  
FIVE YEARS \$5.00







Published Weekly Established 1843 Copyright 1921

## The Lawrence Publishing Co.

Editors and Proprietors

1632 LaFayette Boulevard Detroit, Michigan

TELEPHONE CHERRY 8384

NEW YORK OFFICE-95 Madison Ave.

CHICAGO OFFICE-111 W. Washington St.

CLEVELAND OFFICE-101 1-1013 Oregon Ave., N. E.

PHILADELPHIA OFFICE-261-263 South Third St.

M. J. LAWRENCE President

PAUL LAWRENCE Vice-President

J. F. CUNNINGHAM Treasurer

F. H. NANCE Secretary

I. R. WATERBURY Associate Editors

BURT WERWUTH Associate Editors

ALTA LAWSON LITTLE Associate Editors

FRANK A. WILKEN Associate Editors

I. R. WATERBURY Business Manager

TERMS OF SUBSCRIPTION

One Year, 52 issues \$1.00

Three Years, 156 issues \$2.00

Five Years, 260 issues \$3.00

Canadian subscription 50c a year extra for postage

RATES OF ADVERTISING

55 cents per line (agate type measurement, or \$7.70 per

line (14 agate lines per inch) per insertion. No advertise-

ment inserted for less than \$1.65 each insertion. No

objectionable advertisements inserted at any time.

Member Standard Farm Papers Association and

Audit Bureau of Circulation.

Entered as Second Class Matter at the Post Office at

Detroit, Michigan. Under the Act of March 3, 1879

VOLUME CLVIII NUMBER THREE

DETROIT, JANUARY 21, 1922

CURRENT COMMENT

THE MICHIGAN FARMER SAYS.

Organization without definite pur-

pose is like a gun without sights.

It takes a vigorous and highly moral

people to make a great nation.

Knowing how to do the things every-

body wants done is the first qualifica-

tion for leadership.

The advantages of wise and efficient

agricultural legislation may easily be

lost to the individual farmer through

unwise and inefficient farm manage-

ment.

In Denmark we have a fine demon-

stration of how common folks may be-

come highly enthusiastic for the arts

of peace.

The Agri-

cultural

Program

MONDAY, January

23, an agricultural

conference called

by Secretary of Agri-

culture Wallace, will

begin its delibera-

tions at Washington.

This conference

will consist of a rather large body of

men who will participate in its delibera-

tions at the invitation of Secretary

Wallace. More than half of the person-

nel of this conference will consist of

farmers and their representatives, in-

cluding officers of state departments

of agriculture, agricultural college pro-

fessors, agricultural editors, econo-

mists and farm organization leaders.

In addition to these spokesmen for the

farmers men from all walks of life,

including railroad executives, meat

packers, commission men, canners, fer-

tilizer manufacturers, millers, grain

dealers, farm implement manufactur-

ers, bankers, automobile and truck

manufacturers, etc., will sit in the con-

ference. These men have been invited

to sit in with the farmers, hear the

agricultural situation discussed from

the farmer's standpoint, then all to-

gether undertake to arrive at a mutual

understanding of the actual conditions

and problems involved and if possible

arrive at a solution of this basic phase

of the national economic problem.

Whether the combined thought of

this conference is able to formulate a

remedy for present universal economic

ills or not, the idea of getting a body

of representative farmers and business

men together to discuss a great mutual

problem is a good one, and if nothing

more is accomplished than to better

acquaint the business men with the

farmer's viewpoint and vice versa it

must be productive of beneficial re-

sults. A mutual understanding of the

problems involved is most desirable.

Men in other lines of business cannot

know too much about the agricultural

problem, and farmers will be broaden-

ed by the viewpoint of men engaged in

other lines of business. It is also pos-

sible that more practical and tangible

benefits may result from the delibera-

tions of the conference, regarding

which our readers will be kept inform-

ed through the attendance of a special

editorial representative besides our

resident Washington correspondent.

But in this connection we would

again urge our readers to give the

most careful consideration to their own

individual economic problems in the

planning of next season's farm cam-

paign. Michigan farmers are more for-

tunately situated in this regard than

those of perhaps any other great agri-

cultural state. Nature has been kind

in giving them soil and climatic con-

ditions suited to the production of a

wide variety of food products. Industrial development has favored them with good markets for the bulk of this varied production close at hand. The Michigan farmer is in the best possible position to not only make his farm provide the bulk of the foodstuffs needed by his family, but also to supply the bulk of the foodstuffs required by the industrial population of the cities close at hand at a fair price as compared with receipts from distant markets upon which the great majority of American farmers must depend. This fact is responsible for the present comparatively independent financial condition of Michigan farmers, and with proper development on the part of farmers, acting individually, and by communities, it may be made to contribute still more largely to their prosperity this year.

IN the last issue we commented on the necessity of greater public economy all along the line, to the end that the burden of taxation, which is falling so heavily on the farmers of Michigan this year, may be lightened. In this comment it was pointed out that there are two classes of people interested in taxes, the large class who pay them and who are especially interested in getting value received in necessary service for the tax money they pay, and the comparatively small class who render and get the money for a varying degree and value of service. Obviously, as was pointed out in the comment above referred to, substantial relief from the present burden of taxation can come only through the initiative of the former class in the selection of officers for all legislative and executive positions whom they believe will stand consistently for wise economy in public expenditures. Hence the suggestion for united discussion and effort to that end during the next few months.

Fortunately the first opportunity for effective work along this line will be right at home for every Michigan Farmer reader. Local township officers will be the first to be selected. It is not only the privilege, but the duty of every farmer to familiarize himself with the financial affairs of his township, his road district and his school district. He should also be in a good position to judge whether the service purchased with his local tax money has been reasonably adequate for its cost. In judging this question fairly it should always be borne in mind that it is very difficult, if not impossible, to secure the conduct of public business on as economical and efficient a basis as private business is conducted. This is especially true where it is "part time" work, as is often the case in local affairs. But a reasonable relation of the cost of necessary public service should be maintained, and the way to insure this in local affairs is for

every voter to familiarize himself with and be interested in the proposition. Next to the purely local tax problem comes the county tax problem. Here the individual contact cannot be as close as with the township problem. The township is our only purely democratic governmental unit. The people of every township have opportunity to transact their own business and make their own appropriations of money for public purposes. The representative or republican form of government begins with the county. Under our present form of county government every township is a unit of representation. The farmers of most townships constitute a majority of the voters and pay by far the greatest bulk of the county tax money collected in the township. Their direct contact with the county government is through the supervisor of their township, who is a member of the county board of supervisors and a more or less important factor in the county government, depending in degree on his ability as a leader and the length of his service. It is entirely proper for any farmer or any group of farmers in any township to ask the supervisor of that township for a detailed statement regarding any phase of the governmental affairs of the county. This should be done during the months intervening before the annual township meeting in April, to the end that you may have a better understanding of county governmental problems and expenditures. Such a course, generally followed, would go a long way toward insuring a more economic conduct of county administrations.

Securing similar results in the larger unit of state government is more difficult, but much can be done along this line after local tax problems have been given "first aid" attention. Poor economy in governmental matters is largely due to a too general application of the old maxim that "What is everybody's business is nobody's business." From this standpoint the people of every governmental unit will always get about the kind of public economy they are entitled to, at least they are not likely to get better results along this line than they are entitled to as measured by their interest in the conduct of public affairs. If they are to get better and more economic public service they first must live up to their primary duties and obligations as responsible citizens. There has never been a time in our history when this was more important than at the present time, as the present tax illustrates. No amount of vigilance can reduce the plane of taxation in this state to its former level, but eternal vigilance on the part of every public spirited citizen is essential to the end that this burden may be kept within the most reasonable possible limits in the immediate future and in the years to come.

ful impulses and becomes broken in spirit and ambition, or breaks away from the bondage and goes out to "see life" with the usual disastrous results.

We, of mature age, shirk a great responsibility when we do not try to provide some wholesome and interesting form of activity for those who are just budding into manhood and womanhood. Sometimes we think we are fulfilling our duties in this respect when we attempt to have youth conform to the ideas and activities of maturity. But in so doing we are utterly failing, for we cannot be successful in coping with this problem until we look at it from the standpoint of youth.

In the city there are activities aplenty; the problem is to guide the young people to the right ones. But in the country the problem is often a greater one. In many rural districts there are no organized activities for young folks. There is nothing to do and nothing to do is nearly as bad as something to do that is not just right. Someone has truthfully said that an idle mind is the devil's hand-maid.

So, it seems that our duty to our community is nearly as close to us as our duty to our children. For, it is for the happiness and safety of our young folks that we should be a factor in providing the community with good wholesome social activities in which our children can participate.

Much can be done in this respect by encouraging the development of Boys' and Girls' Clubs, Scout troops, Campfire Girls, church clubs, debating clubs and various forms of sports and social activities which will develop in the young people an interest in a wide variety of wholesome things.

Silence

SILENCE is no noise. It is something that you can't hear, but what you sometimes can feel.

For inst., when keepin' still is uncomfortable, you bet there's somethin' wrong. But when sayin' nothin' is satisfyin' the parties of the first and second part sure is agreed on their mental contents. There's times when say-

in' nothin' means a lot what ain't got no house on it.

Silence must be recreation for some folks 'cause it's so different from what they is doin' most of the time.

There's one Englishman what spent the evenin' with another. They said, "How do" when he came, and "Good-night. This was the most enjoyable evenin' I ever spent," when he left. They spent two hours keepin' still about somethin' and enjoyed it. There's no chance for argument in such considerashun of subjects.

Somebody said speech is silver and silence is gold. Guess he's right about the silver part, the way Bill Bryan talked about silver when I was a pup.

And judgin' from that, there's lots of folks what is full of silver besides what they's got in their teeth and pocketbooks. For inst., there's Walt Smith what talks all day and snores all night.

Silence is keeping still what is legal. But some kinds of still ain't lawful what produces more'n the legal specifications of liquid socialbity.

Silence is useful in love. Now, I ain't no authority on such scientific subjects 'cept I've been through the calf stage and find lookin' at the moon helps in what you call silent seances. But there's a lady friend of a Frenchman what said, "We don't know each other well, 'cause we ain't learnt how to be silent together."

Now Sophie says, when you ain't got nothin' to say, don't say it. So I guess I better keep still. HY SYCKLE.

Our Duty to Our Community

THE other day a local paper published a review of a book entitled "The Community," by Edward Lindeman. This book was dedicated to the communities of this state in which Mr. Lindeman had his experience as state leader of boys' and girls' clubs.

In the same issue there was an article on "The Mystery of the Missing Girls." This article stated that one hundred thousand girls disappeared from their homes every year, forty-two thousand of whom were never heard from again. Many came from moderately well-to-do families and a great proportion of them from rural districts. These two newspaper articles are mentioned as there is a close relation between the community and the missing girl.

Youth is a period of life and activity and if there is not the proper outlet for the spirit of youth, the individual involved either subdues the youth-

ful impulses and becomes broken in spirit and ambition, or breaks away from the bondage and goes out to "see life" with the usual disastrous results.

We, of mature age, shirk a great responsibility when we do not try to provide some wholesome and interesting form of activity for those who are just budding into manhood and womanhood. Sometimes we think we are fulfilling our duties in this respect when we attempt to have youth conform to the ideas and activities of maturity. But in so doing we are utterly failing, for we cannot be successful in coping with this problem until we look at it from the standpoint of youth.

In the city there are activities aplenty; the problem is to guide the young people to the right ones. But in the country the problem is often a greater one. In many rural districts there are no organized activities for young folks. There is nothing to do and nothing to do is nearly as bad as something to do that is not just right. Someone has truthfully said that an idle mind is the devil's hand-maid.

So, it seems that our duty to our community is nearly as close to us as our duty to our children. For, it is for the happiness and safety of our young folks that we should be a factor in providing the community with good wholesome social activities in which our children can participate.

Much can be done in this respect by encouraging the development of Boys' and Girls' Clubs, Scout troops, Campfire Girls, church clubs, debating clubs and various forms of sports and social activities which will develop in the young people an interest in a wide variety of wholesome things.

Silence

SILENCE is no noise. It is something that you can't hear, but what you sometimes can feel.

For inst., when keepin' still is uncomfortable, you bet there's somethin' wrong. But when sayin' nothin' is satisfyin' the parties of the first and second part sure is agreed on their mental contents. There's times when say-

in' nothin' means a lot what ain't got no house on it.

Silence must be recreation for some folks 'cause it's so different from what they is doin' most of the time.

There's one Englishman what spent the evenin' with another. They said, "How do" when he came, and "Good-night. This was the most enjoyable evenin' I ever spent," when he left. They spent two hours keepin' still about somethin' and enjoyed it. There's no chance for argument in such considerashun of subjects.

Somebody said speech is silver and silence is gold. Guess he's right about the silver part, the way Bill Bryan talked about silver when I was a pup.

And judgin' from that, there's lots of folks what is full of silver besides what they's got in their teeth and pocketbooks. For inst., there's Walt Smith what talks all day and snores all night.

Silence is keeping still what is legal. But some kinds of still ain't lawful what produces more'n the legal specifications of liquid socialbity.

Silence is useful in love. Now, I ain't no authority on such scientific subjects 'cept I've been through the calf stage and find lookin' at the moon helps in what you call silent seances. But there's a lady friend of a Frenchman what said, "We don't know each other well, 'cause we ain't learnt how to be silent together."

Now Sophie says, when you ain't got nothin' to say, don't say it. So I guess I better keep still. HY SYCKLE.

Our Duty to Our Community

THE other day a local paper published a review of a book entitled "The Community," by Edward Lindeman. This book was dedicated to the communities of this state in which Mr. Lindeman had his experience as state leader of boys' and girls' clubs.

In the same issue there was an article on "The Mystery of the Missing Girls." This article stated that one hundred thousand girls disappeared from their homes every year, forty-two thousand of whom were never heard from again. Many came from moderately well-to-do families and a great proportion of them from rural districts. These two newspaper articles are mentioned as there is a close relation between the community and the missing girl.

Youth is a period of life and activity and if there is not the proper outlet for the spirit of youth, the individual involved either subdues the youth-

ful impulses and becomes broken in spirit and ambition, or breaks away from the bondage and goes out to "see life" with the usual disastrous results.

We, of mature age, shirk a great responsibility when we do not try to provide some wholesome and interesting form of activity for those who are just budding into manhood and womanhood. Sometimes we think we are fulfilling our duties in this respect when we attempt to have youth conform to the ideas and activities of maturity. But in so doing we are utterly failing, for we cannot be successful in coping with this problem until we look at it from the standpoint of youth.

In the city there are activities aplenty; the problem is to guide the young people to the right ones. But in the country the problem is often a greater one. In many rural districts there are no organized activities for young folks. There is nothing to do and nothing to do is nearly as bad as something to do that is not just right. Someone has truthfully said that an idle mind is the devil's hand-maid.

So, it seems that our duty to our community is nearly as close to us as our duty to our children. For, it is for the happiness and safety of our young folks that we should be a factor in providing the community with good wholesome social activities in which our children can participate.

Much can be done in this respect by encouraging the development of Boys' and Girls' Clubs, Scout troops, Campfire Girls, church clubs, debating clubs and various forms of sports and social activities which will develop in the young people an interest in a wide variety of wholesome things.

Silence

SILENCE is no noise. It is something that you can't hear, but what you sometimes can feel.

For inst., when keepin' still is uncomfortable, you bet there's somethin' wrong. But when sayin' nothin' is satisfyin' the parties of the first and second part sure is agreed on their mental contents. There's times when say-

in' nothin' means a lot what ain't got no house on it.

Silence must be recreation for some folks 'cause it's so different from what they is doin' most of the time.

There's one Englishman what spent the evenin' with another. They said, "How do" when he came, and "Good-night. This was the most enjoyable evenin' I ever spent," when he left. They spent two hours keepin' still about somethin' and enjoyed it. There's no chance for argument in such considerashun of subjects.

Somebody said speech is silver and silence is gold. Guess he's right about the silver part, the way Bill Bryan talked about silver when I was a pup.

And judgin' from that, there's lots of folks what is full of silver besides what they's got in their teeth and pocketbooks. For inst., there's Walt Smith what talks all day and snores all night.

Silence is keeping still what is legal. But some kinds of still ain't lawful what produces more'n the legal specifications of liquid socialbity.

Silence is useful in love. Now, I ain't no authority on such scientific subjects 'cept I've been through the calf stage and find lookin' at the moon helps in what you call silent seances. But there's a lady friend of a Frenchman what said, "We don't know each other well, 'cause we ain't learnt how to be silent together."

Now Sophie says, when you ain't got nothin' to say, don't say it. So I guess I better keep still. HY SYCKLE.

Our Duty to Our Community

THE other day a local paper published a review of a book entitled "The Community," by Edward Lindeman. This book was dedicated to the communities of this state in which Mr. Lindeman had his experience as state leader of boys' and girls' clubs.

In the same issue there was an article on "The Mystery of the Missing Girls." This article stated that one hundred thousand girls disappeared from their homes every year, forty-two thousand of whom were never heard from again. Many came from moderately well-to-do families and a great proportion of them from rural districts. These two newspaper articles are mentioned as there is a close relation between the community and the missing girl.

Youth is a period of life and activity and if there is not the proper outlet for the spirit of youth, the individual involved either subdues the youth-

ful impulses and becomes broken in spirit and ambition, or breaks away from the bondage and goes out to "see life" with the usual disastrous results.

We, of mature age, shirk a great responsibility when we do not try to provide some wholesome and interesting form of activity for those who are just budding into manhood and womanhood. Sometimes we think we are fulfilling our duties in this respect when we attempt to have youth conform to the ideas and activities of maturity. But in so doing we are utterly failing, for we cannot be successful in coping with this problem until we look at it from the standpoint of youth.

In the city there are activities aplenty; the problem is to guide the young people to the right ones. But in the country the problem is often a greater one. In many rural districts there are no organized activities for young folks. There is nothing to do and nothing to do is nearly as bad as something to do that is not just right. Someone has truthfully said that an idle mind is the devil's hand-maid.

So, it seems that our duty to our community is nearly as close to us as our duty to our children. For, it is for the happiness and safety of our young folks that we should be a factor in providing the community with good wholesome social activities in which our children can participate.

Much can be done in this respect by encouraging the development of Boys' and Girls' Clubs, Scout troops, Campfire Girls, church clubs, debating clubs and various forms of sports and social activities which will develop in the young people an interest in a wide variety of wholesome things.

Silence

SILENCE is no noise. It is something that you can't hear, but what you sometimes can feel.

For inst., when keepin' still is uncomfortable, you bet there's somethin' wrong. But when sayin' nothin' is satisfyin' the parties of the first and second part sure is agreed on their mental contents. There's times when say-

in' nothin' means a lot what ain't got no house on it.

Silence must be recreation for some folks 'cause it's so different from what they is doin' most of the time.

There's one Englishman what spent the evenin' with another. They said, "How do" when he came, and "Good-night. This was the most enjoyable evenin' I ever spent," when he left. They spent two hours keepin' still about somethin' and enjoyed it. There's no chance for argument in such considerashun of subjects.

Somebody said speech is silver and silence is gold. Guess he's right about the silver part, the way Bill Bryan talked about silver when I was a pup.

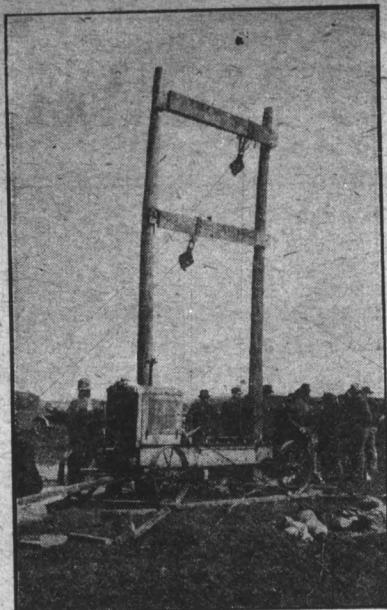
And judgin' from that, there's lots of folks what is full of silver besides what they's got in their teeth and pocketbooks. For inst., there's Walt Smith what talks all day and snores all night.

Silence is keeping still what is legal. But some kinds of still ain't lawful what produces more'n the legal specifications of liquid socialbity.

Silence is useful in love. Now, I ain't no authority on such scientific subjects 'cept I've been through the calf stage and find lookin' at the moon helps in what you call silent seances. But there's a lady friend of a Frenchman what said, "We don't know each other well, 'cause we ain't learnt how to be silent together."

Now Sophie says, when you ain't got nothin' to say, don't say it. So I guess I better keep still. HY SYCKLE.





No. 1.—Hoist Ready for Use.

FOR several years back, spasmodic efforts to utilize Michigan's marl deposits for agricultural purposes have been made. Many of these efforts have thrived for a time, and then died a natural death. More than one factor caused the discontinuance of these early efforts. In the first place, the need of lime has not, until recently, been recognized by any great number of Michigan farmers. Again, it was often found cheaper to buy ground limestone which, while more expensive of first cost, could be readily spread and handled. Anything was cheaper than labor, especially when help on the farm could not be hired at any price. Also, marl does not always act just as you expect it to. Some beds of marl

## Utilizing Marl Deposits

By C. L. Nash

come out, and on being exposed to the air, readily disintegrate so that it is easily spread. Other marls do not handle so easily. Some marl deposits are near the surface, and are dry beds so that all that is needed is to shovel it into the wagon or spreader, and haul it direct to the field. Others have to be mined.

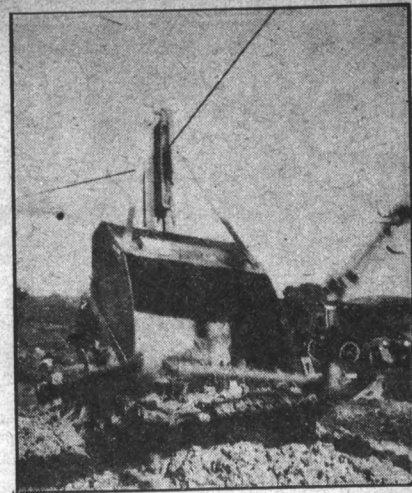
Higher freight rates, coming at a time when the farmer was just beginning to use more and more lime, has focused his attention on this marl proposition. Special Bulletin No. 21 of the Michigan Agricultural College tells us that marl testing eighty-eight per cent contains about 1,470 pounds of (CA CO<sub>3</sub>) lime to the cubic yard. To the practical farmer desiring to use lime, this means that if he can get a yard of marl on his land for less money than he can get its equivalent in limestone, marl is what he is going to use as a source of lime.

Recognizing this interest on the part of the farmer in the mining and utilization of marl, the Branch County Farm Bureau, after discussing the matter for nearly a year, and after seeing several different types of marl mining machinery in use, decided to stage a marl mining demonstration. The object of this demonstration was: First, to stimulate interest in the use of marl; second, to bring together those who had experimented with the different methods of mining marl; and third, to

assist, if possible, in hastening the day when more successful methods of handling marl will be available.

To this end, the bureau arranged with Mr. Tom Turner, of Matteson township, to stage such a demonstration at his farm on October 14, 1921. This demonstration was made possible by the cooperation of the Branch County Road Commissioners, the Farm Mechanics Department of the M. A. C., and the Beech Manufacturing Co. Mr. Musselman, of the Farm Mechanics Department, just before the demonstration, had completed a tour of the state to investigate methods of mining marl. He gave many valuable suggestions, and, by the use of photos, etc., explained to the people attending the results of his investigation. The Beech Manufacturing Company loaned the use of a bucket which they had made especially for this demonstration, and gave other valuable assistance and suggestions. The road commissioners moved their two-drum hoist; used in getting out gravel, to the scene of the demonstration, and also assisted in its operation.

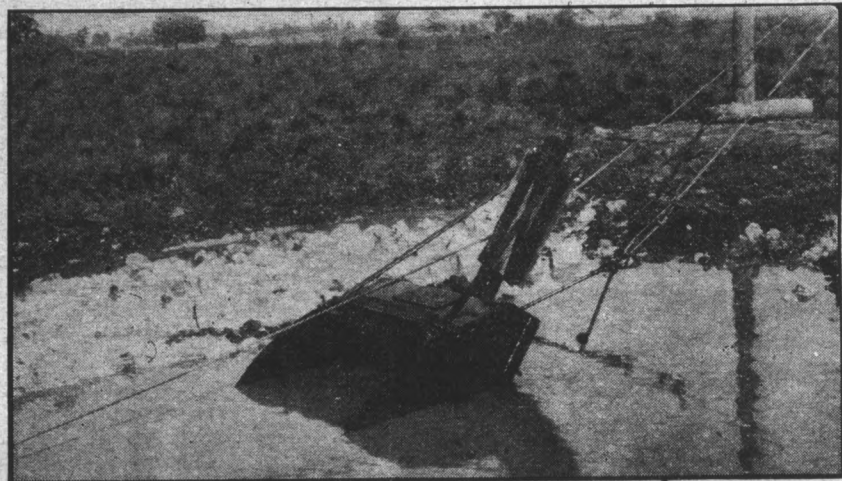
The outfit used consisted of the two-drum hoist mentioned above, equipped with an eighteen-horse-power gas engine, and a drag line bucket. The two-drum hoist is shown in Illustration No. 1, set up ready for use. No. 2 shows the bucket just entering the marl bed, while No. 3 shows it filled with marl.



No. 4.—Bucket is Dumped.

Illustration No. 4 shows the bucket being emptied of its load. This picture needs some explanation. It will be noted that the bucket is hinged on a pair of runners. As the tension is put on the cable to pull the bucket back, the bucket is set up on its nose, and the load dumped. This feature overcomes one trouble experienced in mining marl; i. e., getting the bucket to dump.

Other marl mining demonstrations have been held in southern Michigan during the past season. All have been more or less successful; however, it is safe to say that further trials will perfect machinery for getting out marl beyond its present development. If large quantities were used in any given neighborhood so that expensive equipment could be bought, the problem of getting out marl would be simplified. As it stands today, the problem is to get it out with a cheap outfit.



No. 2.—Position of Bucket as it Enters the Marl Bed.



No. 3.—The Catch—a Good Load is Secured Each Haul.

## Winter Care of the Breeding Ewes

By Leo C. Reynolds

THE winter months with the successful sheep owner is always a busy and important time in the management of the breeding flock. If the ewes have been well cared for during the fall and have come into the winter in fair flesh condition and mated to a male possessing marked qualities of masculinity, the success of the lamb crop now depends very largely upon the care the flock receives during the remaining winter months. It is always a great disappointment to the flock owner when lambing time arrives to find the lambs come inferior in strength and size and the ewes lacking in milk production.

Frequently where sheep are kept in conjunction with other farm live stock it is the practice to allow the breeding ewes to shift for themselves during the winter, running on pasture when the ground is not covered too deep with snow, with little or no grain and a very narrow roughage ration.

The breeding flock must not be allowed to get wet from cold, chilling storms. Disastrous results are sure to follow. Sheep, unlike other farm live stock, carry a heavy dense fleece of wool and when once wet through not only requires a long time to dry out,

but the temperature of the body is lowered that the general health of the animal is impaired. Pregnant ewes in particular should be protected against cold drenching storms.

Some flock owners follow the practice of confining the ewes to a close stable during the night, allowing them to run out during the day. Close stabling at night causes the sheep to exude oil and moisture from the skin on account of their heavy covering of wool and when turned out in the cold are likely to become chilled and contract catarrh. Sheep do not require costly shelter. A dry, light and well-ventilat-

ed shelter is sufficient. Ventilation in the sheep barn should be ample, care being taken to avoid drafts.

If a large flock of breeding ewes are kept, the sheep should be divided into smaller groups. Individuals of about the same age, strength and general disposition should be housed together. There is always some members of the flock that are timid and rather delicate feeders. These ewes should be separated and put in a pen by themselves, and given special attention. Pregnant ewes do much better when kept in small flocks where each individual can be observed and given care.



Pregnant ewes should be allowed plenty of yardage and stable room so they will not injure one another by crowding. It is not uncommon for ewes to lose their lambs from too close confinement. Sheep are susceptible to being suddenly frightened running against one another through doors or narrow passages, between racks, causing abortion or internal injury. This is very apt to happen when the ewes get well along in pregnancy. It is a safe rule to follow to allow ewes weighing around one hundred pounds ten square feet of free ground space in the barn. The feed racks should also be measured so as to allow about sixteen inches to the animal, and more in case of the large mutton breeds. There should always be rack room to spare as some ewes will not crowd, but had rather stand back and go hungry. Pregnant ewes should be closely watched and means devised that each member of the flock receive proper care.

The ewes should be encouraged to take plenty of exercise. Without exercise pregnant ewes soon become inactive. Feeding as much as possible in

(Continued on page 76).



## HUBAM

*This Spring*

Exceptionally low prices on large lots to sow with Small Grain. Guaranteed against impurities until safe in your hands.

*Certified Pedigreed Northern-Grown*

Write to-day for quotation.

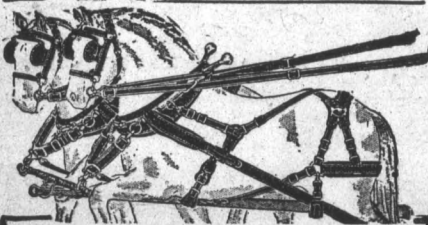
Cooperate with

**MICHIGAN FARM BUREAU BRAND SEEDS**

**MICHIGAN STATE FARM BUREAU**

Seed Department BOX J-2

Lansing, Michigan



**\$7.50 Down**

**Puts this Olde-Tan Metal-to-Metal Harness on Your Horses**

We trust you wherever you live. Only \$7.50 down. Pay the rest monthly. Write for free harness book. Learn all about this improved metal-to-metal harness construction. Metal wherever there is wear or strain. No old-fashioned buckles.

**Olde-Tan Harness**

First Olde-Tan leather produced 70 years ago. Now known throughout America for its pronounced superiority. Olde-Tan harness is made by a tanner-manufacturer who follows every step from the raw-hide to the completed harness.

**Write for Free Book**

Ask for free harness book. Learn all about our \$7.50 down and easy payment offer and the Olde-Tan metal-to-metal harness.

Henry Blake Harness Co., Dept. 9101

19th Street and Marshall Blvd., Chicago, Ill.

**Why Not PUT THIS NEW MILL ON YOUR OLD TOWER**

**ALBION**

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main Pitman bearing subject to wear. This is oilless, and easily replaceable. Governed by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your churning time now with a good Windmill? This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to Union Steel Products Co. Ltd. No. 523 N. Berrien Street, ALBION, MICHIGAN, U. S. A.

**CHANGE POWER AS YOU CHANGE JOBS**

1½ to 6 H. P. as you need it. The one economical engine on farm jobs to 6 H. P. Saves investment. Busiest machine on farm. Wonderful value at less than pre-war price. Never was such an engine bargain. Direct from factory to you. Learn about this wonderful farm helper. Kerosene or gasoline. No cranking. Write for description and factory price.

**THE EDWARDS MOTOR CO.**

619 Main St. Springfield, Ohio

## LATE FARM BUREAU NEWS

## BEET GROWERS HOLD ANNUAL MEETING.

THE annual meeting of the Michigan Beet Sugar Growers' Association will be held at the East Side Auditorium, Saginaw, on Monday, January 23, at 1:30 p. m. Besides the election of officers and the transaction of such other business as may properly come before the session, a thoroughly worthwhile program has been arranged. Among the speakers will be John A. Doelle, of the State Board of Agriculture; James Nichol, president of the State Farm Bureau; C. W. Waid, formerly of the extension staff of the M. A. C., and now with the Ohio Farm Bureau; A. B. Cook, Master of the Michigan State Grange, and Frank Diekman, sugar beet specialist of the Illinois Agricultural Association. Every farmer interested in sugar beet growing is urged to be present.

## MUCK PROBLEMS TO BE AIRED.

A MEETING of the Michigan Muck farmers' Association will be held at the Agricultural Building, at M. A. C., on January 31 and February 1. Among the speakers will be N. P. Beebe, of Niles; R. N. Graham, Lum; H. G. Decamp, Imlay City; Dr. W. P. Bope, of Decatur; E. W. Kingery, of Buchanan; A. H. Sherman, of Homer. These practical farmers will all speak from their experience with the growing of crops on muck land. Other speakers will be Dr. F. J. Alway, of the University of Minnesota; Dr. McCool, Dr. Coons and Dr. Harmer, all of the M. A. C., and Mr. Ezra Levin, secretary of the association and now

of the State Department of Agriculture.

## ALFALFA CAMPAIGN FOR CALHOUN.

AN alfalfa campaign in Calhoun county has been arranged for the days of January 21-24. Local programs have been arranged by Mr. Garfield Farley, an M. A. C. short-course graduate, and Mr. Elton E. Ball, with the class of '20 at M. A. C. The farm crops department of the Agricultural College will be represented by G. W. Putnam, Professor Megee and Professor Cox respectively, who will alternate on the different days in making speeches. This is another move carrying out the plan of spreading knowledge of methods of growing alfalfa to the farmers of Michigan.—T.

## WOOL POOL NEWS.

WITH nearly all of the 1921 wool pool gone to market the Michigan State Farm Bureau executive committee on January 10 ordered Clark L. Brody, general manager of the State Farm Bureau, to begin preparing plans for a 1922 wool pool.

The wool market has pulled itself out of the 1920 stagnation and is improving steadily. During 1921 the State Farm Bureau marketed more than 6,000,000 pounds of wool—the entire 1920 pool of 3,500,000 pounds and more than 2,300,000 pounds out of the 1921 pool. A sale in early January brought the pool thirty-two cents for fine clothing, thirty cents for three-eighth clothing, thirty cents for quarter-combing and twenty-three cents for rejects. Last

May when a small block of 1921 wool was sold—the first sale out of the 1921 pool—three-eighth clothing brought as a top price eighteen cents, three-eighth combing twenty-three cents and quarter combing twenty-two cents. The farm bureau began the real movement to market 1921 wool late in August.

## DEAN RUSSELL'S COMING POSTPONED.

PRESIDENT HARDING having invited Dean L. H. Russell, of Wisconsin, to attend the farm conference called in Washington for January 23, it has been necessary to postpone the series of meetings announced in these columns last week to start at Flint on January 23. The new dates for the series will be as follows:

Flint, February 6.  
Bay City, February 7.  
Battle Creek, February 8.  
Kalamazoo, February 9.  
Grand Rapids, February 10.  
Lansing, February 11.

## STUDYING MICHIGAN'S TAX PROBLEMS.

AGRICULTURAL taxation problems are receiving special study at the hands of a committee of farmer students of taxation. Conference is called for January 25 by the Michigan Tax Inquiry Commission.

The commission is making an investigation of Michigan tax conditions for the purpose of suggesting changes to the next regular session of the legislature. Various property interests are appearing before the commission at hearings and are making their suggestions for improvement.

January 25 the agricultural interests are to gather at the State Capitol at ten a. m. The Farm Bureau, Grange, Gleaners and Association of Farmers' Clubs have been invited to send their representatives along with those of other agricultural interests.

## TO STUDY TAX PROBLEMS. ATE.

ELMER BEAMER, representing the Michigan State Farm Bureau, and E. E. Compson, representing the Michigan Live Stock Exchange, met recently at Toledo with representatives of the Ohio Farm Bureau Federation and with H. G. Beale, a director of the National Live Stock Board, to consider preliminary plans leading to the establishment of cooperative commission houses on those markets to which go a sufficient number of Michigan and Ohio cooperative shipments.

Briefly stated, the decisions of the conferees were:

First.—That existing organizations both local and state, make it advisable that the Ohio and Michigan Live Stock Producers be represented in cooperative commission houses through their respective state organizations.

Second.—That Michigan and Ohio should cooperate through existing state organizations in the financing and directing of cooperative commission houses at Cleveland, Buffalo, Toledo and Detroit.

Third.—That a second conference should be held at Toledo some time between January 15 and 20.

Fourth.—That each state committee be prepared to report on the type of organization that may and should be established in conformity to the laws of that state.

Fifth.—That Ohio and Michigan should make a vigorous effort to secure the appointment of a member from this territory on the executive committee of the National Live Stock Board.

## NEWS OF THE WEEK

Wednesday, January 11.

EDMOND DE VALERA, president of the Irish Republic, was divested of all powers by a vote of sixty to fifty-eight.—Captain Roald Amundsen plans another Arctic trip.—Wayne county, Michigan, will spend \$3,000,000 in road work during 1922. Senator McCumber, the farmers' senator from North Dakota, becomes chairman of the senate finance committee, formerly held by Boies Penrose.

Thursday, January 12.

THE body of a petrified man was found in a coal mine near Parsons, Kansas.—The Chicago Police Department figures show that crime is decreasing in that city.—A Detroit chemist has been successful in making a gasoline substitute for autos at a cost of two cents a gallon.—Henry Ford will bid for the defunct Lincoln Motors Company.—The Detroit City Farmers' Club visits M. A. C. This club is made up of prominent Detroiters who have farms.

Friday, January 13.

A HEN owned by an Ontario man has been laying two eggs a day for the past three weeks.—Premier Briand and his cabinet resigns after a hot session in the chamber of deputies.—Truman H. Newberry retains his seat in the senate by a vote of forty-six to forty-one.—John Kendrick Bangs, the famous author, is seriously ill.—Germany fears the occupation of the Ruhr district by France because of Briand's resignation.

Saturday, January 14.

OVER a thousand Irish political prisoners are freed by King George.—Martial law has been declared at Mexia, Texas, because of the open violation against gambling, vice and bootlegging laws.—Rudyard Kipling, England's famous author, took an unprecedented action when he refused the high honors of the Order of Merit from King George.

Sunday, January 15.

PORTO RICO petitions the United States for government similar to that of Canada.—It is reported that the copper mines in the upper peninsula will resume operations on April 1.—A professor of the New York University says "modern humor" is smut.—National Prohibition Chief Haynes says that 17,500,000 have quit booze as a result of prohibition. There are about 2,500,000 drinkers left, he says.

Monday, January 16.

IN a conference at Washington, Japan agrees to completely restore to China the Kaio-Chow territory.—Raymond Poincare, the premier-elect of France, is anti-German in his attitude.—When Postmaster General Hays resigns to take charge of the moving picture industry his life will be insured for \$2,000,000.

Tuesday, January 17.

A NEW YORK prosecutor suggests that deported alien criminals be tattooed.—The National Safety Council estimates that 12,000 people were killed by automobiles during 1921.



## Michigan Standardizes Fruits

*Growers Adopt Kinds Best Suited for Planting Quality a Factor*

By James L. Kraker

AT the meeting of the Michigan State Horticultural Society held at Grand Rapids in the first week of December, 1921, a revolutionary step was taken in that the state of Michigan goes on record as being in favor of standardizing varieties of fruit trees planted in this state. So far as is known, no other state in the Union has attempted to standardize the plantings of orchardists, and it is believed that this action by the State Horticultural Society will have a very important bearing on the future orchard industry in our state.

The history of this standardization movement is interesting. When the cooperative associations of Michigan attempted to grade apples in central packing plants, it was found that during the season they barreled and labeled from fifty to one hundred and ten different varieties of apples. This meant that these various varieties must be sold to people who knew the varieties, and while most any buyer knows all about a Greening, Spy, Snow or Jonathan, they often wondered what was meant when an OxNoble or Colbert was stamped on a barrel and caused the shipper to take a lesser price. This same thing happened all over the state, and those men who managed the central packing houses appreciated the tremendous commercial value it would be to the state of Michigan if varieties of fruit produced could be standardized. Therefore they began to talk about it, and a strong sentiment was built up favoring standardization.

About a year ago Mr. T. A. Farrand, secretary of the Michigan State Horticultural Society, was appointed extension specialist in horticulture from the Michigan Agricultural College. He was thoroughly imbued with the standardization idea, and in his travels about the state in horticultural extension work, found that this was one of the crying needs for the advancement of Michigan horticulture. Therefore, at the business meeting of the Horticultural Society held during the mid-summer tour, a committee on fruit variety standardization was appointed to work with the executive committee of the society, and ordered to make a report at the annual meeting to be held in December, 1921.

This committee had several meetings, and a final session just before their report was presented at the annual meeting. This report aroused considerable discussion, but was finally adopted as given below. The following apples are listed now as standard for Michigan by the Michigan State Horticultural Society and the Horticultural Department of the Michigan Agricultural College:

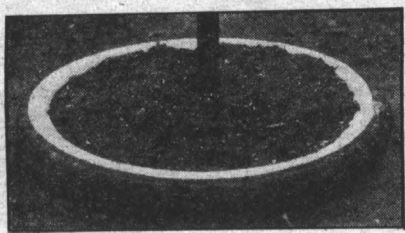
Wealthy, Snow, Grimes Golden, McIntosh, Jonathan, Rhode Island Greening, Steele's Red, Northern Spy, Duchess, Wagener, and Hyslop Crab Apples.

The Spy and Duchess are recommended for the southern section of the state and the Wagener for the northern part of the lower peninsula.

A glance at these varieties at once impresses one with the very high quality of the apples chosen to represent Michigan. Beginning with the fall apples, we find the Wealthy, a fine apple to eat out of hand; and who wants a better tasting apple than the Snow, McIntosh, Grimes Golden and Jonathan around Christmas time? Your Rhode Island Greening and Spy are the best cooking and dessert apple in Michigan. The Duchess is the first apple on the market that makes real apple sauce, and the Wealthys that are a little off type are good to cook; the

McIntosh is the best baked apple grown—try it if you are doubtful, and we all know that the Rhode Island Greening is the apple that made the apple pie famous. Hyslop is by far the best crab apple variety known.

Therefore, when Michigan gets her apples standardized, as they will be twenty years from now, one will speak of Michigan apples, not only as being standardized, but as carrying the highest amount of quality of any apples marketed by any region. Just compare those varieties listed above with the apples boomed by some of the western people—Rome Beauty, Newtown Pippin, Black Ben; consider the difference in quality and flavor of a Michigan apple as compared with a western apple of the same variety, and you will ap-



Auto Tire as Border for Posy Bed.

preciate the outstanding position that Michigan apples will take when this standardization program is carried out.

Other fruits for which standard varieties were adopted follow:

Pears.—Bartlett, Keiffer, Seckel, Bosc, Clapps, for southern Michigan.

Peach.—Elberta.

Any farmer who is planning on planting only a few trees, or if he is considering setting out a commercial orchard should consider this list of Michigan standards and plant those varieties from it which he feels are best suited to his needs. Then when he markets the crop ten or twenty years hence, he will have no trouble in marketing them through his own cooperative association, and the fame of Michigan apples will spread abroad in the land, which means repeat orders.

On the back cover of the program of the Michigan State Horticultural Society this year, the South Haven Fruit Exchange said, "Organize, Standardize, and then you can Merchandise." This the fruit growers of Michigan are now doing.

### A NEW USE FOR THE AUTOMOBILE TIRE.

IN planning an attractive, but inexpensive garden, I found that there are many ways in which one can add to a garden's beauty and yet do so without any considerable cost.

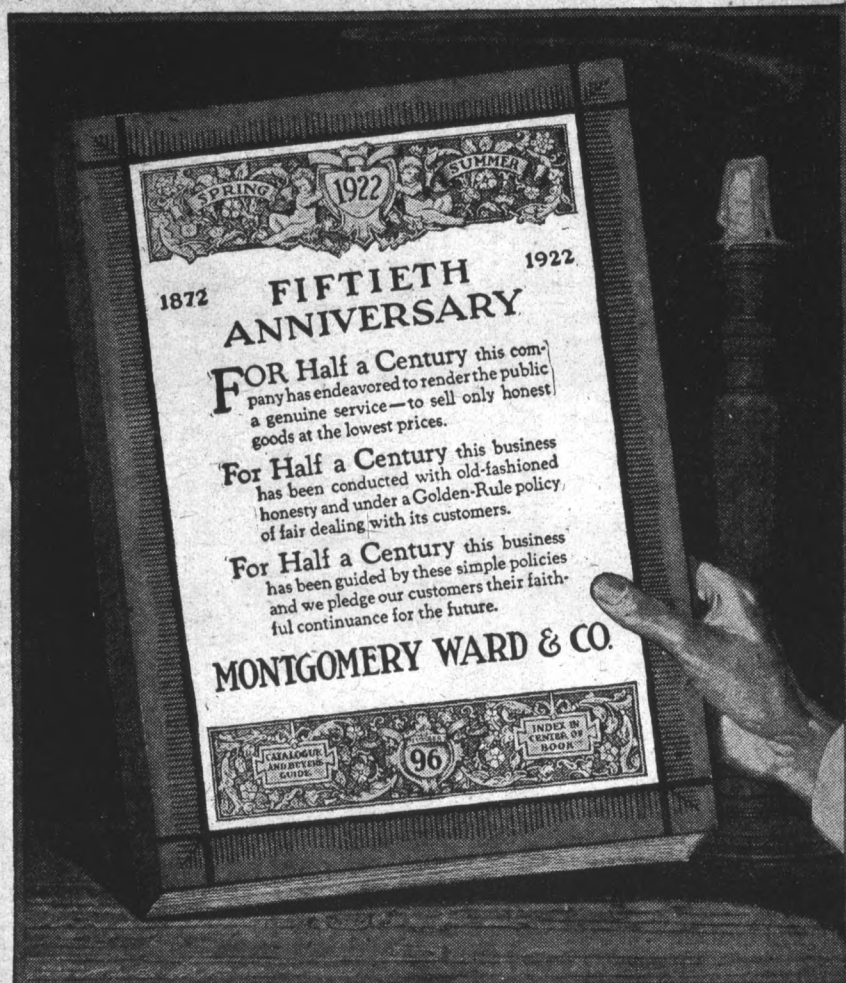
Several places in the garden I used discarded automobile tires to good advantage where circular beds were required. When filled with earth, they present the appearance of concrete basins. They last for years in such a capacity.—P. C. G.

### GOOD SEEDS.

MR. STARR, a Michigan seedsman, said that reliable seedsmen go through considerable trouble to supply good seed, and therefore good seed costs more to produce than the ordinary kind. The best suggestion he could make was that the growers establish friendly relations with the seed dealer. It was stated that considerable seed comes from abroad; but the large reliable seed houses have inspectors abroad just as they have in this country. "You can pay the price and not get good seed," concluded Mr. Starr, "but you cannot get good seed unless you pay the price."

## Montgomery Ward & Co.

**The Oldest Mail Order House  
is Today the Most Progressive**



## This 50<sup>th</sup> Anniversary Catalogue is Yours FREE for the Asking

THIS new and complete 50th Anniversary Catalogue will bring you the full advantage of all our Fifty Years' experience in creating low prices on goods of standard serviceable quality.

For every reader of this paper one copy of this book is ready—waiting here to be mailed to you. Simply fill in the coupon below and one copy of this complete Golden Anniversary Book will be sent you Free.

Today the price you pay for goods is a matter of where you buy.

There is no standard for prices since the war. You must compare prices now.

People in large cities compare prices by shopping from store to store. You, too, should compare prices—by having in your home this 50th Anniversary Catalogue.

Every price this book quotes is based upon the new low costs of raw materials.

It is filled with new merchandise bought at the new low prices and puts before the public the right price—the lowest price you need pay for anything you buy.

### Everything for the Home, the Farm and the Family

Everything that goes into the home to make it more modern and complete from wall paper to curtains, lighting fixtures to rugs—everything at Money-Saving Prices.

**For Women:** All the newest and best New York Fashions—selected by Ward's own fashion experts.

**For Men:** Everything a man needs from clothing to tools—everything for the farm and farmer's use. Everything at guaranteed, lowest prices of the year.

### Montgomery Ward & Co.

Chicago Fort Worth  
Kansas City St. Paul  
Portland, Ore.

We picture above your copy of our Golden Jubilee Catalogue.

And on this picture you may read the policy that has been Montgomery Ward's for Fifty Years.

Today this great new-old institution of Montgomery Ward & Co. marches in the lead among all the alert, progressive, low-price-making business houses of America.

It is a house of experts searching the markets with ready cash, buying at today's lowest prices for YOU.

Every page in this great new 50th Anniversary Catalogue breathes the spirit of Ward's—that of progress in service and saving for you.

And this page is published to tell you personally the story of Ward's and the dollars you, too, may save in buying at Ward's. The opportunity is now yours. You need simply fill in the coupon below.

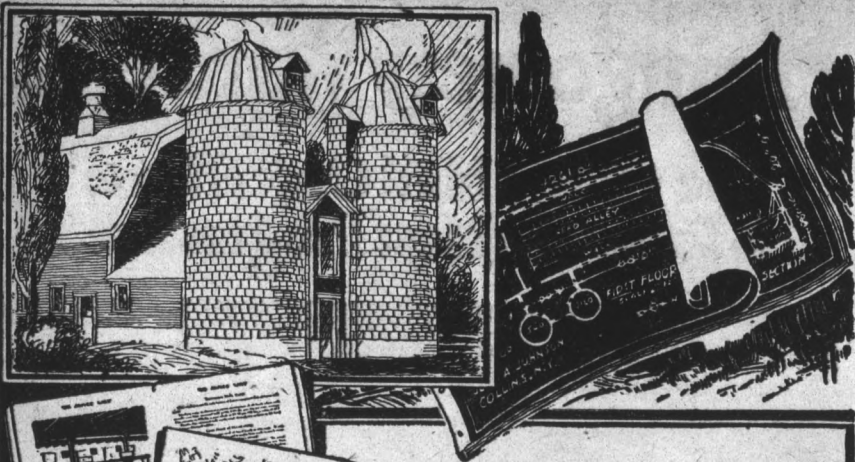
Mail this coupon to the one of our five houses that is nearest you.

To:  
MONTGOMERY  
WARD & CO.  
Chicago Kansas City  
St. Paul Fort Worth  
Portland, Ore.  
(Mail this coupon to the house nearest you)

Please mail my free copy of Ward's 50th Anniversary Catalogue.

Name \_\_\_\_\_  
Address \_\_\_\_\_





## Would \$53 Per Month Be Fair Rental For This Thirty Cow Barn—\$1.75 Per Cow?

A JAMES planned barn with Jamesway Insulation, double glazed windows and silos, completely equipped with Jamesway Ventilating System, Stalls, Stanchions, Drinking Cups, Manure Carrier, Feed Truck, Cow Pen, Calf Pen, Bull Pen, Etc., now costs only about \$53.00 a month or \$1.75 per cow.

You can now afford a new barn. If built and equipped the Jamesway, the cows will pay for it through increased profits.

Indeed, the drinking cups alone will pay  $\frac{1}{2}$  the cost of the entire barn. Conclusive tests in 28 herds proved that "with milk at \$2.50 cwt. and labor at 25c an hour" the cups increased the profits from each cow \$14.01 during the cold weather season.

Silos, the ventilation system, the warmth assured by Jamesway insulation, the stalls, pens, etc., will add enormously to the increase of profits.

Send to-day for 336-page book full of interesting information.

**James Manufacturing Company**  
Fort Atkinson, Wis. Elmira, New York



Ask for Jamesway No. 24.

## Jamesway Equipment For Chickens

Now comes the Jamesway to solve problems of poultry raisers.

You know what the poultry house frequently is—damp, cold, poorly ventilated, dark and hard to keep clean.

The hens won't lay perhaps; many of them get sick and die; and in other ways the owner finds it a discouraging and unprofitable proposition.

The new Jamesway design of poultry house bids fair to revolutionize the poultry industry of the country.

It assures plenty of warmth with draftless pure, fresh air at all times; sunlight; clean, dry floors; dry walls and ceiling; nests free from mites and lice; and makes certain that the hens need never be without feed and water.

It saves great amounts of expensive feeds now being wasted; increases egg yields; and makes the work easy and pleasant. And the cost is surprisingly small.

Send now for your copy of the Jamesway Poultry Book No. 24.

## Stock Men at Annual Meet

Breeders and Feeders Hold Big Session at M. A. C.

THAT the farmers must organize if they are to get fair markets and an economic distribution for their products, was established by every speaker on general farm problems, who addressed the live stock men at the thirty-first annual meeting of Michigan Breeders and Feeders held at M. A. C. on January 11-12. Mr. J. G. Brown, of Indianapolis, president of the Indiana Federation of Farmers' Associations, established this fact in the minds of all his hearers when he said, "When danger threatens a pack of burros the females are huddled in a group and the males gather around them with their heads together and kick the enemy. When danger threatens the farmers they gather with their heads out and their heels together and kick each other."

Organization to place an agricultural bloc at Washington comparable with the blocs placed there by big commercial interests for the purpose of influencing legislation is absolutely necessary if the farmers are to get legislation favorable to their industry, contended Mr. H. A. Moehlenpach, of Milwaukee, president of the Investors' Finance Corporation. To show the place an organization at Washington could fill for the farmer the financial man said, "Legislation is needed at present to authorize Federal Reserve banks to extend a second line of credit to the farmer so that he may get loans for one or two years' time as well as for the six months period which is already provided for." He pointed out that these banks have one hundred per cent of gold back of their notes, whereas the law only requires that they have thirty-five per cent back of them. Mr. Moehlenpach made it perfectly clear, however, that he was not advocating any class legislation. "The farmer wants his just dues, but he will never get them unless he organizes and sticks by his organization," said Mr. Moehlenpach.

Proof of the good that one organization is doing was given by Mr. C. J. Fawcett, head of the wool department of the American Farm Bureau Federa-

tion, who showed that the wool pool, by straightening out that long and circuitous road from producer to consumer, was able to handle wool more economically than the speculator who causes the product to go through so many hands and to travel so many unnecessary miles before it goes into the hands of the mill man. He gave an instance when he traced one clip from its home in Iowa to St. Louis, Missouri, where it was bought by a speculator. Another speculator in the same city next got the wool and from here he could not be certain just where it was sent, but it was found that the last named speculator sent much of his material to a mill in Philadelphia and that this was probably the destination of the Iowa clip. Under the wool pooling plan the product goes directly to the warehouse where it is graded and then sold directly to the mill men. No speculator is allowed to dabble in the marketing plan at all.

Mr. D. D. Aitken, former president of the Michigan Holstein-Friesian Association, brought out another phase in the necessity of organization when he said that the breeders must hold together in compelling the man who is using high-priced machinery on his farm to begin a wise and economical program in the gathering together of necessary equipment. Mr. Aitken said, "We have no right to expect cost of production plus a reasonable profit for our milk when it costs \$7.00 a hundred pounds to produce simply because it is produced by the use of elaborate machinery as has been found to be the case in many places." Have good and efficient machinery but do not use extravagant outfits.

Organizations must advocate the giving of credit by the United States to Europe before a readjustment of the price relation between agricultural products and commercial products can be reached, contended F. O. Lowden, former governor of Illinois and present president of the Holstein-Friesian Association of America. There is no market for a great amount of Ameri-

(Continued on page 75).

## MEN WANTED

**Sweeney**  
Mechanically Inclined  
—to send for my big illustrated 72-PAGE BOOK—  
It tells how in a few weeks you can earn from \$150 to \$400 a month in the Auto and Tractor business.  
**IPAY** Will rebate railroad fare from any point in the United States to Kansas City.  
**Ry. Fare**  
**JOBS OPEN.** Sweeney trained men in demand. See list of jobs. LEARN IN EIGHT WEEKS. No previous experience necessary. Use tools not books. Simply send name and address today, a post card will do, for Free book and 27 photographic reproductions of machine shop work, etc. in world's largest and finest trade school. Let's Go—Write Now!

**LEARN A TRADE**  
**Sweeney**  
SCHOOL OF AUTO-TRACTOR-AVIATION  
67 SWEENEY BLDG. KANSAS CITY, MO.

## PIERCE FORDSON GOVERNOR

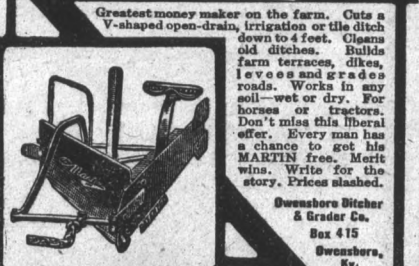
**WILL PAY FOR ITSELF IN TWO WEEKS**  
Saves one man's time on all belt work. Saves fuel. Saves repair bills. Installed in 20 minutes without removing timer, carburetor, radiator or fan. Instantly adjusted for different speeds. Satisfaction guaranteed or money back.  
Write for literature.  
**The Pierce Governor Company**  
Dept. M Anderson, Ind., U. S. A.

**Big Profit** In custom lumber sawing with a Howell up-to-date Saw Mill. Keep your engine earning money all the year. Now is the time to saw your standing timber and turn it into money. Big demand for lumber, lath and shingles. Write for Free Catalog B and Prices.  
**R. E. HOWELL & CO., Mfgs., Minneapolis, Minn.**

## FREE Drain and Terrace Without Cost

**I'll Show You How**  
This year I'm going to give away, absolutely without cost 25 of my record-breaking Martin machines. I'm doing this to bring about better farming conditions and lower crop cost. Find out. Write me.  
**Prices Cut to the Bone**

**THE Martin**  
O.D. & G. CO. REGISTERED



**SAVE YOUR MAPLE TREES!**  
Learn money by making maple syrup. Great demand for quality product.  
**Champion Evaporator**  
Produces finest quality. Saves time, fuel and labor. Pays for itself in a couple of seasons—lasts many years.  
Write for free illustrated catalog and mention how many trees you tap.  
Sap Spouts, Tanks, Full Line of Sugar Maker's Supplies.  
**Champion Evaporator Co., Hudson, Ohio.**

## Our Service Department

Always Give Name and Address When Sending Inquiries

### EMINENT DOMAIN AND CONDEMNATION.

If A. and B. own real estate, one on each side of a half-mile section line, and C. buys real estate of D. less than forty rods back of the main road on one side of this half-mile section line, can C. get a road out to the main road from the property; and if so, how will C. proceed to get this road when A. and B. will not sell a right-of-way.—G. E. M.

Apply to the highway commissioner under Compiled Laws of 1915, Sec. 4447, have a jury called to determine the necessity and damages of the road, and pay to the owner of the land crossed the amount assessed by the jury, and pay the costs of the proceeding.—J. R. R.

### ORAL WILLS.

Before my stepfather died he stated verbally, before three witnesses, that he wished his property divided between his own son and me. Now that there is being no written will, my half-brother claims everything. Have I any right by law?—J. T. T.

So far as the land is concerned, such a will would be utterly void. As to personal property, if it does not exceed

\$300 in value and the declaration was made in the last sickness because of fear that death would come before a writing could be made, it would be sufficient. But if the personality exceeded \$300 in value, it would be void even then, unless made by a soldier in actual service or a mariner on ship board.

A step-son would not inherit any of the step-father's estate.—J. R. R.

### A FEEDING RACK FOR SHEEP.

Will you tell me the best way to make a feeding rack for sheep?—J. G.

The best rack for sheep is made with a tight bottom three or four inches deep. It will hold grain and the leaves of clover, etc., without waste. The sides of it are composed of upright slats and then with side boards that can be raised and lowered. You can feed from this rack from both sides. The sliding boards are arranged so that by the use of a lever at the end of the rack the boards can be lowered down, the feed put into the rack and the sheep kept out until it is time for feeding. Then by working this lever, the sliding boards are raised.  
(Continued on page 80).



## ANOTHER ALFALFA SEED RECORD.

THE record published in last week's issue of this journal, of fifty bushels of alfalfa seed produced on one farm, will have to be revised. On the farm of Henry Fusséy, near Hemlock, was hulled sixty-six bushels of alfalfa seed from thirty acres. The hulling was done by Wm. Yeakle & Sons. In the same neighborhood the same machine hulled forty-three bushels of red clover from ten acres on the farm of George Long.—Y.

## RAILROAD TARIFFS AND POTATOES.

THE influence of railroad rates upon the prices paid producers for potatoes is reflected in shipping point quotations in different sections of the country. At Greeley, Colorado, U. S. Grade No. 1 is quoted at \$1.25 per cwt; at Idaho Falls the quotation is \$1.10 per cwt; at Minneapolis and St. Paul it is \$1.75; at Waupaca, Wisconsin, \$1.75; at Grand Rapids, Michigan, \$1.90; at Rochester, New York, \$2.00.

## THE DURABILITY OF CONCRETE TILE.

ALTHOUGH forming only a small proportion of the total number of tile that have been laid in Michigan, a majority of the failures of tile to stand up must be credited to concrete tile. Until recent years, an argument that was often advanced in favor of concrete tile by manufacturers was that they were porous. It was claimed that water entered the drains readily through their walls and that they were therefore more efficient than non-porous tile. Experiment has proven, however, that only a negligible proportion of the water entering a drain made of concrete tile enters through the tile walls; that the water thus passing through them actually weakens the tile by carrying some of the cement with it in solution; and that the strongest tile are those which show the lowest percentage of absorption.

Nearly all the instances in which concrete tile have disintegrated that have been brought to the writer's attention, have been where they had been laid in muck or sand. In some cases tile similar to those which broke down within a short time after being installed in these soils have given good service in clay soils. Just what is responsible for this has not been definitely determined, although indications are that it is due to the presence of acids common to the lighter soils.

Most of the tile used in these instances had been made on the farm where facilities for mixing and curing are not of the best. Tests made by the College Experiment Station at East Lansing, as reported in Special Bulletin No. 75, show that the breaking down of concrete tile is due to one or more of the following causes:

1. The use of too lean a mixture.
2. The use of too dry a mixture.
3. Improper mixture.
4. Improper curing of the tile after they have been formed.
5. Placing the tile in the ground before the concrete has hardened sufficiently to prevent the absorption of soil water.

Experiments extending over a period of several years will be required to determine the durability of concrete tile in the various types of soils. Until this is done the farmer is advised against taking the risk involved in using them, in view of the fact that good concrete tile cost as much as a good grade of clay tile about whose durability there is no doubt.—W. van H.



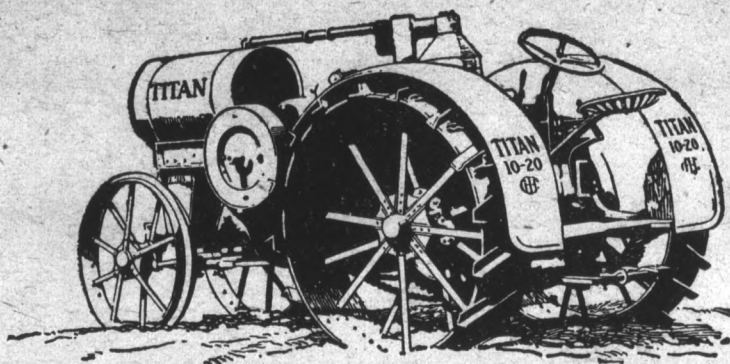
These International Machines, Requiring Power at Drawbar or Belt, are Built to Work Right with Tractors:

## BELT

Threshers  
Baling Presses  
Feed Grinders  
Corn Shellers  
Ensilage Cutters  
Huskers and Shredders  
Huskers and Silo Fillers  
Cane Mills  
Stone Burr Mills

## DRAWBAR

Grain Binders  
Harvester-Threshers  
Headers  
Push Binders  
Mowers  
Grain Drills  
Corn Binders  
Corn Pickers  
Plows  
Disk Harrows  
Spring-Tooth Harrows  
Peg-Tooth Harrows  
Field Cultivators  
Culti-Packers  
Manure Spreaders  
Wagons



## Why Are the Most Successful Farmers Using International Harvester Equipment?

**M**ORE than 100,000 farmers who have decided in favor of International Harvester tractors have been guided by the same impulses.

They knew that, because of its 90-year contact with farming problems, the International Harvester Company was in better position than any other company to design and build long-lived, practical farm tractors.

They knew that in the International Harvester line they could find both tractors and machines which were designed to work together as field units.

They were absolutely sure that the most practical and helpful service would be quickly and easily and forever available to them. Many years' experience with the International Harvester Company had convinced them that nowhere else could they find a line of power farming equipment so closely backed by satisfactory service.

They knew that these factors would guarantee their investments for years of usefulness. Year after year the wisdom of Titan-International Tractor ownership grows more apparent.

Let the judgment of these 100,000 farmers help you. For belt work now and for drawbar work in the spring, follow their advice. Use International equipment. Remember that both Titan 10-20 and International 8-16 now sell for \$900—lowest prices ever quoted on these tractors with their present equipment.

## INTERNATIONAL HARVESTER COMPANY

CHICAGO

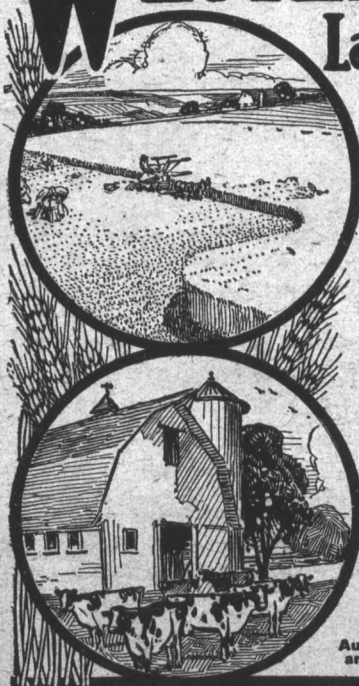
OF AMERICA  
(INCORPORATED)

USA

92 Branches and 15,000 Dealers in the United States

## WESTERN CANADA

### Land of Prosperity



offers to home seekers opportunities that cannot be secured elsewhere. The thousands of farmers from the United States who have accepted Canada's generous offer to settle on FREE homesteads or buy farm land in her provinces have been well repaid by bountiful crops. There is still available on easy terms

#### Fertile Land at \$15 to \$30 an Acre

—land similar to that which through many years has yielded from 20 to 45 bushels of wheat to the acre—oats, barley and flax also in great abundance, while raising horses, cattle, sheep and hogs is equally profitable. Hundreds of farmers in western Canada have raised crops in a single season worth more than the whole cost of their land. With such success comes prosperity, independence, good homes and all the comforts and conveniences which make life worth living.

**Farm Gardens, Poultry, Dairying** are sources of income second only to grain growing and stock raising. Attractive climate, good neighbors, churches, schools, good markets, railroad facilities, rural telephone, etc.

For illustrated literature, maps, description of farm opportunities in Manitoba, Saskatchewan, Alberta and British Columbia, reduced railway rates, etc., write

**J. M. MacLachlan,**  
10 Jefferson Ave., East, Detroit, Mich.

Authorized Agent, Dept. of Immigration and Colonization, Dominion of Canada

160 ACRE  
FARMS IN  
WESTERN  
CANADA  
FREE

## GOOD SEEDS

Grown From Select Stock—None Better—52 years selling good seeds to satisfied customers. Prices below all others. Extra lot free in all orders I fill. Big free catalogue has over 700 pictures of vegetables and flowers. Send your and neighbors' addresses. **R. H. SHUMWAY, Rockford, Ill.**

#### TREES & PLANTS THAT GROW

##### CATALOG FREE

Great Bargains, Standard Varieties, Best Quality, Low Prices.

Satisfaction or money refunded.

60 years in business proof of our responsibility. Write for catalog now.

**PETER BOHLENDER & SONS**

Spring Hill Nurseries

Box 117 Tippecanoe City (Miami County) Ohio

#### EVERGREENS Hill's Hardy

Tested Varieties

Fine for windbreaks, hedges and lawn planting. All hardy, vigorous and well rooted. We ship everywhere. Write for free Evergreen book. Beautiful Evergreen Trees at moderate prices. **D. H. Nursery Co., Box 230, Dundee, Ill.**

**Men Wanted** to sell dependable fruit trees and shrubbery. Big demand. Complete co-operation. Commission paid weekly. Write for terms: **Willems Sons' Nurseries, Rochester, N.Y.**

Please Mention The Michigan Farmer When Writing to Advertisers



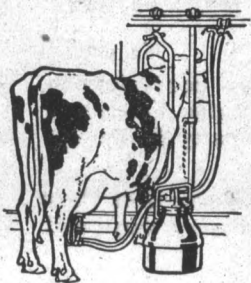
## A "Knack" for Milking

You know that some hand milkers can get more milk out of the same cows than others. They have this "knack" because they milk uniformly, energetically, and yet with an action that is pleasing to the cow.

You know, too, that it pays to keep the same man on the same cows. A change in milkers usually means a decrease in production, for a day or two at least.

Further than this, you know the cow which is properly milked from day to day will hold up for a longer lactation period.

These facts show that the organs of the cow which secrete milk work best under certain conditions, are very sensitive to change, and that they respond best to uniformity and gentleness. These facts were taken into consideration in developing the De Laval Milker.



The Better Way of Milking

The De Laval Milker is the only method of milking that insures absolutely uniform, good milking—that milks the cows in the way they like best, that milks them as the very best hand milker would, and keeps it up without changing. It is doing so on thousands of farms, whose owners say it pays for itself in less than a year by saving time and increasing milk production. Easy terms. Write for full information.

**The De Laval Separator Co.**  
NEW YORK CHICAGO SAN FRANCISCO  
165 Broadway 29 E. Madison St. 61 Beale St.

Sooner or later you will use a  
**De Laval**  
Milker and Separator



## Organize to Distribute Milk

*Dairymen in Lansing Area Prepare to Handle Milk.*

By W. C. Cribbs

**F**OLLOWING closely in the wake of the Muskegon Cooperative Milk Distributing Plant, the farmers of Lansing are about ready to launch a building program for the most up-to-date milk plant in this part of the state of Michigan.

For many months past the milk producers of the Lansing area have been very much dissatisfied with the returns for their milk. This constant friction between the producers and the distributors of the Lansing territory has led to the farmers taking things into their own hands and today there is practically completed a producers' organization of considerable note.

The men that have been instrumental in promoting this organization are some of the largest producers of milk in this section. The first step which was taken by them was to investigate the Grand Rapids Dairy Company, operating in the city of Grand Rapids and conducting a distributing business for their farmer members. Upon investigation of this plant it was found that several mistakes had been made and these have been entirely corrected. The plant today was found to be in a very healthy condition. It was also found that there were three other farmers' distributing plants in the state. One at Kalamazoo, which has operated for fifteen years and during the last twelve months has paid their members \$3.20 per hundred for 3.5 milk, with five cents a point for any additional butter-fat contained in the milk above the 3.5. This organization at Kalamazoo was found to be running in competition with four other distributing plants of about equal size. They were supplying their customers with better than four per cent milk at thirteen cents a quart, until in December the price was reduced to eleven cents a quart and then the price was reduced to the producers to \$2.50 for 3.5 milk.

The Lansing men also investigated the Berrien County Milk Producers' Association, located at Benton Harbor and supplying the cities of Benton Harbor and St. Joseph. This plant has been in operation for three years, starting with an output of 750 gallons per day and reaching the 2,000 gallon

per day output at the present time. This organization has been able to pay its members \$3.00 per hundred for 3.5 milk with an additional five cents per point butter-fat above the 3.5. This price was paid in 1921 until September, when the price of milk was reduced to thirteen cents a quart for 4.5 milk and eleven cents a quart for 3.5 milk daily. Their returns to the farmers since September have been \$2.50 for 3.5 milk. In addition to this price paid to the farmer for their milk, this organization has been able to lay by a surplus of approximately \$4,000, which will be used to retire some of their outstanding bonds. This organization has a \$70,000 plant and equipment of the very latest type.

There is also another cooperative milk distributing plant at Muskegon Heights which these men have not as yet visited.

The Lansing Association started a canvassing campaign for the selling of their stock to dairymen about eight weeks ago. The farmers themselves have done all the canvassing for stock subscriptions and have not paid out one dollar for any professional stock salesman.

At the very enthusiastic meeting held Thursday, January 5, the canvassers reported from every section, to which they had been assigned, and it was found that their survey showed 2,000 cows signed up to this organization. This number of cows constitutes approximately two-thirds of all the cows in an area seven miles each way from Lansing. At this meeting the stockholders determined to discontinue the selling of stock on and after January 26, giving anyone who had not signed up for a membership in the organization three weeks in which to do so. It was the sentiment at this meeting that enough cows had been signed up and enough money subscribed to warrant the closing of the campaign.

A committee of three members of the board of directors, Mr. Daniel Kreitz, Edward Stahl and Samuel Young were selected to take a trip over several cities in other states, where plants were operating and using

(Continued on page 77).

## HEALS ANY CUT WOUND OR SORE!

*Prove it at Our Risk*



Corona Wool Fat is one of the best and most widely used remedies for quickly healing cuts, wounds, collar boils, split hoofs, scratches, caked udders, or any sore or bruise on man or beast. Made from the fatty secretions extracted from wool and skin of sheep. If you have sheared sheep you know how soft the oil makes your hands and how it heals any cuts or bruises.

These oils with other medicinal properties make Corona Wool Fat a first aid remedy that is unsurpassed—it is the world's greatest ointment.

**SEND NO MONEY**

**CORONA MFG. CO.**

11 Corona Building, Kenton, Ohio

I accept your special offer—you may send me 1/4-lb. can of Corona Wool Fat. I will pay mailman 50c on delivery—will use as directed and if not satisfied, you are to refund my money.

Name.....

Town.....

State..... R. F. D.....

Fill out coupon and we will send you full size 1/4-lb. can without asking a cent of money in advance—you pay mailman our special reduced price of 50c when delivered. Use it on any sores, burns, on man or beast—if you don't find it the best remedy you ever used we will refund your money. This special offer is made to let you prove its merits at our risk. You can purchase future orders from your druggist, blacksmith, general store or harness dealer. Mail coupon NOW.

**CORONA MFG. CO.**  
11 Corona Building Kenton, Ohio

## Best Locking Device Ever Made



**West Bend**  
BARN EQUIPMENT

An improvement found only on West Bend Barn Equipment. One lever locks in or releases from 2 to 50 cows instantly, and also operates cow-stops. Saves thousands of steps. Simple, practical and indestructible. Used on the best dairy farms everywhere. Our steel stalls, mangers, pens, litter carriers, ventilators, water bowls and other dairy barn necessities are your best investment. Get our

**Big, FREE Barn Equipment Book**

Explains entire line, also our special FREE service to farmers building new or equipping old barns with the best labor-saving devices. Blue prints furnished. Drop us a postal for full information. We are helping thousands of farmers make more profit out of their barns. Why not you?

Write TODAY

**WEST BEND EQUIPMENT CO.**  
289 South Water Street WEST BEND WIS.

## Cow-Testing Association Profits

*Some Interesting Work in Lapeer County*

By A. J. Patch

**M**EMBERSHIP in a cow-testing association opens up for the milk producer three avenues for increasing the profits received from the herd. The first and probably the greatest benefit is the ability to determine which cows are paying a profit for their feed and which are losing money on the feed which they are eating. It also is possible to determine the economic value of certain rations. One balanced ration may appear to have all desirable properties; but it may cost more in proportion to milk produced than another balanced ration. Only by records obtained by testing in some form, private, association, or official, can a farmer be certain which cows and which feeds are economical.

The second manner in which herd profits may be increased is by the higher price received for calves from tested cows, and the additional value of a herd the young stock in which is all produced by the best cows.

The third manner in which profits may be increased is through the possession of figures which permit checking up tests given by milk distributors and creameries when whole milk or

cream is sold. Most milk and creamery companies will take the association tester's figures on fat content of milk as a basis for settlement, in case any dispute arises over the test of milk or cream.

Besides these three direct ways of increasing profits from herds of cows there is opened up to the wide-awake dairyman an almost unlimited field of possibilities. The figures given here are the official figures for the year for the Lapeer County Cow-testing Association. When reading these figures remember that the costs given are for feed only. No labor, investment, or overhead is included in costs shown.

There were 290 cows entered for test in the association. These cows were divided into twenty herds which varied in numbers from seven cows to sixty-two cows.

The average production per cow for the year was 7,989 pounds of milk testing 3.81 and containing 304 pounds of butter-fat.

The average price received for milk was \$2.12 and the total average value of produce of cow was \$169.97.

The average cost of feed per cow

When You Write to Advertisers Please Say "I Saw Your Ad. in The Michigan Farmer."



was \$73.42 and the average profit above feed costs was \$95.99. The cost for feed in producing the average pound of butter-fat was \$0.24 and the cost of 100 pounds of milk was \$0.92.

Now compare the average production of butter-fat per cow in the whole association with the production per cow in the three herds ranking highest. Messrs. Reek's and Smith's herds are pure-bred Holsteins, and Mr. Curry's is grade Jerseys.

Owner.	Lbs. Milk.	Lbs. Test.	No. Cows.
Average .....	7,989	3.81	304
A. C. Reek.....	11,874	3.62	434
C. F. Smith.....	11,080	3.69	409
M. Curry .....	7,542	4.82	363

There is a difference of 130 pounds of butter-fat between the association production per average cow and the production per cow in the highest producing herd. One hundred and thirty pounds of butter-fat per year per cow are well worthy of the consideration of any dairyman. That amount of butter-fat amounts to approximately \$65 a year on the production of one cow. Would you pay more for a heifer calf from the high-producing herd, or from the average herd, or would you rather buy calves from untested herds?

Compare the production of the highest producing cow with the average association production per cow.

	Lbs. Milk.	Lbs. Test.	Value at 50c lb.
High .....	15,210	3.85	\$586.34
Average ..	7,989	3.81	304

A difference of 282.34 pounds of butter-fat with a value of \$141.17 is shown

by these figures. One hundred and forty dollars and seventeen cents per cow is an item worth considering.

The average feed cost of producing one hundred pounds of milk was \$0.92 and of one pound of butter-fat was \$0.24. Compare these costs with the high figures and the low figures in the association.

	100 Lbs. Milk.	1 Lb. Fat.
Low cost in Ass'n.....	\$0.67	\$0.17
Average .....	0.92	0.24
High .....	1.71	0.40

There is a variation of \$1.04 in the feed cost of producing 100 pounds of milk, and of \$0.23 per pound in producing butter-fat. Here is a chance for some rural Sherlock Holmes, but the cost detective should also remember that the lowest cost in feeding is not always the most profitable. Rattle-snake tonic, as marsh hay is called in some sections in Michigan, will produce milk at a low cost but the amount of profit derived per cow is questionable.

The costs of belonging to a cow-testing association are very nominal. It costs the average Lapeer member \$30 a year. The feed saved when one boarder cow is sold will pay a year's membership. A heifer saved from the high-producing cow of your herd will go a long way towards paying a year's costs. The average dairy farmer cannot afford to continue his work without belonging to such an association. The complete figures for the Lapeer County Cow-testing Association are given below. A study of them along the lines suggested will prove profitable to any dairyman.

#### Lapeer County Cooperative Cow-testing Association.

The following is a yearly report of the Lapeer County Cooperative Cow-testing Association for 1921. The averages and highest cows are figured on the butter-fat basis.

##### Three Highest Herd Averages.

	Test.	Fat.	Cows.
A. C. Reek, Holsteins.....	11,874 lbs. milk	3.62	434.13
C. F. Smith, Holsteins.....	11,080 lbs. milk	3.69	409.91
M. Curry, Jerseys (Gr.)....	7,542 lbs. milk	4.82	363.92


##### Highest Twenty-five Cows.

Owner and Name of Cow.	Breed.	Lbs. Milk.	Lbs. Fat.	Lbs. Fat.
A. C. Reek, Renno.....	Hol. (Pb)	15,210	3.85	586.34
C. F. Smith, Vale.....	Hol. (Pb)	13,443	4.21	566.23
Michigan Home, 189.....	Hol. (Gr)	17,022	3.25	553.92
A. C. Reek, Ripster.....	Hol. (Pb)	13,141	4.02	528.53
Michigan Home, 30.....	Hol. (Gr)	16,533	3.1	512.86
Mitchell Curry, 6.....	Jer. (Gr)	8,841	5.53	488.99
C. F. Smith, Kate.....	Hol. (Pb)	11,571	4.1	474.92
C. F. Smith, Q. of Grape.....	Hol. (Pb)	11,955	3.93	469.98
Michigan Home, 100.....	Hol. (Gr)	14,578	3.15	459.52
Michigan Home, 139.....	Hol. (Gr)	13,709	3.82	452.57
A. C. Reek, May.....	Hol. (Gr)	12,024	3.7	445.59
Michigan Home, 87.....	Hol. (Gr)	14,048	3.17	445.56
Wm. Thorman, 15.....	Hol. (Gr)	10,468	4.19	439.55
Wm. Thorman, 1.....	Hol. (Gr)	10,448	4.16	435.58
Michigan Home, 153.....	Hol. (Gr)	12,028	3.61	435.56
H. P. Rollins, Brindle.....	Jer. (Gr)	7,337	5.71	429.22
Wm. Rider, 11.....	Hol. (Pb)	11,508	3.72	428.77
M. Curry, 3.....	Jer. (Gr)	7,687	5.43	427.84
Michigan Home, 275.....	Hol. (Gr)	13,695	3.11	426.66
Michigan Home, 175.....	Hol. (Gr)	12,514	3.4	425.57
Michigan Home, 299.....	Hol. (Gr)	12,844	3.36	423.02
H. P. Rollins, Bess.....	Hol. (Gr)	11,554	3.64	420.77
Michigan Home, 158.....	Hol. (Pb)	12,593	3.29	414.92
Michigan Home, 210.....	Hol. (Pb)	12,946	3.11	413.13
C. F. Smith, Q. Butter Boy.....	Hol. (Pb)	12,613	3.2	403.64

##### The Herd Averages.

Owner and Breed.	Lbs. Milk.	Lbs. Fat.	Value Product.	Cost. Feed.	Net Profit.	Cost 100 lbs. Milk.
C. F. Smith, Hol. (Pb).....	11,080	409.91	\$220.61	\$124.80	\$106.90	\$1.02
Mich. Home, Hol. (G-P).....	10,400	335.54	253.50	137.03	117.32	1.31
A. Lilley, Jer. (Gr).....	5,956	290.66	171.82	102.17	69.63	1.71
Stock Bros., Hol. (G-Pb).....	8,484	285.47	163.10	72.56	90.82	.85
H. P. Rollins, Mixed.....	8,081	340.74	178.60	66.28	110.30	.82
J. Periberg, Mixed.....	7,628	286.89	156.38	72.71	77.47	.95
H. Hough, Durham.....	6,521	288.30	171.81	74.29	91.61	1.41
L. Curtis, Mixed.....	7,190	288.95	156.88	61.16	96.26	.85
J. A. Scully, Jer. (Gr).....	5,509	291.42	148.91	68.27	69.52	1.23
W. Currie, Mixed.....	8,036	294.86	159.54	57.18	102.46	.71
G. Miles, Mixed.....	6,959	255.98	140.03	47.81	92.31	.68
H. Milliken, Mixed.....	8,007	318.36	170.34	54.28	116.05	.67
W. Rider, Hol. (G&Pb).....	8,394	282.77	157.57	67.01	90.29	.79
L. Muir, Mixed.....	6,063	199.51	114.42	54.40	60.00	.89
Farley Bros., Hol. (G-P).....	7,969	254.21	143.77	59.54	84.23	.74
M. Currie, Jer. (Gr).....	7,542	363.92	187.39	63.01	124.35	.83
W. Thorman, Hol. (Gr).....	9,422	355.87	192.24	76.50	115.74	.81
C. R. Watson, Hol. (Gr).....	7,145	284.42	146.17	64.43	81.74	.90
W. Chriscinske, Hol. (P).....	7,527	236.77	127.24	52.97	74.27	.70
A. C. Reek, Hol. (Pb).....	11,874	434.19	239.19	92.10	146.70	.77

The average for the entire association of 290 cows was 7,989 pounds of milk with 3.81 test, and 304.93 pounds of butterfat. Average price was \$2.12 and value product \$169.97. Average cost of feed was \$73.42 with a profit above feed cost of \$95.99. Returns for \$1.00 expended for feed was \$2.31. Cost of one pound of butter-fat was \$0.24 and average feed cost of 100 pounds of milk was \$0.92.



## Do You Need A New Barn?

### Get this Free Book that Saves You Money

**LOUDEN BARN PLANS**

The Loudon Machinery Company  
Fairfield, Iowa

## Saves You Lumber and Carpenter Work

The Loudon Book shows you how to make every foot of lumber count—how to reduce construction costs—how to get a better arranged—better looking all-around barn for considerably less money. This 112 page encyclopedia is crammed full of data on every phase of barn building from foundation to cupola—information gained in our 55 years' experience of studying barn conditions.

The 400 odd illustrations in the Loudon Book include numerous construction details on wall framing, different types of roofs, windows, doors, etc., and show over 50 complete, up-to-date barns and other farm buildings. This book has chapters on foundation work, floors, advantages of one kind of roof over another, amount of cement needed, drainage, ventilation, lighting, silo building, size barn required for different purposes, strength of materials, etc. Fill out and mail coupon for this book today.

### Let Loudon Barn Experts Help You

In case you should not find a plan in the Loudon Book that exactly meets your special requirements, let our expert barn architects give you their ideas and suggestions on a barn in which you get an economical and convenient arrangement of floor space—a hay mow of the greatest capacity—a barn where the stalls, gutters, feed alleys, and supporting posts, will be the correct size and and properly placed. You can have the benefit of their many years' experience in planning over 12,000 barns and there's no cost or obligation.

### Make Your Barn Work Easier

Louden Plans will help you get the best barn for the money you put into it. Loudon Equipment will save you a tremendous lot of work daily in running the barn—as long as it stands. Loudon Manure and Feed Carriers save half the time of barn cleaning and feeding. Loudon Water Bowls enable cows to water themselves whenever they need it—increasing milk yield 25% to 40%. Loudon Stalls and Stanchions make sanitary conditions possible—give cows pasture comfort in the barn, and with the Loudon High Built Up Feed-Saving Curb, prevent waste of feed. Our big 224 page catalog tells all about these and 50 other labor savers for the barn—sent postpaid—no charge. Fill out coupon for these valuable Books and service—today.

**The Loudon Machinery Co.**  
1932 Court St. (Established 1867) Fairfield, Iowa

# LOUDEN

## BARN PLAN SERVICE

Fill Out and Mail Coupon Today

Please send postpaid, without charge or obligation, book checked below: 1932 Loudon Barn Plans Catalog I expect to build (remodel) a barn for..... cows..... horses. Interested in Manure Carriers... Stalls & Stanchions... Water Bowls...

Name..... P.O..... State.....

## Where Does the Money Go?

CLEAR, concise records will help you to make your dollars go farther and bring bigger returns. Keep records. The Papec way is simple and easy. A few entries daily in our Farmer's Record and Account Book will show you where the money goes and what return it brings. There are 50 pages for accounts, inventories, breeding records, useful tables, etc. Easily worth a dollar, but you can get it free.

### The Powerful PAPEC Ensilage Cutter

The Papec is made from the best materials by skilled workmen in the largest exclusive ensilage cutter factory in the world. Principles of construction adopted 20 years ago have been improved, but never abandoned. Time has proved them correct. The Papec runs with little power—3 h.p. and up, lasts many years and requires few repairs. Six fans, instead of the usual three or four, keep the silage moving in a steady stream—prevent clogging. Four sizes: 10-inch; 13-inch; 16-inch; 19-inch. The Papec Guarantee is different—the strongest given by any ensilage cutter maker. Write for it today, also full particulars.

**PAPEC MACHINE COMPANY**  
150 Main St., Shortsville, New York.  
36 Distributing Stations Enable Papec Dealers To Give Prompt Service

## THROWS AND BLOWS

How To Get This Book FREE If you own a silo intend to build one this year, write us stating its size, also the name and address of your dealer. We will promptly mail you this book—free.

"Look at that simple Cutting Wheel!"



## BROWN'S SMASH GO PRICES

### PRICES CUT on fencing, gates, roofing and paints

Don't buy fencing, roofing or paint until you get our New Special Cut Prices.

C. V. Hogan writes: "I saved at least \$200 by ordering from you." Our new Freight Prepaid prices are surprisingly low. 150 styles. Field, hog and poultry fence, gates, all double galvanized, basic open hearth wire—last longest. Also Roofing, Paints. Send for cut price catalog today.

**The Brown Fence & Wire Co.**  
Dept. 491-B Cleveland, Ohio

## PERMANENCE

HOOSIER SILOS last for generations. Proof against wind, fire and frost. Glazed or unglazed vitrified tile, reinforced every course. Continuous double sealed doors set flush inside allow even settling of silage. HOOSIER SILOS also in wood or cement stave. Same splendid value, backed by HOOSIER reputation. Build ALL farm buildings of hollow tile for permanence and economy. Write for prices, literature and special agency proposition.

**HOOSIER SILO CO.**  
Dept. M99 Albany, Ind.

### 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.

## Wanted

bright young aggressive men, with spare time to sell high grade line of implements. Liberal terms. Address 1131, Indianapolis, Ind.



## Francisco Farm Notes

By P. P. Pope

**T**HE first week in the new year and I am helping to care for some imported Belgian horses, milking Jersey cows and feeding Duroc hogs (apologies to my Shorthorn and Poland-China friends). We are winding up the Christmas vacation with the wife's good people down on Greenwood Stock Farm. The hired man is off the job, so I am permitted to work off the evil effects of the big eats by helping with the chores and occasionally husking a few ears of the big corn.



Mr. Hannah, the proprietor of the Greenwood Stock Farm, has been for many years prominent among farmers. He has almost a habit of becoming president of all sorts of farmers' organizations. And, although now at the threshold of his seventieth year he retains an abundance of vigor and vitality, and has just recently been the unanimous choice for president of the largest County Farm Bureau in Ohio.

**F**OR twenty-four years he has been a director, and twelve years of that time president of the County Farmers' Mutual Insurance Company, an organization with over three thousand members and carrying a risk of close to ten million dollars, which my own father helped to organize in 1894 and served as secretary until his removal from the county.

Mr. Hannah has always been a great lover of a good horse, and on Greenwood Stock Farm has produced many of them: Percherons, Belgians, Standardbred animals, was raised on the are breds. His best Belgian stallion, farm. His dam is one of the greatest mares I have ever known. She has a sweepstakes championship medal won at an international fair at Brussels before being imported. She also won first at Ohio State Fair soon after reaching this country. Her official weight is one ton.

**T**HERE are many things about the Greenwood Stock Farm that would be of interest to Michigan Farmer readers. I have mentioned the horses first because they have long held the center of the stage. A small herd of Jersey cattle is also maintained upon the farm. The milk is separated and cream is the main cash product. The separator is belted to the line shaft along with the churn, the power washer, and emery wheel. Mr. Hannah raises and feeds pure-bred hogs principally for the market, making no special effort to sell for breeding purposes, although none but pure-bred hogs have been bred on the farm for many years. He maintains that "blood will tell" in the feed lot, as well as in the show or sale ring, and practices what he preaches.

The poultry houses on Greenwood Stock Farm are of the open front type, closed tightly on the other three sides, and are filled with White Leghorns. There are at present around two hundred layers. They are confined to the houses in winter and are allowed limited range in large well-fenced runs of an acre or more in summer. Their ration consists just now, of corn fed on the ear and small grains in deep litter to induce plenty of exercise. In the self-feeders is a mixture of ground oats, bran, beef scraps and oyster shells. Grit and charcoal are supplied

in separate compartments, also self-fed. Fresh water and skim-milk are supplied each day on a raised platform out of the way of the litter from the scratching floor. With early hatched pullets and the assistance of the extension department experts in culling the flock, this practice is insuring a liberal supply of winter eggs. An eighty-five per cent egg yield is not uncommon at the height of the laying season. Mr. Hannah likes alfalfa forage for the hens as well as for the hogs, and he has a fresh plot ready to sow for each in the spring.

**A**VARIATION from the regular farm practice the past season, resulted in securing twenty-five bushels of choice alfalfa seed in lieu of a second cutting, on a piece of eight acres. In addition to a liberal acreage of alfalfa, the fields on Greenwood Stock Farm are mainly devoted to growing corn, oats, wheat and clover in rotation. Sugar beets are grown to some extent for the Toledo factory, and tomatoes for the Heintz plant near the farm. Wheat and cloverseed are also reliable cash crops. All other farm products are marketed through the live stock and the residue which goes back on the fields is largely responsible for their high state of fertility. Steers in the feed lot are often necessary to supplement the rest of the live stock in this process of converting forage into cash and fertility.

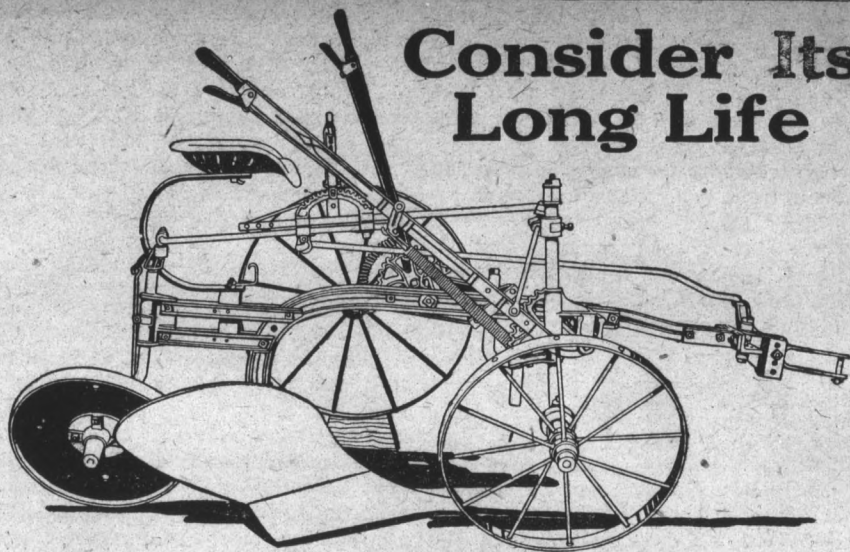
**T**HIS little sketch would hardly be complete without reference to the little lady of the house, the big end of the whole works, the best little mother-in-law in existence. Some of you may differ with me on this last statement, but there is simply no chance for argument, as it would be quite impossible for you to get my viewpoint. The world has been harsh in its treatment of many of her dear ones, and most of her days have been filled with cares and tasks the nature of which, few of us are able to comprehend. Through it all she maintains a cheerful, happy, patient, unselfish disposition. It shows just the good scout that she is.

### THE POTASH TARIFF.

**T**HERE was a wide difference of opinion on the potash tariff question. The American Farm Bureau Federation and National Grange are opposing the tariff on potash on the grounds that it would compel the eastern farmers and truckers who use potash fertilizers extensively, to pay heavy tribute not only to the producers and handlers of potash, but to the railroads in expensive transportation of potash across country from Utah and California.

In a statement on the potash tariff in the pending bill, Dr. T. C. Atkison, Washington representative of the National Grange, said:

This material is placed on the free list in the Fordney house bill but included in the potash item appears a provision deferring the duty free entrance of potash until five years after the bill takes effect, and charging a duty equivalent to two and a half cents per pound for the first two years, two cents for the third year, one and a half cents per year for the fourth year and one cent for the fifth year. It has been carefully estimated that for the five years assuming that this duty does not materially reduce the amount of potash used, which would of itself be a calamity, it will cost the farmers approximately \$40,000,000.



## Consider Its Long Life

There are more acres of good plowing in it — it costs less per year of use and per acre of ground plowed — that's the reason why there is real economy in buying the

### JOHN DEERE STAG SULKY

**It's All Plow ..** Frameless — no unnecessary parts — strong, compact construction — known as "the plow of fewest parts and fewest repairs."

**Does High-Grade Work** — genuine John Deere bottom scours, wears long and makes good seed beds. A type for every soil. Share is quick-detachable.

**Unusual clearance** between beam and share point and between front wheel and moldboard prevents clogging in trashy land.

**Simple, Easy Control** — handy landing lever enables operator to change

width of cut instantly — kinks can be taken out of furrow — full-width cut can be maintained in plowing around stones — plow can be held to its work on hill-sides.

**Poleless** — gets into corners and up close to fences. Pole attachment furnished if desired.

**Pulls Light** — weight is properly balanced and all-wheel-carried — no land-side friction or dragging of bottom.

**Tell Your John Deere** dealer to show you a John Deere Stag.

Write today for a free folder that tells real news about a real plow. Address John Deere, Moline, Illinois, and ask for free folder SK-922.

If it's a gang plow you want, remember there's a John Deere Stag Gang built like the Stag Sulky.

Farm implements are your cheapest investment. The University of Missouri found the implement cost of producing a crop of corn last year to be only one-ninth the total production cost per acre. Based on this year's prices, the cost will be only one-thirteenth.

## JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS



ROYSTER REFLECTS QUALITY

**Royster's Fertilizer** planted with your seed will reflect itself in the *quality and quantity* of your crop.

Again, it reflects itself in your sense of satisfaction that you have selected **Roysters**—the fertilizer that is crop insurance and crop assurance.

And **Then—Royster Quality** is reflected in that additional profit you receive for the **Bigger and Better** crops grown with the **Royster Brands**.

The test of years has strengthened the popularity of **Royster Quality and Royster Service**.

If there is no **Royster** dealer near you, write us.

**F. S. Royster Guano Co.**  
Box A, Toledo, O.

**We Pay \$200** MONTHLY SALARY, furnish rig and expenses to all who qualify for introducing guaranteed poultry and stock powders. BIGLER CO., X-683, Springfield, Ill.

### Make \$20<sup>00</sup> a Day



**Make \$20 a Day.** Anyone, with a new, improved LONG LOG Saw, can make big money sawing wood for himself and neighbors. It fells trees, saws logs and limbs, saws 15 to 40 cords a day easy. Goes anywhere. Perfect balance makes it easy to handle—just push it like a wheelbarrow. No watching. One man runs it.

**Genuine LONG Log Saw**  
Has new patented features found on no other. Easy starting, 4 H.P., specially designed engine with magneto, does all bolt work when not sawing. Throttle governed—speed controlled like a steam engine's. Two counter-balanced flywheels. Safety Friction Clutch starts and stops saw—prevents breakage if saw binds. Uses little fuel (either gasoline or kerosene). Lightest, fastest, most durable saw equipment made. Does 10 men's work for few cents a day.

**60 Days' Trial—10-Year Guarantee**  
Result of 25 years' log saw and engine experience. Made by old reliable company. Try a LONG LOG Saw in your own timber—TWO MONTHS at your risk. Easy terms and iron clad guarantee. Write today for latest FREE Catalog of LONG LOG Saws—a card will do.—GEO. E. LONG, Pres., LONG MFG. CO., Dept. 105 Cherryvale, Kas.

**\$24<sup>95</sup> ON TRIAL**

**Upward**

**American**

**FULLY GUARANTEED**

**CREAM**

**SEPARATOR**

A SOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for \$24.95. Closely skims warm or cold milk. Makes heavy or light cream. Different from picture, which illustrates larger capacity machines. See our easy plan of **Monthly Payments**. Bowl a sanitary marvel, easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan. Western orders filled from Western points.

**AMERICAN SEPARATOR CO.**  
Box 3061 Bainbridge, N. Y.

### FERRETS

#### Ferrets For Sale

Price list free. Wellington, Ohio.

#### 500 Ferrets For Sale

C. J. DIMICK, Rochester, Ohio



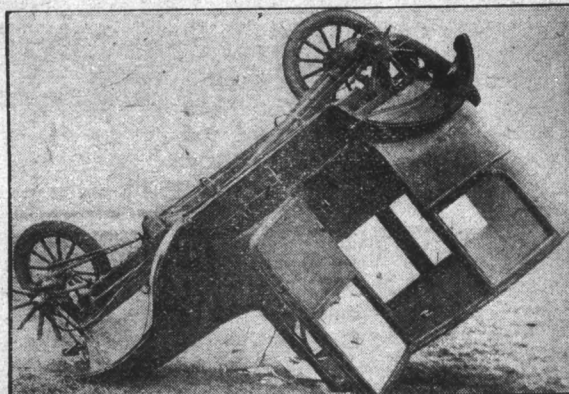
# WORLD EVENTS IN PICTURES



Floating monument to mark the spot where Lusitania was sunk.



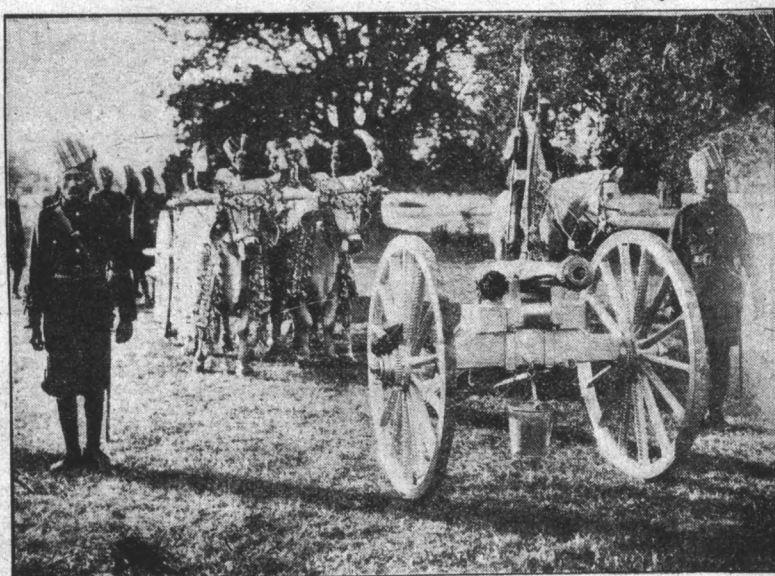
Jugo-Slavia's most beautiful woman in native head gear.



Completely turned over in accident but the occupants escape death.



Water used to put out fire in business section of Quincy, Mass., freezes this auto to the ground.



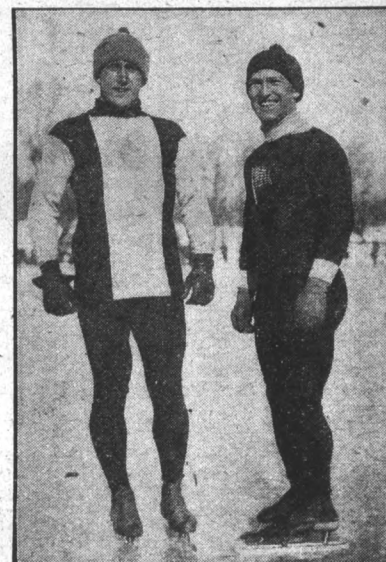
Solid silver cannon trimmed with gold shown to the Prince of Wales while he was in India.



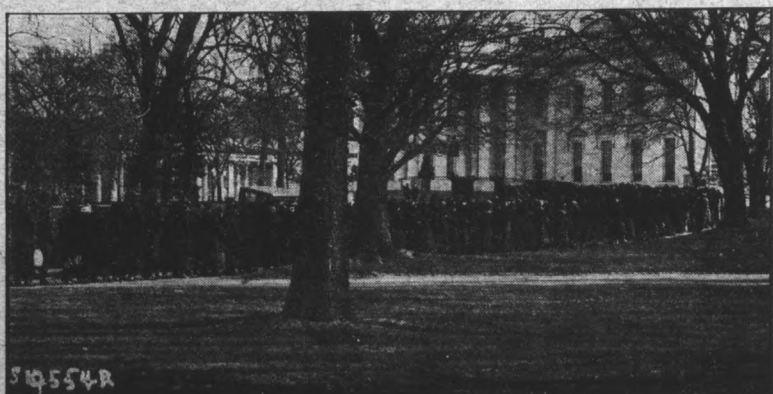
Venice "Bridge of Sighs" and prison to be art center.



To counteract the tendency of girls to bob hair, the principal of the Waterbury, Conn., high school starts a curl contest.



Two famous New York skaters are after world's records.



Part of the 6,500 people who exchange New Year's greetings with President and Mrs. Harding at the White House.



World's largest freight train consisting of 100 freight cars, carries 500 automobiles from coast to coast.



# THE BLIND MAN'S EYES

By William MacHarg and Edwin Balmer

Copyright by Little Brown & Company

"What did you want, Father?" Harriet asked.

He had recognized her step and had been about to speak to her; but at the sound of her voice he stopped the words on his lips and changed them into a direction for the nurse to leave the room.

He waited while she called together and closed the door behind her. Harriet saw that, in his familiarity with her tone and every inflection of her voice, he had sensed already that something unusual had occurred; she repeated, however, her question as to what he wanted.

"That does not matter now, Harriet. Where have you been?"

"I have been walking with Mr. Eaton."

"What happened?"

She hesitated. "Mr. Eaton was almost run down by a motor-car."

"Ah! An accident?"

She hesitated again. She had seen on her father's face the slight heightening of his color which, with him, was the only outward sign that marked some triumph of his own mind; his blind eyes, abstracted and almost always motionless, never showed anything at all.

"Mr. Eaton said it was an accident," she answered.

"But you?"

"It did not look to me like an accident, Father. It—it showed intention."

"You mean it was an attack?"

"Yes; it was an attack. The man in the car meant to run Mr. Eaton down; he meant to kill him or to hurt him terribly. Mr. Eaton wasn't hurt. I called to him and pulled him—he jumped away in time."

"To kill him, Harriet? How do you know?"

She caught herself. "I—I don't know, Father. He certainly meant to injure Mr. Eaton. When I said kill him, I was telling only what I thought."

"That is better. I think so too."

"That he meant to kill Mr. Eaton?"

"Yes."

She watched her father's face; often when relating things to him, she was aware from his expression that she was telling him only something he already had figured out and expected or even knew; she felt that now.

"Father, did you expect Mr. Eaton to be attacked?"

"Expect? Not that exactly; it was possible; I suspected something like this might occur."

"And you did not warn him?"

The blind man's hands sought each other on the coverlet and clasped together. "It was not necessary to warn him, Harriet; Mr. Eaton already knew. Who was in the car?"

"Three men."

"Had you seen any of them before?"

"Yes, one—the man who drove."

"Where?"

"On the train."

The color on Santoine's face grew brighter. "Did you know who he was?"

"No, Father."

"Describe him, Dear," Santoine directed.

He waited while she called together her recollections of the man.

"I can't describe him very fully, Father," she said. "He was one of the people who had berths in the forward sleeping-car. I can recall seeing him only when I passed through the car—I recall him only twice in that car and once in the diner."

"That is interesting," said Santoine.

"What, Father?"



"That in five days upon the train you saw the man only three times."

"You mean he must have kept out of sight as much as possible?"

"Have you forgotten that I asked you to describe him, Harriet?"

She checked herself. "Height about five feet, five," she said, "broad-shouldered, very heavily set; I remember he impressed me as being unusually muscular. His hair was black; I can't recall the color of his eyes; his cheeks were blue with a heavy beard closely shaved. I remember his face was prognathous, and his clothes were spotted with dropped food. I—it seems hard for me to recall him, and I can't describe him very well."

"But you are sure it was the same man in the motor?"

"Yes."

"Did he seem a capable person?"

"Exactly what do you mean?"

"Would he be likely to execute a purpose well, Harriet—either a purpose of his own, or one in which he had been instructed?"

"He seemed an animal sort of person, small, strong, and not particularly intelligent. It seems hard for me to remember more about him than that."

"That is interesting."

"What?"

"That it is hard for you to remember him very well."

"Why, Father?"

Her father did not answer. "The other men in the motor?" he asked.

"I can't describe them. I—I was excited about Mr. Eaton."

"The motor itself, Harriet?"

"It was a black touring car."

"Make and number?"

"I don't know either of those. I don't remember that I saw a number; it—it may have been taken off or covered up."

"Thank you, dear."

"You mean that is all, then?"

"No; bring Eaton to me."

"He has gone to his room to fix himself up."

"I'll send for him, then," Santoine pressed one of the buttons beside his bed to call a servant; but before the bell could be answered, Harriet got up.

"I'll go myself," she said.

She went out into the hall and closed the door behind her; she waited

ward the open fireplace as he came toward her.

"Father wants to see you, Mr. Eaton," she said.

He looked at her intently for an instant and seemed to detect some strangeness in her manner and to draw himself together; then he followed her up the stairs.

## CHAPTER XIV.

### It Grows Plainer.

BASIL SANTOINE'S bedroom, like the study below it, was so nearly sound-proof that anything going on in the room could not be heard in the hall outside it, even close to the double doors. Eaton, as they approached these doors, listened vainly, trying to determine whether any one was in the room with Santoine; then he quickened his step to bring him beside Harriet.

"One moment, please, Miss Santoine," he urged.

She stopped. "What is it you want?"

"Your father has received some answer to the inquiries he has been having made about me?"

"I don't know, Mr. Eaton."

"Is he alone?"

"Yes."

Eaton thought a minute. "That is all I wanted to know, then," he said.

Harriet opened the outer door and knocked on the inner one. Eaton heard Santoine's voice at once calling them to come in, and as Harriet opened the second door, he followed her into the room. The blind man turned his sightless eyes toward them, and, plainly aware—somehow—that it was Eaton and Harriet who had come in, and that no one else was with them, he motioned Harriet to close the door and set a chair for Eaton beside the bed. Eaton, understanding this gesture, took the chair from her and set it as Santoine's motion had directed; then he waited for her to seat herself in one of the other chairs.

"Am I to remain, Father?" she asked then.

"Yes," Santoine commanded.

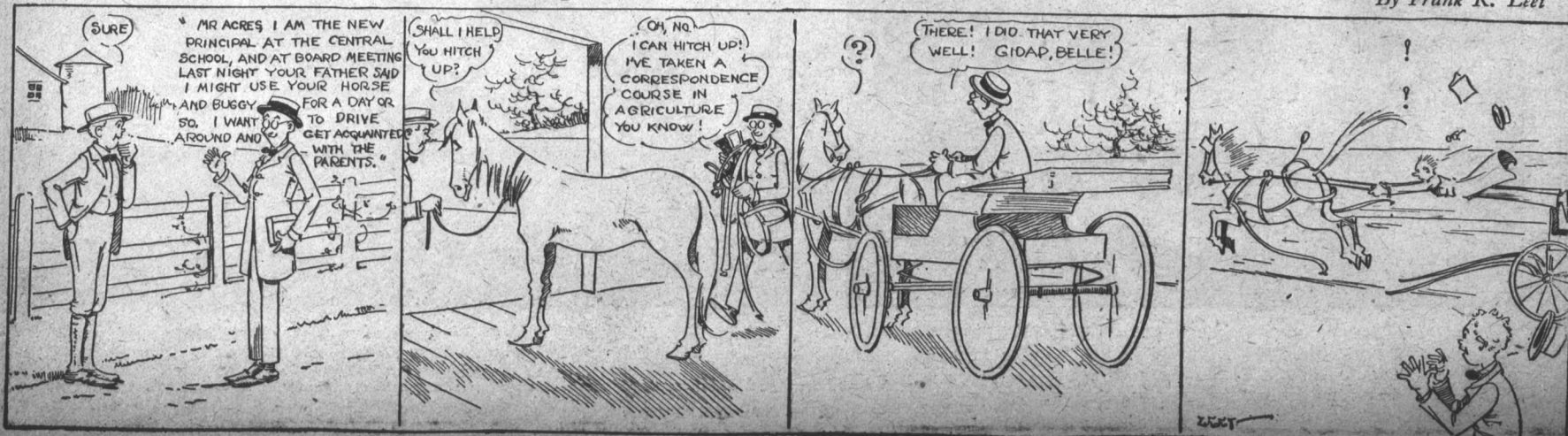
Eaton waited while she went to a chair at the foot of the bed and seated herself—her clasped hands resting on the footboard and her chin upon her hands—in a position to watch both Eaton and her father while they talked; then Eaton sat down.

"Good morning, Eaton," the blind man greeted him.

"Good morning, Mr. Santoine," Eaton answered; he understood by now that Santoine never began a conversation until the one he was going to address himself to had spoken, and that Santoine was able to tell, by the sound of the voice, almost as much of what was going on in the mind of one he talked with as a man with eyes is

AL ACRES—Experience is Necessary Even in Hitching Horses

—By Frank R. Leet





able to tell by studying the face. He continued to wait quietly, therefore, glancing up once to Harriet Santoine, whose eyes for an instant met his; then both regarded again the face of the blind man on the bed.

Santoine was lying quietly upon his back, his head raised on the pillows, his arms above the bed-covers, his finger-tips touching with the fingers spread.

"You recall, of course, Eaton, our conversation on the train," Santoine said evenly.

"Yes."

"And so you remember that I gave you at that time four possible reasons—as the only possible ones—why you had taken the train I was on. I said you must have taken it to attack me, or to protect me from attack; to learn something from me, or to inform me

of something; and I eliminated as incompatible with the facts, the second of these—I said you could not have taken it to protect me."

"Yes."

"Very well; the reason I have sent for you now is that, having eliminated today still another of those possibilities—leaving only two—I want to call your attention in a certain order to some of the details of what happened on the train."

"You say that today you have eliminated another of the possibilities?" Eaton asked uneasily.

"Today, yes; of course. You had rather a close call this morning, did you not?"

(Continued next week.)

To clean the inside of flower vases, use salt and soda.

## The Pathfinders

Milly Reverses Her Opinion of Father Allen

By Alta L. Littell

THE letter carrier was not due at the Allen farmhouse for another hour, but Milly, with a bulletin on poultry raising in her hand, strolled down to the big tree by the road to await his arrival. She was puzzled. Ten days before she had drawn on her old home town bank for \$650 and as yet had received no reply from them. In the ordinary course of events the money should have come to her in four days, and a week should cover all unavoidable delays. What was the matter with the bank? Or was the trouble with the mails? Certainly one or the other had bungled.

She resolutely rejected uneasy suspicions that the trouble lay nearer home. She had not mailed the letter herself, but had trusted it to Tom. Now she reproached herself for having given a valuable letter to an eight-year-old child, though Tom had proven unusually reliable in every other particular. She refused to admit even to herself that it was not Tom whom she suspected. When a week had passed without a reply to her letter she had questioned Tom closely. He remembered everything about the two letters. She gave him that day—the day she made the blackberry jam and let him "lick the dish." But he didn't mail them, Pa was up to the house resting and he took the bank letter and the other one to the agricultural college and said he'd mail them. And he did, 'cause he went right down to the road with them, so he couldn't have forgot and been carrying them in his pocket.

Of course, Father Allen had mailed the letter, Milly told herself this morning. What possible object could he have for not doing it? But Father Allen's anxiety to be the first to get the mail for the past week would loom up in her mind in spite of her insistent assertions that the letter had been lost in the mail.

He had so far warded off all chance for her to question the letter carrier, but this morning she had the field to herself. She settled herself comfortably in the shade, and resolutely dismissing all disquieting thoughts, gave her mind wholly to the absorbing task of comparing relative merits and demerits in standard broods of chicks. She must be absolutely sure which strain would do best up there before she bought.

The rattle of the carrier's flivver brought her back from white eggs and a New York market or brown eggs sold at the door, to the disagreeable thing she had to do. She should find out what he knew of the letter, but for some unaccountable reason she shrank from the knowledge.

"Mornin', Mrs. Bob," Ab hailed her, as he leaned out of the car to shove

the handful of papers and letter in the box. "Hain't seen you out here in quite a spell."

"Morning is a pretty busy time for me," Milly answered, "but I left everything this morning because I wanted to ask you if you remembered anything about a letter I sent to the First National Bank at Chelsea ten days ago."

"No, I don't remember a letter you sent to the First National Bank ten days ago," Ab said, "But I'll tell you what I do remember, Mrs. Bob. I remember one your Father Allen mailed to the bank yesterday, and I don't care what the old man thinks about my blabbin'. He came out with a letter to the bank all sealed up in an envelope he'd made hisself out o' a piece of writin' paper. I thought it was gosh darned queer he'd be writin' to the Chelsea bank, for I knew he didn't have any money in it, so I felt round to see what he was up to. I suspicioned it was your letter. He let on you give the letter to Little Tom to mail, and Tom lost it, and he asked me not to tell you and get you down on Tom, but I didn't make no promises. Me and the missus talked it over last night and I decided to tell you first chance I got. I ain't goin' to run the risk of losin' my job for no kid. Feller on Route 3 got first just for keeping a registered letter over night—overlooked it till he got by the house and then didn't go back. The folks kicked up a rumpus and someone else has his route now. So that's what happened to your letter, and if Old Man Allen don't like my tellin' he can come out with the truth himself next time."

Milly went back to the house with a heavy heart as the auto chugged away. Relief that her letter was safe and that her suspicions of Bob's father were baseless was counterbalanced by the knowledge that Tom was not to be trusted. She could not believe that a child could look so honest and straightforward and tell such a wretched untruth. She would have believed anything little Tom told her; and three years in a schoolroom had taught her pretty thoroughly how to recognize signs of deceit. A lump came up in her throat. If he had only told the truth, the losing of the letter was easy to forgive.

And how mean she had been to suspect Father Allen! How noble of him to want to shield his baby! She reproached herself for all her unkind thoughts of him—she had never taken him so unreservedly into her heart as she had the rest. In fact, she had thought him small in many ways. But this exhibition of his kindness to little Tom wiped out all his past delinquencies. Milly resolved to begin at once to make up to him for all her past uncharitable thoughts.

## Will your "Good Morning" last all day?

Easy to start from the breakfast table with zest and enthusiasm, but how easy is it to keep on? Does ambition last, or lag, as the day develops?

The afternoon "slump" is a factor to be counted upon, in business or social life.

Usually, there's a reason.

Nerves whipped by tea or coffee won't keep on running, and they won't stand constant whipping.

Many a man or woman who has wished the afternoon would be as bright as the morning has simply been wishing that the nerves wouldn't have to pay the natural penalty for being whipped with the caffeine drug.

Postum gives a breakfast cup of comfort and cheer, without any penalties afterward. There's no "letting down" from Postum—no midday drowsiness to make up for midnight wakefulness; no headaches; no nervous indigestion; no increase of blood pressure.

Think it over. There's full satisfaction in Postum—a cup of comfort for anybody (the children included), any time.

You can get Postum from your grocer or your waiter today, and probably you'll begin to have better tomorrows, as so many thousands have had, who have made the change from coffee to Postum.

Postum comes in two forms: Instant Postum (in tins) made instantly in the cup by the addition of boiling water. Postum Cereal (in packages of larger bulk, for those who prefer to make the drink while the meal is being prepared) made by boiling for 20 minutes. Sold by all grocers.

Postum for Health  
"There's a Reason"



# Planet Jr.

## Accurate seeding pays

Seed costs money. Labor costs money. Save both by planting with Planet Jr. seeders. Planet Jr. sows regularly, rapidly and accurately in hills or drills at proper depths in even, narrow lines. A Planet Jr. leaves no gaps—wastes no seed. Every Planet Jr. has an adjustable index with the names of the principal seeds, enabling the user quickly to change the feed to sow the different varieties.

Planet Jr. sows so evenly and straight, it makes close cultivation of standing crops quicker and safer.

All Planet Jr. Farm and Garden Implements are scientifically constructed on proved, practical lines. Send for the complete Planet Jr. catalog, showing seeders, wheel hoes, horse hoes riding cultivators, etc.

**S. L. ALLEN & CO., Inc.**  
Dept. 58,  
5th & Glenwood Avenue, Philadelphia

No. 4 Planet Jr. Combined Hill and Drill Seeder, Single Wheel Hoe and Plow. An economical, easy-working and serviceable implement for large gardens. Does most of the garden work from planting to cultivating right through the season. Built to last a lifetime.

## SCOPE

### HOT SPOT

through complete vaporization by the Scope Hot Spot. Price \$5.00 installed. Sold by any garage. Or send \$4.00 for sample with plain directions. Satisfaction or money back.

Local Agents, Write for Money-Making Proposition

**Briscoe Devices Corporation**     **Dept. F**     **Pontiac, Michigan**

## Cheaper Gas for Fords

Guaranteed to save 20 to 30 cents on each dollar. More power, quicker warming up, sweeter running, no carbon. Accomplished



## GARDEN SEED

**BELL BRAND**

Isbell's Michigan-grown Garden Seeds assure a big-yielding, profitable garden, for they are thoroughbred stock—the result of 43 years of development and selection. Send today, for Isbell's 1922 Seed Annual, giving valuable information on quality seeds and quoting direct-from-grower prices.

**S. M. ISBELL & COMPANY**     531 Mechanic St. (30) Jackson, Mich.

Write for Isbell's 1922 Catalog



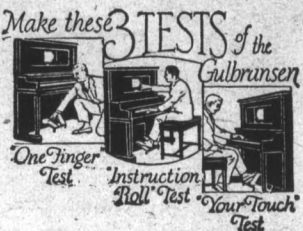
# GULBRANSEN Player-Piano



Nationally Priced  
Branded in the Back



Go into your dealer's store. Play a Gulbransen. Make the three tests shown below. You'll realize the pleasure a Gulbransen will bring you and—further than that—you'll understand why the Gulbransen encourages the interest of children in good music, and music study.



## "Ten Minutes With the Gulbransen and I Was Enthusiastic"

"I thought—as many people do—that a player-piano was simply a mechanical instrument that ground out tunes—much as a machine turns out bolts!

"But after the salesman had me sit down and play the Gulbransen, I changed my idea. I found the Gulbransen a finished musical instrument—a tremendous advance over the player-pianos I had known in years past.

"I became enthusiastic. I wanted it for my home.

"Now that I have it I am more pleased than ever. Between business and social duties I

never had much time for music. But in a few evenings Gulbransen Instruction Rolls taught me to play—well. In fact, better than my wife, who has taken lessons for years.

"I bring out every shade of expression I desire—I do everything the pianist of ability does—without the tedious finger work."

"New Book of Gulbransen Music" Free on Request. Check Coupon  
☐ Check here if you do not own any piano or player-piano.  
☐ Check here if you want information about having a Gulbransen player action installed in your present piano (or player-piano).  
Write name and address in margin and mail this to Gulbransen-Dickinson Co., 3216 W. Chicago Avenue, Chicago.

Gulbransen-Dickinson Company  
Chicago, Illinois

## Woman's Interests

### Reviving the Rural School

By Hilda Richmond

WITH the hundreds of one-room school houses that are closed all over the land, and all talk running to centralized districts, many people nearing middle age are becoming alarmed at the decline of community interest, and are trying more or less successfully to revive the old-time country school activities that sweetened and elevated country life in days gone by. There is no use denying that it is a hard task after so many years of ignoring the possibilities of the school as an intellectual and social force to the whole neighborhood, but better late than never is the motto of these men and women who see in the closing of the "little red school house" a real peril to country life.

It is all very well to go in for big things and talk of the advantages of carrying the children to a big graded

of community life that it used to be. Usually the authorities will furnish the fuel and the permission to use the school house, so about the only expense will be the light which should be adequate and bright. Nothing so discourages young folks as a dim, smoky atmosphere. Even a soft, subdued candle glow is superior to smoky kerosene lamps, for there is something harmonious and pleasing about candle light that coal oil can never attain. Flags, pictures and strictly rural decorations in the form of wheat, grasses, fruits and pumpkins in season, corn braided in long strings, flowers and country oddities help make the social occasions delightful and furnish employment for the young people. A victrola, a piano or even an organ will liven the meetings wonderfully, and so will other musical instruments brought in by the young folks.

Home talent entertainments, and as much foreign help as can be secured will provide the literary part of the program, while the ladies will look out for the eats and the young people the games. The men will have to provide the little bit of money for the undertaking and all will have to pull together to keep out frictions and make the activities so democratic and so inclusive as to take in tenant farmer and owner, rich and poor, old and young and even the stranger within the gates. Then the little old school house will renew its youth and possibly be retained as a local club house, even after no more school sessions are held in it and all the rural pupils are gathered into the new and modern buildings that rise stately and beautiful in so many country communities nowadays.

#### FOLK SONGS FOR CHILDREN.

MOTHERS and teachers who are looking for folk songs for young children will find the following collections interesting: Our Old Nursery Rhymes, harmonized by Moffat, and published by David Mackay, Philadelphia; Every Child's Folk Songs and Games, collected by Carolyn Sherwin Bailey, and published by Milton Bradley, Springfield, Mass.; Songs for the Little Child, by Clara Belle Baker and Caroline Kohlsaat, published by the Abingdon Press, 150 Fifth Avenue, New York City; The Rote Song Book, by Surette and Davison, published by the American Society for Universal Teaching, Philadelphia. The collections are suggested by the National Kindergarten Association.

#### THE AMERICAN NOVEL.

THE first extended study of the American novel to be set forth in book form has recently been published by MacMillan Company. The book is by Carl Van Doren, literary editor of The Nation, and editor of the Cambridge History of American Literature. Starting with the first American novel, "The Power of Sympathy," which was published in Boston in 1789 by Sara Wentworth Morton, Mr. Van Doren traces the growth of this form of literature on down to Sinclair Lewis and "Main Street." When one considers Gene Stratton Porter with her sales of 8,132,432



institution where they will enjoy the modern equipment, but it must be remembered that the one-room school house turned out many intellectual giants in days gone by, and it is not certain in the minds of the thoughtful that its days of usefulness are entirely past. Many youths who thundered and stamped and ranted in the country lyceum a generation past received there the inspiration for public speaking and increased knowledge that landed them later in positions of responsibility and fame. The triumphs of the old time spelling matches are as fresh in the minds of many grandmothers and grandfathers as if it were but yesterday that they ranged, eager for the fray, down the sides of the dimly lighted school house and "slew their thousands" in the verbal fray.

In many communities the school house is opened many times each winter for box suppers, spelling matches, entertainments, magic lantern shows, agricultural clubs, school exhibitions, community sings, neighborhood suppers, public speaking on various topics, political speeches, meetings to discuss public improvements, musical entertainments and other pleasant little gatherings that sweeten and enliven country living and furnish the young people a place to go without having to run off to town for their amusements. In many communities amateur actors put on creditable little plays and get more fun out of the rehearsals and entertainments than they do out of the thrilling and impossible scenes of the town movies. In every community there should be legitimate and pleasing social joys, and opportunities for young and old to mingle together. Country life just now is more strenuous than ever before, but it pays to cultivate the social side in the winter and make the school house the center

**PLANT FOR PROFIT**

**\$500 to \$700 Per Acre Growing Strawberries**

THERE is Big Money in Growing Strawberries when strong, healthy plants are set. Our plants grown on New Land are the best for Big Paying crops. One of our varieties brought growers \$700 per Acre last Spring. It will pay you big to get.

**KEITH'S NEW LAND STRAWBERRY PLANTS**

Grown on fresh virgin soil, having access to all the Natural Plant Foods they can use, they are as full of vigor and life as Nature can fill them. Big, strong, heavily rooted plants they are. Much better than plants grown on old soil. They are just the kind that will bear you those Big Profitable Crops.

**A Guarantee That's Right**

Buy from us and you take no chances. We guarantee our plants to be Strong, Healthy and True to Name and to give you entire satisfaction or we refund your money. Our New Land plants are certainly the best you can buy and guaranteed to reach you in good growing condition. We ship them fresh direct to you from our Nursery. Keith's Everbearing Strawberry Plants bear berries all Summer and Fall from plants set in the Spring. We have the genuine Everbearing Varieties. Have fruited them every Summer for over five years. Keith's Ways to Successful Berry Culture tells you how to grow Everbearing Strawberries successfully. It's free to customers. Write for our 1922 Catalog before you place your order. It pictures and describes the most profitable varieties of Strawberries, Raspberries, Blackberries and other small fruits. It's FREE.

**KEITH BROS. NURSERY, Box 702 Sawyer, Mich.**



Frozen fancy, large, dressed Herring, 4½¢ per pound. Remit with order or send for complete list before buying elsewhere.

CONSUMERS FISH CO., Green Bay, Wis.

### Cooper Big in Size Big in Yield

If you wish to know real strawberry satisfaction you must grow our new variety Cooper, one of the greatest strawberries ever grown. Our new catalog tells you all about Cooper. Don't buy a plant until you get our catalog. We can save you money on standard and everbearing strawberries, also on raspberry, blackberry, grape, and other fruit plants. Big Cash Prize Offer. Send for catalog.

STEVENSVILLE NURSERIES, Box 80, Stevensville, Michigan

**Strawberries**

Grown the Kellogg Way

**Yield BIG Profits**

Our Free Book tells how. Written by the Strawberry King. Gives his secrets for growing the Big Crops of Fancy Strawberries that won him fame and fortune. Worth its weight in gold. Costs nothing—It's FREE.

**R. M. KELLOGG CO.**

Box 371 Three Rivers, Mich.

### Strawberry Plants

\$3.50 Per Thousand. Our strong, healthy, tremendous bearing plants guarantee big crops of luscious berries. Best varieties for all kinds of soils. Full line of Raspberries, Blackberries, Currants and Asparagus. Large stock of extra fine Grape plants. GREATLY REDUCED PRICES. Our customers are making up to \$1200 per acre from small fruits. New color catalog free. Write today.

BRIDGMAN NURSERY CO., Box 22, BRIDGMAN, MICH.

### STRAWBERRY PLANTS

and a full line of Raspberry, Blackberry, Grape and other bush fruit. Asparagus, Rhubarb, etc. Send for Free Catalog. J. N. Kokely & Son, R. 4, Bridgman, Mich.



## BALDWIN



How delightful it is to have seasonable fruit grown in your own garden, freshly picked and served in your own home. Strawberries and other small fruits are easy to raise. Produce quickly. Keep you healthy. Make you good money easily. Baldwin's Big Berry Plant Farms, personally conducted by himself, produce healthy, northern grown, new ground berry plants. Standard varieties and everbearing strawberries, raspberries, blackberries, dewberries, grapes—all well known. Packed and shipped with care. Freshly dug. True to name. The money-making kind.

### BALDWIN'S Money-Back Guarantee

Protects you and assures perfect satisfaction. Baldwin's Big Berry Book, chock-full of useful information to the small fruit-grower, serving as one of the most valuable Fruit Growers Guides, is ready for you. Tells how to plant, how to grow, how to care for and properly market your fruit. In short, tells you how to make a success of the berry business. Told by one who knows. Known, tried and tested varieties, produced and recommended by us. Avoid experiments and fads. Use the best. We have produced this year a wonderful crop of berry plants. Millions of them. The demand is going to be large. Place your order early. We can save you money. We will please you or pay you back. We want you as one of our satisfied customers. You need the profit. The world needs the fruit.

Send for Baldwin's Berry Book. Save a day. Write tonight.

O. A. D. BALDWIN

R. R. 16 Bridgman, Michigan



books, and Harold Bell Wright's 7,250,000, not to mention Zane Grey's million copies a year sales, it is almost impossible to believe that less than a century ago novels were decidedly bad form. Even the critics, to quote Mr. Van Doren, declared that novels were lies, served no virtuous purpose and softened sturdy minds. With all the old Puritan standards to overcome, it is little short of a miracle that today the novel should be almost the only book to be found in many homes.

Mr. Van Doren hails James Fenimore Cooper as the first American novelist of unquestioned rank, and the "The Spy," published in 1821, as the book which showed that American fiction had "come of age." Hawthorne was the first American to regard literature as a work of dedication, demanding the finest a man could give. Mark Twain he regards as a partially frustrated genius.

The romances of the nineties brought out no masterpieces, he says.

## Women at Farmers' Week

HOME economics workers at the Michigan Agricultural College are preparing to entertain overflow crowds of women during Farmers' Week. The morning meetings are to be held in the People's Church on Grand Avenue, opposite the Campus, this year, instead of in the women's building. A departure in the usual method of conducting these meetings is to be made. Only one speaker will be heard during the morning, which will give time for questions and conferences after the talk.

Demonstrations will be given during the afternoon from 3:30 until 5:00 o'clock, first by Miss Mariel Hopkins, nutrition specialist of the extension department, and Miss Rebekah Gibbons, of the home economics department, on nutrition, the demonstration to be illustrated by groups of rats which have been living on differing diets. Miss Garrison will demonstrate millinery, Miss Anna Bayha, clothing for small boys and girls, Miss Marion Tucker, clothing for high school girls, and Glenn Stewart, meat canning. A whole beef will be cut up and canned, as well as some poultry. Mr. Stewart is an M. A. C. graduate, and was leader of boys' and girls' work in Grosse Ile and later in Wayne county.

The speakers include Dr. Caroline Hedger, child welfare specialist with the Elizabeth McCormick Memorial Fund of Chicago, who speaks to both men and women Wednesday evening in the gymnasium; Miss Martha Phillips, who speaks on dyes on Tuesday morning, and gives a demonstration of home dyeing in the afternoon; Dr. Mitchell, of Battle Creek, who speaks on nutrition and diet Wednesday morning; Mrs. Barbara Bartlett, head of public health nursing at the University of Michigan, and Dr. R. W. Bunting, secretary of the Dental College of the University of Michigan, who will give an illustrated talk on the care of children's teeth on Thursday morning.

Tea will be served every afternoon from 3:30 until 5:00 o'clock in the new practice house, which will be open to visitors. Dean Sweeney, Assistant-Dean Kirby, and Mrs. Louise H. Campbell, of the extension department, will be at the practice house to meet Farmers' Week guests. Men as well as women will be welcome to rest and visit there and to inspect the house and equipment. Tea will be served every afternoon from 3:30 to 5:00 o'clock in the parlors of the woman's building by the dean of women and the house mothers of the women's dormitories. The parlors of the women's building will be at the disposal of Farmers' Week guests as a place to rest, visit, and meet friends. There will be a quiet room in the basement of the women's building where women may lie down, and also a nursery where children may be left to be cared for during lectures and conferences. Miss Marion Tucker, of the home economics department, Miss Edna Smith, of the extension service, and Miss Landenbach, of the physical education department will be in the halls of the women's building to meet visitors and give them information, and a group of senior girls will be prepared to show visitors over the building.

During Farmers' Week the Woman's League will serve meals in the first and second floor laboratories of the women's building under the supervision of Miss Sprague and Miss Nelson, who have charge of the women's commons. Men and women will be served.

### ABOUT CEDAR CHESTS.

THE much heralded moth-proof red cedar chest is effective only if care has been taken to properly beat and brush all articles to remove all eggs, pupae and moths, according to findings of the United States Department of Agriculture. The moth passes through four stages, egg, pupa, worm and adult moth miller. There is only one stage in this process when the cedar chest kills them, that is in the young worm stage. Worms one-half to full grown are not killed.

It is the odor of the cedar which kills these worms, so great care should be taken to prevent its escape. Chests should be kept tightly closed except when clothing is to be put in, and this should be done quickly.

Naphthalene in any ordinary chest will also drive away moths. One to two pounds of naphthalene placed in any chest constructed as tightly as a cedar chest will be as effective as cedar. Clothing may also be cleaned and brushed and rolled up immediately with naphthalene in several thicknesses of unbroken paper. Double the ends, so no moths can crawl in, and fasten securely.

### FASTENING CUT CROCHET.

To prevent crochet lace from raveling after it is cut, catch up all the stitches with a thread of contrasting color, taking care not to twist the stitch. Then with hook and thread matching the lace, work in single crochet across the cut end, catching the hook through every stitch. Fasten the thread neatly, and draw out the colored thread.

### TO FINISH DOILY EDGE.

Instead of working the scallops before they are cut, take sharp scissors and cut around just outside the line of scallops; turn the edge under, baste down with short stitches, and then buttonhole the scallops thus prepared. Or you can work double crochet around the scallops. This gives a neat edge which will not pull out when laundered.

### SHORT CUTS.

When washing light-colored goods use one of the milder soaps containing no free alkali. The soap should always be shaved and dissolved in boiling water, using about one-eighth of a cake to each gallon of water. A little household ammonia will whiten the clothes and loosen the dirt.—M. P.

When the heel becomes blistered and the skin broken, take a fresh egg and very carefully remove the thin inner skin from the shell, place this over the bruised spot and hold until it adheres. Then slip a bit of absorbent cotton between the chafed spot and the shoe, and no discomfort will be felt when walking.—Mrs. L. T.

## Which is Larger the Sun or a Cent?

"Why—the sun of course" you will say. But remember—you can hold the cent so close to your eye that you lose sight of the sun.

Some baking powders can be bought for a few pennies less than Calumet—but don't hold these cents too close to your eyes—you will not be able to see the quality—the purity—the dependability of

## CALUMET BAKING POWDER

In other words, don't be deceived by a few pennies—the cheapest baking powder in price is often the most expensive.

When you buy Calumet you know that it will produce pure, sweet and wholesome bakings. You know that you use less because it contains more than the ordinary leavening strength.

Buy it—try it—be convinced.

A pound can of Calumet contains full 16 ounces. Some baking powders come in 12 ounce instead of 16 ounce cans. Be sure you get a pound when you want it.



## Get this Fine Range NOW Take Till Oct. 1st to Pay



### Stove Prices Hit Bottom

Buy direct from manufacturers. Get our split price offer—small first payment—balance Oct. 1st. No interest. Most beautiful ranges ever made. Porcelain blue enamel—designs that make your heart swell with pride.

### Write Today—Don't Wait

Satisfied customers everywhere. Money back guarantee. Special Sale. Write today. See savings you can make on Kalamazoo Furnaces, Paint, Fencing, Shoes and other farm and home needs. Money-saving event of years. Don't miss it. Get our catalog. Your credit is good. Ask for Catalog No. 113

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

## A Kalamazoo Direct to You

## Color Your Butter

"Dandelion Butter Color" Gives That Golden June Shade and Costs Really Nothing. Read!

Before churning add one-half teaspoonful to each gallon of winter cream and out of your churn comes butter of Golden June shade to bring you top prices. "Dandelion Butter Color" costs nothing because each ounce used adds ounce of weight to butter. Large bottles cost only 35 cents at drug or grocery stores. Purely vegetable, harmless, meets all State and National food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless. Wells & Richardson Co., Burlington, Vt.

### FOR SALE

160 A. farm, 1 1/2 miles from Onaway, Mich., on State Pike. 125 A. cultivated dark clay soil, no waste, new modern house. Large bank barn. Good dairy farm. Address owner A. J. Breniser, Onaway, Mich.

## TANNERS

of CATTLE, HORSE, CALF, COON, FOX, SKUNK, MINK, MUSKRAT, WOODCHUCK, DOG, CAT and RABBIT SKINS.

What kind of skins have you? We make up and line Men's & Ladies' Fur Coats, Scarfs, Muffs, Capes, Collars, Robes and Mittens from raw skins. Circulars Free. Use plenty of salt on green hides.

W. W. Weaver, Reading, Mich. Custom Tanner, 30 yrs. Experience

## FISH

New Winter Caught Pickerel Round 6c, Headless and dressed 7 1-2c. Tullibee Whitefish 7 1-2c, in boxes 120 lbs. net weight. Smaller quantities 1-2c lb. higher. 10 lb. basket Smoked Tullibee Whitefish \$1.50. Write for complete price list of all varieties. Imported and Domestic Frozen, Smoked, Salted, Spiced and Canned Lake and Ocean Fish. Johnson Fish Company, Box 44, Green Bay, Wis.

## Farms and Farm Lands

### Farm Bargain To Settle An Estate

We offer for sale at the same price as paid 15 years ago 480 A. of level, heavy sandy loam, 4 miles from Marshall, Michigan. All tillable, 400 A. under cultivation. 40 A. second growth oak, 40 A. cut over land, 60 A. of rye, 40 A. seeded. Good woven wire fences. Good 4 room house for two families. Well shaded lawn. Two large basement barns. Horse barn, two silos and other usual out buildings. Two wells, windmill, good school, telephone, R. F. D., etc. Price \$65,000 per A.; terms—cash subject to present mortgage of \$9,000. This has been used as a stock farm for years. Correspondence or rigid investigation invited. C. H. Billings, First National Bank, Marshall, Mich.

### 50-Acre Michigan Farm With Horses, 3 Cows, Tools

Implements, hay, grain, potatoes, included; has yielded 100 bu. corn, 65 bu. oats, 24 bu. beans, 27 bu. wheat acre; on improved road, close city; 35 acres loamy tillage, creek-watered pasture, wood, fruit; practically new 5-room cottage, large barn, poultry house, etc. Adjoining farms worth to \$150 acre. To close out all \$4700, part cash, see page 69 Illus. Catalog 1100 Bargains. FREE. STRAUB FARM AGENCY, 814 BO Ford Bldg., Detroit, Mich.

### Big Money In Strawberries

\$500. down secures immediate possession of 20 acres near Gladwin, new house, barn, poultry house, 20 apple trees. Strawberries will pay for this in 3 years. Price \$1,600. I have other farms for sale. U. G. REYNOLDS, Owner, Gladwin, Mich.

WANTED To hear from owner of land for sale. O. K. HAWLEY, Baldwin, Wis.



## Head off that Croup with Musterole

Keep the little white jar of Musterole handy on your bathroom shelf and you can easily head off croupy colds before they get beyond control.

The moment you hear that warning cough, get out the good old Musterole and rub this soothing ointment gently on the chest and throat.

Made from pure oil of mustard and other simple ingredients, Musterole penetrates right through the skin and breaks up the cold by relieving the congestion.

Musterole does its good work without blistering the skin like the old-fashioned mustard plaster.

Use it for treating tonsillitis, rheumatism, neuralgia, chilblains, colds and croup.

Sold by all druggists, in tubes and jars, 35c and 65c; hospital size, \$3.

The Musterole Co., Cleveland, Ohio  
BETTER THAN A MUSTARD PLASTER



## LET US TAN YOUR HIDE.

Horse or Cow hide, Calf or other skins with hair or fur on, and make them into coats (for men and women), robes, rugs or gloves when so ordered, or we can make your hides into Oak Tanned Harness Leather, making it into work harness when so ordered; or make Slaughter Sole Leather.

We can tan your calf skins into Shoe Leather, giving them an elegant grain finish in Gun Metal, Mahogany Russet or lighter shade.

Your goods will cost you less than to buy them and be worth more.

Our illustrated catalog gives a lot of information. It tells how to take off and care for hides; how and when we pay the freight both ways; about our safe dyeing process on cow and horse hide, calf and other skins; about the fur goods and game trophies we sell, taxidermy, etc.

Our Fashion Book, which heretofore has been a separate affair, has been incorporated in and made a part of our regular catalogue. It has fashion plates of muffs, neckwear and other fine fur garments; also remodeling and repairing, together with prices and estimates. In ordering catalog, write name and address plain.

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



## A FINE FUR COAT

Made from Your Own Horse or Cow Hide.

We make this coat to measure from the hide you send. Write us for special low price.

Any Kind of Skin We make up any kind of skin to suit your needs.

Also Ladies' Coats and Furs, Robes, etc.

We have been in the tanning business since 1878 and guarantee satisfaction.

FREE Book of styles of Men's and Women's furs.

Write for it today  
Reading Robe & Tanning Co.  
116 East St. Reading, Mich.



## TIMES ARE HARD Hides and Furs are cheap in price,

So are our PRICES on making FUR COATS, ROBES and LADIES' FURS.

WE TAN YOUR HIDE and make you the best FUR COATS or ROBE for \$15.00. Also tan hides for harness and sole leather, deer skins for buckskin. Send for our catalog. It's free.

The Blissfield Tannery,  
W. G. White Co. Inc.,  
Blissfield, Michigan



## WE TAN

and make to your order from your Cattle, Horse and all kinds of Hides and Furs, Men's Fur Coats, Robes, Caps, Gloves and Mittens, Ladies' Fur Coats and Fur Sets. Remodeling and Repairing latest styles. Ship us your work and save one-half. New Galloway Coats, Robes, Gloves and Mittens for sale. We are the oldest Galloway Tanners: 34 years continuous business. Free style Catalogue, prices and samples. Don't ship your hides and furs elsewhere until you get our proposition.

HILLSDALE ROBE & TANNING CO.  
Hillsdale, Mich.

Mention The Michigan Farmer When Writing Advertisers

## Our Boys' and Girls' Department

### Club Work Starts Family Farming

*Theodore Jarvinen's Success Gets His Father Interested*

THE introduction of county agricultural agent work into Baraga county in the spring of 1918, opened up a new era for the boys and girls of that county, for with county agent work came club work, which has a hold on many a rural boy and girl of Baraga county.

One of these boys is Theodore Jarvinen, of Keweenaw Bay. Theodore, at the start, as a member of a garden club, was one of the sturdiest and staunchest exponents of club work.

During the summers of 1918 and 1919, he had to content himself with garden and potato club work. But in the spring of 1920, under the tutelage of Mr. L. V. Benjamin, Theodore and six other former garden club members

arriving at home from Chatham, when he informed his father, who at that time was section foreman for the Mineral Range Railroad, that he had been successful in adding another pig to his pig farm.

Theodore's success spurred the interest of Mr. Jarvinen, and it was not long before he backed his boy by purchasing a pure-bred Duroc-Jersey boar.

In the spring of 1921, Theodore, backed by his father, was the proud owner of a pure-bred Duroc-Jersey boar and two pure-bred sows, one with a litter of nine pigs, and the other eight—in all, twenty pure-bred animals.

Not satisfied with this accomplishment, Theodore wanted to go on. He

fast developing agriculture of the upper peninsula.

#### SAGINAW COUNTY BOYS AT SHOW.

MEMBERS of the Saginaw County Boys' Stock-judging Clubs, who won a free trip to the International Live Stock Exposition at Chicago, November 25 to December 1, inclusive, motored to Lansing and joined the party from other parts of the state, led by R. A. Turner, state club leader. Those attending from Saginaw county were: Ralph Nowak, of Burt; Joseph Bishop, Maple Grove township; Glen Livermore, Reno, Mich., all of whom won highest honors in the annual stock judging contest at the Saginaw County Fair. Miss Louise Weisemberger, a member of the Springbrook Canning Club, whose exhibits of 570 quarts of canned fruit at the fair won for her the Chicago trip, accompanied the party.

This is the third annual live stock exposition arranged by the national committee on Boys' and Girls' Club work. H. C. Wallace, secretary of agriculture, was a guest of honor at the exposition, and a number of other members of the United States Department of Agriculture were listed as speakers.

Grain exhibits and live stock from Saginaw county were among the Michigan exhibits that won prizes at the exposition. Michigan Rosen rye won twenty-five premiums, practically all the prizes that were offered for that variety. Michigan soft winter wheat won three good prizes. The Prairie Farm, managed by Jacob DeGeus, of Alicia, captured prizes on Belgian horses. Saginaw county had a number of corn exhibits of high class at the exposition made up from the prize-winning corn that was exhibited at the county fair by Douglas V. Bow, of Kochville township; A. W. Johnson, of Swan Creek; David Geddes, of Thomas township, and Edward Davis, also of Kochville. These exhibits were prepared by D. F. Rainey, of the Michigan Crop Improvement Association, at the farm bureau office.—M.

#### MEAT PACKER AWARDS.

THE Institute of Meat Packers gave the following Boys' and Girls' Club members blue ribbon awards on their live stock shown at the International.

##### Beef Cattle.

Shorthorns.—Josephine Garden, of Wapello, Iowa. Aberdeen-Angus—Willet Downey, Aledo, Ill. Herefords—Willet Downey, Aledo, Ill.

##### Swine.

Poland-Chinas—Ralph Peak, of Winchester, Ill. Duroc-Jerseys—Frances Ray, Veedersburg, Ind. Hampshires—Jennie E. Turner, Dewitt, Iowa.

##### Sheep.

Southdowns—J. Lloyd Marquis, of Hickory, Pa. Shropshires—Collins Thornton, Waukesha, Wis. Oxfords—James L. Hogan, Waunakee, Wis.

Michigan was one of the several states to be represented in the non-collegiate stock judging contest at the International. Calhoun county, winner at the State Fair contest, sent the team which was composed of William Peters, of Homer, Deo Kellogg and Ovid Martin, of Athens.



Theodore Jarvinen and the Pig that Got His Father Interested in Farming.

decided to organize a pure-bred Duroc Jersey Pig Club. With the assistance of Mr. H. R. Gladden, a banker in Baraga, the boys were able to procure for themselves an eight-week-old sow pig. Then began the real work of making their pig club a success. Each boy in addition to taking care of his pig, produced one-quarter of an acre of Green Mountain potatoes. With the money received from their potatoes they were to pay for the loan procured from Mr. Gladden.

Regular meetings of the pig club were held for the purpose of getting the best possible results, because it was the first attempt to any party in that community to raise pure-bred pigs and the boys wanted to demonstrate that their proposition was fully worth while.

One of the feature meetings of the summer was when Mr. Benjamin piled the club into his "Lizzie" and announced that they were to entrain for the farm of Mr. William Rice, of Houghton, Michigan. At Mr. Rice's farm, the boys received instructions in judging dairy cows, pigs and sheep. This visit was made for the purpose of determining whether the members of the club would be interested in sending a team to represent Baraga county to the live stock judging contest, held at Chatham, Michigan, in connection with the Upper Peninsula Farmers' Round-up. Needless to say, the club was unanimous in saying, "You bet." So in the summer of 1920, Baraga county was represented by Kauno Moilanen, Theodore Stenson and Theodore Jarvinen. The team won third honors, Theodore Jarvinen was proclaimed the best judge of hogs, and won the pure-bred Duroc-Jersey sow pig as an individual prize.

Theodore was a mighty proud boy on

enrolled as a member of the Keweenaw Bay Garden, Potato and Sow and Litter Club. He also had just completed the handicraft project at his school and captured second honors.

Then, one day, Mr. Benjamin mentioned calf club work to the boys, and not long after he received a letter from Theodore asking him if he could arrange with Mr. Gladden at the Baraga bank for a loan so that he could purchase a pure-bred Guernsey calf.

Mr. Gladden was only too willing to abide by the boy's wish, because Theodore had more than made good on his pig club loan. Mr. Benjamin then purchased a pure-bred Guernsey, which made Theodore Jarvinen, a boy of thirteen, a proud owner of twenty-one pure-bred animals, a record, Mr. Benjamin said, which could not be beaten by many farmers in Baraga county.

Then to make things better for Theodore and everyone else concerned, Mr. Jarvinen gave up his position as section foreman and purchased a fifty-eight acre farm, and today boy and father are working together, and are more than interested in applying the best methods and ideas to their little farm.

This little pig club not only helped Theodore and Mr. Jarvinen, but it aroused interest among many other individuals in the community, for Mr. Benjamin has been able to place a pure-bred Guernsey bull and several pure-bred Guernsey females right into the community, to say nothing of the pigs that were distributed from the litters owned by the boys.

So the little saying, "To make the boys better, give them better agriculture," seems to do a little more, for it really is opening a way for better live stock, which is one big need of the



# Roosevelt the Christian

Our Weekly Sermon—By N. A. McCune

THREE years ago the fifth of this month, Theodore Roosevelt closed his eyes on earthly scenes. It scarcely seems yet as though he has gone. He had become such a vast moral force in the land that his voice was above the strident voices and the conflicting forces of the times. As intensely hated as he was ardently loved, he made an ineffaceable impression on American life. He was not perfect, like the rest of mankind. He made mistakes, he was hasty of temper and sometimes was guilty of very harsh judgments. But he loved righteousness,



and he raised the whole level of American politics, during the seven years of his presidential term. One day, while still a very young man, he went to the pastor of the Dutch Reformed church in New York where he attended, and said, "Pastor, I believe what you are preaching, and I would like to unite with the church." To the church he was always loyal, attending it regularly throughout life. After retirement, and he was living at Oyster Bay, he was an officer in the Episcopal church, which is, I understand, the only church in town.

LATE in life he wrote his nine reasons for going to church. They are almost as famous as President Wilson's "fourteen points." Here they are:

"1. In this actual world, a churchless community, a community where men have abandoned and scoffed at or ignored their religious creeds, is a community on the rapid down grade. 2. Church work and church attendance mean the cultivation of the habit of feeling some responsibility for others. 3. There are enough holidays for most of us. Sundays differ from other holidays in the fact that there are fifty-two of them every year. Therefore, on Sundays, go to church. 4. Yes, I know all the excuses. I know that one can worship the creator in a grove of trees, or by a running brook, or in a man's own house just as well as in a church. But I also know, as a matter of cold fact, the average man does not thus worship. 5. He may not hear a good sermon at church. He will hear a sermon by a good man who, with his wife, is engaged all the week in making hard lives a little easier. 6. He will listen to and take part in reading some beautiful passages from the Bible. If not familiar with the Bible, he has suffered a loss. 7. He will take part in singing some good hymns. 8. He will meet and nod or speak to good, quiet neighbors. He will come away feeling a little more charitable toward all the world, even toward those excessively foolish young men who regard church going a soft performance. 9. I advocate a man's joining a church for the sake of showing his faith by his works." Roosevelt's favorite Scripture verse was, "He hath showed thee O man, what is good; and what doth the Lord require of thee, but to do justly, and love mercy, and walk humbly with thy God?" "I have a horror," he says, "of the people who bark but don't bite. If I am ever to accomplish anything worth doing in politics, or ever have accomplished it, it is because I act up to what I preach, and it does not seem to me that I would have the right in a big crisis not to act up to what I preach."

That he did act up to what he preached was apparent to all except his enemies. A large class of

folk, whether republicans, democrats or, what not, do not like to be disturbed in their complacent, indifferent citizenship, in dirty machine politics, or in other forms of evil living. These people were Roosevelt's enemies, and it was an honor to him to have so choice a string of haters. "Woe unto you when all men speak well of you." This was apparent when he opposed, as a young man, the nomination of Blaine for president, when he would not visit Boss Cox at Cincinnati, and when he forced Kaiser Wilhelm to arbitrate the Venezuelan affair.

Mrs. Robinson, the colonel's sister, has within a few weeks put a book on the market, "My Brother, Theodore Roosevelt." It is full of interesting material from an intimate personal viewpoint. She says that she was in Porto Rico while her brother was in the White House, and discovered that a certain official there was utterly unfit for office. She was given abundant proofs of this by the governor of Porto Rico. On returning, she laid the facts before the president. "Have you proof of this?" he demanded. The proofs were laid before him. "This is a very serious matter. I have got to be sure of the correctness of these statements. A man's whole future hangs on my decision." But there was no evading the facts. With a stroke of the pen he erased the man's name forever from official connection with the United States government.

THE sorrow of Roosevelt's life came toward its close. It was two-fold. First, he was not allowed to go to France as a volunteer, or in any capacity. Second, the death of his son, Quentin, in the flying corps. He was very critical of Mr. Wilson's administration. Articles poured from his pen that spilled their wrath on the administration, then in power. This was not personal vindictiveness or hatred of the other party as such. He felt that America was not taking the part she should in the great struggle for the rights of humanity. He did not believe in the League of Nations, or in any league of that kind. He felt that it would accomplish nothing. He said, "I frequently meet one of those nice gentry in whom softness of heart has spread to the head, who say: 'How can we guaranty that everybody will love one another at the end of the war?' The first step in guaranteeing it is to knock Germany out!" Perhaps he was right about "knocking Germany out." But it is pretty generally felt now, I think, that Roosevelt was behind his age in not believing in any methods of a non-military nature for preserving the peace of the world. The sentiment of the times is against him, on both sides of the ocean. One of the last letters written for publication slightly indicates, however, that he was beginning to look at the problem in a different way. President Roosevelt was an amazing man. One fact alone would mark him as extraordinary. He was the son of wealth, yet he was never idle, and thought and labored for the upbuilding of the moral forces of his time. He lived in a very large sense a sacrificial life. A few days before his death he said, "I promised myself that I would work up to the hilt until I was sixty, and I have done it." How many other rich men can say that? President Harding classes him with Lincoln and Washington.

Alvy Hall worked for his uncle last year at threshing time. Now Alvy says he has more respect for a slice of bread than ever before. He says he thought the stuff grew without work, but threshing is the hottest, titchiest, messiest sort of business that he ever monkeyed with.



## Pendergast Fence

**FROM FACTORY TO FARM**  
**We Pay The Freight**



M. DE PENDERGAST  
PRESIDENT

## My New Factory at Elkhart, Ind., Will Save Fence Users a Lot of Money and Give Better Service

The new factory I have just opened at Elkhart, Indiana, together with the plants already established at Stillwater, Minnesota, and Fort Madison, Iowa, means that I am prepared to give you special service at all times. While my efforts the past few years have been made in the territory surrounding my other plants, this part of the country is not a new field to me. For twelve years I had a plant—The United Fence Co. at

Port Huron, Michigan—and today you will find in Indiana, Ohio and Michigan thousands and thousands of rods of my fence standing up under the test of years of service.

### YOU BUY AT MANUFACTURERS' PRICES.

I sell my fence direct from Factory to Farm so that I can eliminate two or three freight charges and the cost of handling many times. When you buy Pendergast Fence you get full fence value for every dollar you invest. Another thing I want to say, right here, is that every rod is guaranteed to give satisfaction or money refunded. I have a reputation for quoting remarkably low prices. I know I can save you a lot of money on quality fence. Quality is the big word with me and you know that my fence must have given satisfaction or I could not have stayed in the business for thirty years. I have located all of my factories with the idea of saving freight for my customers and giving prompt delivery. Drop me a line to my nearest factory and get my big folder and reduced prices. You'll be pleasantly surprised.

## PENDERGAST FENCE COMPANY, Inc.

### OFFICES AND FACTORIES

331 Main St.,  
Stillwater, Minn.

232 Eaton St.,  
Fort Madison, Iowa.

433 Division St.,  
Elkhart, Indiana.

## Sow Seeds of Success

Write Today For This Catalog  
Some vegetable gardens pay their owners \$100 in returns for every \$5 spent. They are a constant source of big profit. They yield the finest vegetables and yield lots of them, because they are planted with—

## Isbell's Seeds

Isbell's Gardens Pay—for the same reason that pure-bred cattle produce thoroughbred offspring. Every ounce of Isbell Seed is tested. Isbell Seeds are Michigan grown; earliness, hardness and sterling qualities are bred into them. Isbell's 1922 book on seeds and gardening tells what and how to plant and what to expect from the crop. It's one of the most authoritative catalogs in America. Ask for your copy. Mail coupon.

S. M. ISBELL & COMPANY  
530 Mechanic St. Jackson, Mich. (25)

### Free Catalog Coupon

S. M. Isbell & Company  
530 Mechanic St., Jackson, Mich.

Gentlemen:—Without obligation, send me your 1922 Catalog of Isbell's Seeds.

Name \_\_\_\_\_  
Address \_\_\_\_\_

## Peach, Cherry and Apple Trees

at Wholesale both 1 yr. and 2 yr. by mail and Express  
Special prices to Orchardists. Send for 1922 Guaranteed Seed and Tree Catalog. Send today. Allen Nursery & Seed House, Geneva, Ohio.

## SEEDS

Reliable and Full of Life  
**SPECIAL OFFER**  
Made to build New Business. A trial will make you our permanent customer.  
**PRIZE COLLECTION** Radish, 17 Varieties, worth 15c; Lettuce, 12 kinds, worth 15c; Tomatoes, 11 the finest, worth 50c; Turnips, 7 splendid, worth 10c; Onion, 8 best varieties, worth 15c; 10 Spring Flowering Bulbs, worth 25c. 65 varieties in all; worth \$1.  
**GUARANTEED TO PLEASE**  
Write today; mention this paper.  
**SEND 10 CENTS**  
to cover postage and packing and receive this valuable collection of seeds, postpaid, together with my big instructive, beautiful Seed and Plant Book, telling all about Buckbee's "Full of Life" Seeds, Plants, etc.  
**H.W. BUCKBEE**  
Rockford Seed Farms  
Farm 42, Rockford, Ill.

## For Healthy Orchards Plant Michigan Grown Trees

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

Celery City Nurseries  
Box 204 Kalamazoo, Mich.

## Nursery-to-you, At Pre-War Prices

## VICK'S Garden and Floral GUIDE

For 33 years the leading authority on Vegetable, Flower and Farm For Ready to plant seeds, plants and bulbs. Better than ever. Send for free copy today.  
**JAMES VICK'S SONS** Rochester, N. Y.  
48 Stone Street The Flower City

### DOGS

### COLLIE PUPPIES

Write Dr. W. Austin Ewalt, Mt. Clemens, Michigan for thoroughbred Pedigreed Collie Puppies, bred from farm trained stock that are natural heelers with plenty of grit. Puppies guaranteed.

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

**FOR SALE** Pure bred Scotch Collie Pups. Males \$5, Females \$3.  
**F. J. MAUREL**, E. 4, Nashville, Mich.



## POULTRY

# DAY OLD CHICKS

## HOMESTEAD FARMS

### Leghorns

We are issuing a Bulletin that describes the kind of fowl the farmer now days wants. Send for this description of our Pure Breed Practical Poultry.

The highest class practical stock in Michigan; stock that each year is also now being shipped to poultry farmers of other states.

You will like particularly the White, Brown and Buff Leghorns of this breeding; they give the eggs. Also Barred and White Rocks; Reds; Wyandottes; Orpingtons; Anconas.

STATE FARMS ASSOCIATION  
B3, Kalamazoo, Mich.

# Chicks Baby Chicks

Order your baby chicks now from Michigan's largest practical Single Comb White Leghorn Egg, pullet and broiler farm. We supply all the eggs that go into our incubators from our own strain of Bred-to-lay S. C. White Leghorns [2000] and have a few thousand surplus chicks to spare at certain periods of the season.

We turned away orders for thousands of chicks last spring as our supply is limited and we absolutely refuse to sell anything but our own stock. So order early and avoid disappointment.

We guarantee satisfaction in every way.  
Prices on application.

Macatawa White Leghorn Co., Inc.  
R. F. D. 1, Holland, Mich.

Whittaker's R. I. Reds Both combs. Greatest Color and Egg Strain. Free, by blood test, from bacillary white diarrhea. If you are interested in Breeding Stock, Day Old Chicks or Hatching Eggs write for our Twelfth Annual Catalog. It is free. INTERLAKES FARM, Box 39, Lawrence, Mich

Barred Rocks, W. Wyandottes, R. I. Red cockerels from bred-to-lay stock.  
HOWARD GRANT, Marshall, Mich.

## BOOKING—1922—ORDERS

### B-A-B-Y C-H-I-X

WHITE LEGHORNS AND MOTTLED ANCONAS Also Black Leghorns, Brown Leghorns, Buff Leghorns, Black Minorcas, R. O. Rhode Island Reds, Barred Plymouth Rocks, White Plymouth Rocks, Silver Wyandottes, White Wyandottes. WE HATCH eggs from Hologized flocks on free range on separate farms. Send for Price List.

Valuable Booklet with first order for twenty-five or more  
CRESCENT EGG COMPANY  
Allegan Michigan

DAY OLD CHICKS and hatching eggs from select heavy producing stock. Delivery guaranteed. W. Wyandottes, Bar. Rocks, W. Wyand., S. C. Reds, B. Orp. Cat. free. GOSHEN POULTRY FARMS, R-19 Goshen, Ind.

Barred Rocks egg contest winners, eggs from strain with records to 290 a year. \$2.00 per setting prepaid by P. P. Circular free. FRED ASTLING, Constantine, Mich

Barred Rocks Exclusively. Cockerels farm raised. Bred from M. A. C. championship show. Describe color, size, laying ability wanted. \$3.00 and up. ROSEMARY FARM, Williamston, Mich.

Barred Rocks That Lay Cockerels, Pullets. Look up my records at laying contests. Write for prices. G. Oaball, Hudsonville, Mich.

Barred Plymouth Rock Cockerels, large birds from prize-winning heavy-laying strain \$5.00 each. J. A. Barnum, Union City, Mich.

Barred Rock Cockerels Bred from great layers Bargain prices now. W. C. COFFMAN, R. 3, Benton Harbor, Mich

Barred Rock Cockerels, Hill's heavy laying strain. Deep, narrow barring. Large birds \$4 and \$5 each. Lucian Hill, R. 3, Tekonsha, Mich.

## CHICKS FOR 1922

Prices reasonable. Selected and Cull S. C. Eng. Whites and Brown Leghorns, Anconas and Pure Bred Barred Rocks. All eggs for hatching after Feb. 1. 100% Guaranteed. Postage prepaid. Catalogue free. FAIRVIEW HATCHERY, Zeeland, Mich., R. 2, John Bos & Son, Prop.

Choice S. C. White Leghorn cockerels line bred at \$3.00 each while they last. They are the big thrifty kind that beget persistent producers. MACALWHITE POULTRY YARDS, Caro, Mich.

CHICKS, Have shipped thousands each season since 1904. Let us send our prepaid prices. Freeport Hatchery, Box 12, Freeport, Mich.

Top Quality Cockerels Minorcas, Houdans, Rocks, Reds, Orpingtons, Spanish. Tyron Poultry Farm, Fenton, Mich.

Northrup or Papes Strain. 100 S. O. Giant Black Minorca cockerels 6 mo. old \$2.25 each. M. SCHAEFER, R. 1, Essexville, Mich.

RHODE ISLAND WHITES win over all breeds at the egg laying contest. 30 eggs \$5; 50 \$8; 100 \$15 order from this ad. Some chicks. H. H. JUMP, R. 5, Jackson, Mich.

Original Dr. Heasley S. C. Buff Leghorn Rock Egg Basket Strain. Officially Certified Egg bred Winners at Chicago, Cincinnati, etc. Cockerels breeding hens and chicks, at bargain prices. Also bred to lay English Strain S. C. White Leghorn chicks for 1922. Discount on Early Orders. Hillside Hatchery Farm, R. 3, Holland, Mich. Successor to Henry DePre

100,000 Chicks 12c & Up. Of pure bred finest egg producing flocks. Built directly from laying and exhibition contest winners hatching eggs. Ducklings. Catalog. 20 varieties. Early bookings avoids disappointment. Beckman Hatchery, 26 E. Lyon, Grand Rapids, Mich.

HA! HA! 75,000 { 12c and up. } CHICKS Buy Hi-grade Profit Paying Bred-to-Lay Chix. From tested egg strain. Best foundation stock ever produced. Hatching eggs, ducklings, 10 varieties. Or stamp appre. Laurence Poultry Farm, R. 7, Grand Rapids, Mich.

## 140 Egg Guaranteed INCUBATOR \$12.45

World beating low price offer on high grade. Guaranteed Hatcher. You waste money to pay more. The Detroit has double walls, hot water heat, copper tank, no cold corners, big nursery, automatic regulation thermometer — all features that insure big hatches — strong, healthy, vigorous chicks. Equal to incubators costing twice the price. Only

**\$7.10 FOR A 140-CHICK DETROIT BROODER**

An equally big bargain. Double walls, hot water heat. High class. Built to last. Write for complete description. You will marvel at the value. Get Big Bargain Offer on both machines ordered at one time. Save money. Act quickly. Address  
Detroit Incubator Company  
Dept. 11 Merritt St., Detroit, Mich.

## A Quality Hatcher At The Lowest Price "Successful" INCUBATORS & BROODERS

Mail a postal—Get our offer. Poultry lessons free to every buyer. Booklet, "How to Raise 48 Out of 50 Chicks," 10c. Catalog FREE. Make green, egg-making feed in "SUCCESSFUL" Grain Sprouters. Des Moines Incubator Co. 368 Second St., Des Moines, Ia. 29 Years of Big Successes

130 Egg Incubator and Brooder \$17.75 Both for \$17.75

Freight Paid east of the Rockies. Hot water—copper tanks—double walls—lead air space—double glass doors—shipped complete, all set up ready to use.

180 Egg Incubator and Brooder - \$22.00  
250 Egg Incubator and Brooder - \$30.00

Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our 1922 catalog. [2]  
WISCONSIN INCUBATOR CO. Dept. 92 Racine, Wis.

## \$13.95 Buys 140-Egg Champion Belle City Incubator

Hot Water, Copper Tank, Double Walls Fibre Board, Self Regulated. \$19.95 \$7.95 buys 140-Chick Hot Water Brooder. Or both for only \$17.95. Freight Prepaid. All of Rockies and allowed on Express. Guaranteed. Order now. Share in my \$1,000 in Prizes, or write for free Book "Hatching Facts." It tells everything. Jim Rohan, Pres. Belle City Incubator Co., Box 14, Racine, Wis.

## 150 EGG CHICK Both for \$19.75

Incubator and Brooder made of California Redwood. Incubator covered with asbestos and galvanized iron triple walls, nursery, copper tanks in incubator and brooder. 30 days trial—money back if not O. K. FREE Catalog. 260 EGG INCUBATOR AND BROODER \$28.75 Ironclad Incubator Co. Box 77, Racine, Wis.

## GET MORE EGGS

Make more money from your poultry. Let us prove to you that Lay or Bust Poultry Tonic will make them lay. Keep them free from disease and working overtime to fill the egg basket. Get eggs regardless of the weather. Satisfied users everywhere. Write today. Send 65c for package on our guarantee—money back if not satisfied.

THE CONN PRODUCTS CO., Dept. N, Waterloo, Iowa

## \$12.75 FOR A BADGER 140 EGG INCUBATOR

140 CHICK BROODER \$6.75 Built of California Redwood with double walls. Insulate top covered with wall board gives double protection. Hot water—Copper Tank—Self Regulation—Thermometer—Deep Nursery. Set up and shipped COMPLETE with all fixtures. Order DIRECT or send for descriptive circular.

BADGER INCUBATOR CO. BOX 136 RACINE, WIS.

## America's Foremost Poultry Journal 5 MONTHS' TRIAL 25 cts.

For over 30 years the leader in down-to-date poultry helpfulness. Tells how to get more eggs. Monthly, 40-60 pages. Only 25c. stamps or coin, for 6 months' trial. Full year subscription, \$1.00. Poultry Success, Box 15, Springfield, Ohio

## GUARANTEED BABY CHICKS

You take no risk in buying "Continental" chicks—guaranteed in quality, breed, safe delivery—everything. Big, husky chicks that grow faster—lay earlier. All breeds: 500 to 300 egg strains. Shipped anywhere, prepaid. Send for catalog and prices. Continental Hatcheries, Box 232 Springfield, O.

Poultry Book Latest and best yet! 144 pages, 216 beautiful pictures, hatching, rearing, feeding and disease information. Describes busy Poultry Farm handling 53 pure-bred varieties and BABY CHICKS. Tells how to choose fowls, eggs, incubators, sprouters. Mailed for 10 cents. Berry's Poultry Farm, Box 195 Clarinda, Iowa

64 BREEDS Most Profitable pure-bred ducks, geese, turkeys. Fowls, eggs, incubators at reduced prices. 29th year. Largest plant. Large valuable poultry book and catalog free. R. F. NEUBERT Co., Box 514 Menkato, Minn.

# Grand Rapids Poultry Show

By R. G. Kirby

THE recent poultry show at Grand Rapids placed emphasis on both fancy and utility lines and the exhibition was of unusual interest to both commercial egg producers and fanciers. There were many beautiful fowls in the exhibition which were of excellent egg type. The birds that were shown as high egg producers were of good type for the breed.

The idea of making the beautiful birds useful and the useful birds more beautiful will be more easily understood by all beginners that attended the show. The winning Barred Rock pen from the M. A. C. egg-laying contest was displayed. This pen produced a total of 1,041 eggs, or an average of 208 eggs each. The best layer, Lady Supreme, produced 264 eggs. Miss Betty was second with 258 eggs.

The birds in this contest pen seemed to be of excellent vigor, proving that they were able to stand the strain of high egg production when given the proper care. They were of good type. I heard several say that they would have liked to have seen the male bird that produced them. Another Barred Rock hen on exhibition had a trap-nest record of 257 eggs in ten months and twenty-seven days.

### Brief Show Notes.

There were no Black Jersey Giants displayed. I heard one breeder say that he liked them but they were not a finished breed. He had seen several flocks and said they looked like Black Langshans without the feathered legs.

Two pair of White Swiss Mondaine pigeons attracted much attention. One pair brought their squabs along and were giving the youngsters plenty of feed and attention in spite of the crowd. They are a beautiful breed and very large and worth considering by the farm boy who can devote a little time to squab raising.

At the American Poultry Association meeting the breeders were told that an egg-laying contest for Michigan is practically assured. An effort was also made to gain sentiment for bringing the National A. P. A. meeting to Michigan in 1923. It was not possible to find out whether either the Detroit or Grand Rapids Associations feel able to raise enough money and give enough time to the cause to obtain the meeting.

Mr. Foreman moved that in future shows all birds be judged by standard and utility qualifications. As the writer understands it, a breeder can enter birds in either class and can have his birds judged in both classes if he wishes to do so. He reported that many birds entered in the show were good enough for any laying contest. By a strong effort to combine utility qualities with good-looking birds it will be possible to prevent a break between standard and utility breeders and the two lines will slowly unite.

### A. P. A. Meet at Show.

Mr. Edward Hayes, the national organizer for the American Poultry Association reported that the shows throughout the country are bigger and better than ever. The new plan is to have two dollar annual memberships instead of life memberships and organize the association from the bottom up instead of the top down. The man who joins is a member first of his local, then his state association and then his national association. This plan will

permit the sending of delegates to the national convention instead of only a few of the most prosperous breeders who can afford to pay all their own expenses.

The new membership plan will give the association money to advertise the value of poultry and eggs for food in the same way that dairy products have recently been advertised. A new Standard will be issued next year and it is desired that the different breed specialty clubs state just what is wanted in that Standard.

One value of the A. P. A. to the farm poultry keeper is shown by the fact that the activities of the association helped to obtain a tariff on eggs of eight cents per dozen soon after the importation of Chinese eggs helped to cause the great break in the egg market last spring.

Among the very interesting exhibits was the \$500 prize Leghorn male which won first at the New York show. Several fine Leghorn cockerels were given the freedom of the Coliseum and showed visitors that even Leghorns do not need to be wild and difficult to handle if their temperament is properly developed by careful management.

### SWEEPSTAKES BIRDS AT GRAND RAPIDS.

THE sweepstake bird of the entire show was the first prize Black Orpington pullet exhibited by Mr. H. A. Hawn, Grand Rapids. Other sweepstake prize winners were: Pen of birds by George B. Ferris, of Grand Rapids, Single Comb White Leghorns; particular colored pen, Single Comb Rhode Island Reds, exhibited by S. J. Arnold, of Lansing; Orpington pen, F. A. Grace, of Stanford, Mont.; best display of Rhode Island Reds, Grove Carpenter, of Concord; best display of Black Orpingtons, J. Alfred Hannah, Grand Rapids; best display of White Rocks, E. C. Zoeller, Albion; best display of Buff Rocks, J. J. Dekoster, Zeeland; best display of Buff Wyandottes, John Bowstrom, Grand Rapids; best display of Rose Comb Rhode Island Reds, F. J. Fessler, Fort Wayne, Ind.; best display of Barred Rocks, George A. Murphy, Muskegon.—R.

### OFFICERS OF POULTRY ASSOCIATIONS.

BUFF ROCK club: President, Horace Newberry, New Haven; secretary-treasurer, Harry Elenbaas, Grand Rapids.

Rhode Island Red club: President, Frank Hill, Grand Rapids; vice-president, S. J. Arnold, Lansing; secretary-treasurer, John H. Tomlinson, Dearborn.

### National Black Orpington Breeders' Association.

President, F. A. Grace, of Stanford, Mont.; vice-president, Ralph Roberts, Essex, Ont.; secretary-treasurer, J. Alfred Hannah, Grand Rapids.

### Michigan Poultry Association.

President, J. Barnum, Union City; vice-president, George A. Murphy, of Muskegon; secretary, Fred M. Crowe, Owosso, directors, Samuel D. Lapham, of Dearborn; A. N. Walker, of Battle Creek; N. A. DeWar, of Flint; B. H. Smith, of Niles; W. S. Beebe, of Detroit, and John Tomlinson, of Dearborn.—R.







# Aspirin

Then It's Genuine

Unless you see the name "Bayer" on tablets, you are not getting genuine Aspirin—prescribed by physicians for 21 years and proved safe by millions. Always say "Bayer".

Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid.



America's  
Pioneer  
Dog Medicines

## 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

## Chickens Sick? Hens Not Laying

There's no excuse for rump, colds, canker, sore head, chicken pox, skin disorders, cholera, indigestion, bowel troubles and such ailments. **GERMOZONE** positively will rid your chickens of disease and keep them healthy. For over 30 years the dependable remedy and preventive. Get Germonozone and Lee's FINE BOOK-LETS, which explain proper feeding and care and how to keep hens laying regularly the year round. At drug or feed stores. If no dealer, order by card, 75c and \$1.00 sizes. Send no money. Postman will collect. No extra charge.

(SEE N. LEE CO., Dept. F-33, Omaha, Neb.)

25c—will bring you semi-monthly utility farm poultry newspaper one whole year at trial. **POULTRY GUIDE**, Box D, Montpelier, Indiana

### POULTRY

## Baby Chicks

We have 5 Varieties. S. C. W. Leghorns, English W. Leghorns, Anconas, Brown Leghorns and Barred Rocks. Quality and prices are right. 97% guaranteed alive upon delivery. We never have booked so many orders at this early date as this season. Most all are repeated orders. We advise you to order early to avoid disappointment. Our first hatch will be of March 15. We ask you to give us a trial, we are sure to please you.

**City Limits Hatchery,**  
R. 5, Box 11, Holland, Mich.

## Wolverine Baby Chicks

Improved S. C. White and Brown Leghorns. Bred to lay for the past twelve years. Lay large white eggs. Our eleventh year. Shipped by parcel post. Safe arrival guaranteed. Our catalogue tells you all about our English type White Leghorns, list free.

**WOLVERINE HATCHERY,**  
R. 2, Zeeland, Mich.

## JUST-RITE LOOK! Baby Chicks

11-2 MILLION chicks for 1922. POSTAGE PAID. 95% live arrival guaranteed. MONTH'S FEED FREE with each order. A Hatch EVERY week all year. 40 breeds chicks, 4 breeds ducklings. Select and Exhibition grades. Catalogue free, stamps appreciated. Nabob Hatcheries, Dept. 15, Gambier, Ohio

## CHICKS

Seven varieties, from excellent pure-bred stock. 100% live delivery guaranteed. Parcel Post Prepaid. None better. Catalogue Free.

**Lee's Poultry Farm & Hatchery,**  
Edison, O.

## Big Value Baby Chicks

Eleven popular, money-making breeds. Easy to buy—priced low. Easy to raise—husky, healthy, vigorous. And guaranteed! Write today for FREE catalogue showing many breeds in full colors.

**OHLS POULTRY YARDS AND HATCHERY**  
Box 27, Marion, Ohio

### STOCK MEN AT ANNUAL MEET.

(Continued from page 62). can farm products simply because Europe has no money with which to buy. If money were sent across the ocean to the depleted nations there they would be able to reorganize their business and put themselves on an economic basis sound enough to permit of a freer buying of materials on the market. "America, now the creditor nation of the world, is missing her best opportunity by not giving credit to the eastern nations at once," said Mr. Lowden.

One of the great needs of the present time, as pointed out by Mr. Lowden, is a greater knowledge of markets, both on the part of the producer and the consumer. It was shown that if this education cannot come quickly as is probably the case, then the farmers with effectual organizations should hire the best men in the country to study their economic problems and lead them in marketing their crops and solving their live stock products so that they would secure the best price possible. An instance of poor management on the part of a man in charge of a large amount of wool was given by Mr. Fawcett, whose speech has been mentioned above. He told of the financial pressure which was brought to bear on this inexperienced wool man so that he thought that he was compelled to sell his fleeces. Immediately after he sold, the price of wool mounted several cents and the manipulator was able to reap a handsome profit.

Many constructive ideas and much enlightening data was given out by speakers before the different sectional meetings where men interested in the various individual breeds segregated themselves for a discussion of their own particular problem. Professor Kayes, of the Ohio State University, gave an interesting report on present tendencies in the problem of the horse vs. gasoline-propelled machines, before the meeting of Michigan Horse Breeders which took place before the general meeting. He gave data showing that the horse is coming back in the United States and in some places is forcing out the trucks entirely on short hauls.

Jacob DeGeus, of Alicia, one of the state's most prominent breeders of Belgian horses, entreated the breeders assembled to produce bigger and better animals. His observation of the Chicago draft horse market, one of the centers controlling price tendencies, is furnished with animals as light as 1,300 pounds and the consequence is that they bring a lower price than a draft horse of the proper weight should bring. Bigger and better animals can be produced, Mr. DeGeus told the horse men if the breeder will mate his mares wisely and keep on doing so until he has produced the type that is his ideal.

W. M. McFadden, of Chicago, in a talk before one of the general meetings gave out considerable information of especial interest to the swine grower. "When a fine, tender, well-cooked pork chop is placed on your plate, just remember that it represents one of the greatest live stock achievements of this country," said Mr. McFadden. In proving this he pointed out that the pork type hog is absolutely an American production, that the needs of the country demanded that meat be produced more efficiently than the bacon hog from England could do and out of this need the breeders have developed the large, rounded swine of today which produce such an abundance of flesh and fat in a short time.

**Report of Committee on Resolutions.** Your committee on resolutions beg leave to offer the following report:

Appreciating the valuable services of Mr. I. H. Butterfield, of Amherst, Mass., and Mr. H. H. Hinds, of Stanton, Michigan, to this organization and the live stock interests of the state, (Continued on page 79).



## SURPRISE!

We Have A Surprise For You In

## BABY CHICKS

All information free.

Get the facts on our **WORLD FAMOUS TOM BARRON ENGLISH WHITE LEGHORNS, BROWN LEGHORNS AND ANCONAS.**

Simply write your name and address on a card or in a letter and we will do the rest. **WRITE TODAY.**

Don't buy chicks till you get this wonderful offer. We can save you money.

**Superior Poultry Farms & Hatchery,**  
Box 2053, Zeeland, Mich.

## CHICKS At Reduced Prices CHICKS

20,000 large, strong, well hatched chicks every Tuesday hatched from eggs laid by selected hens on free range insuring healthy, vigorous chicks that will live and grow into money for you



Barron S.C. White Leghorn, heavy weight and heavy layers American S. C. White Leghorns, heavy laying strains, S. C. Brown Leghorn, the most beautiful Leghorn and a good layer. S. C. Anconas, great layers.

We Ship By Parcels Post and Pay the Postage to Your Door. Catalog free. **WYNGARDEN HATCHERY, Box M, Zeeland, Mich.**

## BABY CHICKS Pure Bred for 1922



Bred-To-Lay from flocks selected for standard quality and production. We offer Exceptional values in following varieties: Leghorns, Rocks, Reds, W. Wyandottes, Orpingtons, Minorcas and Anconas. Our prices are right when quality is in consideration as this should be the main point in view. Get our big catalogue of Baby Chicks, Brooders & How to Care for Your Chicks after you have them, it is FREE, for the asking. Write today.

**Wolf Hatching & Breeding Co., Dept. 10, Gibsonburg, Ohio**

## CHICKS

English Strain S. C. W. Leghorns and Sheppards Anconas, Stock and day old chicks. We have a few April hatched S. C. W. Leghorn cockerels left that we sell at reasonable prices. Place your orders early. Write for catalogue. **BYRON CENTER POULTRY FARM, G. C. Keizer, Byron Center, Mich.**

## Baby Chicks and Hatching Eggs

Thorough-Bred English White Leghorns, S. C. Reds, Barred Rocks. Big sturdy chicks, the kind that live and grow into fine producers, from the best laying strains obtainable. Priced right. 97 per cent delivery guaranteed. 1922 mating list and catalogue ready. Importer. **Brummers Poultry Farm, Holland, Mich.**

**Baby Chicks \$15.00 per 100 and up**  
Hatching eggs, \$1.50 per setting to \$15.00 per 100. We are listing 17 varieties of pure bred fowls: Chickens, Geese, Ducks & Guinea, also breeding stock. Send for prices and circular. Booking now for early delivery. **OLINTON HATCHERY & POULTRY FARMS, Wilmington, Ohio.**



## BABY CHICKS

We furnish Pure Bred Chicks of the finest quality from high egg-producing stock. Flocks built directly from laying contest winners. We have 17 breeds. Write for free illustrated catalog and price list. **J.W. OSERGE HATCHERY, Dept. 30, Glendale, O.**

**Baby Chicks** English White Leghorn and Anconas. From the best flocks in Michigan. Order now for spring delivery. Catalog free. **SILVERWARD HATCHERY, Zeeland, Mich.**

**Day Old Chicks** B. Rocks, R. f. Reds, Anconas, W. Leghorns Let us hook your order for an early B. Leghorns hatch. Catalogue and price list now. **H. H. Pierce, Jerome, Mich.**

**BABY CHICKS** White and Buff Plymouth Rocks, Buff Plymouth Rocks, White Plymouth Rocks, Rhode Island Reds and White Wyandottes, 25 for \$3.25, 50 for \$10.00, 100 for \$18.00. **FENTON CHICKEN HATCHERY, Box 244, Fenton, Michigan**

**BABY CHICKS.** All popular varieties from selected flocks at living prices. Write for circular and price list. **DEER & ADAMS, Litchfield, Mich.**

**Choice Baby Chicks.** S. C. Anconas and S. C. White Leghorns. New low prices. Catalog free. **M. D. Wyngarden, R. 4, Zeeland, Mich.**

**FOR SALE:** at \$2.50 each, seven S. C. Buff Leghorn cockerels. **S. R. CHAMBERLAIN, Homer, Mich.**

**FOR SALE,** Buff Orpington Cockerels and Toulouse Geese. **MRS. M. B. NOBLE, Saline, Mich.**

**Now** booking orders for hatching eggs. Pure blood Barred Rocks, Park's strain, the laying kind. \$3.00 per 15, 50 for \$8.50, 100 for \$15.00. **Wolf Lake Poultry Farms, F. M. Keck, Peacock, Mich.**

**Ringlet** Barred Rock Cockerels—bred from birds that lay, weigh and win. **Robert Martin, R. 3, Woodland, Michigan**

**Rhode Island Reds** R. C. Large fancy cockerels at \$3 each. **BURT Sisson, Inlay City, Mich.**

**STRICTS POULTRY FARM** Hudsonville, Mich., R. R. 4, Box M. S. C. English White Leghorns. Official records from 9 hens of 208 to 241. Chicks and Eggs. Write for catalogue.

**Single Comb Buff Leghorn** baby chicks. Order now for spring delivery. Send for circular. **Willard Webster, R. 2, Bath, Mich.**

**S. C. B. Minorca** A few choice Minorca Cockerels, great big fellows, bred by our 12 lb. cock. **R. W. MILLS, Saline, Mich.**

## BABY CHICKS

Finest strain Barron White Leghorns, Barred Rocks, R. I. Reds. Northern grown, free range, rugged stock. Low prices. Safe delivery. Catalog. Book early.

**MICHIGAN HATCHERY, Holland, Mich.**  
Member Ottawa County Hatcher's Association

**BABY CHICKS.** White Leghorns, Barred Rocks, Buff Rocks, Anconas, R. I. Reds, Black Minorcas, 25 for \$5.50, 50 for \$10.00, 100 for \$18.00. Postage paid. 95% live arrival guaranteed. **DURAND HATCHERY, R. 1, Fenton, Mich.**

**Barred Rock.** Hatching eggs from Parks 200-egg strain from stock direct from Parks best pedigreed pens. \$2 per 15, \$8 per 50, \$12 per 100. Prepaid by parcel post in non-breakable containers. No chicks for sale. **R. G. KIRBY, Route 1, East Lansing, Mich.**

**BABY CHICKS** \$13 per 100 and up. Leghorns, Rocks, Reds. SEND FOR PRICE LIST. **CONNERS CHICK HATCHERY, Oxford, Mich.**

**Chicks** From "Michigan's Old Reliable Hatchery." S. C. White Leghorns, (3 grades), Anconas, White and Barred Plymouth Rocks and Reds. Fine strong, sturdy chicks from Grand, bred-to-lay Hens, raised, free range brooders. Prepaid by mail, 100% live on arrival. Sold on guarantee to satisfy or money back. 15,000 every week, 14th season. Get my low price and valuable illustrated 1922 free catalogue, and place your order where you get your money's worth. Write **W. Van APFELDORN, R. 7, Holland, Mich.**

**Chicks of Quality** pure bred S. C. White Leghorns and Anconas; bred exclusively for egg production and best standard qualities for prompt delivery; order now; new low price catalog free. **Riverview Poultry Farm, R. 2, Zeeland, Mich.**

**RURAL BABY CHICKS** S. C. White Leghorns and Anconas. Free Range Stock. Heavy layers of large white eggs. Satisfaction and safe arrival guaranteed. Catalogue sent free upon request. **RURAL POULTRY FARM & HATCHERY, R. 1, Zeeland, Michigan**

**Silver, Golden & W. Wyand.** grand winners at Grand Rapids Coliseum show. Choice breeding stock. Prices reasonable. **O.W. Browning, R. 2, Portland, Mich.**

**Nested Strain S. C. W. Leghorns.** Heavy winter layers, snow white, high on shank, pelvic bones thin and well spread. Baby chicks and hatching. Have few choice cockerels and pullets for sale, shipped on approval. **Leonard Sumner, R. 2, Box 97, Romulus, Mich.**

## WE BREED

**Park's Strain Barred Rocks, Barron Strain White Leghorns.** The two greatest strains of utility poultry in America. Baby chicks for early delivery should be ordered soon. Let us quote you our price on your requirements. Pullets, hens and males at reasonable prices. Bred in the north for northern conditions. **PINE BAY POULTRY FARM, Holland, Mich.**

**WHITE WYANDOTTES** 207 egg average. Cockerels \$3.00. Pens \$15.00 to \$25.00. Eggs \$2.00 per 15. **FRANK DE LONG, R. 3, Three Rivers, Mich.**

**5 to 6 lbs.** English W. Leghorns. Larger hens, better winter layers. Free catalog describes them, tells a new way to cull hens, feeding methods, how to make a mash hopper that won't waste feed or clog, and other information. **A. Wauchek, Gobleville, Mich.**

**White Orpingtons.** White Leghorns and R. I. Reds, heavy laying strains. Eggs and cockerels for sale. **KINSELE'S POULTRY FARM, Berg and 10 mile roads, Southfield, Mich.**

**White Wyandotte Cockerels** \$5. Bred from established heavy laying strain. 80% average egg yield all winter. **W. A. Blanding, R. 1, Greenville, Mich.**

**MAMMOTH BRONZE TURKEYS** Choicest breeding. Bird Bros. stock for foundation. Great size, splendid color, good markings. Healthy, thrifty birds for sale. **Wesley Hile, Ionia, Mich.**

**TURKEYS,** Michigan's Best Giant Bronze. Splendid pure bred birds. Great in size, fine in color. **N. EVALYN RAMSDELL, Ionia, Mich.**

**Giant Bronze Turkeys** Copper Bronze strain. Young toms. Large type. Splendid color. Fancy and utility stock. Write for prices. **Mrs. Perry Stebbins, Saranac, Mich.**

**Bourbon Red Turkeys.** Evans strains. Large well priced. **CHAS. A. BEATTY, R. 2, Milford, Mich.**

**White Holland Turkeys.** White African Guinea. Toulouse Geese. Stamped addressed envelope brings prompt reply. **Alden Whitcomb, Byron Center, Mich.**

**W. Chinese** goose eggs 40c each. Pekin duck \$1.50 for 8 R. C. Br. Leghorn \$1.50 for 15. **MRS. CLAUDIA BETTS, Hillsdale, Mich.**

**FOR SALE** Fine Gray African Geese at \$5.00 each. **ED. MILLS, Lakeview, Mich.**



## BREEDERS' DIRECTORY

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



## ACHIEVEMENT

The reward of pure breeding; the accomplishment of quality. Success has again contributed more laurels to the already remarkable record of

## Imp. Edgar of Dalmeny

## The Sire Supreme

At the International Live Stock Exposition, where gathers each year the elite of North American Cattle to compete for the coveted awards, five more honors have been bestowed upon the "get" of Edgar of Dalmeny. You too may share these honors. A bull by this world famous sire will prove a most valuable asset to your herd.

Write us today.

## WILDWOOD FARMS

## ORION, MICHIGAN

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

REGISTERED Aberdeen-Angus. Ten heifers, six bulls from eight to fourteen months. Best of breeding, the growthy kind that make good. Reasonable. Inquire F. J. WILBER, Olio, Mich.

**FOR SALE** Pure Breed Aberdeen Angus Cattle. Cows, Bulls and 2 and 3 year old Heifers. ANDREW EITEL, Vermontville, Mich.

## Registered Guernseys

We have a special proposition on your Bull for next year that will interest you now. J. M. WILLIAMS, North Adams, Mich.

**GUERNSEYS** Accredited Herd. 4 bulls sold in last month. Bull calves under 4 months old. Grandsons of ex-worlds champion A. A. cow and out of A. R. dams. Satisfaction guaranteed. G. W. and H. G. Ray, Albion, Mich.

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

**For Sale** Register Guernsey bull calves out of A. R. dam, \$40.00 each if taken soon. JOHN EBELS, R. 2, Holland, Mich.

**For Sale** Reg. Guernsey Cows or heifers, prices right. GEO. M. CRAWFORD, Holton, Mich.

## Grandsons of King Of The Pontiacs Ready for Service

## From 27 to 32-Lb. Dams

Sire:--King of the Pontiac Segs No. 169124 who is by King of the Pontiacs and from Hillsdale Segs, a 33 lb. daughter of King Segs.

No. 1 Dam:--32 lbs. butter and 620 lbs. milk in 7 days. No. 2 Dam:--28 lbs. butter and 30 day record of 118 lbs. as Junior four year old.

No. 3 Dam:--Granddaughter of Belle Korndyke, 2.77 lbs. butter and 640 lbs. milk in 7 days.

No. 4 Dam:--A great cow, 765 lbs. of milk and 28 lbs. butter in 7 days.

Other bulls out of good A. R. O. dams, with records from 18 to 20 lbs. butter as Junior 2 and 3 year old. All nicely marked and good individuals. Herd under Federal Supervision. CALL AND SEE THEM. For pedigree and information write Percy Nye, Mgr.

## Priced Right for Quick Sale

James B. Jones Farms, Romeo, Mich.

## HERE IS A GOOD ONE

BORN JUNE 2nd 1920 by MAPLECREST DEKOL HENGELVELD whose three sisters have each produced over 1200 lbs. of butter in a year. TWO of them former WORLD CHAMPIONS. Calf's dam by an own brother of a 1248 lb. cow. Write for pedigree. F. B. LAY, Kalamazoo, Mich.

## The Traverse Herd

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

TRAVERSE CITY STATE HOSPITAL Traverse City, Mich.

## "Top Notch" Holsteins

A Fine Purchase For Some Good Breeder. Bull born Sept. 21, 1920, from a good A. R. O. daughter of a cow that produced 18,998 lbs. milk and 750.32 lbs. butter in one year, and is from a son of a 30 lb. cow that produced a 31 lb. cow, who in turn produced a 31 lb. cow.

His 6 nearest dams average 26 lbs. butter in 7 days. Handsomely marked in solid colors--a little more black than white. A good individual. Price \$125.00 f. o. b. Howell.

McPHERSON FARMS CO., HOWELL, MICH. All herds under U. S. Supervision.

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

**FOR SALE** 4 Holstein Bull Calves at Monroe Co. Farm, Monroe, Mich. All registered and sired by Brookside Waldorf Inks Prince Red Book 328-157.

Reg. Holstein Friesian bulls sired by a gdsn of King of the Pontiac's, ages from six months to one year old, nicely marked and good individuals priced to move them to make room for winter calves. Herd under Federal and State supervision, haven't had a reactor in the herd. Henry S. Rohlf, R. 1, Akron, Mich.

## WINNWOOD HERD Registered Holsteins

It was through the daughters of Flint Maplecrest Boy that Sir Ormsby Skylark Burke Our Junior Herd Sire

produced the Junior Champion and Reserve Grand Champion Heifer, at the Michigan State Fair this year, in a class of 38. His get won first in Calf Herd, also first in get of sire, in a class of 13.

A son of either of these great bulls will help the individuality and production of your herd. We have bulls at dairymen's prices, and we also have bulls at the breeder's price, from dams with records up to 38 lbs. of butter in seven days, and 1168 lbs. of butter in one year.

Ask us about a real bull, a Maplecrest or an Ormsby.

JOHN H. WINN, Inc., Rochester, Mich.

## A BLUE RIBBON WINNER YOUNG BULL

On the 1921 Show Circuit For Sale at a low price. Out of an A. R. O. granddaughter of Pontiac Korn-dyke. Sired by our SENIOR SHOW BULL, Model King Segs Glista 32-37 lbs.

**GRAND RIVER STOCK FARMS,** Corey J. Spencer, Owner, 111 E. Main Street, Jackson, Michigan. Herd Under State and Federal Supervision

## State Holstein Sale Cancelled

Pauline Elwine No. 185091 had been consigned. Pauline has a record of near 29 lbs. butter and 618 lbs. milk in seven days. 2 A. R. O. daughters, she is soon due to freshen, she is extra large and a good individual. Herd under state supervision. Priced right for quick sale.

H. F. Lewis, Elsie, Mich.

**Holstein-Friesian** pure-bred bull calves, also good grade heifers; tuberculin tested herd. Prices are right. Larro Research Farm, Box A, North End, Detroit, Mich.

**\$500** buys 5 grade, well marked, heavy milking Holstein cows, soon fresh and one Reg. Bull one year old; sired by 29 lb. grandson of King of the Pontiacs; a few reg. cows, heifers and young bulls for sale. The Long Lane Stock Farm, Home of Michigan's Best Bull. E. A. ROHLFS, Akron, Mich.

**Bull Bargain**, \$100 gets a light colored bull ready for service born Apr. 11, 1920, from 21.51 lb. dam, and sire whose six nearest dams av. 33.34 lbs. butter 7 days. Herd under state and Federal supervision. Oscar Wallin, Wisconsin Farm, Unionville, Mich.

**Holstein** Friesian heifer and bull calves, purebred registered and high-grade. Price \$20 up. Splendid individuals and breeding. Write us your requirements. Browncroft Farms, McGraw, N. Y.

**Reg. Holstein** Bulls ready for service sired by a 42 lb. bull. Priced to sell, also a few heifers and calves. B. B. REAVY, Akron, Mich.

**Beef Producers!**  
Michigan Produces  
The World's Best Beef  
At The Lowest Cost.

Raise far better feeding cattle than you can buy. Grow Baby Beef when gains cost least in feed and labor. Avoid costly rail hauls with their shrink, bruises and loss.

**SOTHAM'S EARLIRIPE BEEF CONTRACT** Solves your problem--insures your success. A fair intelligent, satisfying system evolved from 37 years conscientious service to American Cattle Industry by three generations of Sothams. GET THE FACTS. Write now, or wire, Address

**T. F. B. SOTHAM & SON,** (Cattle Business Established 1895)

Phone 250 Saint Clair, Michigan

**HEREFORDS For Sale.** Bulls, cows and heifers. RALPH CALHOON, Bronson, Mich.

## Herefords

Repeaters, Beau Donalds, Fairfaxes, and Farmers represented in our herd. Repeater 173rd, a son of old Repeater, at head of herd. Both sexes and all ages for sale.

**ALLEN BROS.,** (Farm at Paw Paw, Mich.)

Office 616 So. West St., Kalamazoo, Mich.

## Jersey Thoroughbreds

Few cows and bull calves. Best breeding line. Guaranteed. Tuberculin tested twice a year. If you have no money will take bankable note. E. W. VASVARY, 509 Free Press Building, Detroit, Mich., Main 1267.

**Hill Haven Stock Farm** Shortage of feed compels me to sell a few reg. Jersey cows. Sired by grandson of Sophie 19th of Hood Farm. Also a few young bulls and bull calves out of above cows and sired by a line bred Flying Fox bull. Herd in process of accreditation. Prices reasonable. F. CHAPMAN, Vandalia, Mich.

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

**The Wildwood Farm** Jersey Cattle, Majesty strain. Herd on State accredited list. R. of M. testing constantly done. Bulls for sale. ALVIN BALDEN, Phone 143-5, Capac, Mich.

**Lillie Farmstead Jerseys** Bull calves from R. of M. cows. OOLON C. LILLIE, Coopersville, Mich.

**For Sale** Several registered Jersey Cattle. Belding Land & Improvement Co. Care of CHAS. WIGGINS, Belding, Mich.

## BIDWELL SHORTHORNS BUY A BULL

that will put weight on your dairy calves--the difference will soon pay for the bull. Now selling good Scotch and Scotch-topped yearlings, reasonably priced. We guarantee every animal to be a breeder. Federal Test. One hour from Toledo, Ohio, N. Y. C. R. R.

**BIDWELL STOCK FARM,** Box D, Tecumseh, Michigan

**Milking** Shorthorns, accredited herds, males and females, low prices. Davidson and Hall, Beland and Beland, Tecumseh, Mich.

## Richland Shorthorns

Notice:--Shorthorn Sale M. A. C. Jan. 13th '22. We shall contribute five Heifers and five Bulls. Sired by some of the leading Bulls of the Breed. Attend this Sale and buy cattle in keeping with the times. C. H. PRESCOTT & SONS, Tawas City, Mich.

## Francisco Farm Shorthorns and BIG TYPE POLAND CHINAS

Now offering:--Three bulls ready for service. Mastodon, Olansman, Emancipator blood in gilts bred for spring farrow. See them. POPE BROS. CO., Mt. Pleasant, Mich.

## The Maple's Shorthorns

Kirk Levington Lad, by imported Hartforth Welfare, in service. Bulls and heifers for sale. J. V. Wise, Gobleville, Mich.

**BUY SHORTHORNS** of Central Michigan Breeders' Association at farmers' prices. Write for sale list to M. E. Miller, Sec'y, Greenville, Mich.

**Shorthorns** at bargains. Cows and young bulls ready for use. Spring calves, either sex; also Poland China pigs. Robert Neve, Pierson, Mich.

**Milking** Shorthorns of best Bates breeding, bulls, cows and heifers for sale. E. H. KURTZ, Mason, Mich.

**SHORTHORNS.** Two 4 mo. old bull calves of White-Shall Sultan Strain and a few young heifers. Priced very reasonable. J. A. WILK & Son, Alma, Mich.

**Red Poll** Registered bull calf for sale. Prices right, fine quality. RUSSELL COTTLE, West Branch, Mich.

## HOGS

**EVERY'S BIG BERKSHIRES** Choice boars. Sows bred or open. Satisfaction guaranteed. W. H. EVERY, Manchester, Mich.

## Brookwater Duroc Jerseys

Bred Gilts for March and April farrow. Bred to Big Bone Giant Sensation, Panama Special 55th and Brookwater Demonstrator 26th. Write us for description and prices. Or come and see them.

**BROOKWATER FARM,** Ann Arbor, Mich. H. W. Mumford, Owner J. B. Andrews, Mgr.

**Duroc** Jerseys A few extra good fall boars, and a choice lot of spring boars of the heavy boned type popular blood line at reasonable prices. DROTT & BERNIS, Monroe, Mich.

**DUROC JERSEYS:** A few choice bred gilts for sale. OAREY U. EDMONDS, Hastings, Mich.

**Duroc Service Boars** \$20 to \$40. Bred sows pigs \$10 to \$15. All registered or eligible. We have one of the largest and best herds in state. Ample opportunity for selection. MICHIGANA FARM, Pavilion, Mich., Kalamazoo County.

**Pure-Bred** Duroc Jersey Hogs: we usually have good boars and sows of all ages for sale. Reasonable prices. Larro Research Farm, Box-A, North End, Detroit, Mich.

**DUROCS WITH QUALITY**  
Spring pigs by Walt's Orion, First Sr. Yearling  
Detroit, Jackson, Gd. Rapids and Saginaw 1919  
**Phillips Bros, Riga, Mich.**

**Durocs** Herd headed by Great King Orion Col. assisted by a good son of King Orion Fancy Jr. HARRY FOWLER, Sturgis, Mich.

## Duroc Jersey Swine

Breeding stock for sale at all times at reasonable prices. If in need of a high class boar, or sow any age write, or better, come to farm. Best of Blood line and we guarantee your satisfaction. Herd boars, Panama Special 11th and Home Farm Wonder. Booking order for fall pigs at \$15 each. Thos. Underhill & Son, Salem, Mich.

**DUROC SOWS** and gilts bred to Cherry King No. 169259 Son of the \$10,000 boar owned by Longview Farm, Le Summit, Mo. also young boars ready for service out of good sows. Apply THE JENNINGS FARM, Bailey, Mich.

**Woodlawn Farm** Duroc hogs are from select breeding stock, well mated for size, type and color. Herd boars, sows and pigs, will ship C.O.D. and furnish Reg. certificate. W. E. BARTLEY, Alma, Mich.

## DUROC JERSEYS

spring boars that will improve your hogs, of Orion Cherry King, Col., and Pathfinder breeding, at reasonable prices. Write us your wants. Bred sows and gilts all sold. W. O. TAYLOR, Milan, Mich.

**WEST View Duroc Farm** offers spring boars from Home Farm Tippy Orion and Pathfinder Prince, with big bone and type. Ready for service, sows, fall gilts and spring gilts with quality. Write or come and see them. ALBERT EBERSOLE, Plymouth, Mich.

**The One** you want. Reg. Duroc Jersey boar, of Brookwater stock, age 1 1/2 yr. wt. 600 lbs. large boned type. Sires large litters. The price is right. OLE MARTINSON, Northport, Mich.

**OAKWOOD Farm** Durocs are priced so that they can make good in the feed lot as well as in the breeding pen. They are the long, tall, growthy kind. RUSH BROS., Romeo, Mich.

**DUROC-JERSEYS** A few good Brood sows, E. D. HEYDENBERG, Wayland, Mich.

## BIG TYPE CHESTER WHITES

The prize winner kind from the best prize winner bloodlines. Early developers, ready for market at six months old. I have started more breeders on the road to success than any man living. I want to place one hog in each community to advertise my herd. Write for agency and my plan. G. S. BENJAMIN, R. F. D. 10, Portland, Mich.

**Chester Whites,** bred gilts and fall pigs of excellent quality and breeding. Satisfaction guaranteed. F. W. Alexander, Vassar, Mich.

## WINTER CARE OF THE BREEDING EWES.

(Continued from page 59). . . .

the yard is an excellent means of causing ewes to take exercise. When the ground is not covered with snow it is a good plan to allow the ewes the run of a pasture field. While the ewes will not obtain a great deal of feed from the pastures they enjoy roaming about and in so doing take a great deal of exercise that assists in keeping them in a healthy condition. Experienced flock owners know that exercise stimulates appetite, assists digestion, insures greater prepotency and stronger and more vigorous lambs at lambing time.

The ewes should not be allowed to become overfat or run down on flesh condition. Weak puny lambs and insufficient nourishment at lambing time are generally the results of improper feeding. The ideal winter roughage is good clover hay or alfalfa. Well-cured corn fodder is second in value. Bean pods are also excellent. Oat and barley straw may be fed once daily to help out. When I have plenty of clover hay I like to feed hay twice daily. I think clover hay saves enough grain to keep the ration cost at the minimum. Corn silage is an excellent succulent feed during the winter months. I have fed ensilage once or twice daily as a part of the roughage ration with the best results.

The grain ration should be light during the winter months. This ration may be compounded from two part oats, one part corn and a liberal amount of bran. When good clover hay is fed daily less grain is required, but at least one-fourth to one half pound should be allowed each ewe. The ewes at this time require food that will supply nourishment for the unborn lambs.

## Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Advice through this column is given free to our subscribers. Letters should state fully the history and symptoms of each case and give name and address of the writer. Initials only are published. When a reply by mail is requested the service becomes private practice and \$1 must be enclosed.

**Failure to Come in Heat.**—Our cow has failed to come in heat; she came fresh in May, 1921. Three years ago you prescribed for a similar case; the remedy did good work, but I have lost the formula. E. H., Beaverton, Mich. —The best remedy is Yohimboine hydrochloride, but it is very expensive. Give one dram of fluid extract of nuxvomica, two drams of fluid extract of capsicum and one ounce of powdered licorice in feed two or three times a day. Keep her warm and feed plenty of grain.

**Indigestion.**—I have a cow that was fresh seven weeks ago. About two weeks ago she broke into feeding room and ate about half a bushel of buckwheat grain and a little oil meal. She at once dropped from 45 pounds of milk per day to thirty pounds per day. She is now giving 32 to 34 pounds per day, but 34 pounds seems to be the limit. Her bowels have never failed to move quite regularly. She eats well and appears to be in pretty good health, but there seems to be a continual rumbling in her bowels (is this a symptom of indigestion)? I gave her a dose of salts a few days after eating the grain, which did not seem to do much good. I am feeding corn and oats ground, equal parts by weight, a little bran and a small amount of oil meal. I mix this feed with warm water and feed as a thick slop. For roughage I feed alfalfa hay and corn stover. C. M., Monroe, Mich. —Whenever an animal overeats, you should promptly give a full dose of cathartic medicine which will invariably prevent any serious future trouble. You were too late in giving the salts, that was the reason they failed to help her. Feed less cornmeal, more bran and roots. Give her one-half ounce of powdered gentian and two ounces of powdered wood charcoal in each feed of grain and bran, but don't wet it. Walk her a mile twice daily.





**Perfect—NOW**

"BOG SPAIN and Thoropin as big as a cabbage head removed—not a trace of it left; cured completely"—A. M. Gilbert, Martinsburg, W. Va. "Contracted Hoofs, Shoe Boli, Strained Tendons, Puffs, cured all with Save-The-Horse"—W. F. Wright, Avenel Park, N. Y.

"Save-The-Horse is a wonder—cured spavin with about 1/2 bottle—no sign of lameness now—worth double what I paid for him." Wm. Leigh, Box 38, Clanton, Man., Cal.

For over 23 years SAVE-THE-HORSE has the unrivaled record of curing when everything else fails. Cures while horse works.

**SAVE-THE-HORSE**

is guaranteed by Signed MONEY-BACK Contract to cure Ringbone, Thoropin, SPAIN or Shoulder, Knee, Ankle, Hoof or Tendon Diseases. Write today for FREE 36-page Save-The-Horse Book—on how to locate, understand and treat all forms of lameness; also sample of GUARANTEE and expert veterinary advice—all FREE.

**TROY CHEMICAL CO.**  
320 State Street Binghamton, N. Y.  
At Druggists and Dealers with Signed Contract or sent prepaid.

**GALLOWAY BREAKS PRICES ON ENGINES**

**\$34.90** 1 1/2 H.P.

Quantity production, new low prices on labor and material and sold direct from factory to you make these prices and enormous savings. Get in on these NEW, LOW prices now. Why wait another day when you can get the LATEST GALLOWAY, Down-to-the-Minute, Long-lived, economically operated, kerosene or gasoline engine at our NEW LOW PRICES, on the basis of producing and selling 10 units where we formerly sold one.

**THE W. M. GALLOWAY COMPANY**  
Box 185, Waterloo, Iowa

Write today for our NEW, LOW PRICE CIRCULAR. Prices are a good fair exchange for present prices of grain and live stock. Your dollars go twice as far. 30 days' trial. Satisfaction guaranteed. Cash or Easy payment.



**ABSORBINE**  
TRADE MARK REG. U. S. PAT. OFF.

Reduces Strained, Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Boils, Swellings; Stops Lameness and allays pain. Heals Sores, Cuts, Bruises, Boot Chafes. It is a **SAFE ANTISEPTIC AND GERMICIDE**.

Does not blister or remove the hair and horse can be worked. Pleasant to use. \$2.50 a bottle, delivered. Describe your case for special instructions and Book 5 R free. **ABSORBINE, JR.**, antiseptic liniment for mankind, reduces Strains, Painful, Knotted, Swollen Veins. Concentrated—only a few drops required at an application. Price \$1.25 per bottle at dealers or delivered. **W. F. YOUNG, INC.**, 268 Temple St., Springfield, Mass.

**BARREN COWS** are the results of **CONTAGIOUS ABORTION**.

Prevent this by using **ABORNO**. Easily administered by hypodermic syringe. Kills abortion germs quickly without harming cow. Write for booklet with letters from users and full details of Money-Back Guarantee. **ABORNO LABORATORY**, 44 Jeff St., Lancaster, Wis.


**"More Potatoes"**

From ground planted secured by use of The **KEYSTONE POTATO PLANTER** than by any other method of planting. Work perfectly accurate. A simple, strong, durable machine. Write for CATALOG, price, etc. **A. J. PLATT, MFR.**, BOX J, STERLING, ILL.



**FORD FREE NOT A PRIZE CONTEST**

No Selling—No Canvassing. Well known Company will give Ford Cars free in return for small service. Will not interfere with regular work. Offer open only to men with land to clear. Give size of farm, number of acres to be cleared, and banker's name. Only one man in each locality. Write today to **P. O. Box 303 Escanaba, Mich.**



**HOGS**

**O. I. C. HOGS**

all ages sired by Callaway Edd, 1918 world's grand champ, boar and O. C. Schoolmaster 1919 world's grand champion, also Wonder Big Type and Giant Buster. Write your wants, all stock shipped on approval. **GRANDELL'S PRIZE HOGS**, Cass City, Mich.

**O. I. C's.** Aug. and Sept. pigs and bred gilts for Mar. farrow. **CLOVER LEAF STOCK FARM**, Monroe, Mich.

**O. I. C's.** April and May boars at reasonable prices. Weber Bros., 10 Mt. and Ridge Rds., Royal Oak, Mich.

## ORGANIZED TO DISTRIBUTE MILK.

(Continued from page 64).

the electrical method of pasteurizing and the very latest market milk machinery. This committee is taking two men from the Michigan Agricultural College with them. One man being a bacteriologist and the other a man who is well posted on dairy plant equipment.

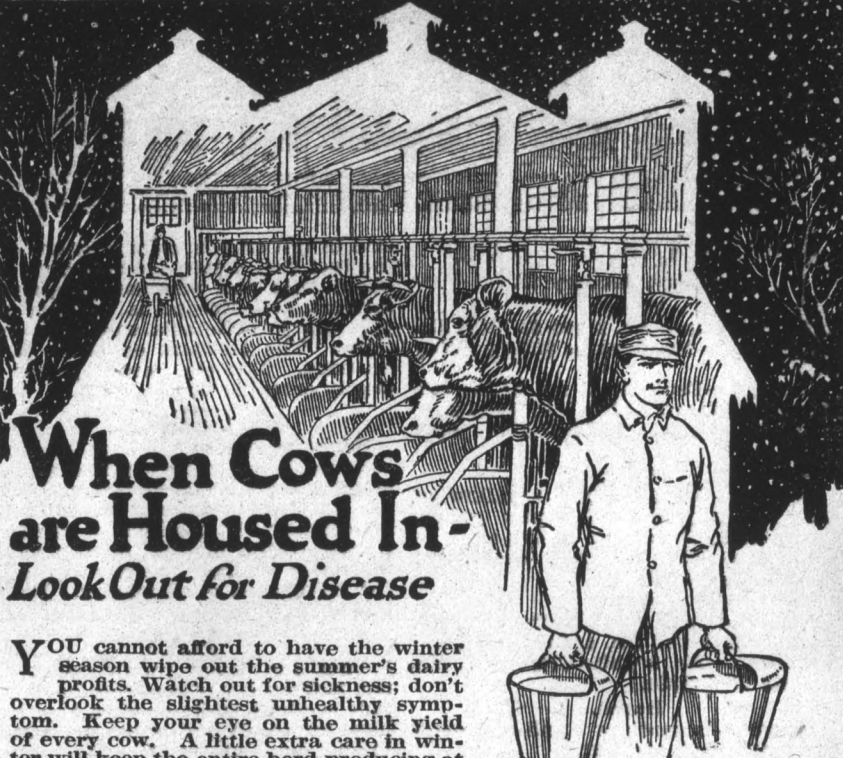
This organization is to be congratulated upon the personnel of their board of directors, five of them being farmers living on their farms and four men owning large dairy farms and living in the city of Lansing. Among these directors are such business men and farm owners as Samuel Young, representative, Edward Ramsey, Mr. B. S. Gier, the head of the Gier Press Steel Company, and a leading financier of Lansing, and Mr. Richard Scott, general manager of the Reo Automobile Company. These men are devoting considerable time to the building of this organization and will continue to lend their business experience to aid in the operation of this plant after the distributing of milk is started to its customers.

This association is being organized on one of the best cooperative plans possible. They have compelled each man who wishes to buy stock and furnish milk to the company to purchase one share of stock at \$40 for every cow he wishes to milk. Thus one share of stock carries with it the privilege of disposing of the milk of one cow to this organization. The largest amount of stock any farmer can buy is \$2,000 worth, and the minimum is \$80. Any man who has purchased two shares has one vote, the same as the man who has purchased \$2,000 worth of stock. The money invested by the stockholders of this organization carries a six per cent interest rate or dividend. All other moneys above the actual cost of operating the plant will be returned to the producer in the price paid for his milk. This plan is the only one which is purely cooperative on a stock basis. There is an unfair element in a company operating on a straight stock plan where all profits or surplus are paid to the stockholders on a basis of the amount of stock they own.

The writer feels that farmers going into a company for the sale of their produce should always insist on the cooperative plan, otherwise the farmer who produces the largest amount of milk and contributes the most business to the organization from which they make their surplus might own a very small amount of stock and he would therefore receive only dividends on the amount of stock which he owns. On the other hand, some stockholder, owning large blocks of stock, may not produce anything for the organization, but would get the lion's share of what his neighbors' produce would provide. It seems that there always is a very unfair element in straight stock companies for farmers' organizations.

This Lansing organization has for its aim the best milk supply that is possible to be had by any milk organization. They expect to build a hard surface, while tile building, which is the latest thing in sanitary construction. Their machinery will be of the type that will insure milk with no active bacteria in it and a product that will satisfy their customers. This company has realized that farmers' organizations can only exist and flourish upon a system of quality production and square dealing, knowing that the future of any farmers' organization lies upon these two elements. These men are heading the organization in the right direction.

A site for their milk plan will be selected in the very near future and building operations commenced, with distribution of milk to be started as early as possible next spring.



**When Cows are Housed In—Look Out for Disease**

**YOU** cannot afford to have the winter season wipe out the summer's dairy profits. Watch out for sickness; don't overlook the slightest unhealthy symptom. Keep your eye on the milk yield of every cow. A little extra care in winter will keep the entire herd producing at a profit the year 'round.

Cows in barn—with very little green feed, much roughage and concentrates—need every aid possible to keep assimilation and digestion strong. Let these functions lag and the milk yield falls. The cow becomes an easy prey to serious disease.

Kow-Kare is the winter cow-health guardian in the best dairies because it supplies just the assistance needed to tone up the digestion and assimilation and keep the genital organs healthy. Besides its wide use in treating Barrenness, Abortion, Retained Afterbirth, Scouring, Bunches, Milk Fever, Loss of Appetite, etc., Kow-Kare is more and more being used during the winter months as an aid to general health and increased production. It acts directly on the milk-making organs, keeping them normal and healthy.

Kow-Kare costs so little and means so much to cow owners that no dairy should be without a constant supply. General stores, feed dealers and druggists can supply you at the new reduced prices of 65c and \$1.25.

Write for our free book on cow ailments, "The Home Cow Doctor." Make this a dairy-profit winter.

**DAIRY ASSOCIATION CO., INC.**  
Lyndonville, Vt.

**O. I. C. BOARS**

J. CARL JEWETT, shipped C. O. D. Mason, Mich.

**O. I. C.** Spring boars and gilts no akin. We breed and own the Grand Champion Boar at West Mich. State Fair. We ship C. O. D. and Reg. Free. **GEO. M. WELTON & SON**, Alto, Mich.

**O. I. C's, Boars and Gilts** from April and May farrow. Size and quality guaranteed. Ship C. O. D. Elm Front Stock Farm. **WILL THORMAN**, Dryden, Mich.

**O. I. C. & Chester White Swine** STRICTLY BIG TYPE WITH QUALITY. Have a few good service boars left that I will sell CHEAP. Also a fine lot of Gilts, bred for Spring farrow. They are of our Prize winning blood lines and priced to sell. **Newman's Stock Farm**, R. 4, Marlette, Mich.

**O. I. C's.** 4 last spring boars and 15 gilts, wt. 250 to 300. Also last fall pigs, good thrifty stock Registered free. 1/2 mile west of Depot. Citiz. Phone. **OTTO B. SCHULZE**, Nashville, Mich.

**O. I. C's.** choice gilts bred for March and April farrow. **A. J. BARKER & SON**, Belmont, Mich.

**For Sale.** O. I. C. Gilts bred for March and April farrow (at a reasonable price) **H. W. MANN**, Danville, Mich.

**O. I. C's** Apr. and Aug. boars all sold, one spring and one July gilt left, two Sept. male pigs. Milo H. Peterson, R. 2, Ionia, Mich. "Elmhurst Farm."

**O. I. C's** A few bred gilts and fall pigs at bargain prices. **C. J. THOMPSON**, Rockford, Mich.

**LARGE TYPE P. C.**

Largest herd of individuals in Mich. Come and see, compare, and be convinced, expenses paid if not as represented. Boars and early gilts all sold. A few late gilts, will sell open or held and bred for late farrow. **W. E. LIVINGSTON**, Parma, Mich.

**LEONARD'S** Big Type P. C. Herd headed by Leonard's Liberator 438,235, the tallest, longest and heaviest boned pig for his age in Mich. Call or write, stock in season. Fall pigs at Bargain Prices. **E. R. LEONARD**, St. Louis, Mich.

**Big Type Poland China** fall pigs either sex, sired by Clansman Buster and by Hoyer's Giant. Also gilts bred for spring farrow to Hoyer's Liberator. Priced to sell, satisfaction guaranteed. **DORUS HOVER**, Akron, Mich.

**Big Type P. C.** some very choice boars double immune, out 1100 lb. sire and mammoth sows from Iowa's greatest herds, E. J. Mathewson, Burr Oak, Mich.

**L.T.P.C. \$15, \$20 & \$25**

We have a fine lot of fall pigs sired by Harts Black Price and Right Kind Clan. **HART, FULCHER and CLINE**, address F. T. Hart, St. Louis, Mich.

**Large Type Poland Chinas**

Spring boars all sold. Fall pigs at bargain prices. Bred gilts held for public sale. **A. A. FELDKAMP**, R. 2, Manchester, Mich.

**Fire Sale** is a place for bargains. We can under-sell any fire sale on earth. We are making a special price on Big Type Poland China Boars Sired in the purple. We can furnish just what you want. Over 100 head on hand. **Bell Phone. JNO. C. BUTLER**, Portland, Mich.

**L. S. P. C.** 1 yearling herd boar as good as you ever saw, spring boars by Nov. 1st. You can't beat the price nor the breeding. **H. O. SWARTZ**, Schoolcraft, Mich.

**Big type Poland China boars and gilts of April farrow.** Also one yearling boar that is hard to beat. Priced right. **CLYDE FISHER**, R. 3, St. Louis, Mich.

**BIG TYPE** Poland Chinas, leading strains at lowest prices. Both sex, all ages, and bred sows and gilts. **G. A. BAUMGARDNER**, R. 2, Middleville, Mich.

**L.T.P.C.** Model spring boars and gilts now ready to ship. Something good at a right price. **W. J. HAGELSHAW**, Augusta, Mich.

**Big type P. C. Spring boars and choice fall pigs, either sex.** Sired by Big Bob Mastodon. Priced low guaranteed. **C. E. GARNANT**, Eaton Rapids, Mich.

**Poland** China gilts sired by a 900 lb. two years old and bred to a son of Mich. 1921 Grand Champion. **ROBERT MARTIN**, R. 2, Woodland, Mich.

**For Sale** large type Poland China pigs 10 weeks old, must sell to make room for others, inquire **JOHN LIST**, Mt. Pleasant, Mich.

**Hampshires** Bred gilts now ready to ship with fall boar pig not akin. **JOHN W. SNYDER**, R. 4, St. Johns, Mich.

**YORKSHIRE BOARS** ready for service. **WATERMAN & WATERMAN**, Packard Rd., Ann Arbor, Mich.

**SHEEP**

**A Real Bargain at Kope Kon Farms**

We offer 40 big healthy yearling Shropshire and Hampshire Rams all registered at \$25.00 each. Come or write while the picking is good. **S. L. WING**, Coldwater, Mich.

**Registered Shropshire Rams** Priced to sell. **Dan Bocher**, R. 4, Evart, Mich.

**Reg. Shropshire Rams** and ewes all ages. Quality and price are right. Will ship on approval. **H. F. Mouser**, R. 6, Ithaca, Mich.

**Ten Aged Registered** Delaine ewes and ten ewe lambs for sale. **CALHOON BROS.**, Bronson, Mich.

**Straight Brook Farm** offers real bargains in bred ewes all ages, in lamb by prize winning rams. **A. M. WELCH & SONS**, J. B. Welch, Manager, R. No. 1, Ionia, Mich.

**HORSES**

**FOR SALE** 2 Reg. Percheron Stallions and a pair of Grade Draft Colts. **CHAS. BRAY**, Okemos, Mich.



# LATEST MARKET REPORTS

## GRAIN QUOTATIONS

Tuesday, January 17.

### Wheat.

Detroit.—Cash No. 2 red \$1.19½; No. 2 mixed and No. 2 white \$1.24½; May \$1.16½.

Chicago.—Cash No. 2 red \$1.19; No. 3 dark, northern \$1.25; May \$1.11½.

Toledo.—Cash \$1.20@1.22; May \$1.21.

### Corn.

Detroit.—Old Cash No. 2 yellow at 56c; No. 3 yellow 55c; new yellow Cash No. 3, 51½c; No. 4, 49½c.

Chicago.—No. 2 mixed 48@48½c; No. 2 yellow 48@48½c.

### Oats.

Detroit.—Cash No. 2 white 42c; No. 3 white 39@40c; No. 4, 34½@37½c.

Chicago.—No. 2 white 37@38½c; No. 3 white 33½@35c.

### Beans.

Detroit.—Immediate and prompt shipment \$4.40 per cwt.

Chicago.—Choice to fancy hand-picked Michigan beans \$4.70@5; red kidney beans \$6@7.

New York.—The market is steady. Choice pea at \$5@5.15; do medium \$5; red kidney \$6.50.

### Rye.

Detroit.—Cash No. 2, 84c.

Chicago.—78c.

### Seeds.

Detroit.—Prime red clover, cash at \$14; alsike \$11.65; timothy \$3.30.

Toledo.—Prime red clover, cash at \$13.90; alsike \$11.60; timothy \$3.25.

### Hay.

Detroit.—No. 1 timothy at \$19@20; standard and light mixed at \$18@19; No. 2 timothy \$17@18; No. 1 clover mixed \$16@17; rye straw \$13.50@14; wheat and oat straw \$12@13.50 per ton in carlots.

### Feeds.

Detroit.—Bran \$30; standard middlings at \$30; fine middlings at \$30; cracked corn \$27.50; coarse cornmeal \$25; chop \$22.50 per ton in 100-lb. sacks.

## WHEAT

Although the demand for wheat from mills failed to show the urgency expected after the first of the year there is an apparent increase in the quantity which mills are absorbing. With mills buying more extensively, a scarcity of choice milling wheat has become apparent at Minneapolis although low grades are abundant. Receipts are small, only half as large as in the same period a year ago. In bond and the commercial visible supply in the United States and Canada, consists of 100,000,000 bushels of wheat in sight while about 25,000,000 bushels more are held at mills and in country elevators. This quantity is so large that advances in price are soon checked by an increase in the quantity offered for sale even though primary receipts are not large.

## CORN

The movement of corn to primary markets increased sharply last week and is averaging over 1,600,000 bushels per day. The industrial demand has been gratifying with Germany and Holland free buyers of starch. Demand from the eastern consuming sections has broadened and nearly 7,000,000 bushels already have been bought for Russian relief. The advance in ocean freight rates has retarded the export sales to other European countries but moderate quantities are being taken and day to day clearances are heavy. The visible supply of corn is increasing from week to week but this is normal during the winter months. Producers in Iowa and Illinois are holding for around forty cents or above, although some of them are willing to let go at lower figures.

## OATS

Although the domestic demand for oats has improved noticeably and the visible supply is beginning to decrease the latter is still entirely too large to allow the oats market to chart a course independent of corn. Primary receipts are holding up better than anticipated. Sales to the south which have grown materially are being filled mostly from interior points so that country elevator stocks are being reduced. Later on, the supply at terminals will be drawn upon more extensively.

## SEEDS

No pronounced change in red clover seed values is in prospect as the small

size of the crop is counterbalanced by the fact that prices are now high compared with the purchasing power of farmers and Europe is sending seed this way in spite of a small crop over there. The discount on alsike is decreasing. Timothy seed prices are slowly creeping upward.

## FEEDS

Slight weakness has been present in feed markets although prices are only slightly lower. The movement of flour has increased to some extent which undermines the position of millfeeds. Larger cotton oil mill operations and inactivity of exporters have weakened the cottonseed meal market. No radical changes in values are expected.

## HAY

Thus far, lower freight rates have not increased hay loadings in the surplus sections while demand appears to have improved and prices are actually higher than late in December at most of the distributing markets in the east and middle west. Heavier country loadings for Chicago have unsettled that market.

## POULTRY AND EGGS

The decline in the egg market reached its climax early last week when fresh eggs were quoted below thirty cents at Chicago. Drastic declines occurred at other points. Another spell of cold weather turned the market sharply upward again but its future course is uncertain. Cheap feeds and favorable weather undoubtedly have stimulated production and it is possible that it is being overdone. Consumption is heavy. In spite of heavy fresh receipts during the month, cold storage holdings decreased 1,499,000 cases in December compared with a five-year average December decrease of 1,484,000 cases.

## BUTTER

The slump in butter markets was stopped, but prices finished lower than a week ago. Arrivals of fresh butter were liberal, but buyers' stocks had been depleted by no buying during the extended decline. Buyers became anx-

ious to rebuild their reserves and demand for all grades improved. The surplus of fancy butter entirely disappeared. Whether the recent break has fully discounted all the bearish factors is a question. Prices of fresh 92-score butter were: Chicago 34½c; New York 37½c. In Detroit fresh creamery is quoted at 31@32c.

## BEANS

Wholesale growers increased their purchases of beans slightly after the first of the year. The Russian Relief organization also is buying a small quantity. Since producers are not selling freely, the increased demand has tightened up the market which is now quoted at \$4.45 per 100 pounds f. o. b. Michigan shipping points for choice hand-picked stock. Colored beans have been persistently weak and are quoted around \$5.50 and in some cases down to \$5.35. The outlook is for higher prices on white beans and a quieter market on kidney beans. Speculative buying is noted in California which is quoted around five cents a pound. The Michigan beans are half a cent cheaper than any other section and demand from all quarters except where freight rates are prohibitive is centered upon that state.

## POTATOES

Shipments from the potato producing sections have increased since the first of the year. Prices held up and even advanced for a time but finally weakened. Northern round whites are quoted at \$1.70@1.90 f. o. b. Consuming markets are quoted at a range of \$1.95@2.35 for sacked round whites, eastern cities being about 25c higher than Chicago. Seed potatoes are quoted at \$3 per 100 pounds for Bliss, Triumphs, f. o. b. Minnesota points.

## WOOL

The advance in the wool market is still unchecked. Sales in London, Antwerp and various points in Australia and New Zealand were at higher prices than the preceding auctions so that the loss early in December has been recovered. Some American buying has been in evidence especially at London.

In this country manufacturers have been obliged to buy at the advance in order to fill out their requirements and talk of scarcity is becoming more prevalent. Latest reports points to a permanent tariff of thirty cents per clean pound. Woolen goods trade sentiment is not optimistic but lower prices upon cloth are not anticipated. The Boston market is quoted as follows: Michigan and New York fleeces, delaine unwashed 40@42c; fine unwashed 31@33c; half-blood unwashed 37@38c; three-eighth blood unwashed 35c; quarter-blood unwashed 33@35c.

## APPLES

Apple markets held nearly steady, with Baldwins at \$6.50@8 per barrel wholesale in city markets. Northwestern extra fancy Jonathans are quoted at \$2.25@3 per box in New York and Chicago. Shipments from producing sections have increased.

## GRAND RAPIDS

The potato market shows signs of unsteadiness. Greenville buyers yesterday reduced bids, making \$1.50 as the highest. Reports of warm weather in the west and heavy Colorado shipments were among the causes. The demand continues fair.

The butter market is steady with supplies well cleaned up and demand stimulated by attractive prices. The egg market is also firm with bids up one and two cents.

Local buyers have raised wool bids slightly on receipt of improved inquiry. The bean trade reports a fair demand. Few deliveries are being made and bids have remained stationary for some time.

Prices to farmers are as follows: Potatoes \$1@1.25 per bu; cabbage white 2½@3c per lb; carrots \$1.25 per bu; celery 15@50c bunch; beets \$1.50 per bu; dry onions \$2.75@3 per bu; Hubbard squash 1c per lb; apples at \$2.75@4; hay \$18@20 per ton.

Live Poultry.—Chickens springs 23c per lb; hens 23c; light 16c.

Dairy Butter.—No. 1, 26@28c per lb; No. 2, 22@24c; packing stock 14@15c.

Eggs.—Fresh 34c per dozen.

## DETROIT CITY MARKET

Consumers are taking butter freely and the supply is liberal. Dealers expect the market to continue easy as offerings are due to increase. Demand for fresh eggs is active and the market is well supplied. Buyers were not bothering with poultry and the market was well loaded up with stock carried over from last week. The tone is weak and outlook not bright for the near future. Fruits and vegetables are steady to firm and in fair demand.

Apples.—Greenings 3@3.50; Baldwins \$2.75@3; Spy \$3@4; Jonathan \$3@3.25; western, boxes \$2.50@3.50.

Cabbage.—\$2@2.25 per bu. Potatoes.—Michigan \$3.50@3.75 per 150-lb sack.

Celery.—Michigan 40@50c per doz. and \$1.25@1.50 per box.

Onions.—Eastern \$7@7.25 per 100-lb sack.

Live Poultry.—Best spring chickens 25c; Leghorn springs 20c; large fat hens 27c; medium hens 25c; small hens 18@20c; old roosters 15c; geese 18@20c; ducks 28c; turkeys 30@35c per pound.

## TO FORM PRODUCE EXCHANGE.

ONE hundred farmers, representatives of six counties, met with the Detroit Board of Commerce to discuss the formation of a produce exchange organization.

It is planned to organize this exchange on a stock basis with a capital stock of \$300,000 stock issue. The plan is to run warehouses and cold storage plants necessary for keeping surplus products and to get produce direct from farmers and sell to retailers. The purpose is to simplify the methods of handling produce with benefits to producer and consumer. Much of the stock will be held by farmers.

Mr. C. A. Bingham, head of the agricultural department of the Board of Commerce, and former secretary of the State Farm Bureau, has spent much time in the development of this plan. Ex-Governor F. M. Warner and W. P. Hartman, of the food and markets division of the State Department of Agriculture, gave talks at this meeting on various phases of the plan.

## Live Stock Market Service

Wednesday, January 18.

### DETROIT

#### Cattle.

Receipts 593. Market opens steady, closing slow.

Best heavy steers	.....	\$ 6.50@ 7.50
Best handy wt bu steers	.....	6.75@ 8.00
Mixed steers and heifers	.....	6.00@ 6.50
Handy light butchers	.....	5.25@ 6.00
Light butchers	.....	4.50@ 5.00
Best cows	.....	4.75@ 5.50
Butcher cows	.....	4.00@ 4.50
Common cows	.....	3.00@ 3.50
Canners	.....	2.00@ 2.75
Best light weight bulls	.....	4.75@ 5.75
Bologna bulls	.....	4.00@ 4.50
Stock bulls	.....	3.50@ 4.25
Feeders	.....	5.50@ 6.00
Stockers	.....	4.25@ 5.25
Milkers and springers	.....	40@ 75

#### Veal Calves.

Receipts 574. Market active and 50c higher.

Best	.....	\$12.50@13.00
Others	.....	\$ 4.50@11.00

#### Hogs.

Receipts 1,969. Market steady to 10c higher.

Mixed hogs	.....	\$8.50
Pigs	.....	8.75
Heavies	.....	7.25

#### Sheep and Lambs.

Receipts 1,416. Market is steady to 25c higher.

Best lambs	.....	\$13.00@13.25
Fair lambs	.....	9.75@ 11.00
Light to common	.....	7.50@ 8.75
Fair to good sheep	.....	5.00@ 6.50
Culls and common	.....	1.50@ 3.00

### CHICAGO

#### Hogs.

Estimated receipts today are 17,000; holdover 10,309. Market fairly active, steady to 10c higher, mostly steady. Bulk of sales \$7.75@8.25; tops \$8.75 early; heavy 250 lbs up \$7.75@8; medium 200 to 250 lbs \$7.90@8.30; light

150 to 200 lbs \$8.25@8.60; light lights 130 to 150 lbs \$8.25@8.60; heavy packing sows 250 lbs up smooth \$6.60@7.35; packing sows 200 lbs up rough \$6.25@6.75; pigs 130 lbs down \$8@8.60.

#### Cattle.

Estimated receipts today are 10,000. Market slow and steady. Beef steers medium and heavy weight 1100 lbs up choice and prime \$9@10; do medium and good \$7@9.10; do common \$6.15@7; light weight 1100 lbs down good and choice \$8.15@10; do common and medium \$5.85@8.15; butcher cattle heifers \$4.15@8; cows \$3.60@6; bulls bologna and beef \$4@6; canners and cutters cows and heifers \$2.50@3.60; do canner steers \$3.25@4.25; veal calves light and handyweight \$7@9.75; feeder steers \$5.35@7; stocker steers \$4.50@6.85; stocker cows and heifers at \$3@5.25.

#### Sheep and Lambs.

Estimated receipts today are 18,000. Market steady. Lambs 84 lbs down \$11.75@13; do culls and common \$9.25@11.50; spring lambs at \$9.50@11.75; ewes medium \$5@7.75; ewes cull and common \$2.75@4.75; yearling wethers medium, good and choice at \$10.25@12.50.

### BUFFALO

#### Cattle.

Receipts 10 cars. Market is slow. No other shipping steers are offered; quoted at \$7.25@8.25; butchers at \$7.25@8.25; yearlings \$9@10; heifers \$5@7.50; cows \$2.25@5.50; bulls \$3.50@5.25; few at \$6; stockers and feeders \$5@6; fresh cows and springs at \$40@125. Calves at \$13.50.

#### Hogs.

Receipts 30 cars. Market is higher. Heavy \$8@8.25; mixed \$8; yorkers at \$8.75@9; light do and pigs at \$8.75@9.

#### Sheep and Lambs.

Receipts five cars. Market steady. Lambs \$13.65; yearlings \$10@11.50; wethers \$7.25@7.50; ewes \$6.50.



**WITTE LOG SAWS**

**\$75.00** New Price For Short Time Only

**Our Biggest and Best Log Saw** DIRECT TO YOU

This low cash price easily saves you \$15 to \$50. Comes complete—ready to use. Big surplus engine—all the power you need. Lever Control. Geared outfit. Latest improved WITTE. Tree Saw Attachment at small cost extra. Sold on Lifetime Guarantee—Cash or Terms. Write at once for catalog, or wire order from this advertisement. Immediate Shipment.

**WITTE ENGINE WORKS,**  
2197 Oakland Avenue, KANSAS CITY, MO.  
2197 Empire Building, PITTSBURGH, PA.

**New 300 Candle Power Lamp**

**Make \$60 to \$100 a Week**

Introducing this wonderful new lamp. Gives soft, brilliant light; restful to eyes; ideal illumination. Burns Kerosene or Gasoline. Clean, odorless, economical. Burns 96% air, 4% fuel. Absolutely safe. Lights with match. 800 times brighter than wick lamps. Patented. Greatest improvement of age. Table lamps, hanging lamps, lanterns. Work all or spare time. You simply take orders. We deliver by Parcel Post and do collecting. Commissions paid same day you take orders. No experience necessary. Get started at once. Big season now on. Write today for catalog and special agents offer.

**THE DIAMOND LIGHT**

AGENTS FREE Outfit Offer

**THE AKRON LAMP CO.**  
392 Lamp Bldg., Akron, O.

**SEEDS** We Pay the Freight

Write today for big illustrated catalog of tested Supreme Brand Seeds.—Clover, Alfalfa, Hubam the wonder crop, Sweet Clover, Sudan, etc. Guaranteed hardy, Northern seed; strong in germination, big crop producers. Selected especially to resist drought and winter freezes. Graded, cleaned, thoroughbred seeds with stamina bred into them. Let us help you select your seeds as you select your brood sows,—for size and vitality. Supreme Quality seeds are subject to rigid State and U. S. Government tests. We pay the freight. Our big seed catalog will open your eyes. Not connected in any way with any other mail order seed house selling to farmers. Write TODAY. Dept. 34

**World Seed Company**  
123 W. Madison St., Chicago, Ill.

**Gasolarm \$2.50**

Do You Own A Ford or Chevrolet?

If so, did you ever run out of gas? Sure you did, just when you were in an awful hurry. But it will never happen again. They eliminate all worry and warn you when your gas is getting low. Send cash or money order and specify model and style car. Local agents write for our proposition.

**DYNAMIC SALES COMPANY**  
2631 Woodward Ave., Room 506  
Detroit, Mich.

**Roofing and Fencing** Galvanized or Lead Coated

Direct from Factory

First quality only. No seconds sold. Prime galvanized iron roofing sheets. Shingles, Spouting, Gutters, Siding, Etc. All roofing products and fittings. ONLY FACTORY IN THE WORLD MAKING ROOFING AND FENCING COATED WITH PURE LEAD.

Factory Prices. Freight Prepaid. Send for prices and samples.

**J. J. NORDMAN**  
Farmers' Bldg., Pittsburgh, Pa.

**KITSELMAN FENCE**

Get it From the Factory Direct

Sold on the Basis of Today's Cost

We pay the Freight and save you money under our Direct from Factory to Farm Selling Plan. Here is a man that Saved 24c a rod

Mr. C. F. McIndoo, Lyons, Ind. writes: "My fence arrived O. K. Like it fine. Saved 24c a rod by buying of you."

Our big Catalog shows 100 styles and heights and is yours for the asking. You can't afford to buy fence until you see this bargain book. Write for it today.

**KITSELMAN BROS.** Dep 4278 MUNCIE, IND.

**SWEET CLOVER** For several years I have specialized on raising sweet clover seed and selling direct to farmers. Am equipped with hulling and scarifying machine and my fields are kept free from noxious weeds. Will guarantee satisfaction or your money back. Have both white biennial and Hubam, the new annual. Write for prices: E. E. Basil, R. 3, Latty, O.

## STOCK MEN AT ANNUAL MEET.

(Continued from page 75).

your committee recommends that the secretary be instructed to send a letter to these gentlemen expressing the appreciation of this body for their untiring efforts, loyal support and wise counsel since the organization was started.

We also recommend that a suitable communication be sent to Mr. Comfort A. Tyler, who was recently injured in an interurban wreck.

We endorse the efficient work being done by the Bureau of Animal Industry of the Department of Agriculture and the federal authorities in the eradication of tuberculosis from Michigan cattle, and commend the action of the administrative board in ordering that funds for indemnity be drawn from the general fund for the continuation of this work.

Whereas, wool and sugar are the two great farm products of which the home supplies are insufficient in the United States, thus requiring large importations, and whereas the state of Michigan can increase the production of wool and sugar without dislocation of other industries:

We, therefore, ask for adequate protection which will allow this state's production to develop its maximum and aid in restoring industry and prosperity and we pledge our support to the Hon. James W. Fordney, chairman of the Ways and Means Committee of the House of Representatives in his efforts to secure protection to these farm products.

We ask congress to speedily enact the French-Capper bill compelling shoddy products to be labeled, which will enable the wearer of clothes to know whether his suit is of new wool or adulterated with shoddy.

## Officers for 1922.

The following is a list of officers of the various live stock and breed organizations of the state:

**Michigan Improved Live Stock Breeders' and Feeders' Association.**—President, H. H. Halladay, of Lansing; vice-president, Jacob DeGeus, Alicia; secretary, G. A. Brown, East Lansing; assistant secretary, W. E. J. Edwards, East Lansing; treasurer, I. K. Waystead, Osseo; executive committee, John Lessiter, Orion; Earl C. McCarty, Bad Axe; Alexander Minty, Ionia; W. E. Livingston, Parma; H. W. Norton, Jr., Lansing.

**Michigan Sheep Breeders' Association.**—President, J. N. McBride, Burton; secretary-treasurer, Don Williams, East Lansing.

**Michigan Shorthorn Breeders' Association.**—President, G. A. Prescott, Jr., Tawas City; secretary-treasurer, W. E. J. Edwards, East Lansing.

**Michigan Hereford Breeders' Association.**—President, Jay Harwood, of Ionia; secretary-treasurer, Earl C. McCarty, Bad Axe.

**Michigan Aberdeen-Angus Breeders' Association.**—President, Alex. Minty, Ionia; secretary-treasurer, Ward Hathaway, Ovid.

**Michigan Guernsey Cattle Club.**—President, F. C. Holbeck, Long Lake; secretary-treasurer, C. Faye Meyers, Grand Blanc.

**Michigan Red-Polled Breeders' Association.**—President, N. C. Herbison, of Birmingham; secretary-treasurer, R. Westbrook, Ionia.

**Michigan Jersey Cattle Club.**—President, H. F. Probert, Jackson; secretary-treasurer, David B. Miller, Eaton Rapids.

**Michigan Poland-China Breeders' Association.**—President, W. E. Livingston, Parma; secretary-treasurer, W. I. Wood, Birmingham.

**Michigan Swine Breeders' Association.**—President, Newton Barnhart, St. Johns; secretary-treasurer, Frank Haynes, Osseo.

**Michigan Duroc Jersey Breeders' Association.**—President, O. F. Foster, Pavilion; secretary-treasurer, J. B. Miller, Ithaca.

**Michigan Ayrshire Association.**—President, Frank Shuttleworth, Ypsilanti; secretary, C. W. Roberts, Fennville, Michigan.

**Michigan Horse Breeders' Association.**—President, Ray Whitney, Onondaga; secretary, Ralph S. Hudson, of East Lansing.

**Michigan Holstein-Friesian Association.**—President, Dudley E. Waters, of Grand Rapids; secretary, H. W. Norton, Jr., Lansing; treasurer, S. H. Munsell, Howell.

Quail eat their weight in insects a day. Not many farmers want to eat such good friends for dinner.

One farmer kept a dry mash before his hens all the time, and averaged 121 eggs to the hen last year.

**FertilEarth**  
Agricultural Gypsum (LAND PLASTER)  
"Makes Crops Grow"

**Raises BUMPER NITROGEN STORING CROPS**

IN addition to directly supplying sulphur and lime to plants; and in addition to indirectly supplying potassium and phosphorous compounds from the soil when present in that soil; FertilEarth increases crops of clover and other leguminous plants hundreds of per cent and these in turn store nitrogen in the soil for other crops. FertilEarth conserves soil richness, preserves manure plant foods, helps crops resist disease and during drought, and increases all crops. Try it on a small plot.

Write for booklet. FertilEarth is sold everywhere.

**GRAND RAPIDS PLASTER COMPANY**  
1203 G. R. Savings Bank Bldg., Grand Rapids, Mich.  
Established in 1856 Manufacturers of

FertilEarth Agricultural Gypsum "Makes Crops Grow"

Climax Wood Mortar "For Plastering Fine Homes"

Hercules Wall Plaster "For Plastering Larger Buildings"

**ALL-RUBBER ARCTICS**  
**\$1.69 HALF PRICE**  
**Send No Money**

Order No. MF179 Sizes 7 to 12

**All First Quality—Brand New Arctics**

We have a limited quantity of first quality, all-rubber, 4-buckle arctics worth \$4.00 to \$5.00 per pair which we are offering at \$1.69 while they last. They are all top quality; every pair guaranteed perfect condition. You need not send a penny with your order—just pay the postman \$1.69 plus postage when they arrive. Then examine them, and if you don't feel they are worth double the money, return them and we will gladly refund every cent.

**HIP BOOTS, \$2.69**  
Men's first quality hip boots at \$2.69 plus postage. Sizes 7 to 12. Order No. MF 179  
Send for our catalog.

**GORDON BATES SHOE CO.**  
Minneapolis, Minn.

**World's Best Roofing** At Factory Prices

"Reo" Cluster Metal Shingles, V-Crimp, Corrugated, Standing Seam, Painted or Galvanized Roofings, Siding, Wallboard, Paints, etc., direct to you at Rock-Bottom Factory Prices. Positively greatest offer ever made.

**Edwards "Reo" Metal Shingles**  
cost less; outlast three ordinary roofs. No painting or repairs. Guaranteed rot, fire, rust, lightning proof.

**Free Roofing Book**  
Get our wonderfully low prices and free samples. We sell direct to you and save you money. Ask for Book No. 167.

**LOW PRICED GARAGES**  
Lowest prices on Ready-Made Fire-Proof Steel Garages, 8' up any place. Send postpaid for Garage Book, showing styles. **THE EDWARDS MFG. CO.,** 117-167 Pike St., Cincinnati, O.

**FREE Samples & Roofing Book**

**NEW LAMP BURNS 94% AIR**  
**Beats Electric or Gas**

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal-oil).

The inventor is offering to send a lamp on 10-days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make \$250 to \$500 per month. Address **J. O. Johnson, 609 W. Lake St., Chicago**

**TOBACCO—KENTUCKY'S FINEST.** 3 Years old. Don't send money. Pay for tobacco and postage on arrival; delivery guaranteed. Finest quality chewing and smoking. 10 pounds, \$2.25; medium smoking, 10 pounds, \$1. Prices good until March 1. **OTHER SHOWS,** Hawesville, Kentucky

**Shippers, Attention!**

Do you want top prices for your veal, hogs and poultry? If you have already shipped to us you no doubt are pleased with the returns and prices; if you have not availed yourself of our service write us for tags and quotations. RETURNS USUALLY MADE THE SAME DAY GOODS ARE RECEIVED

**Gunsberg Packing Company,**  
Commission Merchants,  
2460 Riopelle Street, Detroit, Mich.  
Reference: Peoples State Bank.

**HAY SHIPPERS,** for highest prices bill all cars to **The E. L. RICHMOND CO., Detroit.**

**TANNING**

Let us tan your hides and furs and make up into stylish coats, robes, scarfs, gloves, mittens, muffs, fur sets, etc. We also tan hides into glove, mitten, lace, sole and harness leather. Highest class workmanship and materials used. Write for our samples. Price list and shipping tags free. Over 30 years of experience.

**Stevens Point Tannery,**  
Custom Tanners and Furriers  
Stevens Point, Wisconsin

**LAKELAND FUR EXCHANGE**

Do you want a better market for your furs? An outlet that is open the year around, where only legitimate transactions ever take place. We were never obliged to quote more than we could pay to get our share of furs. Write for a simple four grade list any one can understand, that is made to quote market value, and not to deceive you. **OLIVER DIX,** Salem, Mich.

**OATS** "Burt's Heavyweight" Test 38 lbs. per bu. Also Early SEED CORN. Get our low price, samples and catalogue. **THEO. BURT & SONS,** Melrose, Ohio

**GLASS CLOTH** A transparent waterproof fabric as efficient as glass for hotbeds. **Catalog FREE** Turner Bros., Bladen, Neb

**Tobacco Natural Leaf.** Sweet, mellow hand-picked chew at 25c 5 lbs. \$1.50; 10 lbs. \$2.50. Smoking, 20 lbs. \$4.00. Furnish free receipt for preparing. Quality, del. guar. **Farmers Tobacco Exchange,** Sedalia, Ky.

**Never-Klog Saw Dust Blower**—Guaranteed five years. Write for circular. **HILL-CURTIS CO.,** 1506 No. Pitcher St., Kalamazoo, Mich.

**When writing to advertisers please mention the Michigan Farmer.**



## SERVICE DEPARTMENT.

(Continued from page 62).

ed out of the way so that the sheep can have access to the feed, at the same time these boards in their raised position prevent chaff and dirt from getting into the wool. It is well nigh impossible to tell in any article just how this rack is made, but you could afford to drive several miles to some farm where they make a business of fattening lambs in the winter time and in almost every barn you will find this sort of a sheep rack and you can easily see how it is made.

## BALANCING A RATION.

What feeds should I buy to make up a balanced ration for our cows? We have poor timothy hay, good silage, ear corn and oats, and what are the proportions for mixing?—E. H. G.

Poor timothy hay and silage are very deficient in protein and so you must furnish a food in the concentrated or grain ration rich enough in protein to supply this deficiency in your roughage. I would recommend cottonseed meal but I would not feed to exceed two pounds of it per day to each cow and I would prefer to feed a pound night and morning sprinkled on the ensilage. You do not say that you wish to feed corn-and-cob meal but if you grind your ear corn, cob and all, I would mix it, one part of this to two parts of oats, but if you shell the corn and grind it then I would mix it equal parts, corn and oats, and I would mix this with wheat bran, equal parts by weight. Bran is rich in protein, so also is your cottonseed meal. Feed the cows the two pounds of cottonseed meal and enough of the corn meal, oats and bran so that each cow will receive one pound per day for every three pounds of milk she produces in the milk is four and a half or five per cent. If it is below that then feed one pound for every four pounds of milk produced.

## SURFACE WATERS.

The highway commissioner has put in a tile across the highway; south land owner has tiled a large field of thirty or forty acres across highway; southwest another land owner has tiled his farm of about sixty acres on highway; another land owner northwest drains in on highway and another land owner on the east drains in on highway. These drains flood half of a nine-acre field that I own. Some of them could drain in Sulphur Creek just a very short distance away. I called the district highway commissioner's attention, but he answered that he had nothing to do with opening the ditches. I also went to the township drain commissioner and he said that he could do nothing. What are the rights of a land owner so flooded?—F. A. M.

The highway commissioner and the township he represents have no more right to collect surface water and cast it on a neighbor than anyone else. The remedy of the injured party is injunction to stop casting the water on him, action for damages, abatement of the nuisance himself by damming the water out, or petition for the opening of a public drain, whichever he likes the best.—J. R. R.

## WATERPROOFING CEMENT WALLS.

I have a cement block barn that is rather damp in the winter. Would it help it to paint it on the outside?—R. M.

If the dampness in the barn basement is caused by moisture coming through the wall, which is possible, one or two coats of cream cement applied with a brush will waterproof the wall. This cement wash is made with pure Portland cement and water, mixed to the consistency of thick cream and applied with a brush. It is more likely that the moisture in the basement is caused from lack of ventilation, in which case the remedy is to provide the ventilation.—F. E. F.

# 2 For the PRICE OF 1

## \$139

**FOR ROSS ENSILAGE CUTTER**

Brand new, fully equipped, all the latest improvements, sold under guarantee backed by 12 years experience and a reputation for perfect work, easy operation, economical upkeep, and at our factory price of \$139 for No. 30 on skids, 8 to 5-ton per hour capacity, make the Ross by far the lowest priced cutter on the market—the biggest bargain value you ever obtained anywhere at any time. Made in 4 sizes—all proportionately low in price.

## \$235

**FOR THE NEW-ROSS SILO**

It's a wonder at the price. Made of heat and pressure oil-filled material—not dipped; interlocking which means planting into foundation; guaranteed for 25 years; a crackerjack bargain. An opportunity for you to practice profitable dairying and economical feeding, and get biggest prices for your grain crops for less cost than a good silo has ever been sold for.

That's What Our New Low Prices Mean



Ross Cutters in four sizes will match any power. The capacities range from 3 to 15 tons per hour, and are guaranteed to have the capacity claimed.

We have turned the trick—performed a much-needed operation—cut the appendix off of high prices. We have found a way to bring back profitable farming the farmer dollar the same size as ours—worked out a plan to reviving and extend credits to enable deserving farmers to buy labor and time-saving profit-making machinery—such as Silos and Cutters at prices they can afford.

**WE HAVE TAKEN OUR LOSS**

Our prices have been cut to meet conditions—not just trimmed but cut to the bone—so that you can now buy both Silo and a Cutter for what you formerly paid for one, giving the present Farm Dollar about twice its purchasing power.

Made in 4 Sizes  
30—40—50—60

## Order Now

Special Discount For Early Orders

### No Cash--No Interest--No Deposit

Our prices are opening the eyes of the farmers everywhere—manufacturers are amazed—they wonder how we can do it—perhaps you want to know. First we took for a basis the present low cost of material and labor—we installed modern machinery to cut manufacturing cost—we reduced our overhead—we cut all possible expense of selling by shortening the route between Factory and Farm. All this together with the loss we took on inventory, made these rock bottom money-saving prices possible. Then we inaugurated a plan of extending farm credit—which means you can buy now on our early order special "Discount Plan"—pay later—no cash—no deposit—no interest and terms that any farmer can meet.

## Famous CHAMPION Silo \$200

Cheaper Now

Champion Silos need no introduction. The quality, the best and pressure oil-filled stave, the famous Champion interlocking Anchoring system, the planting into foundation, the other exclusive improvements establish the Champion definitely as the world's best, most permanent silo, and at present low prices the biggest values of all.

## ROSS "Indestructible" METAL SILO

## Three Wonderful Silo Bargains

Silos are coming into their own—cash grain farming is hit hard without any great improvement in sight. Feed more of what you grow and haul less is the slogan of profitable farming—that means more Beef, Milk, Butter, Fat and Pork—the surest, safest, quickest cash crops—the most profitable when you have a good silo and good ensilage, which puts fat on cattle at 3½ cents per pound. A saving of 25 to 40 cents per 100 pounds of milk, 10 to 15 cents per pound saving on butter fat—and this saving, at our present low prices for silos—the lowest of all—and the easiest—no cash—no deposit—no interest plan of payment makes silo owning easy.

Three Silos to Select From—A Silo for every need—at a price for every purpose—three great bargains. Send for catalog and complete prices.

**Act Quick--Write Today**

Get our prices, our terms, special early order discounts as well as new catalogs. Don't buy or sign any order for any other silo or cutter—wait for our special proposition which we will send promptly.

In writing state size of silo wanted or capacity of cutter.

If you are in market for both tell us—we'll give you our very best combination offer.

## Feed Mill Bargain

\$5 Bill

Puts it on your Farm

Biggest value at present low prices. Cheapest to operate—grinds all small grain; also corn. Latest improvements. Order now, \$5 will put the mill on your farm—balance on easy terms. Write today.

DEPT. 214      THE E. W. ROSS COMPANY      SPRINGFIELD, OHIO

## Teach Your \$ To Have More Cents By Renewing YOUR OWN HOME FARM PAPER

Where the investment of your \$ brings you \$\$\$\$ worth of SERVICE.

The many services rendered our readers, individually and collectively, not only enables you to save money but to make money.

Accurate market reports furnish you with up-to-the minute quotations, along with the latest news as to the supply and demand of farm products at the different market centers.

Questions asked our Service Department on feeds and feeding, soil fertility, crops and cultural methods, receive careful attention by practical men who are experts in their respective lines. Each inquiry is answered by personal letter.

Dr. W. C. Fair, with his years of veterinary experience, is at your Service. His advice is free for the asking.

Legal inquiries are given careful attention without charge by our Legal Department. Our Woman's Department gives Mother the help that means so much to every home-maker.

None can offer you more or serve you better than YOUR OWN FARM PAPER. Look at the name label on your paper. If "Feb. 22", "2-22" or "Feb." appears opposite your name, this means that your subscription expires with the first issue of February 1922 or with this number. To do us a favor and assure yourself of not missing a single copy of Michigan Farmer, MAIL YOUR RENEWAL TODAY.

Send All Orders And Remittances To

THE MICHIGAN FARMER,

DETROIT, MICHIGAN