

# MICHIGAN FARMER

AND  
**LIVE STOCK**  
PUBLISHED WEEKLY.

**JOURNAL**  
ESTABLISHED 1843.

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

VOL. CXLII, No. 19.  
Whole Number 3782.

DETROIT, MICH., SATURDAY, MAY 9, 1914.

50 CENTS A YEAR  
\$2 FOR 5 YEARS.

## The Control and Eradication of Weeds

ONE of the greatest enemies the farmer has to contend with in the production of good crops of any kind is the countless weeds found almost everywhere. Some weeds seem to be almost cosmopolitan and everywhere are a constant cause of work, worry and expense. There are some, however, that are only local in their distribution and for this reason are not recognized as very injurious.

Almost any plant may become a weed under certain conditions. A weed has been defined as "a plant growing where it is not wanted." Many of our most useful plants may at times be very bad weeds. June grass is a very valuable native pasture grass, but when it is in the corn field or when it crowds out clover or alfalfa, it is an exceedingly harmful weed. Even one variety of grain, if it become mixed with another variety may cause serious loss in the value of the product for seed, it is in that case a "plant growing where it is not wanted"—a weed.

Weeds are found everywhere, they come up wherever the soil is vacant. They grow in all our crops, they are found in every variety of soil. No matter how wet or how dry, no matter if the soil be acid or alkali, no matter whether it is open plains or densely wooded region, you will always find weeds of some kind. They are an ever present enemy, always waiting for an opening where they can gain a footing, and once they become established they fight every inch of the ground before they can be driven out and destroyed.

The following are the principal ways by which weeds are scattered from one place to another:

1. Probably more weed seeds are distributed by the wind than in any other way, thistles, dandelions, milkweeds, fireweed, fleabane, and dozens of others have balloon attachments to the seeds so that they may use the breezes to float away to some other place. We are helpless to defend ourselves and prevent weeds so distributed from coming on our farms. All we can possibly do is to keep the bad weeds from going to seed. But even in this there is not much satisfaction for when we have done all we can to keep away some pest, we may get our whole farm seeded down through the

negligence of our nearest neighbor. There is another class of weeds that is distributed by the wind in which the whole plant is carried along the ground, dropping its seeds as it rolls. Plants that so distribute their seed are known as tumble weeds. The commonest of these are the Russian thistle, tickle grass and tumbling pigweed. Most of these weeds cannot get past a good fence, so that, except in open country with a few fences they cannot travel very far.

2. We have a few weeds that depend mainly on the water to carry their seeds from place to place. The

threshing machine would probably rank first of all farm tools for scattering seeds from one farm to another. Many a farmer has had his wheat spoiled for seed because the threshing machine was used in threshing rye just before it came to his farm. In the same way, many weed seeds are carried from one farm to another. To prevent seeds being carried or scattered in this way, the machine should be cleaned before going from one farm to another.

Quack grass is frequently taken from one field to another and carried over an entire farm by the ordinary tools used in cultivation. This very

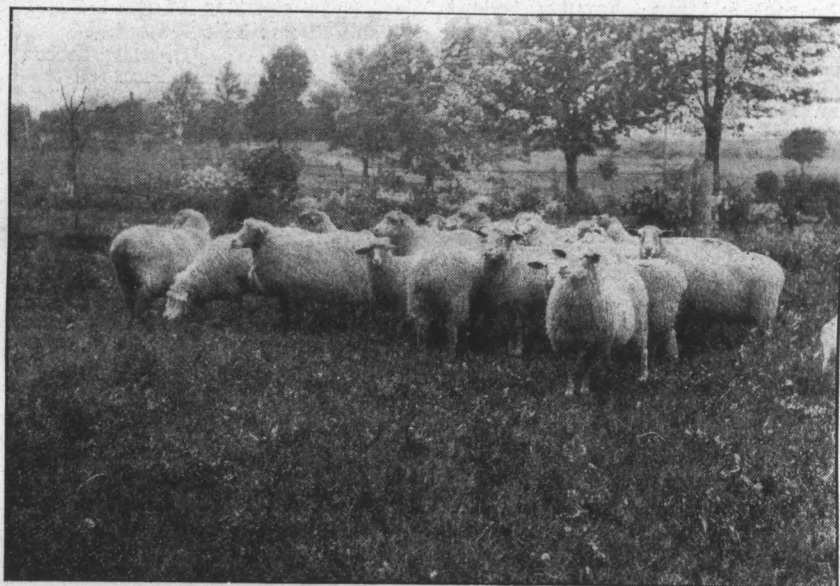
bought from some other section. In most cases the reason for this has been that the farmer himself did not know the weed seeds and for this reason used seed that was not fit to be sown. Last summer I looked over a field of red clover that was sown in the spring. The growth of the clover was excellent but there was also an excellent stand of pigeon grass. The owner informed me that he had never had any of it on his land before and that the pigeon grass seed must have been in the clover seed. Great care should be exercised in the buying of grass and clover seeds to be sure that they are free from noxious weeds. If you are not sure of the weeds yourself, send in a sample of the seed to the Agricultural College and have it examined before buying the seed.

Preventative measures can only keep away new weeds and as most farms are already seeded down and in many cases to innumerable weeds, the great problem is how to control and keep down those already present. The vast majority of our weeds are annuals and every year come up from the seed, reach maturity and, if left unmolested, produce seed the same season. A few, like the bull thistle and mullein require two seasons to mature. Only two of our bad weeds have roots that live more than two years, these are the quack grass and Canada thistle.

### Destruction of Annual and Biennial Weeds.

A general rule for the destruction of weeds that come up from seed every year is this: the smaller the plant is, the more easily it is destroyed. The sooner after the weeds show above ground they can be destroyed, the better. At this time they have very small roots, are readily killed on exposing these small rootlets to the sun and have done comparatively little damage to the growing crops.

It is in hoed crops such as corn, potatoes, and sugar beets that this class of weed does the most damage and it is in these crops that they can best be destroyed. More than 90 per cent of the weeds in a field can be destroyed before the crop is planted, by following the proper methods of preparing and handling the soil. If the land was fall plowed, then as soon as



A Small Flock of Sheep will Help to Keep the Weeds Under Control.

principal ones of these are the different kinds of dock. All of these seeds have little floats that keep them from sinking and enable them to be carried along by the water.

3. Farm animals are no small factor in the distribution of certain seeds which attach themselves to their hair and wool. The burdock, clot bur, sand bur, and dozens of others may be found if careful search is made in the hair of these animals. The only method to prevent these weeds from bothering us and being carried in this way is to not let them grow and produce their armored seeds to be distributed.

4. Farm machinery is responsible for the spread of certain weeds. The

troublesome weed spreads almost entirely by means of underground stems and these are carried from place to place by plows, harrows, drags, etc. To prevent weeds being scattered by farm machinery, the only method is to carefully clean the tools before going from one field to another.

5. In buying farmyard manure, a farmer may sometimes get his farm seeded with bad weeds. Where there is any danger of this, the manure should be piled up and allowed to rot thoroughly before spreading on the land. In this way practically all the weed seeds will be destroyed.

6. Many a farmer has sown on his farm very noxious weeds in seeds



Clean Culture of Cultivated Crops is the Only Method by which the Most Troublesome of the Farmer's Weed Enemies Can be Eradicated.



## Works on any soil

You can always depend on the Caterpillar Tractor—it always works when other Tractors can't, and when they can't, too. The Caterpillar track makes the difference. Its big bearing surface does three things:

1 It takes a firm hold on the hardest or softest soil with no slipping, so you can work in any weather, on any ground—without loss of power.

2 It distributes the weight so the Caterpillar cannot pack the soil.

3 It bridges over the ruts and bumps, saves the rack and jar on the machine, and makes the Caterpillar outlast other tractors. (It is spring mounted too.)

So you can plow, disk and harrow when the ground is wet or loose—haul when roads are bad and prices good—harvest your crop quickly without damaging your fields.

**CATERPILLAR**  
Reg. U. S. Pat. Off.

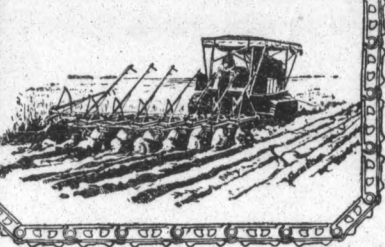
And with the Caterpillar you can do more days of work a year than with any other machine or any team. It will not hurt public roads or break down culverts.

The Caterpillar will thresh your crop—grind feed, bale hay or run a silage cutter. It will grade roads, pull stumps or pull a ditcher. You can't upset it.

Find out about it. Get our Bulletin EF42 from the nearest branch.

**THE HOLT  
MANUFACTURING CO., Inc.**

Spokane, Wash. New York, N.Y.  
Stockton, Cal. Peoria, Ill.



## Elbert Hubbard

(Fra Elbertus)

Recently took "time off" long enough to write a message to farmers on the subject

### "The Silo and Which is Best"

The article, which is sort of a history of silos generally, is penned in Elbert Hubbard's unique and interesting style, with all the quirks and quills and homely philosophy that have made the Sage of East Aurora famous.

Through an arrangement between Mr. Hubbard and The Canton Culvert Company, makers of the famous

**"ZYRO" Galvanized**

ANTI-CORROSION

**No-Co-Ro METAL SILO**

The article has been published in booklet form. A free copy is yours for the asking. The Canton Culvert Co., Box 320, Canton, O.

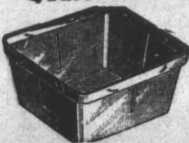
# LIME

Pulverized Magnesia Lime Rock, shipped direct to farmers at lowest prices. Comes to you in closed cars and absolutely dry. We ship from Muskegon and Benton Harbor, Mich.

Write today for interesting Booklets and sample.

**LAKE SHORE STONE CO.,  
MILWAUKEE, WIS.**

The "Berlin  
Quart"



The White Basket

That secures highest prices for your fruit. Write for 1914 catalog showing our complete line and secure your baskets and crates at WINTER DISCOUNTS.

The Berlin Fruit Box Co.  
Berlin Heights, Ohio.

possible in spring it should be thoroughly disked. Within a week or ten days after disking, or plowing, if the weather is favorable, a fine crop of weeds will begin to appear. These can all be destroyed by going over once with a fine-toothed drag. The land should be gone over frequently with the drag until time for planting. After planting the drag may still be used by setting the teeth so that they slant backward slightly. This dragging should be done during the heat of the day when the sun is shining, as the young weeds will then be more readily killed.

Potatoes may safely be dragged to kill weeds until they are five inches high, if the work is done in the heat of the day when the plants are softer and contain less moisture. If this method is followed the great majority of the weeds will be destroyed before they have a chance to do any damage to the growing crops.

### Quack Grass and Canada Thistles.

Quack grass and Canada thistles are the two worst weeds that we have to contend with. They grow on almost every kind of soil and in all of the farm crops. The methods used in combating other weeds will have almost no effect on these two pests. To successfully destroy either of these necessitates the loss of the land for cropping for one season. The only method that has proved at all successful in eradicating them from the soil has been by thorough and careful cultivation for a period covering at least one growing season.

The roots and underground root-stalks contain large amounts of plant food and for this reason they will continue to send up new shoots even if the growth is not allowed to develop green leaves. The leaves are absolutely essential for the formation of starch and the permanent growth of the plant. New shoots that come up do so at the expense of the food stored in the roots.

Quack grass can best be eradicated from a field if it has not been plowed for three or four years, because then practically all the root-stalks will be found within three or four inches of the surface of the soil. During this time it should be kept pastured so as not to allow it to go to seed.

Plow the land late in the fall but do not plow it more than five inches deep, or just deep enough to reach all the horizontal roots. Many of the root-stalks will be exposed to the frost and will be killed by freezing. In the spring begin cultivation as early as possible. A spring-tooth harrow set deep is the best tool for the first cultivation. The object of this cultivation is to drag the roots out and expose them to the sun and wind. In some cases it will be found more satisfactory to plow the land in order to throw the roots up. It is also an excellent plan to use a fine-toothed weeder to collect the weeds in windrows when they should be burned. Cultivation must be continued every week or ten days throughout the growing season. Almost any tool that pulls out the roots so that they are exposed to the sun can be used to advantage. Disc harrows are not generally satisfactory as they cut up the root-stalks and do not throw them out of the ground sufficiently.

The secret of success in destroying any weed of this type is this: do not allow any green leaves to develop, and so starve the roots. Quack grass treated as described above can usually be destroyed in one year. If, however, there is any possibility that it is not all killed, corn should be planted on the field the following season. It should be very carefully cultivated and given an occasional hoeing.

The methods for destroying Canada thistles are practically the same except that a disc harrow or a cultivator with cutting teeth can be used to greater advantage for cutting off the new growth as soon as it appears above ground.

It has also been found that if a good stand of alfalfa can be obtained it will in two or three years almost entirely destroy these thistles.

There are a few general rules, which, if carefully observed, will very materially lessen the number of weeds on our farms. They are as follows:

1. Learn to know the worst weeds so as to be able to combat them.
2. Do not allow land to lay idle.
3. Give hoed crops very careful cultivation.
4. Keep your soil rich. Good crops and especially grass and pasture crops will smother out most of the commoner weeds.
5. Have as few unoccupied corners around buildings as possible and keep weeds cut in them.
6. Use hoed crops to destroy weeds.
7. Use straight wire fences.
8. Twice during the summer cut the thistles and burdocks around the fences.
9. Have tools, bags and the threshing machine carefully cleaned before beginning work on your farm.
10. Do not sow weeds. Be sure that all the seed sown is free from these pests. Send some of the seed to your Agricultural College for examination before buying.
11. Do not disturb the birds that come on your farm. The most valuable allies the farmer has in combating weeds are the numerous seed-eating birds.
12. Keep fighting. Having once begun the battle do not give up, but persist and give them no quarter. Weeds are enemies of good farming and should not be tolerated.

Lapeer Co.

D. S. BULLOCK.

### SOIL AND FERTILIZER QUESTIONS.

I heard Mr. Bramble's address at Portiac on fertilizers, and I am confident that too many of us "Green-horn" farmers don't know enough about fertilizers to use them intelligently. Does the M. A. C. send out any simplified information explaining the action of the different fertilizer ingredients? Now I have seventeen acres I am going to plant to corn for silage. This soil is sand, very badly depleted, being devoid of humus except perhaps seven acres which I manured two years ago. I will manure the greater portion of it this year. Now Mr. Bramble tells us that the expensive element in fertilizer is the nitrogen and that this is held only by the humus. Does he mean that if we sow nitrogen on soil devoid of humus it is not retained, or does he mean that the soil being without humus required more nitrogen? How heavily would you fertilize this field and what analysis? Fourteen acres of this field two years ago didn't produce enough to fill a 10x40 ft. silo. I have another field of 19 acres which was badly run but which has been nearly all manured within two years and which last year produced (with the aid of fertilizer) about 140 tons of silage and 400 bushels of potatoes. I drilled rye on this field, which I intend plowing down and working thoroughly and seeding to clover alone, which I find is the only way I can get a stand. This is also a sand, although not so badly depleted as the one above.

Oakland So.

B. D. W.

Mr. Bramble's advice on the fertilizer question is good. I have heard him talk myself. He is very familiar with the subject, understands the philosophy of it in good shape and, not only that, his scientific knowledge is backed up by years of practical experience; and that's the kind of a man that I like to get advice from. I haven't heard anybody talk at farmers' institutes that seemed to give more sound, reliable advice on commercial fertilizers than Mr. Bramble. I do not know just what M. A. C. has done by way of circulars explaining the use of commercial fertilizers, but you can write the secretary for this information.

On the corn ground I would use a fairly high grade fertilizer. Corn on this kind of soil needs nitrogen, and it needs a good per cent of phos-

phoric acid and also of potash. I would say that a good corn fertilizer for this soil would be something like 2:8:4 or 2:9:5, or perhaps a 2:8:10, if it is real sandy land and you are sure that this sandy land is unusually deficient in potash. The corn plants are gross feeders and require large amounts of plant food. It is difficult for me to give advice as to just the amount of fertilizer to use, but you can use all the way from a very small amount, 100 lbs. to the acre, by applying it to the hill, to 1,000 lbs. per acre, and even more, and get profitable results. If the ground is fairly fertile, if it had clover in the last two or three years, or if you have given it an application of stable manure, this should be taken into consideration and a less amount of fertilizer used. Possibly under such conditions only 100 lbs. per acre, just a little in the hill, to give the corn a quick, vigorous start, will be all that is necessary and would be the most profitable. On the other hand, if the soil is deficient in available plant food and you are sure it would pay you to haul manure a mile and apply on this field if you had the manure given to you, then you can afford to use commercial fertilizers liberally, because your time is worth something and it costs considerable to haul that stable manure, and it won't cost anywhere near as much to apply the commercial fertilizer. In such cases I would say drill in all the way from 500 lbs. to 1,000 lbs. per acre, broadcast, when you are fitting the land and work it thoroughly into the soil. Then when you plant the corn use 100 or 200 lbs. extra in the drill or in the hill to give the corn a quick start.

### Fertilizer and Humus.

Organic matter and nitrogen usually go together in the soil. In other words, if the soil is absolutely deficient in organic matter it would contain little or no nitrogen. On this kind of soil you can raise plants if you supply the nitrogen in the form of commercial fertilizer, but, of course, this isn't a good thing to do. There are so many risks in connection with it. Soil that doesn't contain a good per cent of organic matter will not stand the drought, it will have no means of holding moisture and it has no means of dissolving the fertilizer. Where we have soil deficient in vegetable matter and apply fertilizer we ought to have some control of the distribution of moisture, because no fertilizer does any good unless there is a proper amount of moisture in the soil. The humus in the soil not only by decomposition makes nitrogen available but it also holds the nitrogen which is added. However, there is very little danger of the nitrogen leaching out. You can apply nitrogen to the corn crop with the assurance that very little of it will leach out of the soil, while the corn crop is growing. If there is any left in the fall this might leach out, or a portion of it. Many people think they get the best results by applying a rock and potash fertilizer on a new seeding of clover, something like a 10:8.

COLON C. LILLIE.

### ADVERTISING NOT AN EXPENSE.

Although it costs considerable money to buy space in good farm papers, advertising really is not an expense.

Whether goods are sold by salesmen or catalogs or newspaper advertising, there must be a sales cost. Without some sales cost, there would be no sales.

Advertising in publications is the cheapest form of reaching people, and consequently the selling cost, where such advertising is employed, is usually less than where it is not employed.

Therefore, good advertising may be said to be an economy instead of an expense, and the advertiser can give as good value or even better value, for the same price as the man who does not advertise.



## FARM NOTES.

## Natural Inoculation of Alfalfa.

How long after alfalfa seed is sown before the soil becomes inoculated from the seed alone? I have heard it stated that it took three years. If I should sow a piece to alfalfa in early summer, say in June, could I pasture hogs on it this fall without injuring the plant? If so, at what stage of growth could I turn my hogs onto it?

Shiawassee Co.

H. A. P.

The length of time which will be required for natural inoculation of alfalfa plants to take place will depend altogether upon the condition of the soil. If the soil is acid in its reaction, this process will be slow, if it takes place at all. On the other hand, if the soil is alkaline or even neutral in character, natural inoculation will take place gradually, depending on so many unknown factors, however, that no definite time can be stated within which it might occur.

Where soil has been previously treated with lime, natural inoculation will often occur the first season, and on some soils which already contain plenty of lime, there seems to be little difficulty in getting a successful stand, indicating that the bacteria are already in the soil or sufficient of them are introduced with the seed so that under favorable conditions they multiply and inoculate the plants within a short time. On soil where alfalfa has not been previously grown, however, it will always pay to inoculate, and if there is any question about the need of it, it will also pay to apply lime.

Alfalfa should not be pastured closely at any time, and it will injure rather than benefit it to pasture the first season. When pastured with hogs, it is best not to stock it too heavily, and plan on cutting for hay the same as if it were not pastured.

## Fertilizing Sandy Soil.

I have 12 acres of sandy loam on which rye has been raised continually for several years. When the rye crop was harvested last fall, I plowed this ground and sowed rye again, with the intention of plowing it under this spring for a fertilizer, and as I would like to raise beans for a change I would like to know which would be the most profitable (to fertilize this ground when I sow beans on it, or to fertilize it after the beans are harvested and am ready to sow rye or wheat and seed it down?

Missaukee Co.

W. B.

The growing of rye on soil of this kind for several years in succession would tend to exhaust the available fertility in the surface soil to an extent which would make supplementary fertilization desirable for any crop. If it is to be sown to beans, a light application of fertilizer, say 100 lbs. to the acre, would undoubtedly be preferable. Too heavy an application cannot be used in the row with the beans, as it is likely to injure their germinating quality. A heavier application used with the fall grain would increase the chance of getting a clover seeding with same, and would also be advisable.

## Sowing Alfalfa with or without Nurse Crop.

I would like information in regard to sowing alfalfa on high gravel soil. I had the field into buckwheat last year and it was fall-plowed. Shall I sow the alfalfa with a light seeding of oats rather early, or work the ground until about June and sow it alone?

Tuscola Co.

SUBSCRIBER.

Whether the alfalfa should be sown alone in the early spring or with a nurse crop, will depend somewhat upon whether the land is clean or foul. If a good many weed seeds are present a light nurse crop of oats or barley would tend to keep them back and the nurse crop could be cut for hay before it had any chance to injure the alfalfa plants by appropriating moisture which they needed. If the land is reasonably clean, the alfalfa will make more rapid development if sown alone.

## Four No-Rim-Cut Tires

### For What Some Ask for Three

## Here's a curious situation:

Not long ago the high-priced tire was the Goodyear No-Rim-Cut tire. It cost one-fifth more than other standard tires, because of four costly and exclusive features.

But with tremendous output our costs dropped. New factories, new equipment, helped. And we cut our profit until last year it averaged 6½ per cent. No-Rim-Cut prices came down last year 28 per cent.

Now 16 makes of tires cost more than Goodyear prices—some up to one-half more. You can buy four Goodyear tires now for what some makers ask for three.

## Four Things Missing

Yet every high-priced tire lacks these four exclusive features:

Not one prevents rim-cutting in our satisfactory way. We control this feature, and no other faultless way has been found to end rim-cutting completely.

Not one gets the "On-Air" cure, which adds to our tire cost \$1,500 daily. Each No-Rim-Cut tire is final-cured on air, to save the countless blow-outs due to wrinkled fabric.

Not one employs

our patent method to combat tread separation.

Not one has our double-thick All-Weather tread. A smooth tread on dry roads, but grasping wet roads with countless sharp-edged grips.

None of those costly tires, remember, has any of these features.

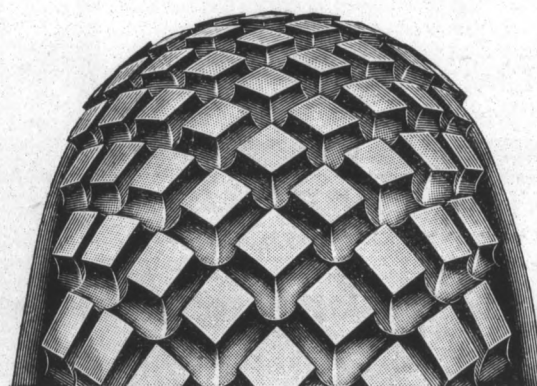
## Up to 10,000 Tires a Day

Goodyear prices are due to the fact that we now build as high as 10,000 motor tires per day. No other one factory, we believe, turns out half so many.

And this output is due to the tire. Men have proved that No-Rim-Cut tires offer lowest cost per mile. They have proved it on hundreds of thousands of cars. Otherwise, some other tire would hold top place in Tiredom.

When someone asks an extra price make him show a reason.

Lower prices are easily explained. But don't pay more than No-Rim-Cut prices unless you know a reason. The verdict of users—as shown by sales—is that Goodyears are the world's best tires.



**GOOD YEAR**  
AKRON, OHIO  
**No-Rim-Cut Tires**  
With All-Weather Treads or Smooth

## THE GOODYEAR TIRE &amp; RUBBER COMPANY, Akron, Ohio

Toronto, Canada

London, England

Mexico City, Mexico

Branches and Agencies in 103 Principal Cities

DEALERS EVERYWHERE

Write Us on Anything You Want in Rubber

(1514)

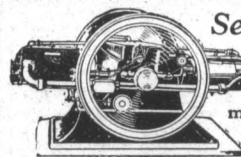


**The ACRE-AN-HOUR Sifter**  
Beats every hand implement for killing Potato, Melon Bugs, Cabbage Worms, etc. Applies Plaster, Lime etc., mixed with Paris Green or Arsenate of Lead. Regulates to cover big or little plants, also to apply any quantity of any kind of manufactured dry insecticides. Will operate as fast as desired. Better, easier and faster than any \$5, \$10 or \$15 spray pump. Insist on your dealer showing you this wonderful little implement. Prepaid. 75c. Agents wanted. Circulars. ACRE-AN-HOUR SIFTER CO. DEPT. E. POUGHKEEPSIE, N. Y.

## YOUR MONEY WILL NET 5%

if invested with this Society. Interest paid semi-annually. Let us have your name and address and we will tell you of the advantages offered by this Society which has been doing business for over twenty years.

**The Industrial Savings Society,**  
219 Hammond Bldg., Detroit, Mich.  
I. ROY WATERBURY, Pres. AUSTIN N. KIMMIS, Secy.



**Severe Duty**—does not phase the steadiness of Heer Double Opposed Engine. Most economical engine on the market—fuel, oil and up-keep considered. Always ready to work, and work hard too. Write today for catalog.

Heer Engine Co., 45 E St., Portsmouth, O.

## 1914 Pratt Cars

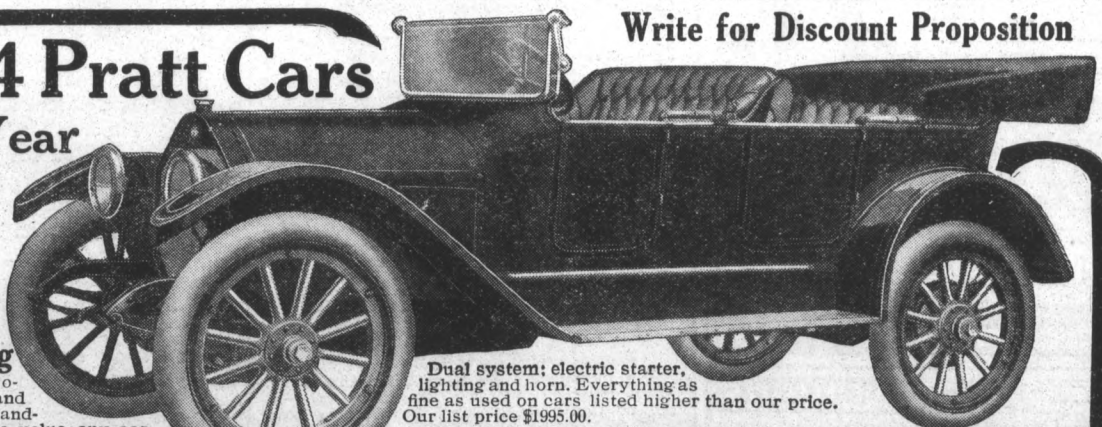
### Sixth Year

Backed By  
Forty-One  
Years' Manufacturing  
Experience!

## Get Catalog

showing photographic views and giving you the standards by which to value any car. We have a proposition for you if we have no agent in your locality. If interested in a Pratt-Fifty at introductory price, it will be to your material advantage to write or wire at once.

Pratt-Fifty has 122 in. wheel base; transmission, Brown-Lipe 50 h. p.; clutch, Multiple disc type; Ignition, Bosch



Write for Discount Proposition

Dual system: electric starter, lighting and horn. Everything as fine as used on cars listed higher than our price. Our list price \$1995.00.

We have a number of used cars of our own make that have been thoroughly overhauled and refinished. All fully guaranteed for one year. Net prices—\$500.00 to \$1200.00. Write for list.

**Elkhart Carriage & Harness Mfg. Co.**  
Elkhart, Indiana

**Full Equipment:**  
Gray & Davis Electric  
Starting and  
Electric Lighting  
Bosch Magneto  
12-inch Upholstery



# UNITED STATES

## Cream Separators

### LEAD

#### Under Any Conditions

For the reason that:

There is as much difference in efficiency between U. S. Skimming Sections and all other skimming devices as between the Twentieth Century Limited (20 hours between Chicago and New York), and the average passenger train (25 hours).

The U. S. Bowl is a marvel of perfection because of its ability in the average dairy to save in closer skimming from \$50.00 to \$100.00 each year (15c to 30c each day) over all other separators, and because it can be cleaned in about one-half the time of other separators, and easily kept perfectly sanitary always.

The U. S. Separator is the only Separator having the non-rusting Nickel Silver Metal which is non-adhesive like glass or ivory, easier than other devices to clean by ordinary methods and immensely easier by the Mechanical Washer.

The 1914 Sanitary Liner for bowl chamber supplies the most sanitary equipment. Iron is quick to rust when milk touches it. This is why other separators become insanitary.

SEND FOR OUR NEW 1914 CATALOG

THE VERMONT FARM MACHINE COMPANY

Chicago  
Salt Lake City

BELLOWS FALLS, VT.

Portland, Ore.  
Los Angeles



Milk cannot touch the iron bowl chamber of the U. S. for the liner prevents.

The U. S. Separator separates thick cream when desired, and at the same time skims clean. This is a hard test, and under it all other separators skim poorly, and some clog. The advantages of thick cream are many.

There are many cream separators outside the class of so-called "cheap separators" which in reality, like poor cows, are "star boarders" because they have not the ability as has the U. S. to meet perfectly the variations found in every day conditions in the average dairy.

The U. S. Cream Separator is in a class by itself.

It holds the World's Record in the longest and hardest fought world's contests. This statement cannot be successfully denied for the proofs are on record.

## Dairy.

CONDUCTED BY COLON C. LILLIE.

### SILLO SKEPTICISM.

A farmer friend and myself would like some supporter of the silo to quote us figures proving the advantage of silage over dry feed for a horse or cow. We understand that the users of silage feeds the stock; but can he prove that there is any nourishment obtained from the same? Perhaps it is the same with the silo as it was with the fellow who said a cow could live on Indian meal and sawdust: the more Indian meal the better. Henry states that at the Wisconsin station, "from 29,800 lbs. of grain fodder were obtained 24,400 lbs. of silage which, fed with 1,648 lbs. of hay and 2,884 lbs. of grain produced 7,496 lbs. of milk containing 340.4 lbs. of fat. From 29,800 lbs. of green fodder were obtained 7,330 lbs. of field-cured fodder corn which, fed with 1,567 lbs. of hay and 2,743 lbs. of grain, produced 7,119 lbs. of milk, containing 318.2 lbs. of fat." This makes a difference of 22.2 lbs. of fat, which at 26c a pound amounts to \$5.772. We would like to ask if more money could not be made from the interest on his money, which paid for the building of the silo, and the filling of it? Neither should he forget that he must climb about 60 ft. every day, and that alone amounts to considerable in eight months.

Clinton Co.

M. J. M.

Nobody can answer a question like this fully in a newspaper article, on account of space. It really covers very much of the ensilage question, and one could write a good sized book on the subject. I think it is a real good sign of progress when a man like this begins to study on the silo proposition. Ten or 15 years ago they would not even consider it at all. Now they are beginning to figure out if there is anything in it, and this is the case all over the country. The silo has become exceedingly popular in the last year or two, especially in this so in the beef sections. I can remember when the beef man would laugh at you if you talked about ensilage for fattening steers. He would admit that it probably was a good thing for dairy cows where you want to produce milk, but the idea of feeding silage to steers was an entirely different proposition. Now, however, experiment stations have made numerous experiments in the fattening of beef and even the most skeptical people must acknowledge that corn silage is a splendid factor in the production of beef, and hence the silo is becoming more popular than ever before.

### Silos Built Last Year.

In some recently completed statistics it is shown that in Michigan there are at present 10,812 silos and 1,081 of these were erected last year. In the whole United States there are 130,283, and of these 30,925 were erected last year. The heavy increase in silos is not in the dairy districts but in the beef districts, in the corn belt where steers are fattened so much.

In the Wisconsin experiment referred to as comparing corn fodder with corn silage, bear in mind that this is corn fodder, not cornstalks or corn stover. The crop of corn was grown thickly, too thick for earing, and then instead of putting it into the silo green it was cut up, probably before it was dead ripe, and shocked and allowed to dry-cure. You must take into consideration that this corn fodder was fed under the most favorable conditions as corn fodder. It was fed just as soon as it was dry-cured. It was not allowed to stand out in the field in inclement weather and deteriorate in value. Chemical analysis shows that when the corn is at the right stage of development to put into the silo it contains, the whole plant I mean, the largest per cent of digestible nutrients. If fed then you

get more out of the corn plant than you can at any other time. If you put it into the silo you preserve all this with scarcely any deterioration in value, but if you cut up the plant at this time and shock it and allow it to cure, there is so much sap in the stalks of the plant that a dry fermentation is going on all the while and much of the sugar and starch that you find in the plant just at maturity is changed to cellulose or woody fiber. In other words, the plant is becoming more indigestible all the while. If it is left there several months a large per cent of it that would have been digestible had it been saved at the proper time, becomes indigestible and is of no particular value to the animal. The chemist would call it crude fiber. Had this experiment been made with corn fodder that was several months old there isn't any doubt but what the results would have been very much more in favor of the corn silage.

### Silo Saves Food Value of Corn.

Experiments at the same experiment station go to show that by siloing the corn when it is at the proper maturity to put into the silo, one need not lose over five per cent of the food value of the corn crop. On the other hand, if the crop is cut up, shocked, and dry-cured, under ordinary favorable conditions, the loss in food value will be about 25 per cent. Now the loss in dry-curing under favorable conditions is 20 per cent of the food value of the corn crop. The question is, is this worth saving. On the other hand, if the corn fodder is saved by shocking it up in ordinary shocks in the field and leaving it there and drawing it in during the winter time, or drawing it up and stacking it and getting it from the stack and feeding it in the winter time, there is a much heavier loss than this. In many instances there is no doubt but what there is a loss of fully 50 per cent of the food value in the dry-curing of the crop. Not only that, but when the silage is fed all of it is consumed.

Anyone who has had experience with a silo knows that after he has built a silo and put the corn crop in it he finds he can keep a large per cent more stock on his farm than he could before when he harvested the corn crop in the old way.

### Silos Economical.

M. J. M. says that this slight difference from the use of silage will not pay for the extra cost of harvesting. It has been proven over and over again, and I have given the exact figures in the Michigan Farmer more than once. This probably was years ago, before this inquirer was at all interested in a silo, that the cheapest way to harvest the corn crop was to cut it up and put it in the silo. You can do that cheaper than you can cut it up and shock it and then haul the fodder or the stalks when you want to feed them. The cost of storage in the silo is very much less than it is to store in the barn, because the necessary capacity of the silo does not cost anywhere near as much as it does to build a barn and store the fodder. The corn crop is so reduced by cutting it up that it is much cheaper to furnish storage in the form of a silo than in the form of a barn. Then the feeding part. The labor of climbing 60 feet every day to get silage is pictured. Now a 60-foot silo, of course, would be a tall silo, but we are going to build many 60-foot silos in the future. You only have to climb 60 feet when the silo is full. When you get down towards the bottom of the silo it isn't very much work to climb into the silo. There is some work, of course, in feeding silage, but it isn't any more work to feed silage than it is to feed corn fodder or cornstalks. Which would you rather do, go into the field in the winter time in the snow and get cornstalks, or climb into a tall silo to get the silage?

## 1595

### AND UPWARD ON TRIAL.

## AMERICAN CREAM SEPARATOR

A SOLID PROPOSITION to send fully guaranteed, a new, well made, easy running, perfect skimming separator for \$15.95. Skims warm or cold milk; making heavy or light cream. The bowl is a sanitary marvel, easily cleaned.

Absolutely on Approval.

Gears thoroughly protected. Different from this picture, which illustrates our large capacity machines. Western orders filled from Western points. Whether your dairy is large or small write for our handsome free catalog. Address:

AMERICAN SEPARATOR CO. BAINBRIDGE, N. Y.

**GALLOWAY**

Sold Direct From Factory to Farm

30 Days FREE Trial

Just put your name and address on a postal card and get my new Separator book free.

Saves \$35 to \$50

On the latest, most modern, most sanitary cream separator built. Gearing runs in a constant bath of oil and all enclosed, dust and dirt proof. Closest skimming, new type disc bowl. A lot of New Sanitary features not found on other makes. One-half the price of the old style, cumbersome machines selling through agents and dealers. Buy direct from factory and save big money. Get my new Catalog. A postal brings it.

W. GALLOWAY, PRES.

William Galloway Co.

133 Galloway Station, Waterloo, Ia.

**Only \$2 Down**

**One Year to Pay!**

**\$24**

Buys the New Butterfly Jr. No. 1. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 35 qts. per hour. Made also in four larger sizes up to 51-2 shown here.

30 Days' Free Trial. Earns its own cost and more by what it saves in cream. Postal brings free catalog folder and "direct-from-factory" offer, buy from the manufacturer and save half.

ALBAUGH-DOVER CO.

2195 Marshall Blvd. CHICAGO

**Harris STANCHIONS**

are made of high carbon steel, WOOD LINED, chain hanging and flexible. Our full line of Sanitary Stalls, including Harris New Adjustable, stands for perfect cow comfort. Economical, easily installed.

FREE ILLUSTRATED CATALOG describes our complete line of labor-saving barn equipment. Write for it today.

HARRIS MFG. CO., Box 50 Salem, Ohio.

## WHOLESALE FEED

Save your money. Ask for price list. Everything in Feed.

THE BARTLETT CO., 100 Mill St., Jackson, Mich.

## Stop Your Cream Separator Losses



DAY after day you are leaving cream in the milk that goes to the hogs—because you are not turning the crank of your separator at the right speed. The Stewart Speed Indicator makes you crank properly and saves all this cream. (You can feed your hogs better on food that costs less than 30 cents a pound.)

The cream you are now throwing away amounts to many dollars a month. If you don't think so, listen to this:

Actual tests at Purdue Experiment Station proved that one dairyman with 20 cows lost \$524.10 in one year by "guessing" at the speed he turned the crank.

Another dairyman owning 8 cows says he lost \$18.50 in one month because he "guessed." The

### Stewart Speed Indicator for Cream Separators

goes on the crankshaft of your separator and shows the exact speed you are cranking. Just tell us the name of your separator, its number, and what year it was made. We furnish the Stewart Speed Indicator on a new crankshaft that will fit. (If yours is a De Laval, then no extra crankshaft is necessary.)

### Price \$10—30 Days' Trial

Order from your dealer or direct from us. The price—complete—is \$10 only. If it does not increase your cream production within 30 days return it and get your money back.

### Figures and Butter Book—Free

Fill in the coupon and send it to us today. We'll forward all this literature—free—at once. Don't wait. Mail the coupon now.

Stewart-Warner Speedometer Corporation  
126 Diversey Blvd., Chicago, Ills.

Please send me, free, all your literature on Cream Production and the book about the Stewart Speed Indicator for Cream Separators.

My name is.....

My Address..... State.....



## Live Stock.

### MANAGEMENT OF THE FOAL.

After the new-born colt's navel has been properly treated, as has been often described in these columns, nature should be allowed to have her way. If the colt gets along well and does not have the scours or is not affected with constipation, all well and good. Should the colt show any sign of diarrhea, the mare's milk may be too rich or the colt may get too much. If this occurs, the dam's ration should be reduced and the colt should not be allowed to take too much milk. Keeping in mind that it is the fat that causes the scours, and that the last milk is the richest, the colt should be allowed to suck out the first portion while the last is drawn by hand. There will not be a great many cases where this will be necessary, but in a few isolated ones it may be well to administer this treatment. It is better that the colt have not quite enough milk than to have too much. Scours may be checked by giving parched flour or boiled milk. Colts vary so much in this respect that a condition which would cause diarrhea in one colt would not affect another. So the best possible preventive of advanced cases is that the owner keep a strict watch of the young animal. Note carefully his actions each day and remember that the excretions are a good indicator of condition.

It is not wise to tinker with the colt unless he needs it. If, however, his bowels should become disordered a mild purgative may be given. Castor oil is suitable and there are many other substances equally as good for relieving constipation. In extreme cases, injections of soapy, soft water may be necessary. The bowels should be kept in a rather laxative condition.

If the mare is turned out to pasture, the colt will soon get to eating grass. He should, however, be induced to eat oats as soon as possible for it is well known that the younger the animal, the easier it is to get him to put on flesh and therefore the cost of raising will be lessened materially if the colt is well fed during early life. Of course, this does not mean excessive feeding, but keep the young animal in a good healthy condition, with a liberal amount of good nutritious food. The colts may be fed oats in the pasture by making a pen with the fence so high that the colt can get under it while the mare cannot. There should be a gate opening into this pen. The first three or four days both the colt and mare should be let into the pen where both of them will eat the oats together, after which the mare may be shut out while the colt goes in and eats the grain. By keeping some salt outside the pen, and with an occasional mess of oats or some other feed which is relished by the mother, she may be kept contented outside the pen while the colt is eating.

If the mare is worked, the colt should not be allowed to follow her to the field. This practice is very detrimental to both the mare and colt and at times, the colt becomes very irritating to the driver. The mare has a tendency to lag while the colt is along. It would be better to provide the colt with a box stall opening out into a paddock or pasture, rather than to allow him to accompany the mare when she goes to work. Of course, when the colt is still quite young and the dam's milk flow is plentiful, they should not be separated too long.

If the colt does not wean himself at the age of five or five and a half months, he should be gradually weaned. If he has learned to eat, he will not miss his mother very much at this age and if turned out on good

pasture will be able to shift for himself with an occasional feed of grain. The colt must by all means be kept growing. The faster the growth while young, the less will be the expense of rearing.

In short, feed the brood mare a succulent, rather bulky ration and give her plenty of good exercise of not too strenuous a nature. Provide her with clean quarters in which to drop her colt. After the colt has been dropped, give the mare simple, yet nutritious feed. Watch the foal; keep the bowels in good condition; feed judiciously a liberal amount of suitable foods. Unless physiologically wrong, or some disease complications set in, the result will be a good vigorous colt which will be a pride to the owner and one which will obtain a ready market. Of course, it is presupposed that the dam and sire of the colt are desirable individuals.

Ingham Co. I. J. MATTHEWS.

### FEEDERS' PROBLEMS.

#### Ground vs. Whole Rye.

Which is the best and most profitable way to feed rye to a bunch of 12 fattening hogs, grind it and make a slop or soak it and feed it in the berry?

Ingham Co. T. C. R.

The most satisfactory way of using rye as a pig feed is to grind same and feed in the form of a slop. If the meal is soaked from one feed to the next, better results will be secured, and it is better to feed in combination with other grains than alone.

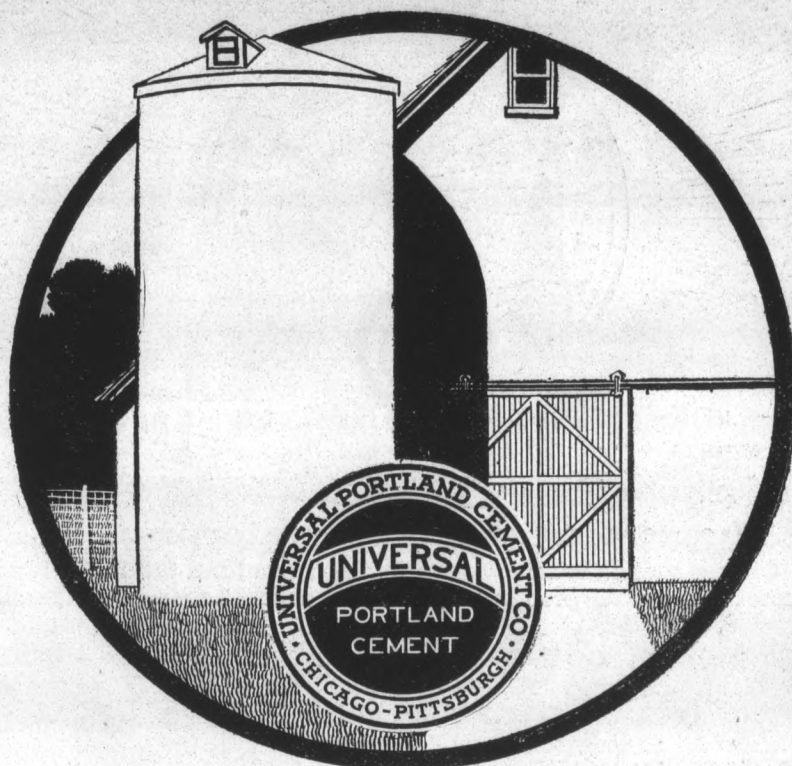
### LIVE STOCK NEWS.

High prices have proved a serious obstacle in buying southern cattle to ship to northwestern ranges this spring, and shipments are being made extensively to Kansas and Oklahoma pastures, although it is learned that between 50,000 and 60,000 head of two-year-olds have been purchased to go to northwestern pastures at from \$40@45 per head.

Recent purchases of stocker and feeder cattle in the Chicago market were made mainly by stockmen from Illinois and Indiana, with moderate numbers taken to go to Michigan, Wisconsin and Ohio. Farther east so many wintered cattle remain in feed lots that stockmen are not yet ready to make purchases. It is reported that no large selling of beeves by Pennsylvania stockmen is likely to take place until well along in May, or perhaps before early June, and the probability is that many of these eastern cattle will be moved direct from feed lots to slaughter houses.

August and Ferdinand Kruse, of Goose Lake, Iowa, marketed in Chicago on a recent day 86 head of choice steers which averaged 1582 lbs. and sold for \$9.45 per 100 lbs. There were in the consignment 24 fat Hereford steers which were purchased during the Denver live stock show for \$7.20, delivered at the "river," and at that time they averaged 1020 lbs. The remainder of the cattle were Shorthorns that were bought in Iowa. These cattle were grazed during last spring and summer, and were on full feed for the last five months.

Ever since prime hogs reached \$9 per 100 lbs. in the Chicago market several weeks ago, the high-water mark for the year, frequent attempts have been made by the packers to place the market on a lower basis, and at such times as eastern shippers were smaller buyers than usual, such efforts have been successful, provided the receipts happened to be of fairly large proportions. Lower values have been followed by curtailed receipts, however, and this has caused rallies in prices. Hogs are coming to market unusually choice and fat, showing evidences of good feeding, and the bulk sell near top prices every day, with the lighter weights selling highest. Prices are much higher than in most former years, last year and 1910 excepted. A year ago prime hogs were selling around \$9.50, with a shortage throughout the corn belt states, and at this time in 1910 the shortage was much greater, resulting in hogs of the best grade bringing around \$11.



## The Economy of a Concrete Silo

The farmer who feeds his fodder green instead of dry gets the most out of his stock. The Silo being a permanent investment, should be built of the material which will give longest and most satisfactory service. Concrete is practically everlasting; it needs no repairs; is unaffected by time or weather; fireproof and ratproof; air-tight, water-tight. No other material has so many good qualities to recommend it to silo builders; nor is any other so enduring.

## UNIVERSAL PORTLAND CEMENT

has been used in the construction of thousands of concrete silos. It has given such uniformly satisfactory results, that many farmers are using it for every kind of building on their farms. Our free booklets on "CONCRETE SILOS" will be mailed you for the asking.

### UNIVERSAL PORTLAND CEMENT CO.

CHICAGO . . . . . 208 South La Salle Street  
PITTSBURGH . . . . . Frick Bldg.  
MINNEAPOLIS . . . . . Security Bank Bldg.

Plants at Chicago and Pittsburgh

Annual Output 12,000,000 Barrels

## International Harvester Haying Machines



### The I H C Line

#### GRAIN AND HAY MACHINES

Binders, Reapers  
Headers, Mowers  
Rakes, Stackers  
Hay Loaders  
Hay Presses

#### CORN MACHINES

Planters, Pickers  
Binders, Cultivators  
Ensilage Cutters  
Shellers, Shredders

#### TILLAGE

Peg, Spring-Tooth,  
and Disk Harrows  
Cultivators

#### GENERAL LINE

Oil and Gas Engines  
Oil Tractors  
Manure Spreaders  
Cream Separators  
Farm Wagons  
Motor Trucks  
Threshers  
Grain Drills  
Feed Grinders  
Knife Grinders  
Binder Twine

WHEN haying time comes you cannot control weather conditions, but you can make the best of them if you use the rakes, tedders, stackers, loaders, sweep rakes and hay presses sold by I H C local dealers. With a line of I H C haying tools in your sheds you can come out of the least favorable weather conditions with the highest percentage of bright, well cured hay.

I H C haying tools are carried in stock or sold by local dealers who can take care of you quickly in case of accident. It is their business to see that you are satisfied with the I H C haying machines and tools you buy from them. You cannot go wrong if you buy only haying tools with the I H C trade mark.

Write us, and we will give you the name of the nearest dealer handling I H C haying tools, and we will send you catalogues on the machines in which you may be interested.

### International Harvester Company of America

(Incorporated)

CHICAGO

USA

Champion Deering McCormick Milwaukee Osborne Plano





### The roofing with real waterproofing

Choose roofing whose waterproofing is a natural product. Man cannot make waterproofing that equals asphalt made by Nature.

## Genasco

THE TRINIDAD-LAKE-ASPHALT  
**Ready Roofing**

is made and waterproofed with natural asphalt. This Trinidad-Lake-Asphalt waterproofing goes clear through. It doesn't crack in any weather.

Get Genasco for lasting protection and true economy.

THE KANT-LEAK KLEET keeps seams watertight without cement and prevents nail-leaks—packed in rolls of smooth surface Genasco.  
Ask your dealer for Genasco; smooth or mineral surface—several weights. Write us for the Good Roof Guide Book and samples.

**The Barber Asphalt Paving Company**  
Largest producers in the world of asphalt and ready roofing

Philadelphia

New York

San Francisco

Chicago



#### POULTRY.

**Rose Comb Rhode Island Red Eggs** 15 for \$1.50, postpaid.  
**BUELL BROS., Ann Arbor, Michigan**

**BARRED PLYMOUTH ROCKS**—Cockerels all sold. Have some nice pullets and yearling hens. Eggs for hatching. **OSTRANDER BROS., Morley, Mich.**

**PLYMOUTH Rock** cockerels 5 to 11 lbs., according to age, hens 5 to 8 lbs., 15 eggs \$2. Mammoth Bronze Tom Turkeys 8 to 35 lbs., according to age. Price \$3 to \$25. 10 eggs \$4. **A. E. ORAMTON, Vassar, Mich.**

**Barred P. Rock Eggs**—From the Bradley strain for hatching at \$1.50 per setting.  
**A. A. PATULLO, Deckerville, Michigan.**

**ORPINGTONS**—Single Comb White Cockerels, eggs, day-old chicks. Safe delivery guaranteed. Order ahead. **Mary Thompson, Redford, Mich.**

**EGG-A-DAY**—Barred Plymouth Rocks, Bred-to-Lay. Eggs, \$1.50 per 15; \$2.75 per 30.  
**EGG-A-DAY Poultry Ranch, Marshall, Mich.**

**Barred Rock Eggs, 15 For \$1.50, 100 For \$7.**  
**W. C. COFFMAN, R. No. 6, Benton Harbor, Mich.**

**BARRED ROCK EGGS FOR HATCHING**—\$1.50 per 15, \$10 per 100.  
**J. A. BARNUM, Union City, Michigan.**

**CHICKS**—We ship thousands each season. Booking orders now for spring delivery. Prices always right. Free booklet. **Freeport Hatchery, Box 12, Freeport, Mich.**

**LILLIE FARMSTEAD POULTRY**  
B. P. Rocks, R. I. Reds, and S. C. W. Leghorn eggs for sale. 15 for \$1.25; 50 for \$2.50.  
**COLON C. LILLIE, Cooperville, Mich.**

**FOR SALE**—Pekin Ducks and R. C. Br. Leghorn EGGS \$1 per setting; \$5 per 100.  
**CLAUDIA BETTS, HILLSDALE, MICHIGAN.**

**Eggs For Hatching**—From white Indian runner and Pekin ducks. White African guineas. **H. V. Hostetler, Route No. 1, St. Johns, Mich.**

**EGGS**—Pure bred Light Brahmas, White Wyandottes, \$1.50 per setting; \$2.50 per two settings. Cockerels, **MRS. E. D. BISHOP, Lake Odessa, Michigan.**

**FANCY (S. C.) WHITE LEGHORN COCKERELS**, Price \$2 and \$3 each. Choice eggs, \$1 per setting. **John McNeill, Station A., R. 4, Bay City, Michigan.**

**S. C. White Leghorns**. Bred for size, shape, vigor, egg production, 12 yrs. experience breeding Leghorns. Hatching eggs \$4 per 100, day-old chicks \$10 per 100. **A. O. Howard, Tecumseh, Mich.**

**EGGS FOR HATCHING**—Buff Orpington, \$1 per 15, \$2.50 per 45; \$5 per 100.  
**MRS. CALVIN FULLER, R. No. 2, Bancroft, Mich.**

**Pine Crest White Orpingtons**—Lay, pay, weigh, try \$2.50 per 15, utility \$7 per 100. **MRS. WILLIS HOUGH, Pine Crest Farm, Royal Oak, Michigan.**

**RINGLET BARRED ROCKS**—The winning and laying strain. Birds of quality & size. Eggs \$1.50 per 15. M. B. Turkey eggs, selected mating \$2.50 per 10. Years of experience. **Plainview Stock Farm, Romeo, Mich.**

**STANDARD BRED R. I. REDS**  
Rose & Single Comb, S. L. Wyandottes, Pearl Guineas, F. & W. I. R. Ducks. Eggs (show quality) \$2 per 15, (good grade) \$2.25 per 30. All eggs sent free by P. P. & I yrs. sub. to Michigan Poultry Breeder given to each customer. **FRENCH FRUIT & POULTRY FARMS, Ludington, Michigan.**

**S. L. WYANDOTTE EGGS**—From great laying strain of Blue Ribbon Birds. Satisfaction guaranteed. **F. E. Cowdrey, Ithaca, Mich.**

**S. C. B. Minorca Eggs**—\$1.50 and \$2.50 for setting of 15. A few choice fall boars. Satisfaction guaranteed. **R. W. Mills, Saline, Mich.**

**SILVER, White and Golden Wyandottes**. Eggs from Whites \$1.50 per 15, \$2.50 per 30. Silvers & Golden at catalog prices. **Browning's Wyandotte Farm, Portland, Michigan.**

**Single Comb Black Minorcas**—One pen, cockerel and 4 hens that are fine. **D. C. HUGGETT, Grand Ledge, Michigan.**

**EGGS from prize winning Barred Rocks, R. C. White Leghorns, Silver Spangled Hamburgs, Fawn & White Runners, Circular free. Holstein bull calves Hengerveld DeKol blood. Riverview Farm, R. No. 8, Vassar, Mich.**

**White Wyandottes**—Eggs from best pens \$2 per 15; \$6 per 50; \$10 per 100; from 3 pens 75c per 15. **David Ray, 202 Forest Ave., Ypsilanti, Mich.**

**MONEY** In Peacocks and Pheasants; Buy and sell at best prices. **Lock Box 116, South Bend, Indiana.**

#### DOGS AND FERRETS.

## Fox and Wolf Hounds

of the best English strain in America  
40 years experience in breeding these fine hounds for my own sport. Save your pigs sheep and poultry. Send stamp for catalog.

**T. B. HUDSPETH,**  
**Sibley, Jackson County, Mo.**

**Hounds for hunting Fox, Coon, Skunk and Rabbits. Shetland Pony Mares**  
Send 2c stamp. **W. E. LECKY, Holmesville, Ohio.**



Sections, Foundation, Bee Veils, Smokers, a complete line of supplies for bee keepers. ready for immediate shipment. 40-page catalogue free. **Bees Wax Wanted.**  
**A. G. WOODMAN CO., Dept. M. F., Grand Rapids, Michigan.**



### BEE HIVES, SECTIONS, BERRY BASKETS

Comb Foundation. and CRATES.  
etc. We sell everything for the bees. Also Bees and Queens. Catalog free. Beeswax Wanted.  
**M. H. HUNT & SON, Box 525 LANSING, MICH.**



## Poultry and Bees.

### Things to Plant for the Poultry.

THE general farmer expects to plant for his cows and sheep, his horses and hogs, but scarcely one in a hundred thinks of planting for his poultry. Much may be grown for the farm flock, however, which will add a variety to the diet, increase the egg yield and cut down the expenses for feed. Of course, we understand that corn and other cereals may be raised, and these may enter largely into the feeding of the flock, but there are other things which should be grown especially for the hens and ducks.

#### A Handy Method.

An excellent plan, which I once saw in practice by a man who kept several hundred hens, was a large fenced yard running the entire distance across the back end of his runways, so that each pen opened into the yard. In the fall he planted winter rye and when it had got a good start in the spring, he opened one pen after another, allowing the hens to gather their own green feed. This was done until the rye was practically all eaten down by the hens, then they were shut out and the land harrowed and seeded to oats. This second crop of green food would be ready for the hens in a few weeks, and they were allowed to eat it off in season to plant again for the next spring. In this way the piece of land was used year after year, occasionally varying the rye and oats with some other crop for the biddies. The hens furnished all the fertilizing material required to keep the land in an excellent condition.

Mangels are recognized as a standard part of the winter ration for the hen, but a good many poultrymen depend on buying rather than raising the supply themselves. These are very easily grown and but a small patch is necessary to furnish succulent feed of this kind for a large flock. It will pay to have the ground well prepared and fertilized as, like the beet, the mangel is a gross feeder. I feed the mangels raw. My method is to cut the large vegetables in two pieces and hang them up where the hens can reach them. They will soon dig out all the pulp and get lots of valuable exercise in doing it. Vegetables like turnips and carrots are fed in a limited way. For the flock of ducks, they may be boiled and mixed with bran, and as the duck's diet should be largely composed of a wet mash, these vegetables may take the place of more valuable food. In fact, if the ducks are closely confined and unable to forage for themselves along running streams, they require a good deal of food of this nature.

#### Cabbage Very Good for Poultry.

Cabbage is one of the best of green foods for the hens, at all times of the year whenever available. Especially is it appreciated in the late fall and winter months. A liberal quantity fed to the early pulets, when they are about ready to lay, will help to fill up the egg basket and well repay the small amount of labor required to grow it. A ton or two can be raised on a surprisingly small piece of ground. One should plant the large-headed drumhead varieties for the hens, and perhaps some of the Danish ball head, because of its late-keeping qualities. It is not necessary to grow the finer-grained varieties, for the biddies are not particular as to quality. They seem mighty glad to get any kind.

#### Lettuce Good for Chicks.

A loose-growing lettuce, like the Grand Rapids, makes an excellent

green feed for the chicks, and ducklings if they are kept in confinement during the summer. Endive is another plant which young ducks seem to appreciate. They will eat a surprising quantity of it, and I always give it to them until it is spoiled by the frosts. Very little labor is required to raise it. Simply sow the seed in the garden rows and occasionally pull out the big weeds. No thinning or blanching is necessary.

The Russian sunflower may be grown for the seed if one desires. I do not see very much value in it, however, and have never considered it worth growing as a means towards economy in feeding. A waste corner or odd row might be utilized in this way to add a variety to the winter diet of the hens. At any rate, whatever you plant this year, be sure to raise a variety of green feed for the biddies, at least enough to keep them well supplied during the winter.

New Hamp.

C. H. CHESLEY.

#### CAUSE AND CURE FOR GAPES.

Many poultry writers give improper food to be the cause for gapas among chickens and turkeys. This I beg to differ from, as in my experience and observation weather conditions invariably have all, or much, to do with this disease. Cool, damp atmosphere for several days as often happens in the early spring and long in May is most favorable for producing the worms which cause the trouble. If it is not checked it will prove fatal.

I have tried turpentine by putting a little down the windpipe with a stripped feather or medicine dropper. This is sometimes successful. Some recommend the use of a horsehair for twisting the worm out but decidedly the best remedy I know is smoking them with tobacco. This can be done by using a pipe and smoke each one separately but the better way is to put the tobacco in a can or any small receptacle that will hold fire and place it in the closed coop at night. Let it remain there. Make the coop as close as possible. It will not hurt the chicks but only make them sneeze the better. It will do not harm to do this two or three nights in succession. As I have used the remedy and know its efficacy, I wish to pass it to others who may reap benefits from it.

Kentucky.

TOMMIE L. BAKER.

#### CHICKENS SWALLOW LEG BANDS.

Investigations at the Maine Experiment Station show that chickens have some ability to digest, or rather dissolve, aluminum. It is their custom to reband the chickens with a different type of band when they get larger. The old bands were clipped off and thrown to the ground. It was found that many of these clipped bands disappeared, and in dissecting a chicken they found fourteen pieces of these bands in the gizzard. All of them were in the state of dissolution and some of them were nearly all dissolved. Aluminum is soluble in dilute hydrochloric acid, which is present in the gastric juice and the resulting salt, aluminum chloride is not poisonous. These pieces undoubtedly serve the same purposes as grit until dissolved small enough to pass out with the feces.

Every beekeeper should be thoroughly informed regarding foul brood as it is the most serious thing he has to contend with.



## Horticulture.

### Spraying For the Apple Scab.

IN many places last summer the apple trees presented a bad appearance. The foliage was badly affected with the scab fungus. There has been considerable inquiry as to the cause of this. The writer will give his opinion. During the blossoming time last spring the weather was wet and unseasonably cold, just the ideal conditions for germination of the scab spores, and the blossoming period was unusually long, so that there was a much longer period than usual between the two sprayings—just before and subsequent to blossoming—and the foliage was unprotected during that time. Ordinarily the blossoms open and fall within a week or a little more, and only about two weeks intervene between those two sprayings, but last spring the trees were fully three weeks in opening and shedding the blossoms, and nearly a month passed between those two sprayings. While the little apples stood about still during that time the foliage continued to grow and expand, exposing unprotected surface to the attack of the scab. It is understood, of course, that the control of scab by means of spraying is effected by destroying the spores before germination, and after this has taken place it is impossible to kill the fungus with the ordinary sprays. Last spring there was ample time for this growth to start during that long season of blossoming and before the spray was applied soon after blossoming. The writer felt at the time that the time was altogether too long to allow the trees to go unprotected during such favorable conditions for scab development, but what to do was a question. It is not regarded as good practice to spray during blossoming time, and, besides, it is understood that it is unlawful to do spraying at that time on account of the danger of poisoning the bees.

#### Injury to Bees.

It is a question, however, if an inter spray under similar conditions would not be advisable. There would probably be little call for an arsenical spray at such a time, and this is what is supposed to kill the bees. An application of dilute lime-sulphur or Bordeaux would control the scab at that time, and in case the organs of some of the flowers were injured or covered so that pollination were prevented there would still be plenty of blossoms to make a crop. The blossoms on a given tree never all open at the same time, and ordinarily not more than one blossom in a dozen is required to make a crop, even if some were destroyed. I have not examined the spraying law to find whether such a spraying would be permissible or not, and this is a matter that should be looked after. Whether a fungicide spray alone would injure the bees or not at this time is also an open question.

#### Spraying at Blossoming Time.

We don't often have such a season as last, when the trees are so long in blossoming, but in any event it is not safe just at that season for the apple trees to go a whole month without spraying, and the ravages of the scab are too serious to allow the trees to go without some protection during such a long time. That this was the cause of the scab visitation last season I am confident. That the only known means of prevention would have been an inter-spraying with a fungicide is equally apparent. Possibly Bordeaux would endanger bees less than lime-sulphur, and probably either would be less hazardous to the crop than the scab. And is the value of a few bees (there are practically

none in my vicinity) greater than the welfare of a promising apple crop? If it shall be found that the law does not permit of the protection of the apples at such a time, perhaps it might be wise to investigate the matter and see if some amendment to the law might not be procured which shall make it a little more elastic in a case where the danger to bees is extremely doubtful.

Allegan Co.

EDW. HUTCHINS.

The spray law states that spraying should not be done at blossoming time except for the control of the spring canker worm. Regardless of its effect on the bees, which is an undecided question, the spray would have a detrimental effect on the blossoms, even if the fungicides were used alone. There are too many natural causes of preventing blossoms from setting that we should not use unnatural ones.

Spraying for scab is greatly a matter of guess when the matter of the proper time is considered. In some seasons a difference of two or three days makes the difference between clean and scabby fruit. Local conditions also make some difference in the control of this disease. If the orchard is high and on a soil which is quick drying on the surface, scab will not spread as fast as in orchards where the air drainage is not good and the soil does not dry off quickly. The density of the orchard is also a factor in scab control. Dense orchards prevent the free circulation of air essential for the quick drying of the foliage and fruit after rains and morning dews. Thoroughness is, of course, very important. One thorough spraying will do more than two that are not thorough.

Last year was an exceptional one with reference to conditions at blossoming time, but even so, where conditions, those of elevation, soil, etc., were at all favorable thorough spraying at the regular times accomplished very good results in the control of the scab.

#### ANNOUNCEMENT.

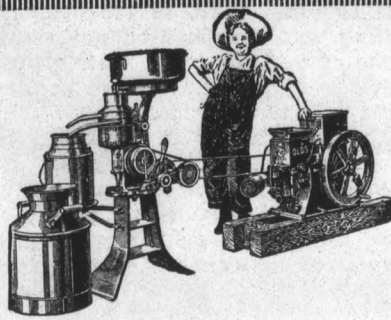
Commencing next week, and at frequent intervals thereafter, there will appear in the Michigan Farmer, articles entitled, "Notes from the Ward Orchards." These will give the experiences and results in the care of the famous Ward Ferniehurst Orchards at Pontiac.

As this is one of the best known orchards in the state, and as the lessees intend to use the latest and most improved methods of orcharding, the experiences, successful or otherwise, should be of interest to our readers.

#### BOOK NOTICE.

The first volume of the Standard Cyclopaedia of Horticulture, edited by Prof. L. H. Bailey, has just been issued. Although this is founded upon the popular Cyclopaedia of American Horticulture it is not a revision of that work, but rather a new work with an enlarged scope. The handsomely arranged volume of over 600 pages, 10½x7½ inches, contains about 700 engravings, including many full-page cuts, some of them being in color. In this volume every subject of interest to people in all lines of American horticulture, indexed under the letters A-B, is covered very thoroughly. This is the first of a set of six volumes, which will undoubtedly be the standard and authoritative reference work on horticultural matters. In cloth, \$6.00. Published by Macmillan Co., New York, N. Y.

Cultivate as early as possible so as to conserve the spring moisture.



### The Profitable Way

Gas engines furnish power for less than one-third the cost of man power, and do your work better and quicker than it can be done by hand.

### Rumely-Olds Engines

1 ¼-65 horsepower

and

### Falk Kerosene Engines

3-20 horsepower

are built for all kinds of work—may be had mounted on skids, trucks or stationary bases, or combined in handy outfits with balers, cream separators and saw mills.

Falk engines use the Secor-Higgins Oil-Fuel System and burn cheap kerosene and distillate.

Olds gasoline engines have made and sustained a reputation as leaders in their class for thirty-three years. Both are backed by Rumely service—49 branches and 11,000 dealers. Ask for Olds catalog No. 344 and Falk catalog No. 118.

#### RUMELY LINES

Kerosene Tractors  
Gasoline Tractors  
Engine Plows

Threshing Machines  
Corn Machines  
Baling Presses

Cream Separators  
Feed Mills  
Stationary Engines

Road Machines  
Grain Elevators  
Steam Engines

### RUMELY PRODUCTS COMPANY

(Incorporated)

Chicago  
Battle Creek, Mich.

Power-Farming Machinery  
Columbus, Ohio.

Illinois  
Indianapolis, Ind.

### Real Northern Grown Seed Potatoes BUELL'S RUSSET RURALS

Disease free; blight resisting; scab resisting; fine eating; high yielding. Grown on Maplewood Farm. Write DORR D. BUELL, Elmira, Otsego County, Mich.

### SWEET CLOVER

SEED, pure white and biennial yellow. Prices and circular how to grow it sent on request. Everett Barton, Box 129, Falmouth, Ky.

### SEED CORN

—Mich. Yellow Dent, home-grown, fire dried, tested, Golden Pledge and Reg. Swedish Select Oats. Send for sample and circular. F. A. Bywater, Memphis, Mich.

### STRAWBERRIES

—EVERBEARING American \$2.50 per 100, Fancies \$2.75 per 100. All you want. Postpaid anywhere in U. S. or Canada. Guaranteed true to name. The coming berry for home and market. ALLEGAN NURSERY, Allegan, Michigan.

Strawberry FREE Send address and get 25 fine. Everbearing Strawberry Plants free. Dept. 39, MUTUAL NURSERY CO., St. Louis, Mo.

Seed Corn—1000 bus. 1912 crop. Imp. Early and White Cap. Finest quality, germination perfect, \$2 per bu. Catalog free. THEO. BURT & SONS, Melrose, O.

SEED OATS—Regenerated Swedish Select, stiff straw, heavy yielder, free from smut, prime stock, re-cleaned, \$1 per bu., sacks free. Write for sample. Also Green Mountain Potatoes, vigorous grower, good yielder, quite free from blight, 75c per bu., sacks free. Colon O. Lillie, Coopersville, Mich.

Selected Seed Potatoes—Sir Walter Raleigh, purity guaranteed. Write us for prices. Stuart Acres Fruit Farms, Marshall, Mich.

PEA BEANS—Early Klondyke, white, 1913 yield 25 bu. screened per acre. \$2.25 Hand Picked \$2 screened. Early Yellow Dent corn \$2 bu. sacked. F. O. B. Dryden, Mich. FRANK BARTLETT.

WHITE CAP DENT SEED CORN, fire dried, 98% germination, \$2.50 per bushel shelled, bags free. ALFADALE FARM, St. Johns, Michigan.

SOY BEANS—Early Brown. One of the best and most reliable varieties. Michigan grown seed \$2.50 per bushel. R. C. CLEMENT, Blissfield, Michigan.

Early Corn Seed—Minn. No. 13, White Cap. 40 lb. Var. winning 1st prizes. Also all kinds of vegetable plants. A. W. Jewett & Sons, Mason, Mich.



### Tom Profit's Reasons

We stick to our friends 'cause they treat us right! Don't we? If one of 'em turns us a mean trick, we quit 'em. Don't we? Unless my opinion's second class, it's much like that with tools. We farm folks need our farm tools like we need friends when we collide with trouble. I like tools that stick like true friends an' that's why I like

## KEEN KUTTER

farm and garden tools. They stick. They stick 'cause they've the stuff in 'em that makes friends. Why—I wouldn't any more think of buyin' any other kind of tools than I'd think of livin' in a city flat, missin' the blossoms an' forgettin' there's a moon. There's a power of reason in just the fact that no Keen Kutter tool ever went back on me—an' if that wa'n't enough, the Simmons people give their dealers leave to hand back the price any time I say so—any time you say so.

Tom Profit.





# The Michigan Farmer

Established 1843. Copyright 1914.

## The Lawrence Publishing Co.

Editors and Proprietors.

39 to 45 Congress St. West, Detroit, Michigan.  
TELEPHONE MAIN 4525.

NEW YORK OFFICE—41 Park Row.  
CHICAGO OFFICE—604 Advertising Building.  
CLEVELAND OFFICE—1011-1015 Oregon Ave., N. E.

M. J. LAWRENCE.....President  
M. L. LAWRENCE.....Vice-President  
E. H. HOUGHTON.....Sec.-Treas.

I. R. WATERBURY.....Associate Editor  
B. W. WERMUTH.....Associate Editor  
F. A. WILKEN.....Associate Editor  
ALTA LAWSON LITTELL.....Associate Editor

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

### TERMS OF SUBSCRIPTION:

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

Canadian subscriptions 50c a year extra for postage.  
Always send money by draft, postoffice money order, registered letter or by express. We will not be responsible for money sent in letters. Address all communications to, and make all drafts checks and postoffice orders payable to, the Lawrence Publishing Co.

WE GUARANTEE to stop THE MICHIGAN FARMER immediately upon expiration of time subscribed for, and we will pay all expenses for defending any suit, brought against any subscriber to The Michigan Farmer by the publisher of any farm paper, which has been sent after the time ordered has expired, providing due notice is sent to us, before suit is started.

### RATES OF ADVERTISING.

40 cents per line agate type measurement, or \$5.00 per inch (14 agate lines per inch) each insertion. No ad't inserted for less than \$1.20 per insertion. No objectionable advertisements inserted at any price. Entered as second class matter at the Detroit, Michigan, postoffice.

DETROIT, MAY 9, 1914.

### CURRENT COMMENT.

Following the custom Mothers' Day, which has been established in Michigan in recent years, Governor Ferris has issued a proclamation designating Sunday, May 10, as Mothers' Day. The purpose of the day and its proper observance is fully explained in the text of his proclamation, which follows:

The mother is the queen of the home and the home is the ante-room to Heaven. Industry, thrift, honesty, self-sacrifice, sobriety, virtue, sympathy and love are fostered in the home. The home is the bulwark of our glorious nation. Every influence that stimulates the founding of homes adds to the nobility of manhood and womanhood.

"Breaking Home Ties" is one of the most pathetic, yet one of the most beautiful pictures in the world of art. The boy or girl bidding good-bye to Father and Mother, receives a holy benediction that can never escape memory. Out of the shadows and out of the sunshine comes Mother's face, Mother's voice, Mother's love.

On Mother's Day, I urge every boy, every girl, every man, every woman in Michigan to pay a tribute of love and devotion to the living Mother. Just read her last letter once more, then write her a joyous letter telling her of your loyalty and abiding love. On the grave of the sleeping Mother scatter flowers mingled with your tears.

Yes, the greatness and glory of a nation is in the hands and hearts of the mothers.

Therefore, I, Woodbridge N. Ferris, ask that the people of Michigan set apart the second Sunday in May (the 10th) as Mothers' Day. As far as possible, let parents in their homes and both young and old in public meetings discuss the theme of Mother with that enthusiasm and sincerity which should characterize all loyal Americans.

May we not hope that every Michigan Farmer reader will not only observe Mother's Day in the spirit suggested by the Governor's proclamation, but that through such observance they will get the habit of devoting more thought to the lightening of the mother's burdens and adding to her joys.

Following the campaign The Rural Church, which has been conducted in urban centers to get all of the people interested in the church and its work by making an effort toward a general church attendance on a given Sunday, which has been generally designated as "Go to Church Sunday," similar movements have been inaugurated in the rural districts of several states. The plan has been similar to that adopted in the cities and towns, except that the appointed day for the effort toward general church attendance in most cases has been designated as "Rural Church Day." As straws show which way the wind

blows, so activities of this kind show the trend of public thought. The rural churches have, in the opinion of many sociologists, been neglecting a line of work to which their organization and opportunities are peculiarly adapted, that of making the church the social center of the rural community. Naturally, progress along this line has been slow, and its very slowness is often given as the reason for non-interest in the church and its activities by many country people. Most of these people, however, believe that the country church might be made vastly more beneficial to country communities by broadening this line of work. A good way of securing such action on the part of the country church is for the thinking people of the country community to take an interest in it, and use their interest in this direction. If rural church day should accomplish this result it will have proven beneficial to the communities in which the movement is inaugurated, as well as the churches themselves.

A St. Clair county reader, in commenting upon the increased rate of taxation in Michigan, says: "In looking over old tax receipts, I find my state tax for 1905 was \$1.75 per thousand valuation, while for 1913 I find there was \$6.09 tax on each thousand dollars valuation. Now during this time the land has increased in valuation fully one-third and there have been no improvements, as the land was cleared and stumped nearly forty years ago. Can anyone tell me why we farmers are paying such an increase in state taxation? It is because we have not enough business farmers in the two houses at Lansing? The average 80-acre farmer is paying about \$80 tax on his farm, which would rent for about \$250 cash under present conditions. In comparison, I know of a rooming house in a city, that rents for \$2,000 per year, and the owner informed me that he only paid \$84 in taxes last year. It looks as though there might be an improvement in our tax system."

The most satisfying definition of a tax of which we have ever heard was recently given by a farmer member of the Michigan Legislature, who stated that a tax is an unjust penalty which someone else ought to pay. Most of us view the question of taxation from about that standpoint. It is probable that our state government is as economically administered as any in the country, but there are certain government obligations which must be discharged, such as the care of the unfortunate and the maintenance of penal and educational institutions. This has caused constant increase in state taxation, and if the history of other commonwealths is repeated, will continue to do so as our population increases.

Occasionally the Legislature fails to care for this increase in expenses, thus making the taxes for subsequent years higher by comparison, which has been the case during the past two years. Then the process of equalizing assessments has made the burden of taxation somewhat unequal during its progress. For instance, the state tax on property assessed in Oakland county was \$2.60 per thousand last year, while in Gladwin county it was \$3.80 per thousand, owing to the fact that valuations have been adjusted in one county and not in the other, while the state taxes were apportioned to the counties under the old equalization. It is undoubtedly a fact that improvements might be made in our tax system, but the matter of taxation has been a vexed question for legislators to solve, and that the millenium in this direction is a long way off, is attested by the fact that no perfect universally satisfactory system has yet been devised.

Good business farmers in the Legislature are unquestionably desirable,

and more of them should be elected to every Legislature, but too much should not be expected of them in the early solution of the vexed question of equal taxation.

### Immigration and the Labor Problem.

Official records show that over a quarter of a million immigrants arrived in the single port of New York during the last two months of 1913 and the first two months of 1914. That such a number of unskilled laborers should land at a single port during the winter months when immigration is generally lighter than at any other season of the year, notwithstanding the fact that the unemployed, not only in New York, but in the country at large, are largely unskilled workmen, would seem to be conclusive proof that industrial conditions in Europe are far from satisfactory, as has been commonly reported. The influx of unskilled workmen from Europe will, however, doubtless have an important bearing on the American labor problem if continued indefinitely. True, there is a large field for unskilled foreign workmen in industries which are not attractive to American labor, but this field is now fairly well supplied at all times, and it would appear that the real labor problem in this country will center on the assimilation of this large element of unskilled labor from abroad within the next few years.

Efforts have been made to direct the better element of this foreign labor toward agriculture, but, so far as Michigan is concerned, this movement has not yet assumed any very considerable proportions, except in the beet growing industry, where considerable foreign labor is employed in the care of the crop.

### The Railroad Problem.

Mention was made in these columns of the action taken by the National Breeders' Association affiliated with the National Society of Record Associations relating to a petition to the Interstate Commerce Commission for a re-classification of rates on live stock in less than carload lots. The record of the case which is now before the Interstate Commerce Commission, would be an interesting booklet to those readers of the Michigan Farmer who have never had the opportunity of examining the record of such a case. In this case the petitioners are the National Society of Record Associations and some thirty affiliated organizations, while a list of the respondents which are the railroad organizations of the country, covers 48 closely printed pages which are required for the naming of over 2,700 railroads that are made respondents in this case. One has but to look over this official list of the railways of the country to realize something of the magnitude of the railroad problem. Such a list is well calculated to scare the advocate of government ownership, if not discourage the exponent of legislative control. Perhaps no exhibit could better illustrate the magnitude of the railroad problem than the record of a case before the Interstate Commerce Commission.

### "Safety First" for Boys and Girls.

State Superintendent of Public Instruction Keeler recently issued a bulletin entitled "Safety First," which was intended to inaugurate a Safety First movement in the schools of the state. It is graphically illustrated with half-tones from photographs showing boys crossing railroad tracks in their games and picnicking under the shady end of a car. In it are given statistics relating to the mortality among trespassers on railroads in the United States, showing that more than 25,000 young people under 18 years of age have been killed or injured while trespassing on railroads

during the last twenty years. Strange as it may appear, tramps numbered less than 25 per cent of the victims of such accidents. Being circulated with this bulletin is a poster containing the following injunctions:

Do not walk on railroad bridges or tracks.

Do not walk around the end of lowered gates.

Do not crawl under lowered gates.

Do no loiter about railroad stations or cars.

Do not jump on or off trains, cars or engines.

Do not crawl under, between or over cars.

Do not cross tracks without stopping, looking and listening to see whether a train is coming.

Do not play in or around turntables.

Never take chances. The safe course is always the best and it is the quickest in the long run.

Be on the alert.

Get the Safety Habit.

Practice it every minute.

### HAPPENINGS OF THE WEEK.

#### National.

During the past week affairs have been moving against Gen. Huerta. It now appears that he will not hold out against his enemies much longer. The rebels are making a strong stand before Saltillo and will likely take that position before long. Gen. Villa will not halt in his military activities while mediation is being considered by representatives of Huerta, the United States, Brazil, Argentina and Chile. While the American forces have made preparation for an aggressive campaign, they have not attempted further military demonstration than the taking of Vera Cruz.

The United States Health Department is planning to clean up Vera Cruz and Tampico, Mexico. These ports are among the worst yellow fever cities of the world. By utilizing the time of the American troops it is expected that the places can be put in such condition that persons coming from there will not need to be held in quarantine before being admitted to this country.

As an outcome of the tragedy in Colorado, when a fortnight ago troops in attacking miners, raided a camp of women and children, killing 13, the members of the company are facing courtmartial and trial by the civil authorities, while the Governor of the state will be impeached, in all probability.

Of the 172 miners entombed in a mine at Eccles, W. Va., last Tuesday, by an explosion, 96 have been taken out dead. Many other bodies have been located and will be removed immediately.

Electric car operators of the Lehigh Valley Traction Company are out on strike. Two persons were shot Sunday when the strikers clashed with the police of Freeland, Pa.

Orders have been given for the United States battleship before Manzanillo, Mexico, to bombard that harbor and notice has been sent the inhabitants to abandon the city.

The bank clearings in the city of Detroit for the first quarter of 1914 excels all former records, bettering 1913 by over 12 per cent. There has also been an exceedingly large increase in building operations.

This week the United States Senate will consider the measure for the repeal of the tolls on coastwise trade through the Panama Canal.

The brokerage firm of Champ, Mitchell & Co., of Philadelphia, has failed with liabilities of over \$3,600,000 and assets of \$3,000,000.

Prosecutor Hugh Shepherd, of Wayne county, has tendered his resignation to the above office to Governor Ferris.

#### Foreign.

A fire in the commercial center of Valparaiso, Chili, resulted in the death of 50 persons.

A battle between French forces and the followers of a pretender to the Moroccan throne, resulted in a victory for the Frenchmen with heavy losses by the natives.

The treaty between the United States and Columbia, with provisions for settling the long standing dispute over the separation of Panama from the latter country, goes before the Columbian senate this week.

The first use of the Panama Canal will be made May 10, when barges loaded with a cargo of sugar from the steamer Columbia will pass through by special order of the government at Washington.

Madame Nordica, the world-famed opera singer, lies hopelessly ill at Batavia.



# Magazine Section

LITERATURE  
POETRY  
HISTORY and  
INFORMATION

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

The FARM BOY  
and GIRL  
SCIENTIFIC and  
MECHANICAL

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

## A Farmer's Impression of Ancient Italy.

By PROF. ALFRED VIVIAN.

**E**VEN if a man were so inclined he could not take a tour around the world and observe only things which were directly connected with his own line of work, for there is so much of compelling interest on every side that would attract him in spite of himself. Now that the time has arrived for departure from Europe for the voyage to the Orient, we feel that it would be leaving an entirely erroneous impression in the minds of the readers of the Michigan Farmer if they were led to believe that attention had been paid to nothing but agriculture during the sojourn on this continent. The fact is that many enjoyable hours have been spent in the cities viewing the marvelous architectural achievements of this interesting land, and in visiting many of the magnificent collections of paintings in the numerous galleries here.

The itinerary followed has permitted of a visit to a number of the principal cities of Europe, beginning with smoky old London, mention of whom attractions was made in a previous letter. Berlin is a modern commercial city and savors of business well conducted, although not to the exclusion of art, music and education. Paris will always be remembered for its broad avenues and its large open squares, as well as for the exuberant gaiety of the life which one would think would soon pal on the Anglo-Saxon. How strange the cafes on the sidewalk (and even in the middle of the street) seem to a people who like to dine in private.

But the most unique of them all is Venice—once the glory of the Adriatic—the greatest commercial city of the world—now lying in poverty, neglect and decay, dreaming of her mighty past. Built "on a thousand islands" her streets are canals; her cabs are gondolas; and her street cars (Oh! shades of the departed dogs) are steamboats. The only horses that she boasts are the four bronze ones over the chief portal to the Church of St. Mark.

A vivid imagination is necessary to picture the events that have transpired here, for today there is little that is romantic in gondola or gondolier, and the ubiquitous mosquito is likely to cause more of a thrill than is occasioned by the sight of the Rialto or the Bridge of Sighs.

Not a little of the pleasure of this trip has been due to the opportunity afforded of seeking most of the famous cathedrals of the world, including historical Canterbury so intimate-

ly connected with the life and death of Thomas a' Becket; wonderful Cologne, by many considered most beautiful of all; graceful, fairy-like Milan, with her two thousand statues, and her lace-like tracery and pinnacles that look like frost work in the moonlight; and the monster of them all—St. Peters at Rome—in which almost any other two could be placed bodily.

When this journey is finished one of the greatest pleasures of retrospection will be found in recalling the superb paintings of the masters. One need not be an art critic to thoroughly enjoy such pictures as Raphael's Sistine Madonna, Titian's Flora, Guido, Reni's Beatrice Cenci, the Murillo

absorbing a little of the antiquarian spirit, and now demand to be shown things that are either strictly up-to-date, or else have at least one thousand years to their credit, and as it is easier in Italy to find the latter than the former, we have been reveling in ancient history for the past few weeks.

"What a grand thing it would be if every boy and girl could study the important events of history on the exact spot where each one occurred;" so said someone the other day at the Colosseum at Rome, and we echoed the sentiment. How much more real all that we had read about the tragic events which took place in the arena

beasts in the arena, and where it has been estimated, 70,000 of the hated sect suffered martyrdom in one way or another.

In Rome are found also the catacombs so intimately connected with the early history of the Christian church. These subterranean passages were first used as burial places by the Christians who later vainly sought refuge from persecution in them and many of them suffered martyrdom here. The catacombs consist of many passages with recesses along the sides one above another, for receiving the dead, and these were afterwards closed with tablets of marble or terracotta. On the walls in many places may still be seen the crude decorations symbolizing Biblical scenes—the raising of Lazarus from the dead being one of the favorite subjects. The catacomb visited is said to contain at least eleven miles of passages.

The excursion to Pompeii will long be remembered as one of the most enjoyable experiences of the year. The ruined city lies at the base of the volcano Vesuvius. At the beginning of the Christian era it was a prosperous town of probably 20,000 to 30,000 inhabitants. In the year 63 A. D. it was visited by an earthquake which destroyed a large number of the better buildings, and was not entirely rebuilt when it was overtaken by the catastrophe of A. D. 79. At that time an eruption of Vesuvius covered the city with a layer of ashes ten to fifteen feet deep. Most of the inhabitants escaped and many came back to rescue from the ashes as many valuables as possible. Some of these people were undoubtedly asphyxiated by the gases, as were some who failed to escape in the first place. Later eruptions increased the depth of the ashes to twenty feet or over and the city was abandoned and forgotten.

Sixteen hundred years afterwards some accidental discoveries again called attention to the site, and during the last half century much of the old city has been excavated. The discoveries made during these excavations have thrown new light on the history of the Roman Empire and have made plain many of the customs of the period. Today the visitor can walk the streets of old Pompeii and see things much as they were in the first century, or at least see enough to assist in imagining the rest.

The streets are bordered with sidewalks and are paved with polygonal blocks of lava which in some cases are over a foot in thickness. At fre-

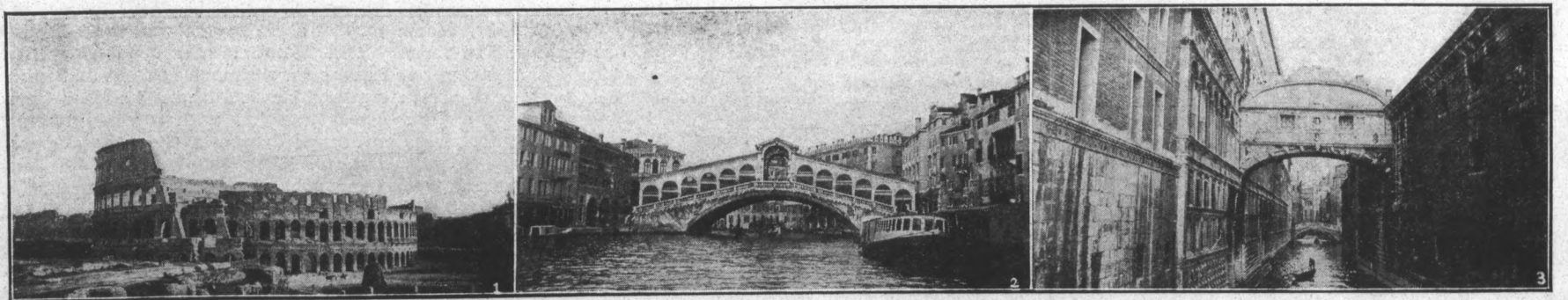


Business Street of Ancient Pompeii.—Note Stepping Stones for Crossing.

Madonnas, Rosa Bonheur's animal pictures, or many others of the really great paintings to be found in the European galleries. An unfortunate thing for the hurried traveler is that the gems of art are so scattered among the works that are merely mediocre.

One of the first things that strikes the traveler from the United States is the antiquity of many of the things seen on this side of the Atlantic. The visitor to an American city is shown the new library, or the latest skyscraper, but here he is taken to see the oldest building in the town, or the castle whose walls were in ruins before America was settled. Perhaps he has the temerity to admire a building when he is contemptuously told that it is "only five hundred years old," or else, "oh, yes, but that was restored six hundred years ago." All this makes him feel that America is indeed a very young country. We are

seem when standing on the very ground where they actually occurred! The Colosseum, which Mark Twain facetiously described as "a looped and windowed band-box with one side bitten out," is an oval structure over 1,600 feet (nearly one-third of a mile) long, 750 feet wide and 65 feet high. Originally it was four stories, or rather four galleries high, and had a seating capacity of 60,000 and standing room for fully half as many more. The ruins of this immense amphitheater tell the story of the grandeur of Rome as well as of her decay, for walking the streets of Rome today one could not, without the Colosseum, realize that this was once a city so large that it required accommodations for 90,000 of such of her citizens as demanded amusement. To the Christian this has become holy ground for he will remember above all things that this was the place where many Christians were thrown to the wild



1. Ruins of the Colosseum at Rome. 2. Rialto and Grand Canal in Venice. 3. The Famous Bridge of Sighs.





**\$925**

**Completely Equipped.**

**\$1050 with Self-starting and Lighting System.**

**You Can Go Anywhere with a Detroit.**

This picture was drawn from an actual photograph. It shows the Detroit climbing a 50 per cent grade on the demonstration course of the Brice Auto Company, Minneapolis. Neither hills, mud, nor sand can stop the Detroit. It is beyond a question the greatest car ever designed for country use.

The Detroit won't *break down* until it is *worn out*, either. It is built for keeps. Throughout last year, all the thousands of Detroiters in use averaged only \$3.81 apiece for factory repair parts. No other car ever made such a record.

AGENTS: There is still some mighty valuable territory open in Michigan. Write at once for our proposition.

### BRIGGS-DETROITER COMPANY

604 Holbrook Avenue

Detroit, Mich.



**BROWN FENCE**

**13 Cents Per Rod Up**

Strongest, heaviest wire, Double galvanized. Outlasts others nearly 2 to 1. Low prices direct from factory. Over 150 styles for every purpose—hog, sheep, poultry, rabbit, horse, cattle. Also lawn fence and gates of all styles. Mail postal for catalog and sample to test and compare with others. Address THE BROWN FENCE & WIRE CO., Cleveland, Ohio, Department 49.



**MASON'S LAWN FENCE**

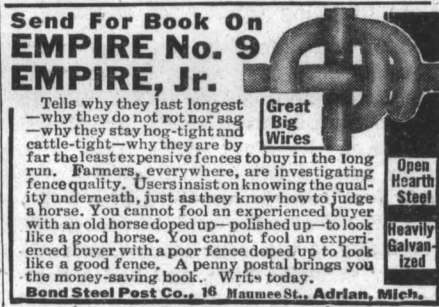
**6 PER FT.**

Lawn Gates only \$2.25. Close woven 48 in. Stock and Poultry Fence 2 1/2 in. rod. Heavy 4 in. Field Fence 2 1/2 in. rod. Hog Fence 1 1/2 in. rod. 60 days' trial. We not only lead on prices but on quality as well. Our great FREE Catalog proves it. Write for it today. It saves you money. The Mason Fence Co., Box 68, Leesburg, O.



**Why Pay Two Prices For Fences?**

Buy direct from our factory. Hundreds of exclusive styles. Wire and Ornamental Iron guaranteed Fences for every purpose: Gates, etc. Write for Free Catalog, First Order and Early Buyer's Offer! Ward Fence Mfg. Co., 268 Penn St., Decatur, Ind.



**Send For Book On EMPIRE No. 9 EMPIRE, Jr.**

Tells why they last longest—why they do not rot nor sag—why they stay hog-tight and cattle-tight—why they are by far the least expensive fences to buy in the long run. Farmers, everywhere, are investigating fence quality. Users insist on knowing the quality underneath, just as they know how to judge a horse. You cannot fool an experienced buyer with an old horse doped up—polished up—to look like a good horse. You cannot fool an experienced buyer with a poor fence doped up to look like a good fence. A penny postal brings you the money-saving book. Write today. Bond Steel Post Co., 16 N. Main St., Adrian, Mich.

## POTATO GROWERS

One Spraying With "Rex" Arsenate of Lead equals 2 to 5 sprayings with Paris Green. That's why all fruit growers now use Arsenate of Lead instead of Paris Green. Both are arsenical poisons.

**DON'T DELAY—PREPARE NOW.** If dealers in your town have none, write telling us how many acres or what portion of an acre of potatoes you have and we will give prices on amount you need. Full particulars free. **WRITE US TODAY.**

**The Toledo Rex Spray Co.**  
DEPT. 11 TOLEDO, OHIO

**REX**  
Trade Mark

## A New Seeder—Between Rows

**Reduces Labor and Assures Better Results Than From Any Other Method or Machine**

For seeding and covering seed between rows of corn, etc. Sows clover, timothy, rye, wheat, oats, buckwheat, etc. 17 flat teeth cover the seed to any depth desired and leave the field level. Wind does not interfere. Seeder mechanism and teeth same as used on our large machines for 10 years. Accurate and adjusts for various quantities.

### Eureka One Horse Mulcher and Seeder

also forms dust mulch and kills weeds. It is an ideal cultivator for farm or garden. Works close to small plants. Any of the teeth can be removed. Light weight with greatest strength—all parts of steel or malleable iron, except handles. Easily operated. Low price. Send for free catalog. EUREKA MOWER CO., Box 1226, Utica, N. Y.

Chas. C. Gelder, Princess Anne, Md., says:—  
"My stand of Crimson Clover sown in over 60 acres of standing corn in 1913 by the Eureka One Horse Seeder was the best and most uniform I have ever had."

quent intervals high stepping stones were placed across the street for the use of foot passengers. In the pavements are found ruts sometimes six inches or more in depth indicating that there must have been a heavy traffic. On many of the corners are public fountains and here and there were found public bulletin boards with notices concerning the election which was probably about to take place. The fellow who always likes to write his name in public places also lived in Pompeii and probably was no more respected than is his fellow of the present day.

Many of the houses were found just as they were at the time of the catastrophe, even to the inhabitants. The ashes sifting in covered the bodies and gradually became more and more compact, so that when the flesh finally decayed the bones were left in a cavity which was an exact mold of the body. By careful opening some of these molds, and filling them with plaster of Paris, it has been possible to get an accurate cast of the original body. Some of these casts show the features perfectly, and even the folds of the dress can be traced with certainty. Casts of dogs and other animals have also been made, the positions in most cases indicating that the victim died without struggling.

Beside the temples, theaters, baths and other public buildings it is easily possible to determine the use of many of the smaller edifices. In one is found three stone mills such as were used

for grinding wheat, and in the same establishment an oven containing several loaves of bread, indicating that in those days the baker ground his own flour. Near by is what was undoubtedly the forerunner of the lunch counter of today which had its wares displayed to attract the passing crowds. Numerous jars for wine and oil point to flourishing vineyards and olive groves similar to those for which Italy is now famous. The walls of the better houses are covered with frescoes in brilliant colors many of which are in a perfect state of preservation. The people of Pompeii must have loved bright red as much as does the Neapolitan of today.

Plumbing was not unknown at this time for in many of the houses are found connections made with lead pipe and the city was supplied with water brought in through an ingeniously constructed aqueduct.

At one place was found the body of a Roman soldier clad in full armor standing erect by the city gate; true to his duty to the very last. In a cellar eighteen bodies of women and children who had provided themselves with food and sought safety here were found. They had wrapped their heads up and were half buried by the ashes. Near here a man was found with a key in his hand and beside him a slave with money and valuables. Traversing the streets of Pompeii today with the bright sunshine over all, who can picture the terror of that awful day over 1800 years ago.

## The Expressiveness of Rural Terms

By JAS. N. McBRIDE.

I HAVE a series of photographs given me by my friend, Charles Poulot, of his father's estate near Lyons, in France. Among others are the Grange Neuve, or new storehouse. The word Grange, as used by the founder of the Patrons of Husbandry, was supposed to refer to their collective assembling as the Lodge among other fraternal organizations. Public usage, which is often stronger, if not wiser, in nomenclature, seized on this, the wider meaning of the French word, Grange, and called the members Grangers. If one might Anglicize this word it would be "storehouse," which sounds quite German to say the least. What this has to do with Agricultural style has reference to form and manner of expression or language we use.

The elegance and charm of correct expression is a gift, or acquisition, to admire, if not envy.

Vast sums of money are spent in acquiring scenes of actual life for moving pictures. The observant artist of the storehouse of the farm and field may preserve in his mind the primary functions of all the world's phases and unfold these scenes in conversation with words, painting them on the fleeting canvas of your perception. I am going to analyze just a bit for the benefit of the younger readers of The Farmer, or maybe it may be to the advantage of some speakers in farm gatherings.

When the Christ of all ages was on earth he was the man Jesus, who had stored his mind with the images of the field and flock and spoke as never man spake. The gospels are filled with these allusions, and what is of special interest, the gospels were not actually written by Matthew, Mark, Luke or John, but according to them. That is the incidents and sayings of Jesus was handed down orally until reduced to writing almost a century afterward. The field with the tares, the flowers of the field, corn ripening for the harvest, the barren fig tree, and many others, were word pictures of correct observation. These word paintings were impressed on his followers and could be remembered, until now they are fixed more firmly than if upon canvas.

If you wish to use expressive language and have it impressive, paint the picture in words so your hearers see it also. An unknown speaker is given a few minutes of impartial hearing. If he is able to divert the attention of his audience from himself to the mental pictures he throws upon the screen of his audience's conceptions, he succeeds. If he rambles or excuses, he has made a poor start, or, in the language of base ball, an error, which subsequent brilliant work must be forthcoming to overcome.

Examine examples of sacred writings for these first word-striking pictures and see how they have survived the ravages of time, and are as fresh as ever. "The Lord is my Shepherd," etc., is ever a picture, orinetal or ocidental, of watchful care of the flock. The first verse of the Scotch song, "Annie Laurie," breaks in upon a scene of beauty to our eyes, in "Maxwelton's braes are bonnie." It is these views of the field and flock, forest and stream, that every boy and girl should lay by in their mental "Grange," or storehouse, ready for use because they are ever fresh and are the common meeting grounds of all minds in all ages.

Ingersoll, at Napoleon's Tomb, was most happy in painting pictures with words. In the following paragraphs observe these: "I saw him (Napoleon) in Russia where the infantry of the snow and the cavalry of the wild blasts scattered his legions like the winter's withered leaves. \* \* \* I thought of the orphans and widows he had made and the tears that had been shed for his glory, and of the only woman that had ever loved him, pushed aside by the cold hand of ambition. And I said I would rather have been a French peasant and worn wooden shoes. I would rather have lived in a hut with a vine growing over the door and the grapes growing purple in the kisses of the autumn sun. I would rather have been that poor peasant with my loving wife by my side, knitting as the day died out of the sky, with my children upon my knee and their arms about me. I would rather have been that man and gone down to the tongueless sil-





You have seen many cases of shoes bearing the Hamilton, Brown trade-mark come into your town. Have you worn any of the shoes that came in them?

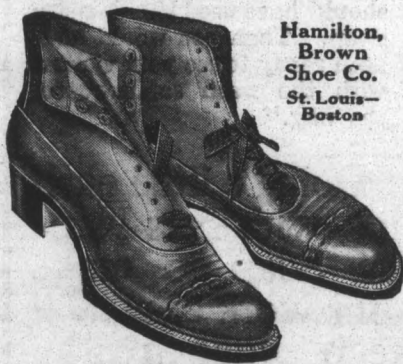
If you have you don't have to be told anything about the quality of

### Hamilton, Brown Shoes

They are absolutely the best shoes for the money. They wear best, look best and fit best, all because they are made by shoemakers who have had long years of training in quality shoe making.

Look for the Hamilton, Brown sign and buy your shoes there.

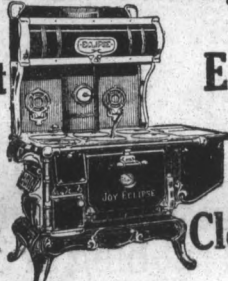
You can get any kind of a Hamilton, Brown Shoe you want, for any purpose, and for any member of the family, in all styles and sizes and prices.



Hamilton, Brown Shoe Co. St. Louis—Boston

## ECLIPSE

Built To Last Easy To Clean



BEFORE you buy that new stove or range, be sure to write us for the name of Eclipse dealer. He will show you one that will heat or bake well, is economical, easy to handle, looks attractive and lasts long—while even the first cost is low. FREE illustrated book describes all styles. Write for it today.

ECLIPSE STOVE COMPANY  
Mansfield, Ohio

### The Grand Rapids VETERINARY COLLEGE

Offers a three years course in Veterinary Science. Complying with all the requirements of the U. S. Bureau of Animal Industry. Established 1897. Incorporated under State law. Governed by Board of Trustees. Write for Free Catalog.

152 and 154 Louis St., Grand Rapids, Michigan.

**Do You Need Farm Help?** We have many able-bodied young men, mostly without farming experience, who wish to work on farms. If you need a good, steady, sober and willing worker write for an order blank. Ours is a philanthropic organization, and we make no charge to employer or employee. Our object is to encourage farming among the Jews. The Jewish Agricultural Society, 714 W. 12th St., Chicago, Illinois.

**POSITION WANTED**—by a Holland Couple without children on a dairy farm. Good milkers. State salary in first letter. Address G. R. CREAMERY CO., Grand Rapids, Mich.

**Help Wanted**—Reliable and experienced single farm hand; good milk and familar with all farm work. Good position. Permanent. Rougemont Farms, Detroit, Mich.

**Government Farmer's Wanted**—Make \$125 monthly. Free living quarters. Write Ozment, 17 F. St. Louis, Mo.

**Soy Beans**—Great soil improvers, heavy yielders, high feeding value, best variety tested Agricultural College, \$3 per bu. O.D. Woodbury, Lansing, Mich.

**5 Baldwin Apple 30c.** 4 ft. up, true-to-name, postpaid. to new customers only. With Rose, 40c. Wholesale Nurseries, Bloomington, Mich.

ence of the dreamless dust than to have been that imperial impersonator of force and murder, known as Napoleon the Great."

You are charmed with the orator whose figures of speech are largely taken from the storehouse of the soil and the home. When next you listen to a public speaker, mark his power or lack of it, along the lines of imaging or painting the pictures with the scenes appreciated by his hearers.

We are the grownups who, in our very childish days wanted to be told stories. To have pictured in our youthful minds stories of Indians, bears and wolves, was delightful, then later came Robinson Crusoe and his companions. The illustrated magazines and moving pictures please us in maturity. In the social circles try the experiment of description and imagery shorn of personal participation as to the opinion you formed. Such a thing was grand, it was fine, is not description. In fact, egotistically selfish as though the effect was greater than the cause, and you make yourself the central figure on the stage, a reversal of fact, for you are before the people and the scene is not. Profanity is a parasite of speech, it emphasizes where emphasis is undesirable, and detracts from the mental picture that may follow, by surrounding beauty or comeliness with nothing, or worse, in the sense of the offensive being mingled with the pleasant.

### THE CRUDE RUBBER SUPPLY INCREASES.

The development of "plantation rubber," which in the past few years has not only brought down crude rubber prices but changed the world's basic supply, has had a marked effect on the tire-making industry.

Four or five years ago Brazil produced most of the world's high-grade crude rubber supply, and the price per pound was steadily rising. It reached \$3 a pound in 1910 and the supply was not nearly up to the demand, so that a serious crisis was in sight, and there was danger that the prices of rubber products, such as tires, would become prohibitive and seriously retard the development of the automobile except as a toy of the very wealthy.

Meantime far-sighted men and companies had established vast plantations of young growing rubber trees, easily accessible, instead of being located in remote jungles, and susceptible of the best scientific training. At first the product of these plantations was very small, but it has grown year after year until it is now greater than the wild rubber supply, and has not, even now, reached its full development. Crude rubber has recently been as low as 60 cents per pound. Recently there has been a little rise, but indications are that the trend will be gradually downward for some time, until a rock-bottom price, on the basis of a full development of the plantation system, has been reached.

Brazil, which in the beginning did not take seriously the menace of the plantations, failed to protect herself, either with extensive plantations of her own or by improving facilities for gathering her wild product and preparing it for market, so now the big basis of the crude supply is in other parts of the tropical world, such as Ceylon, the Philippines, etc.

General Daniel Sickles, the last of the great commanders of the Civil War, died at his residence in New York, Sunday night. It was through his skill that the battle of Gettysburg was turned against the south, he commanding the Union left, gained a position on Peach Orchard Ridge which prevented Longstreet from reaching Round Top and sweeping the Union forces all along Cemetery Ridge. He also had an important part in the battles of Williamsburg, Fair Oaks, Malvern Hill, Antietam, Fredericksburg and Chancellorsville. He was born in New York City in 1825.

A Man's Drink—  
A Woman's Drink—  
Everybody's Drink



Vigorously good --- and keenly delicious. Thirst-quenching and refreshing.

The national beverage ---and yours.

Demand the genuine by full name—  
Nicknames encourage substitution.

THE COCA-COLA COMPANY

Whenever you see an Arrow think of Coca-Cola.

Atlanta, Ga.



This FREE Book Will Save You Money



## PURE PAINT.

90c a Gallon and Up

Paints for all purposes. Made from finest ingredients obtainable. Marked at prices that show you a tremendous saving. Backed by strongest, most liberal paint guarantee ever given by a firm that makes its guarantees good. Guaranteed 100% pure; to be all that paint should be, in the can and on your buildings. Beautifully illustrated new Paint Book, shows house, barn, inside, carriage, wagon and floor paints in actual colors. Lists stains, enamels, kalsomines, oils, varnishes, brushes, tools, etc. Quotes new reduced prices. Gives helpful hints and valuable information for paint buyers. Send for it. It's free. Cut your painting costs. Secure positive paint protection.

## WALL PAPERS

5c and up Per Double Roll

The most attractive designs and colors you can imagine. Different. More desirable. The best products of some of the world's best mills. Offered in our 1914 sample book at prices 1/2 and 1/2 lower than are usually asked for papers of equal quality.

Send for this big Free Sample Book. See the actual samples. Save 1/2 to 1/2 on your paper bill, or paper 3 rooms at the cost of 2. Learn how to make suitable selections. How to measure rooms, to make the best paste, to do your own papering easily and quickly. The Free Book explains all. Send now.

## Groceries One-Third Less

Always at from one-fifth to one-third less when ordered from our cost cutting grocery list. Often at even a greater saving. Many rare bargains in this home grocery book. 33 1/2% saved on every \$1—more than \$3 on every \$10. Think what this means on articles you must buy—sugar, teas, coffees, canned goods, everything used on your table. Means more than mere money saving. You secure absolutely pure, wholesome foods. Send for the latest Grocery list. Compare prices with those you have been accustomed to paying. Place a trial order. Do this at our risk. Every cent of your money refunded if not thoroughly satisfied. So send now for catalogue. Save 1/2 on living expenses.

## Special Money Saving Catalogues

Guides to safe, economical and satisfactory buying. Completely describing and illustrating special lines of merchandise of guaranteed excellence. Free upon request.

Wall Paper Sample Book	Gasoline Engine	Sprayer and Sprayer's Solutions
Reliable Fencing	Grocery List	Made-to-Order Clothing
Dairy Book	Bicycle and Bicycle Supplies	Plumbing Book
Baby Book	Including Motorcycle Supplies	Tombstones
Prepared Roofing	Heating Book	

Automobile Supply Catalogue. Everything for the auto owner. And a special department devoted exclusively to the handling of high grade Ford Parts and Accessories.

**BUILDING PLANS and BUILDING MATERIALS**—These splendid free volumes not only show how to reduce building costs, but tell how to build better buildings. Send for them before you buy or build. State name of catalogue desired.

**MONTGOMERY WARD & CO.**

New York, Chicago, Kansas City, Fort Worth, Portland.

Send to the city nearest to you, address Dept. 00-11

00-11  
Kindly send me FREE Catalogues named below.

Name .....

Address .....

R.F.D. ....

Concrete Mixer \$11.50 and up. Easily turned by hand or 1 H. P. Engine. Mixes big wheelbarrow full every 3 minutes. Write now for catalog. G. C. SHELDON, Nehawka, Nebr.

**SUGAR** with Tea, Coffee and Groceries. Free Catalogue. Star Tea Co. Dept. X, Chicago 2 1/2c lb.





**The General says:-**

There is no *beforehand* test by which you can know how long a roof will last. But when you buy

## Certain-teed ROOFING

you also buy the responsibility of the three biggest roofing mills in the world—to make that roofing make good for 15 years at least. See that *Certain-teed* label is on every roll or crate.

Your dealer can furnish *Certain-teed* Roofing in rolls and shingles—made by the General Roofing Mfg. Co., world's largest roofing manufacturers, East St. Louis, Ill., Marseilles, Ill., York, Pa.

## Let Us Figure On Your Furnace

**Our Free Plans and Direct Factory Prices Will Help You Greatly No Matter Where You Decide To Buy.**

Expert heating engineers will draw detail plans to your special needs and quote exact cost on furnace with fittings—no obligation.

**Customers Everywhere To Refer You To**

No Delay—No Freight to Pay—Satisfaction Guaranteed. And \$25 to \$75 saved. Cash or easy terms.

**WRITE for Catalog**

Ask for No. 909.

See the simple, practical, economical plan that is winning favor everywhere.

**Kalamazoo Stove Co.**

Mrs. Kalamazoo, Mich.

We make a full line of Ranges, Stoves, Furnaces, Metal Kitchen Cabinets and Gas Stoves.

Mention catalog wanted.



This Book Saves You From \$25 to \$75

**"A Kalamazoo Direct to You"** And Gas Stoves Too

## The Reflex Slicker

asks no favors of the weather man.



**Reflex Edges Protect You**

by keeping out every drop.

"Staydriest" Pockets will not drip.

**\$3.00 Everywhere**

**PROTECTOR HAT 75c.**

(waterproof)

**Satisfaction Guaranteed**

Catalog Free

**TOWER'S**

**FISH BRAND**

A. J. TOWER CO., Boston  
Tower Canadian Limited, Toronto

## LIGHTNING RODS 9c PER FOOT

**Best Quality Copper—Extra Heavy Cable**

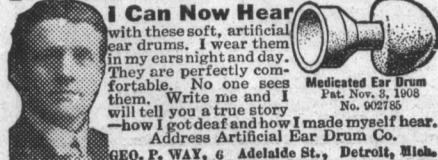
System guaranteed satisfactory or your money back. Just write a postal for our

Proposition and FREE Catalog which makes everything plain.

**The J. A. Scott Company**

Dept. 3 Detroit, Mich.

## I Was Deaf 25 Years



**I Can Now Hear**

with these soft, artificial

ear drums. I wear them

in my ears night and day.

They are perfectly com-

fortable. No one sees

them. Write me and I

will tell you a true story

—how I got deaf and how I made myself hear.

Address Artificial Ear Drum Co.

GEO. P. WAX, 6 Adelaide St., Detroit, Mich.

When writing advertisers please mention The Michigan Farmer.

## Woman and Her Needs.

At Home and Elsewhere.

### Are Housekeeping Women Uninteresting?

**W**HY does the average woman become so uninteresting after she is married? I have been asked that question often lately, and have been studying the married women of my acquaintance for sometime in an effort to find out if they are so very stupid. Somehow I don't find that they are.

To be sure, the things about which they talk are not always exciting. How to make over last year's skirt, the exact age at which little Mary cut her first tooth, just what Johnny's symptoms were when he had scarlet fever, how big John likes his eggs cooked, and the latest recipe for angel food without eggs, does not make what you would call spicy conversation. But does it necessarily follow that it is uninteresting? On the contrary, is it not of the greatest interest to the person talking? For is it not her life? And life in any of its phases is of interest to the real philosopher, whether it is life in the kitchen, on the stage, in the business office or the baseball ground. Any revelation of another's soul is interesting, whether that revelation comes from a commonplace recital of bread-and-butter facts or from the records of divorce proceedings. And certainly the former is much more decent.

As a matter of fact, what chance has the housekeeper in these days to find much to talk about outside her own interests if she does her whole duty as expounded by her many advisers? There must be children in the real home, and in this year of grace there is seldom help to be secured or money to pay for it if one could find the helper. That leaves one pair of hands to do the whole thing. Meals must be cooked, for though uninteresting to talk about, they seem of vital importance if omitted. Dishes must be washed, beds made, rooms cleaned and dusted, washing and ironing gotten through with some way or other, mending for the evenings when one might like to read, sewing to be done unless one is willing to throw away money on the shoddily made ready-to-wears, gardens must be made and weeded if they are to produce eatables, poultry must be cared for, fruit and vegeta-

bles canned, quilts and blankets looked after, and incidentally and all the time, there are the children with their thousand and one demands on "mother," who is for the time being, their slave and counsellor combined.

Where is the woman who does her whole duty by her family to find time to keep brushed up on outside things which would make her "interesting," unless she has superhuman strength and superhuman will combined? When one has toiled all day until every nerve, muscle and bone in the anatomy is screaming for rest, it requires an incentive more than human to keep on the few moments longer needed to "feed the lilies of the soul" with that book or magazine we are constantly being told to have always at hand for the idle (?) moment.

That some women do keep up an outside interest is either due to good luck or the fact that they leave something about the house undone. It is a physical impossibility for any woman to do all the work about a modern home, with three or four children, do it as domestic science experts tell us it should be done, and still have time to keep up a course of reading or some outside work. If the extra work is done, it is done at the cost of health, nerves, or home. Something suffers.

To me "the average married woman" is not uninteresting. I'll admit that I would rather talk about the possible chances of war with Mexico, the tolls repeal, Charlotte Perkins Gilman's latest outburst, and Eleanor Wilson's wedding, than about the best way to dye an old wrapper, or why the jelly didn't jell. But I do not find married women the only ones who can't talk on topics of the day. Many men who can tell about Ty Cobb's batting average never heard of President Huerta. And who would dare call them uninteresting?

It is all a question of the point of view. Perhaps women might be better companions to their husbands if they took more interest in things outside their homes. But if they do not it is their misfortune, not their fault. And in their round of petty duties lies the one thing of greatest human interest, homemaking. DEBORAH.

### Some Time-Honored Frolics for the May Season.

By L. D. STEARNS.

**N**OW that May is here, young people, and even those of an older growth, instinctively begin to think of frolic and merry-making. Something in the very atmosphere seems suggestive of gaiety and light-heartedness, and the time-honored frolics of our mothers and our grandmothers are brought out and modified year after year.

The first week is often set aside in rural communities as the time for hanging May-baskets, although the custom is by no means universal. While it would not be suitable within city limits, it is such good country sport that it seems a pity it is not more widely adopted, for the baskets are dainty and pretty, and the fun innocent and harmless as well as inexpensive.

They are made in various shapes and sizes. Some of the prettiest are simply pasteboard boxes about six inches square, covered with white or colored tissue paper cut in strips about an inch and a half deep and slit up sideways for perhaps an inch into narrow strips. These are then crinkled with scissors or a dull knife,

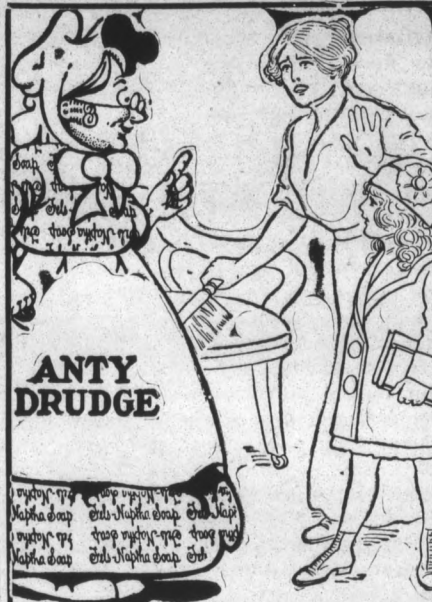
and pasted by the smooth edge thickly over the box, which is finished at the top with a broad band of the tissue, or gilt paper. Through the handles, made of braided paper and crossed from corner to corner, are woven green vines or blossoms. The basket, after being filled with flowers, trailing vines, fruit or candy, is hung to the door knob and a loud knock or ring given, when chase is at once made, for the donor is not supposed to be known, and the fun lies in not getting caught. It is counted rare good fortune if a boy or girl goes the entire week without once being taken captive.

Baskets can also be made by covering boxes with gilt or silver paint or any dainty color, and piling them with artificial or real flowers, fruit or candy.

#### May Basket Luncheon.

A May basket luncheon is also a pretty affair, and greatly enjoyed by both young and old. It, too, is particularly adapted to rural communities where all the early spring blossoms and vines are abundant.

Several days before the luncheon,



**Mrs. Hopeless**—"I'm all upset. Mrs. Pryor phoned me yesterday that she was going to drive over this afternoon, so I had to put off washing. It takes me all day, and I wouldn't have her catch me working for anything—she'd never get done talking about my poor management."

**Anty Drudge**—"My dear, I'm afraid you're a poor manager, to put your washing off. You should have used Fels-Naptha Soap. Then you would have been ready to see your visitor, with the wash safely out of the way."

Doing a little each day, with Fels-Naptha Soap to make your work easy, will keep your house clean and fresh, and won't tire you out, either.

Fels-Naptha will do your washing for you in cool or lukewarm water, without hard rubbing or boiling the clothes, and will do it better, quicker and easier than ever.

Fels-Naptha does every kind of work. It makes dirt disappear, dissolves grease, and makes stains vanish, even stubborn blood stains.

Buy it by the box or carton. Follow the directions on the Red and Green Wrapper.

Fels & Co., Philadelphia.





invitations are tucked into tiny baskets decorated with the spring blossoms and left hanging at the door of each invited guest.

The porch, reception room and hall should be decorated with wild vines and flowers, branches of trees and pussy-willows, with banks of soft green moss wherever feasible. May baskets of all shapes and sizes, from the common quart fruit basket to the made cornucopia, with its long, streaming banners, all filled with early blossoms and vines, hung from the ceiling or roof of the piazza and about the rooms in every conceivable place, from chandeliers, brackets and plate rail, add to the beauty of the scene and impart a most festive air to the whole.

Refreshments are served from the baskets, large ones being piled with fruit and others with sandwiches of different varieties, candies, nuts and cake. The salad should be served in tiny baskets formed of lettuce leaves, while the cream cheese repotes in tiny parsley baskets. Whole strawberries may be served in woven raffia baskets, if the hostess (or some friend) is fortunate enough to be able to weave them, and these may be given as souvenirs of the occasion. Let the affair end with the old-time May-pole dance.

#### HOME QUERIES.

Household Editor:—Will you please publish in the Household Department the song, "When the Myrtle and the Ivy Are in Bloom," or tell me where I could find it?—M. K.

We cannot publish songs and poems in this column. It is intended solely as a corner to solve home-making problems.

Household Editor:—What would be a pretty way to make a dress for a tall, slim girl?—L. H.

The new spring styles are especially becoming to slight figures. Make the skirt with two or three ruffles below the waist, and choose a kimona waist, with sloping shoulders, vest effect and chemisette of white lawn or net.

Household Editor:—How can I make cold meat into croquettes?—Mrs. B.

Make an extra thick white sauce. Remove all bone and gristle from the meat, chop it fine and mix in the sauce. Form the mixture into small ball, roll in crumbs, then dip in egg, again in crumbs, and fry a delicate brown.

Household Editor:—How much time should you allow for a roast of veal?—Mrs. J.

Eighteen or twenty minutes to the pound.

Household Editor:—Please tell me what to do for a 13-year-old girl troubled with indigestion. Will some mother kindly answer this? I have tried to do all we could. Will someone give recipe for molasses cookies where one teacup of boiling water is used?—A Reader.

The only help for indigestion is dieting, and as you do not say what the girl has been eating, it would be difficult to advise you. Girls at that age usually eat too much sweet and starches and not enough milk, eggs and good vegetables. If she is in a serious condition let her fast for 24 hours and take nothing but hot water until the stomach is feeling better. The second day give her a half-cup of hot milk to begin with, and a similar amount every two hours through the day. It would be better to consult some physician who understands dieting and let her eat what he prescribes.

There are several recipes for molasses cookies with boiling water. The following is the best I have ever found: Two cups of molasses, one cup of granulated sugar, one cup of shortening, one tablespoonful of vinegar, one heaping teaspoon of soda, one level teaspoon of salt, two teaspoons cinnamon, two-thirds cup of boiling water. Coffee makes better cookies than water if you have it. Mix in the evening, adding flour until they will roll up clear from the board,

let stand over night and bake in the morning. Made with good molasses these are delicious. Poor molasses will spoil any recipe.

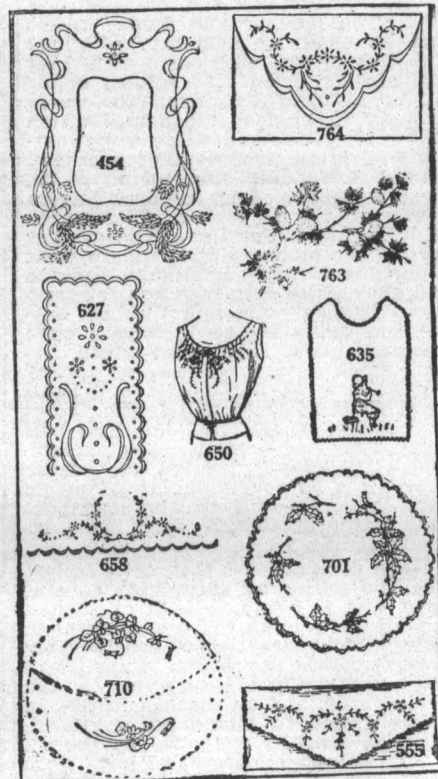
Household Editor:—Will you kindly print in the Michigan Farmer how to make maple sugar and maple syrup? Also how to make a good pie crust.—A Friend.

Every housewife has her own way of making piecrust. A good rule is as follows: Chop four tablespoonfuls of lard into one and one-half cups of flour, through which have been sifted an eighth teaspoonful of salt and a quarter teaspoonful of baking powder. When the lard is perfectly blended add just enough cold water to hold the flour and lard together well. Roll on a well floured board, spread upon the crust four tablespoonfuls of lard or butter, lay the crust over it, and roll and fold until the shortening is perfectly blended. This takes time, and if you prefer you may add the whole of the lard to the flour in the beginning. The tablespoonfuls should be only slightly rounded.

Household Editor:—How do you clarify stock?—D. F.

Allow the white and crushed shell of one egg for every two quarts of stock. Beat the white lightly and pour, with the shell, into the stock while cold. Stir constantly until the mixture reaches the boiling point, boil three minutes without stirring, then push to the back of the stove and let simmer 10 or 15 minutes. Strain through a cheesecloth and the stock is ready to serve.

#### EMBROIDERY DESIGNS BY MAY MANTON.



No. 454—Photograph frame. Stamped and tinted on gray linen, with mercerized floss to work, 25c.

No. 764—Handkerchief case, envelope style. Stamped on best white linen, mercerized floss to work, 35c.

No. 763—Cover for cushion or pillow. Stamped and tinted on crash, 17 x 22 inches, with back and mercerized floss to work, 30c.

No. 627—Hat pin holder. Stamped on best white pure linen, mercerized floss to work, 25c.

No. 650—Corset cover. Stamped on best quality nainsook, with mercerized floss to work, 45c.

No. 635—Child's bib. Stamped on best white pure linen, with mercerized floss to work, 30c.

No. 658—Guest towel. Stamped on superfine 24x15-inch pure linen white huckaback, with mercerized floss to work, 55c.

No. 701—Centerpiece, 22 inches in diameter, stamped on tinted gray linen and mercerized floss to work, 55c.

No. 710—Whisk broom holder. Stamped and tinted on gray linen, with mercerized floss to work, 25c.

No. 555—Handkerchief case. Stamped on best white pure linen, mercerized floss to work, 35c.

Transfer patterns of any of the above designs sent to any address for 10c each. Stamped goods and material for working, at prices quoted. Address all orders to Fashion Department of the Michigan Farmer.

## Madam—Make Your Workshop Attractive

The kitchen is about the most important place in the house and every woman is entitled to have hers bright and cheerful. At a trifle of expense, you or your son or husband can turn that dull woodwork to a dazzling white that will make you the envy of your neighbors.

## ACME QUALITY

### Paints, Enamels, Stains, Varnishes

are made for everyday folks to brighten homes with. Acme Quality Granite Floor Paint will give a hard and sanitary surface that costs less than carpet or linoleum. Enameled woodwork makes cleaning easy. Acme Quality No-Lustre Finish for walls comes in every pleasing tint and makes a washable surface.

Write for our two Free books—Acme Quality Painting Guide and "Home Decorating." They tell how to paint correctly and what to use. We will also send you the name of the dealer in your locality who sells Acme Quality Paints.

### ACME WHITE LEAD & COLOR WORKS

Dept. AA,  
Detroit, Michigan

Boston, Chicago, Minneapolis, St. Louis, Pittsburgh, Cincinnati, Toledo, Nashville, Birmingham, Fort Worth, Dallas, Topeka, Lincoln, Salt Lake City, Spokane, Portland, San Francisco, Los Angeles, San Diego.



For Quick  
Thorough  
and Easy  
HOUSE  
Cleaning



Order Old Dutch from your dealer today.

Directions and suggestions for easy house cleaning on large sifter-can show how to lighten your tasks and make all cleaning quick and thorough.

Large Sifter Can 10c



# Markets.

## GRAINS AND SEEDS.

May 5, 1914.

**Wheat.**—Prices are going both ways; cash and May wheat advancing while July and later futures are declining. The old grain is in short supply, while the condition of the growing crop and the acreage which is placed at 3,000,000 acres more than were ever harvested in this country before, makes the future bearish. For immediate deliveries there is a strong demand abroad, with small shipments from Argentine, improved demand for Australian cargoes, and a firmer feeling in all European markets. One year ago the price for No. 2 red wheat was \$1.07 per bu. Quotations for the past week are:

	No. 2 Red.	No. 1 White.	May.
Wednesday	98 1/4	97 3/4	98 1/4
Thursday	98 3/4	98 1/4	98 3/4
Friday	99	98 1/2	99
Saturday	99 1/4	98 3/4	99 1/4
Monday	99 3/4	99 1/4	99 3/4
Tuesday	99 3/4	99 1/4	99 3/4

Chicago, (May 4).—No. 2 red wheat 95c; May 92 1/2c; July 85 1/2c per bu.

**Corn.**—No changes of importance occurred in corn circles and prices are being well maintained. Conditions for farm work have encouraged plans for the usual acreage in most districts of the country and in some sections to the south planting has actually begun under favorable soil and weather environments. Argentine reports a 10 per cent damage to her crop. The price for No. 2 corn a year ago was 57c per bu. Last week's quotations were:

	No. 2 Mixed.	No. 2 Yellow.
Wednesday	67 1/2	69 1/2
Thursday	67 1/2	69 1/2
Friday	67 1/2	69 1/2
Saturday	67 1/2	69 1/2
Monday	68	70
Tuesday	68	70

Chicago, (May 4).—No. 2 corn 65 1/4c @ 67 1/4c; May 64c; July 64 1/2c per bu.

**Oats.**—A fraction has been taken from oat quotations this week, with the grain now holding about steady under a moderate demand. A normal acreage of oats is being sown but the seeding is generally late, which will decrease the chances for a good crop. One year ago the price for standard oats was 38 1/2c per bu. Quotations for the past week were:

	No. 3 Standard.	No. 3 White.
Wednesday	41 1/2	41
Thursday	41	40 1/2
Friday	41	40 1/2
Saturday	41	40 1/2
Monday	41	40
Tuesday	41	40

Chicago, (May 4).—Standard oats, 39c; May 36 1/4c; July 36 1/2c per bu.

**Beans.**—Good demand prevails and prices are higher. The local board of trade quotes immediate and prompt shipment at \$2.10; May \$2.15 per bu. Chicago reports higher prices. Pea beans, hand-picked, choice, are steady at \$2.25; common \$2@2.15; red kidneys, choice \$3.25.

**Rye.**—This cereal is lower. No. 2 is quoted at 65c per bu.

## FLOUR AND FEEDS.

**Flour.**—Jobbing lots in one-eighth paper sacks are selling on the Detroit market per 196 lbs. as follows. Best patent \$5.30; second \$5; straight \$4.75; spring patent \$5.10; rye flour \$4.40 per bbl.

**Feed.**—In 100-lb. sacks, jobbing lots are: Bran \$28; coarse middlings \$30; fine middlings \$32; cracked corn \$29; coarse corn meal \$30; corn and oat chop \$26.50 per ton.

**Hay.**—Good hay scarce, with prices steady. Carlots on track at Detroit are: No. 1 timothy \$16.50@17; standard \$15.50@16; No. 2, \$14@15; light mixed \$15.50@16; No. 1 mixed \$13.50@14; No. 1 clover \$13@13.50.

New York.—Prices steady. No. 1 timothy \$22; No. 3 to standard \$18@20.

Chicago.—Market firm at lower prices. Choice timothy is quoted at \$17@18 per ton; No. 1, \$15@16; No. 2, \$13@14 per ton.

**Straw.**—Steady. Rye \$8@8.50; oat straw \$7@7.50; wheat straw \$7@7.50 per ton.

## DAIRY AND POULTRY PRODUCTS.

**Butter.**—Prices have advanced 1c but good judges predict lower market than ever next week. Extra creamery 24 1/2c per lb; firsts 23 1/2c; dairy 17c; packing stock 14c.

Chicago.—Market is firm with the price 1c higher. Trading is of a moderate character. Extra creamery 25c; extra firsts 23@24c; firsts 22c; seconds 18@19 1/2c; packing stock 14c.

Elgin.—Market is firm at 25c per lb., which is 1/2c higher than last week. The demand is good and offerings light.

New York.—The market is firm with prices advanced. Creamery extras 26 @ 26 1/2c; firsts 24@25 1/2c; seconds 22 1/2@23 1/2c; packing stock 16@16 1/2c.

**Eggs.**—Market active but easy, and prices remain about the same. Current receipts of fresh stock are quoted at 19 1/2c.

Chicago.—Market is steady with prices slightly advanced over last week. Miscellaneous lots, cases included 18@19 1/4c; ordinary firsts 18@18 1/2c; firsts 19@19 1/4c.

New York.—Market firm with prices slightly higher. Fresh gathered extras 22@22 1/2c; storage packed firsts 21c; fresh gathered firsts 21@21 1/2c.

**Poultry.**—Market is easy and is without important change. Live—Springs 18@19c; hens 19@20c; turkeys 19@20c; geese 14@15c; ducks 17@18c.

Chicago.—There is a good local demand but increased receipts brought the price of fowls and old roosters down 1/2c. Quotations on live are. Turkeys, good weight 16c; others 12c; fowls, choice 15 1/2c; old roosters 11 1/2c; geese 10@11c; ducks 16c.

## FRUITS AND VEGETABLES.

**Apples.**—Market is quiet and easy on account of warm weather. The quality is getting poor. Barrel stock quoted: No. 1, \$5.50@6.50; No. 2, \$4@4.50 per bbl. In Chicago the market is very easy. The demand is slow and holders take advantage of every chance to sell. Prices slightly lower. Barrel stock is now quoted: Spies \$5@6; Baldwins \$5@5.25; Ben Davis \$3.50@4; Golden Russets \$5; Starks \$4@5.

**Potatoes.**—Market is firm, with prices unchanged. Quotations: In bulk 62@65c per bu; in sacks 70@72c per bu. for carlots. At Chicago the market is quiet but firm. The offerings are light. Good Michigan stock is quoted at 65@70c per bushel.

## WOOL.

Although the market is quiet, a strong tone with upward tendencies in prices is everywhere apparent. The crop will be short this year, which with the old clip out of the way and manufacturers cleaned up, will urge buyers to take hold of the new offerings without delay. Already early buyers have realized well on their purchases which is stimulating further investment in the territories. Fleece dealing is of so little consequence just now that prices cannot be given—the old clip is gone and the new has not arrived, save an occasional consignment. The quality of the new clip is reported excellent.

## DETROIT EASTERN MARKET.

About the usual volume of transactions for the season was made Tuesday morning. Prices are steady. Potatoes rule from 80@90c per bu; Ben Davis apples of rather inferior quality sold for \$1.50; lettuce 70c; eggs 24@25c; rhubarb 10@35c per bunch, according to size and quality; tomato plants 75c per box; loose hay \$15@18 per ton.

## GRAND RAPIDS.

Dealers are paying 17 1/2@18c for eggs this week, while dairy butter is quoted at 17c. Poultry is scarce, with live chickens bringing 15c; ducks 16@17c; geese 12@13c. Early garden stuff is now offered on the city market, including onions, parsnips, pieplant and spinach. Pieplant is off to 50c per bushel. No change is reported in potatoes. Dressed hogs continue at 10 1/4@11c. Wheat is worth 93c; corn 65c. Beans advanced to \$1.90 on white pea and \$2.75 for red kidneys.

## THE LIVE STOCK MARKETS.

### Buffalo.

May 4, 1914.

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

**Cattle.**—Receipts 3500; market 10 @15c higher; prime steers \$8.75@9.25; best shipping steers \$8.50@8.75; best 1100 to 1200-lb. steers \$8@8.50; coarse and plain heavy steers \$7.75@7.90; fancy yearlings \$8.25@8.50; medium to good \$7.75@8; choice handy steers \$7.85@8.10; fair to good \$7.60@7.75; extra good cows \$6.75@7.25; best cows \$6@6.50; butcher cows \$5.25@5.75; cutters \$4.35@4.50; trimmers \$4@4.25; best heifers \$7.50@7.85; medium butcher heifers \$6.75@7.25; stock heifers \$6.25@6.50; feeding steers \$7@7.85; best stock steers \$7.25@7.50; common light @6.50@7; extra good bulls \$7@7.25; bologna bulls \$6.25@6.50; stock bulls \$5@6; milkers and springers \$4@90.

**Hogs.**—Receipts 19,000; market 5 @10c higher; all grades \$8.75@8.80.

**Sheep and Lambs.**—Receipts 12,000; market strong; top lambs \$7.65@7.75; yearlings \$6.50@7; wethers \$5.50@5.75; ewes \$5@5.50. Calves slow; tops \$9.25@9.50; fair to good \$8@9; heavy \$5.50@7.

### Chicago.

May 4, 1914.

**Cattle.** Hogs. Sheep.  
Receipts today..17,000 25,000 21,000  
Same day 1913..19,190 39,250 25,087  
Last week .....46,910 118,311 89,701  
Same wk 1913..46,719 132,362 75,221

Today's cattle supply is extremely small for Monday, and trade is brisk in pretty much everything, including steers, butcher stock and stockers, with prices all of a dime higher and in some instances 15c better. Some prime 1400-lb. steers brought \$9.60. Hogs opened 5c higher, with the top price \$8.55, and sales all the way down to \$8.10, but later demand fell off and the improvement was lost. Hogs marketed last week averaged 234 lbs. Sheep and lambs were active and largely about 10c higher, prime woolled lambs bringing \$8.40 and prime clipped lambs \$7.40. It was very warm weather, and cattle filled with water freely.

Cattle weakened in value last Wednesday, with a larger supply than is usual on that day, the fact that tax day falls on May 1 in Minnesota and South Dakota being responsible for many shipments from those states.

The loss in prices for the week was about 10@15c for cattle not of the best class, there being no decline in bullocks selling at \$8.50@9.50. The bulk of the steers marketed during the week sold at \$7.85@9, with the commoner class of light-weight steers going for \$7.15@8, while a medium class sold at \$8.10@8.35 and good cattle at \$8.40@8.95. Yearlings of common to prime grading sold at \$7.75@9.25, good lots going at \$8.60 and upward and poorly fattened yearlings being bad sellers. Butchering cows and heifers had an outlet at \$5.15@8.75, demand being especially urgent for a good fat class. Cutters brought \$4.60@5.10, canners \$3.50@4.55 and bulls \$5.25@7.75. The stocker and feeder traffic was lessened by moderate offerings and high prices, with sales at \$6.15@8.30 and no good lots selling below \$7.50. Demand continued to center strongly in choice stockers, which sold at \$8@8.30, and while a few carloads of prime feeders that averaged around 1,000 lbs. sold up to \$8.25, there were not many country buyers willing to pay as high as \$8 for anything in the feeder line. The greater part of the stockers and feeders went to feeding districts in Illinois, Indiana and Ohio, with fair numbers forwarded to Pennsylvania and Virginia buyers, but many intending buyers were reluctant about paying the prices asked. Stock steer calves of heavy weight brought \$7.60@8.50, and sales were made of stock and feeding cows and heifers at \$5.15@7.25. The calf market showed a good deal of animation at \$5@9 per 100 lbs. for coarse heavy lots to consignments of prime light vealers. Milk and springers sold better at \$55@90 each, most inquiries being for the better class.

Hogs disappointed their friends last week by selling off sharply on several days, and it began to look as though buyers were going to be successful in placing the market on a considerably lower basis in the future. Supplies of hogs accumulated extensively in the stock yards, and as the bad breaks in prices failed to lessen country loadings for market, it looked as though stockmen owning droves of hogs were less confident regarding the future than heretofore. Prime light and medium-weight shipping hogs continued the highest sellers, with the best heavy lots going at a discount of 5c usually. Recent receipts have averaged 235 lbs., comparing with 245 lbs. one year ago, 228 lbs. two years ago, 246 lbs. three years ago and 227 lbs. four years ago. After the best hogs had dropped to \$8.40 on Friday there was a rally that left hogs on Saturday at \$8@8.50 for inferior heavy packing lots to prime light shipping offerings comparing with \$8.35@8.80 a week earlier, while pigs brought \$7@8.25.

Sheep and lambs sold at declining prices as a general rule last week, with a less urgent demand from most sources than usual, although fat handy-weight woolled Colorado lambs had a good outlet on the whole. Most of the fed western lambs came to market shorn, and clipped flocks of lambs and sheep were greatly preferred by local packers. Numerous consignments of southern spring lambs arrived from Louisville consigned direct to packers. Straight loads of 61-lb. spring lambs sold in the Louisville market at \$9 per 100 lbs., and it is stated that contracts have been made for both June and July delivery at \$7. The southern spring lamb crop is expected to be marketed freely by May 20, according to late reports. Prices rallied late in the week after the best woolled lambs had sold at \$8.25, leaving quotations on Saturday as follows for woolled

flocks: Lambs \$6.50@8.35; wethers \$5@6.25; ewes \$4.25@6; bucks \$5@5.75; shearing and feeding lambs \$6.75@7.50; shorn lambs closed at \$5.25@7.35. A week ago best woolled lambs sold at \$8.60.

## Don't Burn Out the Temper of Your Tools

Here's a grinder that puts a sharp cutting edge on farm tools without injuring them. Never wears humpy. Anyone can use a

## CLEVELAND Grindstone

made from the only Berea stone, famous for its even grit, just right for farm use. The standard by which all grindstones are judged. 9 out of every 10 makers of farm implements use CLEVELAND GRINDSTONES in their own shops. They know what grinds best. We guarantee everyone to do good work. If it doesn't, we refund your money.



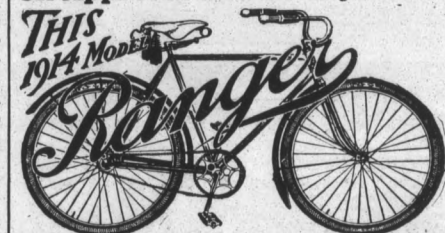
### Farmer's Special

Here's the identical stone you need. Specially selected by our experts. Genuine Berea stone. Hard-wood frame. Ball bearings. Hand or engine power. Write for booklet, "The Grit that Grinds," and name of dealer who will supply you.

THE CLEVELAND STONE CO.

1117 LEADER-NEWS BLDG., CLEVELAND, OHIO

## Delivered TO FREE on Approval and 30 days Trial



**SEND NO MONEY** but write today for our big 1914 catalog of "Ranger" Bicycles, Tires and Sundries at prices so low they will astonish you. Also particulars of our great new offer to deliver you a Ranger Bicycle on one month's free trial without a cent expense to you.

**BOYS** you can make money taking orders for bicycles, tires, lamps, sundries, etc., from our big hand-some catalog. It's free. It contains "combination offers" for re-fitting your old bicycle like new at very low cost. Also much useful bicycle information. Send for it. **LOW FACTORY PRICES** direct to you. No one else can offer such values and such terms. You cannot afford to buy a bicycle, tires or sundries without first learning what we can offer you. Write now. **MEAD CYCLE CO., Dept. B-77, CHICAGO, ILL.**

## SAVE MONEY On Your LUMBER

I pay the freight and save you the profit of both wholesaler and retailer.

For 33 years I've been in the lumber business here in Bay City and I've got manufacturing costs down to rock bottom. I have nothing but good clean lumber and give you a Guarantee Bond that every piece will be up to grade. If it isn't I'll refund your money. I promise to save you at least 15 per cent. When you buy from me you buy direct from the mill—no middleman—so you can't help but save money. Send me your schedule and let me make you a detail estimate. Do this today so you won't be delayed. Write me personally.

THEODORE HINE, PRESIDENT

HINE LUMBER CO.

203 Salzburg Ave. Bay City, Mich.

## WHICH WILL YOU PAY? \$4.05 - or - \$2.85!

We will save you the difference on Working Clothes SOCKS—SHIRTS—PANTS

For \$2.85 we will send to you all charges prepaid: 2 regular 75c value work shirts; 6 pair extra fine black or tan work socks that never sell for less than 2 pr. for 35c; 1 pr. best quality work pants the kind that sell for \$1.50 everywhere.

Now Mr. Man figure it up for yourself:

2 shirts at 75c.....\$1.50  
6 pr. socks at 2 for 35c.....1.05  
1 pr. good quality pants.....1.50  
That's what you have to pay now.....\$4.05

We can send you the same identical garments by Parcel Post for just \$2.85. We deal exclusively with farmers—we like their trade—they like our goods. Try this combination offer now—just see the quality of the goods we sell at that price. You can buy anything in the clothing line at a saving of 30% to 40% by writing to us. Do it today. Remember to give shirt size and waist measurement for working pants.

Country Gentleman Woolen Company, Inc., Buffalo, N.Y.

## DRESSED HOGS

These are our specialties just now. Our 25 years' experience has taught us how to sell them for you to best advantage. Our reputation for honest dealing and quick returns is assured by our record.

## DRESSED VEAL

## POULTRY

WRITE TODAY.

Chas. W. Rudd & Son, Detroit, Mich.

## HAY

Ship your Hay to Pittsburgh and to Daniel McCaffrey Sons Company Pittsburgh, Pa.

Ref.—any bank or Mercantile Agency

**FARMERS**—We are paying good premium above the Official Detroit Market for new-laid eggs shipped direct to us by express. Write us for information. It will pay you. American Butter & Cheese Co., 31-33 Griswold St., Detroit, Mich.

**EGGS, Etc.**—Small consignments from producers in Michigan bring very attractive prices. Returns day of arrival. Refer to Dun or Bradstreet.

Zenith Butter & Egg Co., 255-59 Greenwich St., New York, N.Y.

**Griggs, Fuller & Co.**—Wholesale Commission House, potatoes, poultry and rabbits. Quick returns.



## To Have Healthy Fat Hogs, Feed Merry War Powdered Lye

"I want to say in praise of MERRY WAR POWDERED LYE that I only lost one hog all last Winter and Spring while they died with Cholera all around me; about thirty died on same farm I was on. Everybody that had hogs lost heavily, according to number, while I lost one and I think it got hurt that caused it to die. But we used MERRY WAR POWDERED LYE all the time and I want to say to my fellow hog raisers, if you want to prevent Cholera, use MERRY WAR POWDERED LYE and use it freely, according to directions, and often, and you will preserve the health of your hogs and have fine healthy hogs all the year 'round."

(Original letter on file in our office. Name and address will be furnished upon application to us. E. Myers Lye Co.)

## Merry War POWDERED Lye

Costs Only 5c per Hog, per Month, To Feed Regularly, Twice Each Day  
A 10c Can of Merry War POWDERED Lye Contains 120 Feeds—

enough to keep a hog well conditioned for 2 months. For sale at most druggists, grocers and feed dealers. It is convenient to buy in case lots, 4 dozen cans, \$4.80, at which price we will ship it to you direct, prepaid, if your dealers won't supply you. When ordering send us your dealers' names.

## Don't Take Chances Putting Anything Claimed To Be "Just As Good" In Your Hogs' Stomachs

Don't make doubtful and perhaps dangerous experiments with "any old lye". Merry War POWDERED Lye has been proven—it is not an experiment—it is safe to use according to simple directions. Let us send you free our valuable booklet "How to Get the Biggest Profits from Hog Raising".

E. MYERS LYE CO., St. Louis, Mo. Dept. 178

"There Are No Substitutes"



FOR SALE—One two passenger automobile all in A No. 1 condition, cheap at \$80. Also other cars cheap. Floyd E. Lott, Oak Grove, Mich.

## Farms and Farm Lands For Sale

Investigate This: Excellent land in Minnesota, Washington and Oregon—adjacent to the Northern Pacific Railway—the best developed sections of the Northwest; obtainable at low prices. State land on long payments deeded land on crop payment plan; good climate, good schools—no isolated pioneer. Send for literature saying what state most interests you. L. J. BRICKER, Gen. Immig. Agt., 380 Northern Pacific Bldg., St. Paul, Minn.

## VIRGINIA FARMS

You can become happy and independent farming in Virginia. You can grow profitably alfalfa and all grasses, corn, fruits, grains, beef and dairy cattle. Virginia boasts the finest apple growing section in the world. Farms \$15 per acre and up. We welcome you. Write now for booklets, maps and other literature.

G. W. KOINER,

State Commissioner of Agr., Richmond, Va.

## McClure-Stevens Land Co.

Successors to A. J. Stevens & Co. Established 1883 Farm, Fruit and Stock Lands. We own 18,000 acres of choice unimproved land in Gladwin and Clare counties. Sold on easy payments. Interest 6 percent. Write for information.

Gladwin, Michigan.

## LOCAL

## FARMERS

List with

us. WHY?

Because they know we advertise truthfully and extensively. OOM-MAND the respect of our Banks and Merchants, and look after their interests as well as those of the buyer. Our bargains are bargains. Seeing is believing.

FARMERS' REALTY CO.  
Quakertown, Pennsylvania.

FOR SALE—40 acre farm, eight miles from Pt. Huron. 35 acres cleared, 2 acres good timber, good buildings, 50 fruit trees. An elegant place for fruit, berry or poultry farm. Price \$2000, one half down. I have lots more. L. A. McCarthar, Port Huron, Mich.

## Read and Come and See This Big, Fine Farm.

320 acres, 21-room house, four large barns, many outbuildings. Grand opportunity. Price, \$12500, part cash. Great stock farm, catalogue number 314. Hall's Farm Agency, Owego, Catalogue Co., New York.

For Sale—In whole or part. 320 acre Southern Michigan farm. Good soil, buildings and fences. Must sell. O. S. Schaifer 24 Dewey Ave., Swissvale, Pa.

## MICHIGAN FARMING LANDS

Near Saginaw and Bay City, in Gladwin and Midland Counties. Low prices. Easy terms. Clear title. Write for maps and particulars. STAFFORD BROTHERS, 15 Merrill Building, Saginaw, (W. S.), Michigan.

6000 ACRES—Rainy Lake, Presque Isle County. Clay loam land, lumbered 20 years ago. Easily cleared. \$10 to \$12.50 per acre. Small payment, long time. Also, 200-acre ranch and partly improved farm. No crop failures or floods. Grain, grass, fruit, vegetables and live stock returns challenge comparison. JOHN G. KRAUTH, owner, Rainy Lake Settlement, P. O. Millersburg, Mich.

FARMS, GOOD, CHEAP, PROFITABLE.  
UNUSUAL OPPORTUNITIES NOW.  
State Board of Agriculture, Dover, Delaware.

South Georgia Farms—2 crops a year here, no snow. New Colony of Ohio and Mich. igan Farmers, virgin soils, on railroad, Corn, Cotton, and paper Shell Pecan lands. Write for booklet today. Wayne Development Co., Owners, Grand Bldg., Brunswick, Ga.

Just Say "Saw your ad. in the Michigan Farmer" when writing advertisers

## THIS IS THE FIRST EDITION.

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

## DETROIT LIVE STOCK MARKETS.

Thursday's Market.  
April 30, 1914.

### Cattle.

Receipts 1426. Market steady at Wednesday's and last week's prices. We quote: Best steers and heifers \$8@8.50; steers and heifers, 1000 to 1200, \$7.50@7.75; do 800 to 1000, \$6.75@7.25; do that are fat, 500 to 700, \$6.50@7; choice fat cows \$6@6.50; good do \$5.25@5.75; common cows \$4.50@5; canners \$3@4.25; choice heavy bulls \$6.75; fair to good bolognas, bulls \$6.25@6.50; stock bulls \$5@6; choice feeding steers 800 to 1000 \$6.75@7.40; fair do \$6.50@6.75; choice stockers, 500 to 700, \$6.50@6.75; fair do \$6@6.25; stock heifers \$5@6; milkers, large, young, medium age \$65@75; common milkers \$40@55.

Haley & M. sold Sullivan P. Co. 5 butchers av 988 at \$6.50, 1 cow wgh 990 at \$5.75, 2 do av 1100 at \$6, 2 steers av 810 at \$7.35, 5 do av 1020 at \$8, 1 do wgh 860 at \$7.25; to Boetner 28 feeders av 874 at \$7.40; to Kamman B. Co. 7 steers av 835 at \$7.35, 17 do av 825 at \$7.50, 12 do av 905 at \$7.50, 1 bull wgh 830 at \$6.50; to Breitenbeck 2 cows av 950 at \$5.75, 1 bull wgh 1410 at \$6.40; to Newton R. Co. 18 steers av 1044 at \$7.80, 15 do av 1007 at \$7.80, 2 cows av 1110 at \$6, 2 cows av 900 at \$6.25, 3 steers av 1073 at \$7.80; to Schuer 2 cows av 875 at \$5.

Spicer & R. sold Sullivan P. Co. 4 cows av 1125 at \$6.60, 2 do av 995 at \$6, 3 steers av 983 at \$7.60, 3 bulls av 1327 at \$6.75, 12 steers av 1030 at \$7.75, 4 cows av 1175 at \$6.25; to Hammond, S. & Co. 2 bulls av 1410 at \$6.50, 9 steers av 833 at \$7.50, 1 cow wgh 1160 at \$6.75; to Haddrell 9 feeders av 787 at \$7.35; to Breitenbeck 20 steers av 825 at \$7.30; to Parker, W. & Co. 21 steers av 770 at \$7.25; to Bresnahan 2 bulls av 1050 at \$6, 4 cows av 940 at \$5.50, 1 do wgh 740 at \$5.50; to Bresnahan 12 steers av 658 at \$7.20; to Hammond, S. & Co. 2 butchers av 1010 at \$7, 1 cow wgh 1280 at \$7, 1 bull wgh 1240 at \$7; to Bresnahan 1 cow wgh 860 at \$5.50, 1 steer wgh 600 at \$7, 2 do av 495 at \$6.75, 6 do av 655 at \$6.75; to Thompson Bros. 21 do av 860 at \$7.45, 1 bull wgh 780 at \$6.50.

Roe Com. Co. sold Kamman B. Co. 10 cows av 1083 at \$5.90; to Bresnahan 3 cows av 960 at \$5.25.

Bishop, B. & H. sold Rattkowsky 2 steers av 1135 at \$6.50, 3 cows av 1170 at \$6.15; to Newton B. Co. 13 steers av 809 at \$7.50, 4 do av 955 at \$6.60, 14 do av 830 at \$7.35, 1 do wgh 690 at \$7, 16 do av 1065 at \$7.90, 3 cows av 1017 at \$6, 1 do wgh 950 at \$5.25, 1 do wgh 970 at \$6.50, 3 bulls av 1653 at \$6.50, 2 steers av 875 at \$7.25, 2 do av 1185 at \$8, 2 do av 985 at \$8, 26 do av 852 at \$7.60, 8 cows av 1140 at \$6.50, 1 do wgh 1000 at \$5.75, 2 steers av 970 at \$7.50, 1 bull wgh 1370 at \$6.50, 6 heifers av 820 at \$7.65, 3 heifers av 577 at \$6, 1 bull wgh 1690 at \$7.50; to Bresnahan 4 cows av 985 at \$5.50, 2 do av 945 at \$5.50, 17 steers av 872 at \$7.75, 2 cows av 1050 at \$6, 6 do av 1035 at \$5.75, 7 do av 950 at \$5.60; to Breitenbeck 5 do av 994 at \$5.90; to Sullivan P. Co. 23 steers av 1085 at \$7.65, 5 do av 1088 at \$7.80, 2 do av 1080 at \$6.55, 1 do wgh 920 at \$6.50, 2 cows av 1135 at \$6.25, 2 do av 975 at \$5.75; to Hammond, S. & Co. 2 steers av 935 at \$7, 2 bulls av 1400 at \$6.50, 6 cows av 1131 at \$6.50, 6 steers av 1083 at \$8.

### Veal Calves.

Receipts 968. Market steady with last Thursday; 25c lower than on Wednesday. Best \$9@9.25; others \$6@8.50.

Bishop, B. & H. sold Newton B. Co. 3 av 130 at \$7, 14 av 135 at \$9, 12 av 140 at \$9; to Applebaum 4 av 155 at \$9.50; to Ratner 6 av 130 at \$9.50; to Applebaum 7 av 155 at \$9; to Rattkowsky 18 av 140 at \$9.40; to Goose 14 av 145 at \$9.50; to J. Goose 44 av 145 at \$9.50, 4 av 140 at \$9.25, 5 av 115 at \$8.50; to Sullivan P. Co. 4 av 150 at \$9, 2 av 190 at \$9, 5 av 115 at \$8, 4 av 120 at \$8.50, 4 av 155 at \$9, 2 av 135 at \$7.50; to Thompson Bros. 21 av 125 at \$8.50; to Kull 6 av 120 at \$8.75, 2 av 110 at \$8.50; to Costello 5 av 109 at \$8.50, 18 av 140 at \$9; to Hammond, S. & Co. 14 av 145 at \$9.25; to Rattkowsky 3 av 135 at \$9; to Hammond, S. & Co. 7 av 135 at \$8.50, 2 av 160 at \$9.25, 20 av 140 at \$9, 7 av 130 at \$8.75, 21 av 145 at \$9, 3 av 100 at \$7.

### Sheep and Lambs.

Receipts 1967. Market steady. Best lambs \$7@7.25; fair to good lambs \$6.50@7; light to common lambs \$5.50@6.50; fair to good sheep \$4.50@5; culls and common \$3.50@4; wool lambs \$8.

Bishop, B. & H. sold Newton B. Co. 62 wool lambs av 60 at \$7; to Mich. B. Co. 16 spring lambs av 60 at \$12, 4 wool lambs av 75 at \$8; to Parker, W. & Co. 151 do av 85 at \$7; to Thompson Bros. 10 sheep av 100 at \$4.50, 6 do av 125 at \$5, 6 do av 110 at \$5, 15 do av 75 at \$4.50; to Mich. B. Co. 54 lambs av 73 at \$7, 16 do av 55 at \$6, 19 do av 55 at \$6.25, 26 yearlings av 85 at \$6.75, 21 do av 90 at \$6.50; to Thompson Bros. 24 lambs av 65 at \$7; to Hammond, S. & Co. 3 spring lambs av 50 at \$11.

Spicer & R. sold Mich. B. Co. 22 sheep av 110 at \$3.25, 24 spring lambs av 51 at \$10; to Newton B. Co. 113 lambs av 75 at \$6.70; to Parker, W. & Co. 23 do av 71 at \$6.75.

Haley & M. sold Mich. B. Co. 11 sheep av 105 at \$4.75, 19 lambs av 65 at \$6.75, 5 wool lambs av 75 at \$7.75, 69 do av 70 at \$6.75.

Roe Com. Co. sold Barlage 10 sheep av 80 at \$5, 92 clip lambs av 65 at \$7.

### Hogs.

Receipts 8662. None sold up to noon. Looks \$8.35@8.40.

Roe Com. Co. sold Sullivan P. Co. 425 av 190 at \$8.40.

Bishop, B. & H. sold Parker, W. & Co. 2500 av 190 at \$8.40, 24 av 180 at \$8.35.

Spicer & R. sold Hammond, S. & Co. 500 av 190 at \$8.40, 250 av 180 at \$8.35.

Market closed dull at the decline from last week.

James Fontaine, of Lakeview, was on the market with two loads of the best cattle seen here in some time, that he raised himself. Twenty-one of them were sold by Bishop, Bullen & Holmes to Hammond, Standish & Co. for \$8.50 per cwt; they averaged 1130 lbs. The other load was heavier and up to noon \$8 was the best price offered, they being too heavy for the trade.

## CROP AND MARKET NOTES.

(Continued from page 525).

ing short of feed farmers are turning stock out. Winter wheat and rye are promising. Potatoes coming up; corn germinating; markets steady except hogs and cattle are a little off.

Nehama Co.—Fruit and small grain prospects are splendid. Plenty of moisture has fallen. Grasses are growing well. Large acreage of alfalfa is being sown. Potatoes and garden truck are in and some corn is planted. Fruit trees in blossom. The first caught apricots. Other fruit is safe and promises well.

Trego Co.—Weather dry and windy. Crops are not suffering yet for moisture but we need rain to give wheat a start. Cold storm about April 10, killed most of the fruit buds. A large acreage of corn is being planted. A number of farmers started planting corn about April 15. Oats are up but not doing well. All oat fields are very weedy. Potatoes all planted but none are up yet. Farmers are selling butter-fat for 20c; eggs 15c.

Finney Co.—It is very dry here but it is cloudy and threatening rain. Wheat and barley have been damaged some by dust storms. Grass is getting green and stock looks well. The farmers are listing in their crops. Maize and cane are the main spring crops. Butter 20c; eggs 16c; hens 13c; cream 20c; corn chop \$1.60 per cwt; wheat \$1 per bu; seed potatoes \$1.20 per bu.

Cloud Co.—Fine warm weather prevails; wheat looking fine yet, but is beginning to show a little yellow from dry weather. A few cattle on grass but not many. Farmers generally are preparing ground for corn. About as much corn will be planted this spring as last. Not much feed of any kind.

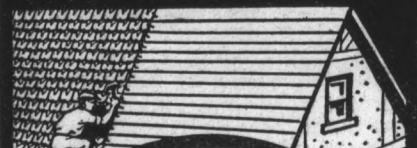
Cowley Co.—Spring seeding has been somewhat delayed by rains but is coming well in most fields. Winter wheat and rye are in fine condition. Pastures are doing well and stock has come through the winter in good shape. About the usual acreage of oats, corn and Kafir will be put in. Have had some late frosts but they have done little damage.

Lincoln Co.—Weather fine but had a frost a week ago. The spring-sown alfalfa is coming out fine. Wheat looks good; meadows are slow in getting green. Some of the fruit is frozen, such as peaches and apricots; cherries are good yet. Corn listing will be in the full go by next week. Corn land is scarce this year. Eggs sell at 15c; cream 24c; hogs \$8.

### Washington.

Klickitat Co.—Weather fine. Have had no frost or snow since the last of January. Cattle and hogs doing fine. Prospects excellent for fruit. Peach and cherry trees in bloom. Winter grains promise well. Many new orchards are being set, also strawberries. Timothy hay \$16@18 per ton; clover and wheat hay \$12@19; potatoes dull; eggs 22c; butter 70@75c per two-pound brick.

## HOME SAFETY against Lightning, Fire and Storm



Lightning causes 75% of roof fires but it never damaged a roof covered with

## Kanneberg

Metal Shingles

"We Pay the Freight"

They are proof against fire, rain, snow, heat and cold. Need no repairs, because they will not rot, rust, crack, buckle, curl nor fall off. Can be laid on low pitch roofs and always look well. Give clean cistern water. You can save big money by using this almost indestructible roofing. Buy direct from the factory. Put it on yourself easier and quicker than wood shingles.

Send for our catalog and rock bottom prices before you buy any roofing. Kanneberg Shingles make the cheapest roof you can buy, judged by service, the real test. Come in single shingles, 8 to a sheet, or in clusters 2 feet by any length from 5 to 10 feet. Many designs and sizes. Write for catalog today. Be sure to give dimensions of your roof and we'll tell you how to get the best roof at lowest cost.

KANNEBERG ROOFING & CEILING CO.  
Est. 1888  
1402 Douglas Street  
Canton, Ohio

Name.....

Address.....

## Easy to own an Engine Now



## WITTE Engines

Kerosene, Gasoline and Gas

Stationary, (skidded or on iron base), and Mounted Styles. Long-wearing, separable, semi-steel cylinders and 4-ring pistons; automobile ignition; spark shift; vertical valves; variable speed; and other merits without which no engine is now high-grade.

60 Days' Free Trial; 5-Year Guaranty

Cash or Easy Terms. Why pay double price for any good engine, or take a poor one, for any price, when the WITTE costs so little and saves you all the risk? Tells you the "ins and outs" of engine selling as well as manufacturing. Get the facts whether you buy from me or not. Ed. H. Witte, Witte Iron Works Co., 2198 Oakland Ave., Kansas City, Mo.

## 35 BUSHELS PER ACRE was the yield of WHEAT



on many farms in Western Canada in 1913, some yields being reported as high as 50 bushels per acre. As high as 100 bushels were recorded in some districts for oats, 50 bushels for barley and from 10 to 20 bushels for flax. J. Keys arrived in the country 5 years ago from Denmark, with very little means. He homesteaded, worked hard, is now the owner of 320 acres of land, in 1913 had a crop of 200 acres, which will realize him about \$4,000. His wheat weighed 68 lbs. to the bushel and averaged over 35 bushels to the acre.

Thousands of similar instances might be related of the homesteaders in Manitoba, Saskatchewan and Alberta.

The crop of 1913 was an abundant one everywhere in Western Canada.

Ask for descriptive literature and reduced railway rates. Apply to Superintendent of Immigration, Ottawa, Canada, or Canadian Government Agent.

M. V. MacInnes, 176 Jefferson Avenue, Detroit, Mich.

## RUN ON KEROSENE

6c for 10 Hours

Ellis Engines develop more power on cheap lamp oil than other engines do on high-priced gasoline. Will also operate successfully on distillate, petrol, alcohol or gasoline. Only three working parts.

## ELLIS ENGINE

have patent throttle giving three engines in one; force-feed oiler; automobile type muffler; ball-bearing governor adjustable while running and other exclusive features. MAKE US PROVE IT—Every engine sent on 30 days' approval, 10-year Guarantee. Special factory prices on all sizes. Thousands of satisfied users. Write for big new 1914 catalog and special discount prices.

ELLIS ENGINE CO., 110 Mullett St., Detroit, Mich.

We Pay Freight.

## Michigan White Cedar FENCE POSTS

GEORGE M. CHANDLER, Onaway, Mich.



## Keep Your Grain Out Of The Straw Stack

Too much grain is lost in the straw pile by incompetent threshers. There is no need of it. The Red River Special has proved that all the grain can be saved. Just to test the Red River Special, hire one this year and note the difference. Walt Flanagan and three other farmers of Golden City, Missouri, say: "It saved our thresh bill."

### Hire A Red River Special And Save Your Thresh Bill!

This machine has an entirely different principle of separation from all other threshers. It beats the grain out of the straw instead of expecting it to drop out while the straw is being rushed through the machine. Insist upon having a Red River Special to thresh all your grains and grass seeds. The saving will pay your cost of threshing. Your thresherman will be glad to operate a Red River Special if he knows you want it for your work. Speak to him about it. It's your privilege to specify the machine that does your threshing. It's your grain. Write today for "Thresher Facts."

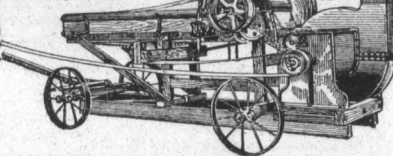
**Nichols & Shepard Company**  
(In continuous business since 1848)  
Builders of Threshers, Wind Stacks, Feeders, Steam Engines and Oil-Gas Tractors  
Battle Creek, Mich.

## The FREEMAN Ensilage Cutter

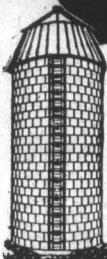
### Best for Over 30 Years

Strongest, safest, most durable and capable cutter ever perfected. Runs smoother, faster, cuts cleaner, uses less power. Adjustable knives, large feed rolls, safety fly wheel, safety stop lever. Blower-elevator fills silo quickly, cuts expense, prevents waste. We also build (patented) Enclosed Steel Carriers which keep feed from blowing away. Get full particulars of the Freeman Line before buying—it means satisfaction and money-saving to you. Write for catalog today.

**THE S. FREEMAN & SONS CO.**  
212 Michigan Ave.  
Racine, Wis.



## Build Stronger, More Durable Walls



with this superior lap jointed block. Less mortar exposed to feed on inside—a better looking silo on outside. That's the

### Lansing Vitrified Tile Silo

Write and learn about this higher grade tile block. Reinforced with twisted steel—continuous doorway—easy climbing ladder—all superior features, yet costs no more than others ask. Write for catalog 365  
**J. M. Preston Co., Lansing, Mich.**  
Get our offer on Climax Silage Cutters and Bidwell Threshers.

## Fill Your Silo Pay when Satisfied

Over 64 Years Experience Back of it. **ROSS Machines are fully guaranteed You take no risk**



Oldest and Largest in the World  
We want to prove that our machines are a good investment before you give up your money. We know they are so good that we do not feel it a risk to make this offer. Many new features have been added which you should know about before buying a machine. Catalog explains all. It is free.  
**The E. W. Ross Co., Box 114 Springfield, O.**

## SAVE ON YOUR \$ILO

Be an early buyer and save money on a Kalamazoo Wood or Tile Silo. Galvanized All-Steel Door-Frame provides continuous opening and safe, convenient ladder. Your choice of Tile Block Silo or seven kinds of wood—all Kalamazoo Quality. Catalog and special offer, free on request. Write today.  
**KALAMAZOO TANK & SILO CO., Kalamazoo, Mich.**  
Minneapolis, Minn., Kansas City, Mo., No. Ft. Worth, Tex.

PROF. STEWART'S NEW 1914 LIME-SULPHUR HYDROMETER  
APPROVED BY PENNA. AND NEW YORK STATE EXPERIMENT STATIONS  
BY MAIL WITH TEST JAR AND INSTRUCTIONS **\$1.50**  
AGENTS WANTED EVERYWHERE  
**CARBONDALE INSTRUMENT CO., CARBONDALE, PA.**

# Farm Commerce.

## Co-operation is Advancing.

**T**HE educational movement for co-operation is gaining ground in this country. Co-operation is business, and not war. Permanent organizations with constructive policies should take the place of spasmodic protest against evils which have been permitted to grow up.

In the United States farmers' co-operative societies have increased 40 per cent during the past five years, while in Germany, Holland and Switzerland, they have gained 50 per cent during that time. The United States stands near the foot of the list of all civilized nations in the number of co-operative organizations. Denmark leads the world, where four-fifths of her products are handled by co-operative associations. Twenty years ago the situation in Denmark was similar to that which confronts the United States today, but now the farmers of that country receive 92½ cents of every dollar that the consumer pays for their products, while the farmers of the United States receive 35 cents of every dollar that the consumer pays. The farmers of this country conduct an industry of individuals, each one a small capitalist in himself.

### Some Essential Principles.

There are a few general principles underlying successful co-operation that must be thoroughly understood, not only by the officials, but also by the members of these organizations, before the greatest benefits can be secured. First of all, a co-operative spirit must prevail; secondly, a definite assurance of loyal support from the farmers of a community is absolutely essential. An honest, energetic, up-to-date manager must be secured. Personal independence has to be sacrificed for the good of the association. The officers of the association must have delegated to them the necessary power to carry on the affairs of the society. The members should be bound by contract to sell their products through the organization. These are some of the important principles required in successful co-operation.

### Production and Income.

Large production generally militates against the largest net income. The statistics of the United States Department of Agriculture go to show that this rule maintains in the economics of American agriculture. For instance, in 1912 the country raised 30 per cent larger crops than in 1911, but for this 30 per cent larger crop the farmers received about 12 per cent less income. This would suggest that the large problem before the American farmer today is not one of production but of distribution, and it seems that co-operation offers the proper solution.

### Aid in Solving Other Problems.

The solving of the marketing problem will aid in the solution of others. By increasing the income of the farm, it will be less difficult, for instance, to keep the boy and girl there. The country boy understands that the fellow who makes the plow and hoe he uses, works three hours to earn one dollar; the wagon and harness maker three and one-half hours; railroad employes two and one-half hours; while the farmer works ten hours and more for this amount, hence the country boy naturally concludes to try the city. The trouble is, he does not carry his conclusion to the final analysis, which is that the ordinary man in the city is crowded out at 45 to make room for the more vigorous men who are coming in. Nevertheless, the

mass of population moves under the operation of the irresistible economic law toward the center of best opportunities. Other problems that would become easier of solution, were the incomes of farmers increased, are those relating to better social and religious conditions, improved sanitation, increased labor-saving machinery and devices, etc.

It is apparent to all who have been closely associated with co-operative enterprises, and who know the conditions that these organizations are required to oppose, that the effort must be a comprehensive one. It will not be solved by small local units. History points out that the small community organization however is the forerunner of the larger scheme, and hence must be carefully nurtured during the formative period of these societies. It should therefore be the purpose and aim of such organizations as the Farmers' Clubs and Grange to lend every aid toward the successful organization and management of local co-operative societies, to the end that these will ultimately amalgamate into a large federation.

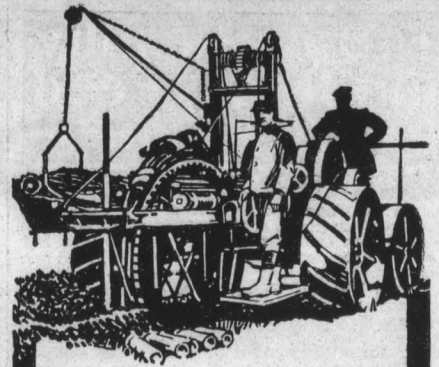
Note.—The above is a brief of an address delivered at the Round-up, by E. C. Shupp, President of the Hillsdale County Farmers' Institute Association.

### THE BUTTER MARKET.

While this is the off season for butter trading, a little comment on the condition of the market will find active interest among the readers of these columns. Statistically speaking, the market should begin the next campaign in good shape. While the receipts at Chicago and New York for the period from May 1, 1913, to April 25, are a little larger than for the same period of the previous year, the amount is considerably smaller than for the corresponding periods of the two previous seasons. And the receipts for the past week are running below those for the same week of last year. Then, too, the storage supplies have been well absorbed, giving the new marketing season which begins with the first of next month, a promise of prices being maintained on a reasonably good basis. It is true that foreign competition may give the trade an additional factor to deal with, the influence of which cannot be measured; but the amount now coming in is very meager.

However, this foreign competition is not likely to be without helpfulness to our butter business. The offerings from outside have been of an inferior quality and have come in competition with our lower grades. It is in this class of butter that the market is slow today while the best grades are bringing a premium. If by reason of the interference of foreign offerings the advantage of manufacturing better grades is impressed on the American buttermaker, a distinct step toward conserving our cream output, increasing consumption and improving general marketing conditions for the home-made product and discouraging foreign importations will be made.

The bulk of the fed lambs received in Chicago recently came from the feeding districts of northern Colorado and few yearlings have shown up of late. The big end of the lamb crop has been marketed, and prospects look bright for the future. Extremely few spring lambs have been marketed so far.



## Tile Drainage is the Goose that lays the Golden Egg

**PROPER** drainage has often doubled the yield per acre. It makes worthless land produce good crops. It often saves a fourth to a half of the fertilizer bill.

### BUCKEYE TRACTION DITCHER

#### A perfect trench at one cut

This machine reduces the cost of putting in tile drainage because it cuts down the cost of labor to almost nothing. Drainage work that would require several men's work for several weeks can be done in a few days with the help of the Buckeye. If you believe in being up-to-date and in using common-sense business methods on the farm, get the Buckeye proposition.

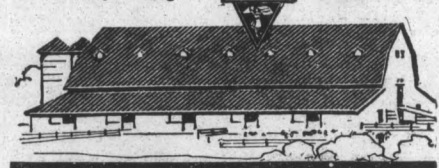
Write today for the Buckeye book of facts No. 46.

**The Buckeye Traction Ditcher Co.**

FINDLAY, OHIO

Builders also of Buckeye Open Ditchers and Buckeye Gasoline Engines for farm use

There's a NEPONSET Roofing for Every Building



Learn this by heart:—

## Only Slowly Made Roofings are Slow to Wear Out

We do not trust to bought felt—the foundation of roofing—we make our own from all-rag fibre, no cheap stock.

Asphalts, gums, good and bad, look alike. Trained chemists select ours and blend them to stand torrid heat and Arctic cold.

We give ample time to tests and inspections at every step of manufacture. That is why Neponset Paroid wears so long, is so truly economical, resists sparks and embers.

Surely send for our ROOF BOOK—free.

## NEPONSET PAROID ROOFING

**BIRD & SON (Est. 1795)**  
651 Neponset Street, East Walpole, Mass.  
Also makers of Neponset Shingles, Wall Board and Building Papers

## PUMP GRIND SAW Made for Hard Use

Wood Mills are Best. Engines are Simple

Feed Grinders, Saw

Frames, Steel Tanks

CATALOGUES FREE

AGENTS WANTED

Perkins Wind Mill &

Engine Co. Est. 1860

135 MAIN ST.

Mishawaka, Ind.

## I X L THEM ALL.

QUALITY TELLS

BEST STEEL MILL. I X L

STRONGEST STEEL TOWER. No

long story here. Send for Cata-

logue and prices of our

POWER AND PUMPING MILLS

PHILIPS & BIGELOW WIND MILL CO.,

Kalamazoo, Mich.

## Use KEROSENE Engine Free!

Amazing "DETROIT" Kerosene Engine, 15 days' FREE Trial, proves kerosene cheapest fuel. If satisfied, pay lowest price ever given; if not, pay nothing. No waste, no evaporation, no explosion. Two pints of coal oil do work of 3 pints gasoline. Send for FREE catalog. Don't buy an engine till you investigate this grand offer. Write!

**DETROIT ENGINE WORKS**

149 Bellevue Ave., Detroit, Mich.

Just Say "Saw your ad. in the Michigan Farmer" when writing advertisers



## Crop and Market Notes.

## Michigan.

**Gratiot Co.**—Three times since April 1 the ground has been covered with snow. The week following Easter was very warm and pleasant, and many farmers succeeded in getting their oats sowed. It is now cool, and fruit buds have made but little development. The heavy freezes have caused the wheat to appear yellow in spots. Very little rain has fallen, and grass and meadows are not showing up much yet. Live hogs sell for \$8@8.25; beans \$1.80; eggs 16c; butter 16@22c.

## Pennsylvania.

**Crawford Co.**—Wheat and rye looking fine and meadows are good. The peaches are all killed; plums, cherries and small fruits are all right as yet. Not much plowing done yet. Roads are in good shape. Cows are selling at big prices, also horses. Potatoes 75c; eggs 18c; chickens 12c; veal calves 8c; milk 1.90 per cwt. This is a dairy section; lots of milk sent to factory, and shipped away.

## Ohio.

**Hancock Co.**—Spring work has been delayed on account of wet weather. Oats are nearly all sowed, and some ground has been plowed for corn, of which a large acreage will be planted. Prospects for the fruit crop are good. Meadows and rye look fine, but some wheat fields look spotted. Fall-sown timothy looks good. Cloverseed is all sowed. Stock came through the winter in good shape. Many farmers are having bad luck with spring pigs. Some corn is being marketed at 92c per cwt; wheat 91c; oats 37c; rye 55c; barley 45c; butter 20c; eggs 15c; chickens 13c; some fall pigs are being marketed at \$8.75 per cwt; good cows \$75@125. Much spraying is being done in this vicinity. Farm hands are very scarce, and high in price. Much wire fencing is being done.

**Hardin Co.**—Farmers are getting busy with their plowing. The cold weather the first part of April did some damage to winter wheat and meadows. Some wheat fields will be sown to oats. Apple and other fruit trees have just begun to show buds, and it is thought that they are safe. A good deal of spraying is being done. Some farmers are losing some of their spring pigs.

**Holmes Co.**—We have had a cold, backward spring, but farmers have now commenced to plow, and roads are drying up. Feed is getting scarce. Wheat looks fine, and meadows are starting out nicely. Hay is about all sold at \$12 per ton; corn 75c; oats 42c; wheat 93c; cream 27c; eggs 15c; beef cattle \$7; hogs \$8.50.

**Highland Co.**—Spring is very backward. Plowing is about half done. There will not be much oats sown, but a large acreage of corn will be planted. Wheat is looking fairly well. Grass is looking in good condition. Fruit trees are beginning to bud. Fat cattle 6@7c; hogs \$8; hens 13c; eggs 16c; ducks 10c; corn 75@80c. Horses are cheaper at this time of year than for several years.

**Clermont Co.**—Fruit buds are in good condition and give promise of a large fruit crop. Meadows and winter grain looking fine. Tobacco plants are starting out well, and about the usual amount will be raised. Farmers are breaking up ground, and many have corn ground broken. Dairy farmers are putting up silos, buying more cows and shipping milk and cream. Poultry raisers are raising early chicks and selling eggs at fancy prices. Eggs 13c; butter 27c.

**Columbiana Co.**—The weather has been very backward, and farmers have not been able to make much headway with spring work. A few have been plowing sod, but it is too wet. The ground has been in fine shape for sowing clover, and wheat looks better than for several years. New meadows are mostly coming out in fine shape. At recent public sales everything seemed to bring a good price. Butter 24c; eggs 16c; wheat 95c; oats 40c; corn 70c; hay \$14; straw \$8.

**Coshocton Co.**—The first two weeks of April were rainy, consequently the farmers are behind with their oat sowing. Farmers have been using the road drags lately, and the roads are now in good condition. Fruit has not been damaged as yet. Wheat is coming on nicely, and the meadows look good. Eggs 20c; butter 32c; potatoes 80c; chickens 14c; hay \$14; corn 80c; oats 55c; wheat 93c; hogs \$8.45. Horses are still low in price.

**Crawford Co.**—Spring work is late on account of the wet weather. Meadows are showing a nice stand, and wheat fields look fair. Cloverseed is all sown. Fruit trees are not budding yet. There was not much maple syrup made this spring. Wheat 90c; oats 36c; corn 60c; hay \$9; eggs 15c; butter 22c; cream 25½c.

**Wayne Co.**—April has been very unfavorable for farm work, being wet

and cold. The low lands are flooded. Very little oats sown and not much plowing done yet. Wheat and meadows are looking good. Peaches are all frozen. Apples bid fair so far. cherries are not frozen yet. Cattle on feed yet, not many out on pasture which is very short. There seems to be plenty of feed yet. Wheat 93c; oats 38c; corn 70c; potatoes 70c; hay \$10@12; butter 26c; eggs 17c.

**Shelby Co.**—Weather is fine with rain a little too scarce. Wheat is a little better than one-half a stand but meadows are good. Oats are sown and some plowing done for corn. Peach buds about all frozen and apples are not budding well. Pears and blue plums are promising. Wheat 90c; oats 35c; corn 86c per cwt; cloverseed \$6.50; eggs 15c; butter 25c. While spring work was behind, the weather has enabled farmers to catch up some.

## Indiana.

**Wayne Co.**—We are having much rain, which is delaying spring work. Farmers have just begun to plow for corn, and no oats have been sown, which is unusual for this time of the year. About the usual acreage of corn and oats will be planted this spring. Fruit buds have not opened up yet. We have a fine prospect for wheat and clover. The roads are good, and a considerable amount of wheat is being hauled to market. Hens are laying well, and a good many chicks have been hatched. Corn 63c; wheat 90c; hogs \$8.50; hay \$10@12.

## Wisconsin.

**Polk Co.**—Late spring and much freezing has damaged winter crops, but they are not in bad shape. Hay is scarce. It is selling at \$10@12 per ton in the barn. Potatoes 42c; butter fat 30c; eggs 16c; roads are in good shape.

**Waushara Co.**—Have had a week of warm weather but it is now cooler again. Some oats are sown. Potatoes have done the unexpected by advancing from 50 to 60c per bushel. Eggs are down to 15c; veal 6@8c for live; pig crop short and selling at \$3@3.50 apiece, when five or six weeks old. No pasture yet, but feed is sufficient in this locality. Seeding looks good.

**Champaign Co.**—Froze here on the 20th, but do not know if the fruit has been damaged here or not. Work is progressing well, with oats sown and ground being prepared for corn. We need rains. Grass is some backward. No grain is being marketed.

## Missouri.

**St. Louis Co.**—The county is all aglow with blossoms of all fruits. Strawberry blossoms froze in the last cold spell. Every indication points to a large crop of apples, pears and cherries. I fail to find peach or plums damaged much, should say they are better than last year. Wheat and rye doing fine. Some new seeding poor. Meadows are needing rain. A good shower at this time would do wonders in the agricultural fields. Roads are fine but dusty. Weather is hot, being 82 degrees. Some of the lowlands are still too wet for the plow for corn.

**Barton Co.**—The weather during April was detrimental to the fruit crop. Considerable small fruit was killed by freezing. Wheat and oats look fine. Corn planting well under way. Grass is growing nicely. Some have turned their stock on pastures, others are still feeding. Some hay moving now. Prairie hay mostly \$15 on track.

**Warren Co.**—Had freezing weather during week of April 12 but it seems to have done damage to the fruit and the prospects are fine. Wheat and rye look fine and meadows are fairly well. Spring work has been delayed on account of rains so that oat sowing is away behind. The usual amount of corn will be planted and a large number of farmers are trying sweet clover and alfalfa. Eggs 17½c; butter-fat 24c; butter 30c.

**Polk Co.**—Apples are in good condition, also peach and berry crops promise 75 per cent of full crop. Grass and wheat are excellent. Farm work retarded to some extent by rains, although some corn has been planted. A large acreage will go in. Pastures are better than usual at this time of year.

## Nebraska.

**Cass Co.**—Winter grains are looking fine and pastures are beginning to furnish feed. Potatoes and early gardens planted. Fruit in fair shape. Stock healthy but many young pigs have been lost by reason of unfavorable weather. Horses low; cattle are steady; hogs 8c; wheat 80c; corn 65c; oats 40c; hay \$8; potatoes \$1; poultry 13c; eggs 16c; butter 20c; butter-fat 24c.

## Kansas.

**Marion Co.**—Spring work behind. High winds, frost and hail have damaged oats and caused loss to spring-sown alfalfa. Fruit has been damaged around 50 per cent. Tent caterpillar prevalent. More oats are sown than usual. Kaffir is taking the place of corn. Pastures are poor, but be-

(Continued on page 523).

## Tuxedo—A Hit with the Hit-Makers

HUNDREDS of the snappiest ball players in the country—the clean-cut athletes who provide Americans with their greatest outdoor relaxation—enthusiastically endorse Tuxedo. This is the kind of endorsement that carries a convincing punch.

These men know that Tuxedo is a mild, pure tobacco, which can be smoked all day with pleasure. Tuxedo cannot bite the tongue; it burns freely and smoothly, giving a cool, sweet smoke.

# Tuxedo

The Perfect Tobacco for Pipe and Cigarette

Tuxedo is made from the finest, mildest, leaves of high-grade Burley tobacco, so treated under the famous original "Tuxedo Process" that it burns slow and cool, with a delightful flavor and aroma.

The "Tuxedo Process" makes it impossible for this perfect tobacco to bite or sting the most delicate throat or tongue.

Tuxedo has many imitators—in outward appearance. It has no equal in the pipe or cigarette.

YOU CAN BUY TUXEDO EVERYWHERE

Convenient pouch, inner-lined with moisture-proof paper **5c** Famous green tin, with gold lettering, curved to fit pocket **10c**

In Glass Humidors, 50c and 90c

FREE

Send us 2 cents in stamps for postage and we will mail you a souvenir tin of TUXEDO tobacco to any point in the United States. Address

THE AMERICAN TOBACCO COMPANY  
Room 1199 111 Fifth Avenue New York



FRED CLARKE

"I'd advise every ball player to smoke Tuxedo. I do, always. I know of no other tobacco that gives the satisfaction that Tuxedo does."

*Fred Clarke*



JIMMY ARCHER

"Tuxedo is my idea of a good smoke in every way—coolness, mildness, purity. Tuxedo is a winner."


*Jimmy Archer*



JACK McINNIS

"Tuxedo gives a cool, mild smoke, and never affects the wind. Tuxedo is a tobacco that's always good."

*Jack McInnis*



## The Many Uses of UNION CARBIDE and ACETYLENE

The Union Carbide Company is the largest user of industrial horse-power in the world. UNION CARBIDE is the granitic-like material that yields acetylene gas. In the process of manufacture the power of Niagara Falls and the great rapids at Sault Ste. Marie is transformed into electric current, which in turn is changed into heat. This heat is used to maintain the highest temperature known to science in the hundreds of huge electric furnaces which turn out the Carbide.

The process of making Acetylene from Carbide is so simple it has brought this gas into world-wide use. Today tens of thousands of mine workers are wearing acetylene mine lamps on their caps—thousands of acetylene torches are illuminating big outdoor construction projects—tens of thousands of automobiles are equipped with acetylene headlights—thousands of factories and machine shops are using oxy-acetylene metal cutting and welding torches—thousands of acetylene lighthouse buoys illuminate our sea coast. Others light the whole course of the Panama Canal. And hundreds of thousands of country home families are using HOME MADE ACETYLENE for both lighting and cooking. The thousands of tons of UNION CARBIDE used to make this acetylene is purchased direct from the Union Carbide Company's warehouses located at shipping points all over the country. In the hundred pound drums in which it is packed UNION CARBIDE is as safe to ship, store and handle as coal. It won't burn and can't explode.

For information regarding any of the uses of Union Carbide address

**Union Carbide Sales Company, Dept. 13.**

42nd St. Building,  
NEW YORK, or  
Peoples Gas Bldg.  
CHICAGO, ILL.

## Plants Must Have Nitrogen

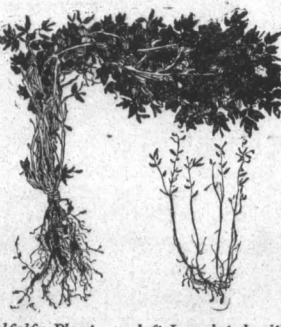
It is the necessary food for clover, alfalfa, peas, beans—any legume. Where can they get it if previous crops have exhausted the supply in the soil or if the soil is naturally poor? You must STOCK YOUR SOIL WITH NITROGEN—not by costly commercial fertilizers but by means of

## Ferguson's NITROGEN BACTERIA

With \$2 worth you can do the work of \$40 worth of commercial fertilizer. The Bacteria, gathering the Nitrogen from the air itself, store up on the roots of your crops more than they can use, producing bigger, better crops and leaving the surplus to enrich the soil for future seasons!

Let us tell you how Ferguson's Bacteria will pay you. A postal card will bring our special booklet M and full explanations, at no cost to you. Bacteria for ¼ acre, 50c; for 1 acre, \$2; for 5 acres, \$8. A big opportunity for agents, under our liberal arrangement.

HOMWOOD NITROGEN CO., 51 Liberty St., New York City.



Alfalfa Plant, on left inoculated with Ferguson's Bacteria; on the right not inoculated.—From Gov. Bulletin No. 159

**When Writing to Advertisers please mention the Michigan Farmer.**





There's a satisfaction in the feeling that your own shirt is the best looking. You enjoy that satisfaction—always—in

## HALLMARK SHIRTS

REGISTERED AT U.S. PATENT OFFICE

The kind of shirts you've always wanted—for their correct styles, their fine fabrics, their smart patterns, and their beautiful colors that are guaranteed fadeless.

HALLMARK Shirts cost no more than you've always paid. Their quality is the kind you have come to associate with shirts at higher prices.

See the new HALLMARK styles for Spring and Summer—dealers everywhere.

\$1, \$1.50 and upward

HALL, HARTWELL & CO.

Troy, N. Y.

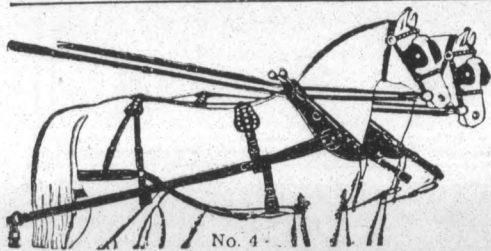
## SLIDEWELL COLLARS



The only collars with the patent back button shield and the permanent graduated tie space for full tie freedom. Newest styles in plain and madras effects.

All dealers—15c, 2 for 25c.

If your dealer hasn't them, send us 75c for box of six, or write for the SLIDEWELL catalog.



## HARNESS HORSE COLLARS

Ask Your dealer for the Label

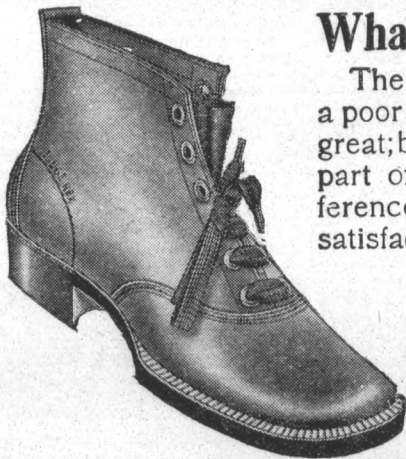
Made and Warranted by

## ARMSTRONG & GRAHAM

WHOLESALE ONLY.

DETROIT.

ESTABLISHED 1880.



## What's the Difference?

The difference in price between a poor shoe and a good shoe is not great; but that difference is the best part of your purchase. That difference buys comfort, service, and satisfaction not found in inferior footwear.

## Use Is the Test

Ask for Rouge Rex Shoe No. 494. Look for the trade-mark on the sole.

This is a tan shoe made of full stock veal skin, with bellows tongue, and heavy sole of first quality leather.

You get all you pay for in comfort and service, and save money in the transaction.

Write Dept. F for descriptive book and nearest dealer's name.

**HIRTH-KRAUSE COMPANY**  
Hide to Shoe Tanners and Shoe Manufacturers  
GRAND RAPIDS MICHIGAN



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

## Grange.

AMONG THE LIVE GRANGES.

Star Grange No. 885, met April 4 in due form with the Worthy Master in the chair. All of the officers were present but the steward. Twelve new applications for membership were presented. We have twenty new members now and we thank Brother Keifer and Brother Ketcham for the help they have given our Grange in getting these new members. Motion was made and supported that we have Pomona Grange in August. As it was getting late the lecture hour was omitted and all sat down to the well filled tables and did ample justice there. Over 50 members were present.

Vermontville Grange met for an all-day session early in April and conferred the third and fourth degrees in the forenoon on a class of four, followed by a potluck dinner. After the dinner hour the members of the Grange were invited to Barber Bros. store, where their spring opening was being held, and treated to several selections on the victrola, among them being, "Uncle Josh Joins the Grange," which was greatly enjoyed. On returning to the hall the following program was given: Song, Grange; roll call, responded to by each brother naming the woman he considers the greatest in American history; sisters, the man they consider greatest. Frances Willard was first choice as the greatest woman, and Abraham Lincoln as the greatest man. Sister Mahar favored us with a recitation about "Brother Brown," and responded to an encore with "The Tango Lady." Sister Brown, assisted by others, gave us some suggestions for gardening. Brother Williams read a paper on "Farm Credits," and Brother Waring one on "Forestry." Brother and Sister Dalzell gave two selections, which were heartily applauded. Sister Williams gave a short paper on "Our Progress in Care of Children and the Young," and Brother Purvis gave a short talk on "Our Progress Toward Co-operation." The time of meeting for the last April meeting was changed from 1:30 p. m. to 7:30 p. m. The following program was given: Song; roll call, responded to by each member giving a sentiment or fact relating in some way to the farm; recitation by Pearl Lovell. "Which is more profitable, making butter at home or selling cream at a creamery?" making butter, by Sister Dwight; selling cream, by Brother Williams; care of cream to be sent to a creamery, by Brother Brown. Reading, "The Discontented Farmer," Cora Hope; surprise feature, Burr Chance.

Harmony Grange met on April 18 with an attendance of 20 members and one visitor from Wilson Grange. The committee on hall site reported an offer of a five-acre site and were authorized to purchase it if satisfactory terms could be arranged. One candidate, August Erber, was initiated in the first and second degrees and two candidates, Mrs. Addie Cushman and Muriel Kerry, were initiated in the third and fourth degrees, after which the following program was presented and the harvest feast served by the ladies: Song No. 102, by the Grange; reading, Mrs. Hattie Simmons; discussion, "My experience with an incubator," led by H. L. Willson; vocal solo, L. D. Willson. It was announced that Deputy State Master D. E. McClure would give an address at the next meeting, May 2. Visitors always welcome.—L. D. Willson, Sec.

At a recent meeting of the South Boston Grange, near Lowell, Kent county, instructed six candidates in the fourth degree. After the work was over a sumptuous supper was enjoyed. The lecture hour was devoted to talks on "Good Roads," by Arthur Lewis and Harvey Lowrey, both of Ionia.

### GRANGE NOTES.

Hadley Grange keeps a bulletin board of black cambric neatly tacked across the rear wall and on this pins printed letters regarding contracts and samples of twine, paint, etc.

Ann Arbor Grange devoted most of one meeting to the Torrens System of Land Transfers, with Prof. John R. Rood, author of the series of articles upon this subject which appeared in the Michigan Farmer recently.

### COMING EVENTS.

Washtenaw Pomona, at Stony Creek hall, June 9. Master Ketcham and county alfalfa campaign. Stony Creek, Fraternity and York Granges as host.

## Farmers' Clubs

CLUB DISCUSSIONS.

**Favor Good Roads.**—An important topic of discussion at a recent meeting of the North Shade Farmers' Club of Ionia county, was "How to Procure Better Roads for our Community," led by R. W. Brice. As he is an old resident he gave a brief history from the time a trail was cut through the forest and the corduroys laid—some of which are in existence at the present time in several places—tracing the way they were covered up by the old system up to the present time. But as we are handicapped for gravel several questions arose, as the two miles built the past year cost \$2,800 per mile, including bridges. But still the sentiment of the Club was to continue to build them. Also, everybody to take an interest. Should a bad place occur in the front of one's place to fix it voluntarily. Everybody lift a little so that the highway commissioner could devote his time to making more good roads. The subject of Boys' Corn and Girls' Domestic Science clubs was presented by Wm. T. Hull. North Shade having decided to co-operate with the Carson City high school under the leadership of Supt. Cook, the territory will include both North Shade and Bloomer townships. This will be open to all boys and girls as contestants under the state directors. The plan as outlined was well received. Supt. Cook being present was called on and stated that he was well pleased with the idea and the interest shown, and he was enthusiastic in the matter. A committee was appointed to boost the plan in North Shade. A vote was taken to commence holding meetings during the hot months, in the evening, beginning the first Friday in June.

**Unlearned Lessons** was a topic discussed at a recent meeting of Conway-Handy Farmers' Club, of Livingston county. In opening the discussion C. Gordon said that people were never too old to learn; experience was a good teacher; but we learn more by our own experience than by copying experience of others; many new things to be learned each day in which others may profit. He had learned by a recent experience that it was better for him to patronize home industry. However, in all things one must weigh experience and advice of others and do what is best in one's own judgment. Mrs. John Snyder said there were more unlearned lessons than learned ones; in a scientific way, women especially, were slow to adopt new methods of simplifying work, we were all slow to catch new ideas, but thought the greatest unlearned lesson was how to live. Mrs. S. R. Holmes thought that men should learn to say no when a man knows that he cannot afford whatever the wife wanted, he should insist on refusing to grant the wish. J. B. Fuller said that farmers should learn that taking out of the meal bucket continually and putting nothing back would soon come to the bottom. By this he meant that farms were becoming depleted because many take off but put nothing back to restore the fertility.

**Favor Farmers' Elevator.**—Among the many entertaining and instructive meetings of the Indianfields Farmers' Club was the one held Thursday, April 16, at the spacious home of Mr. and Mrs. Joseph Fournier, on North State street. Although it was a busy time for the farmers, a good number were present. A very fine dinner was served by Mrs. W. L. Eldridge—"Days may come and days may go" but the fine meals "go on forever," was realized by all the members present. President W. L. Eldridge was at his post of duty and the opening number was a Club song; "Spring on the Farm," a very interesting talk, was given by John Miller; a paper, "Domestic Science," Mrs. Ella Andrews; duet, Clara Miller and Rev. T. D. Druman, who responded to an encore; a choice bit of poetry on domestic science, by Mrs. Densmore; solo, Mrs. Castle Taggett. Regarding the subject for discussion, "Is it wise to invest in the farmers' elevator?" Robert Park read a fine paper, and Bert W. Smith said he had two hobbies, at present—automobiles and the farmers' elevator. Both gentlemen were very much in favor of the co-operative elevator plan. A general and very interesting discussion was given, and all expressed themselves strongly in favor of the elevator. The question box contained many timely questions. Club then adjourned to meet Thursday, May 21, with Mr. and Mrs. M. Auger, on "Harmony Hill."—Margaret Arnold, Cor. Sec.



## Veterinary.

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

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case in full; also name and address of writer. Initials only will be published. Many queries are answered that apply to the same ailments. If this column is watched carefully you will probably find the desired information in a reply that has been made to someone else. When reply by mail is requested, it becomes private practice, and a fee of \$1.00 must accompany letter.

**After Effects of Azoturia.**—About three weeks ago one of our horses was taken sick with azoturia and we left him with Vet. in town for two weeks; since getting him home one leg seems to be lame and weak. S. W. P., Cadillac, Mich.—He will perhaps make a very slow recovery. Apply equal parts alcohol and water to hind quarters twice a day and give 1 dr. ground nux vomica, ½ oz. of ground gentian, 1 dr. powdered nitrate of potash and 1 dr. powdered sulphate of iron at a dose in feed twice a day.

**Foot Soreness.**—I have a mare that is sore in both fore feet, and when newly shod and toe shortened she appears to be relieved. Would you advise me to apply blister to coronet? L. N., Metropolitan, Mich.—Keep her shod, using wide-webbed shoe with a rolling motion, apply lanolin to hoof once a day; and also stand her in wet clay one hour daily.

**Garget—Eczema.**—I have a cow that is troubled with garget, affecting one quarter of udder. Also have three pigs whose skin is scurvy with a few sores which cover quickly with scab. W. K. F., Romeo, Mich.—Apply one part iodine and 20 parts fresh lard to gargety portion of udder once a day. Give her a dessertspoonful of powdered nitrate of potash at a dose in feed two or three times a day. Apply one part oxide of zinc and five parts vaseline to sore parts of skin on pigs once a day and give them some cooking soda in their feed two or three times a day.

**Sore Foot.**—I have a sow lame in one hind leg, her foot is swollen and lower joint of leg is also swollen and tender. I have thought it was soreness between the toe, and applied liniment without it doing any good. She is at present nursing young pigs and does not move around much. A. G., Gaines, Mich.—Give your sow 15 grs. sodium salicylate at a dose in feed three times a day. Apply one part tincture iodine and four parts spirits of camphor to lower joints of leg and foot once a day. It is needless for me to say that her pen and foot should be kept as clean as possible.

**Obstructed Teat.**—I have a cow that came fresh January 2, 1914, which has a soft painless bunch in lower part of udder which obstructs free flow of milk into teat. J. J. K., Rives Junction, Mich.—Apply one part fluid extract belladonna, one part tincture of iodine and five parts olive oil to bunch daily.

**Weakness.**—I have a cow that appears to be weak in knees and back, and is quite low in flesh. C. K., Jr., Romeo, Mich.—Give your cow ½ oz. ground gentian, a teaspoonful of powdered sulphate iron and 1 dr. ground nux vomica at a dose in feed three times a day. Her food supply should be increased.

**Goitre.**—I have two grade Holstein calves that were born with bunches in their throats, but the calves appear to be perfectly healthy and growing nicely. R. A. C., Elm Hall, Mich.—Give each calf 5 or 10 grs. potassium iodide at a dose once or twice a day and the bunches will gradually disappear.

**Fowl Cholera.**—My chickens seem to be dying off quite rapidly; they appear to have diarrhea, breathe short and die after 10 or 12 hours' sickness. C. G., Swartz Creek, Mich.—The sick ones should be removed and kept by themselves; thoroughly disinfect and ventilate their coop and most of the sick ones had better be killed and burned. Be particular about their food and water supply and remember that drugs will not cure them after they take sick. Dissolve 1 dr. of powdered sulphate iron in each quart of drinking water.

**Weak Pigs.**—In the spring of 1913 one of my sows had 11 fine looking pigs without hair on them; they all died. Last winter two young sows farrowed, one had eight pigs and the other had 12; all died except five, but the sows carried these pigs full time. J. W. R., Benzonia, Mich.—Your sows may have farrowed a little too early. Good care and plenty of feed will do more for them than drugs.



### A Good Jersey Bull with Grade Cows

is a start in the right direction. If you cannot have all full-bloods, you can at least have a sire with known lines of breeding. The sire is the greatest factor in enlarging the producing value of your herd.

The great milkers and great dairy herds are not the result of accidents. Breeding to a thoroughbred bull should be your first move.

This Club has neither cows, bulls nor calves for sale. It is maintained solely in the interest of Jersey breeders. We shall be glad to send you helpful facts and information. If you are a Jersey breeder, membership in this Club will be valuable to you. If interested, please address

**THE AMERICAN JERSEY CATTLE CLUB**  
324 West 23rd Street, New York City

### Feeding Molasses

to your pigs is guaranteed to increase your profits 20 to 50 per cent. For prices and full particulars, write **WATKINS & COMPANY, Box 13, Litchfield, Michigan.**

**JNO. CRAWFORD,**  
Horse Importer,  
Byron, Mich.

### 70 Head for Sale

Percheron, Hackney and Clydesdale Stallions.

Also Some Fine Percheron & Hackney Mares with foal. Now gentlemen I am going to sell. Be sure to get my price before you buy.

### AUCTION! AUCTION!! AUCTION!!!

Of horses and mules every Monday. Private sale daily. From two to five hundred head always on hand, farm mares and chunks, delivery and wagon horses pavement sore city horses, and drafters and work horses of every kind. South ST. PAUL HORSE AND MULE CO., Union Stock Yards, South St. Paul, Minn.

**REGISTERED PERCHERONS**—FOR SALE. Two two year old Stallions. Also Some mares, all ages at farmers prices. Visitors always welcome. F. L. King & Son, Charlotte, Mich.

**SOME fine young Registered Clydesdale STALLIONS** for Sale from 1 to 4 years old. In the spring some will make ton horses with lots of quality and good action. F. A. PETZ, Capac, Michigan.

**For Sale—2 Reg. Percheron Mares** in foal. **WELLS W. GARDNER**, Fenton, Mich. Bell phone.

**A BALKY HORSE** can be made to start with an effective remedy. For further particulars, write to. **O. F. HOPPE**, Ann Arbor, Michigan.

### Deadly Scours

Scientific Tested, Safe and SURE CURE. **FOR 75 CENTS**

we will send prepaid bottle to last a year. Money refunded if it fails. Scours are prevalent in best regulated calf barns, retard growth and are often fatal.

**Don't Take Chances.** Equally sure with grown cattle and hogs. Easy to give. **ROUGEMONT FARM REMEDIES**, Detroit, Mich.

### BREEDERS' DIRECTORY.

#### CATTLE.

#### ABERDEEN-ANGUS

HERD FOUNDED IN 1900. Strains represented consist of Trojan Eras, Blackbirds and Prides, only. Black Quality Ito, a bull of rare individuality and merit, heads the herd. **WOODCOTE STOCK FARM, Ionia, Mich.**

**GUERNSEY BULL CALF**, nicely marked, 3 weeks old, great grandson of Gov. Chene, \$50 takes him. **AVONDALE STOCK FARM, Wayne, Michigan.**

**FOUR YOUNG GUERNSEY BULLS**, old enough for service, for sale. Exceptional breeding and in dividuality. **Village Farm, Grass Lake, Michigan.**

**FOR SALE**—2 Reg. Guernsey bulls 2 and 4 years old 2 bull calves best breeding. Pedigree off spring show. **Berkshire swine either sex.** **JOHN EBELS, R. R. 10, Holland Michigan.**

**GUERNSEY BULL AND HEIFER, UNRELATED.** Heifer slightly blemished. Both for the price of one, \$125 takes them. **G. A. WIGENT, Watervliet, Mich.**

**HEREFORD BULLS** 2 six months old 1 18 months old. **ALLEN BROS., Paw Paw, Michigan.**

**HOLSTEIN BULLS AT FARMERS PRICES** Sired by one of the best bulls of America. **LONG BEACH FARM, Augusta, Kalamazoo Co., Mich.**

**ESPANORE FARM,** LANSING, MICH.

### Register'd Holsteins

**Bull Calves \$50 to \$200.** An absolute guarantee with each purchase. **CHASE S. OSBORN, Owners, L. M. HATCH, ADAM E. FERGUSON, Supt.**

**HOLSTEIN FRIESIAN CATTLE BREEDERS** of high record cows. Young bulls at farmers prices. **JONES & LUTZ, Oak Grove, Michigan.**

**Upsiland Herd**—Offer bull calves, choice A. R. O. breeding, \$100 and up. **COLE BROTHERS COMPANY, Ypsilanti, Michigan.**

**Registered Holstein Bull** two years old. 27-lb. dam. 30-lb. granddam, average 29 lbs of butter in 7 days. \$250 delivered. Write for pedigree. **HOBERT W. FAY, Mason, Mich.**

**Holstein Bull Calf only \$25.00** delivered. Handsome three-quarter white, thoroughbred, not eligible to register. Sire 25-lb. butter bull. Dam from 15.00 milk cow. **ROUGEMONT FARMS, Detroit, Mich.**

**\$225** Buys a registered heifer 8 mo. old and registered bull 7 mo. old, both ½ white, not not akin. **B. B. KEAVEY, Akron, Michigan.**

**BIGELOW'S HOLSTEIN FARMS**  
Breedersville, Michigan,  
Breeder of high class  
Registered Holsteins.

**A. R. O. HOLSTEIN COWS FOR SALE.** 6 very fine A. R. O. cows, bred to Johanna Concordia Champion, and Duke Ormsby Pieterje DeKol. Price \$1850. Service bulls and bull calves. Kindly write me just what you want. **L. E. CONNELL, Fayette, Ohio.**

**A FEW CHOICE** Holstein Friesian Bull Calves for Sale. A. R. O. Stock. **GREGORY & BORDEN, Howell, Michigan.**

**Holstein Friesian Cattle** Herd Headed by Albina Bonte Butter Boy No. 93124. Average for dam and sire's dam A. R. O. at 4 yrs. butter 7 days 28.37 lbs. No stock for sale. **W. B. Reader, Howell, Mich.**

**The Michigan Home and Training School, Lapeer, Mich.** Offers Choice Purebred Holstein Bull Calves, 1 to 7 mo. old. Also choice grade Holstein heifers out of good milk producing dams. List furnished upon application.

### "Top-Notch" Holsteins.

Choice bull calves from 1 to 7 mo. old, of fashionable breeding and from dams with official milk and butter records for sale at reasonable prices. **McPHERSON FARMS CO., Howell, Michigan.**

**Purebred Registered HOLSTEIN CATTLE**  
The Greatest Dairy Breed  
Send for FREE Illustrated Booklets  
Holstein-Friesian, Assn., Box 164, Brattleboro, Vt.

**JERSEYS**—Bull calves nearly ready for service. Sired by Jacob's Fairy Emanon 107111. **SMITH & PARKER, Howell, Michigan.**

If you are **JERSEY BULLS** write us today and we in need of **JERSEY BULLS** will quote you prices on some grandsons of Hood Farm Pogie 9th, that will surprise you. **Fisherton Farm, Pontiac, Michigan.**

**MAPLE Lane Register of Merit Jersey Herd**—Tuberculin tested by U. S. Government. Bull calves from cows in R. of M. test. Heifer calves whose dams, grand-dams, and great grand-dams are in the Register of Merit. **IRVIN FOX, Allegan, Michigan.**

**Lillie Farmstead Jerseys**  
(Tuberculin tested. Guaranteed free from Tuberculosis.) Several good bulls and bull calves out of good dairy cows for sale. No females for sale at present. Satisfaction guaranteed. **COLON C. LILLIE, Coopersville, Mich.**

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

**Jersey Bulls** Yearling and two-year-old. Eligible to register. Splendid breeding. Price right. Address **LEWIS RILEY, Metamora, Mich.**

**FOR SALE CHEAP**—Choice Registered Jersey Bull Calf, born Oct. 1st, 1913. From high producing prize winning stock. **O. S. BASSETT, 480 Drexel Pl., Kalamazoo, Mich.**

**JERSEYS**—Bulls calves bred for production. Also cows and heifers. **Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.**

### FOR SALE

#### Registered Red Polled Heifer

12 months old. Having sold all my Red Polls but this one, intended keeping her for family use being out of the best cow in my herd she must go also. Easily worth \$100 but the first draft of \$75 takes her. Also offer a fine lot of Shetland Ponies, \$50 to \$75 each. One to three years old. **EZRA BRACKETT, Allegan, Mich.**

**FOR SALE**—14 Polled Durham & Shorthorn Bulls from 4 to 24 months old. **C. CARLSON, LeRoy, Mich.**

**DAIRY BRED SHORTHORNS** of best Bates strains. All sold. **J. B. HUMMEL, Mason, Michigan.**

**SHORTHORN CATTLE**  
**W. W. KNAPP, Howell, Michigan.**

#### SHEEP.

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

**IT PAYS TO BUY PURE BRED SHEEP OF PARSONS** The Shepman of East. I sell and ship everywhere and pay express charges. Write for club offer and price list. Oxford, Shropshire and Fells, Delaines. **PARSONS, GrandLedge, Mich. R. 8.**

#### HOGS.

**Durocs & Victorias**—A few extra Sept. Boars and bunch of Gilts for 1st of April farrow. **M. T. STORY, Lowell, Mich., Citizens Phone 55.**

### BERKSHIRES

Pure bred berkshire boar pigs, ready for service, \$15 to \$25. Spring pigs \$10 crated for shipment. Aberdeen Angus bull calves \$50 to \$200. Closely related to four International Grand Champions. Write for complete list of Angus Offerings in Michigan.

**GEO. B. SMITH**  
Vice President Michigan Angus Breeders Ass'n. **ADDISON, MICHIGAN.**

**BERKSHIRE**—Choice fall Boars and Gilts of select breeding, also spring pigs. Priced to sell. **WHITE OAK FARM, R. No. 4, Brown City, Mich.**

**Chester Whites**—Reg. Bred Gilts—Orders taken for spring pigs and Collie pups. Holstein Bulls at Bargains. **FAY B. PARHAM, Bronson, Mich.**

**CHESTER WHITES**—The long type, prolific kind. A nice lot of spring pigs. **MEADOW VIEW STOCK FARM, Holland, Michigan.**

**O. I. C's.**—I HAVE A NICE LOT OF HAND. OTTO B. SCHULZE. One-half mile west of Depot, Nashville, Michigan.

**O. I. C.**—Take orders for spring pigs. One 8 mo. fine type Jersey Bull. Price reasonable. **N. H. Weber, Oak View Farm, Royal Oak, Michigan.**

**O. I. C.**—16 sows bred for spring farrow, 30 fall pigs, large and growing. Write your wants. **GLENWOOD STOCK FARM, Zeeland, Mich.**

**O. I. C.**—Sows bred for June farrow. We are also taking orders for spring pigs. **JOHN BERNER & SON, Grand Ledge, Mich.**

**O. I. C.**—Gilts bred for June and July farrow. Also 1 pay express. **G. P. ANDREWS, Dansville, Mich.**



I have started more breeders on the road to success than any man living. I have the largest and finest herd in the U. S. Every one an early developer, ready for the market at six months old. I want to place one hog in each community to advertise my herd. Write for my plan, "How to Make Money from Hogs." **G. S. BENJAMIN, R. No. 10 Portland, Mich.**

**O. I. C's** All sold. Would be pleased to book your order for spring pigs. **C. J. THOMPSON, Rockford, Michigan.**

**O. I. C.**—Three September Boars, four September Gilts. Am also taking orders for spring pigs, they are extra good ones. **NEWMAN'S STOCK FARM, R. No. 1, Marlette, Mich.**

**O. I. C's**—Spring pigs, pairs and trios, 2 year herd boar cheap. **CLOVER LEAF STOCK FARM, R. No. 1, Monroe, Michigan.**

**O. I. C.**—Boars six months old, spring pigs, gilts. Satisfaction guaranteed. **A. R. GRAHAM, FLINT, MICHIGAN.**

**O. I. C. Swine**—May I have the pleasure of receiving your order for a pair or trio, not akin of April and May farrow. They are bred right. Satisfaction guaranteed. **A. J. GORDEN, R. No. 2, Dorr, Mich.**

**For Sale—Duroc Jerseys**—Ten sows one year old, farrowed Sept. 7, 1913, two Aug. 1913 boars. Write for price, etc. **Myron Shorten, Quimby, Mich.**

**Duroc Jerseys**—Choice fall gilts, Sept. farrow at reasonable prices. **S. O. STAHLMAN, Cherry Lawn Farm, R. 2, Shepherd, Mich.**

**FOR SALE**—Duroc Pigs 8 weeks old the big boned kind \$5 each. Also some fine gilts for September farrowing. Pedigrees furnished. Write your wants to, **F. A. LAMB & SON, Cassopolis, Mich.**

**FOR SALE**—A few heavy boned Duroc Jersey boars. Weighing from 100 to 200 pounds each. **M. A. BRAY, Okemos, Ingham Co., Michigan.**

**DUROCS**—A good growthy fall pig immuned and bred for August farrow will make you money. Give me your order now for May shipment. Also fall boars ready for service. **KOFE KON FARM, Kinderhook, Michigan.**

**FOR SALE DUROC JERSEYS**—College Boy 138557 farrowed Sept. 7, 1911, two Aug. 1913 boars. Write for price, etc. **J. H. Banghart, Lansing, Michigan.**

**Fancy bred Duroc Jerseys**—Boars & Gilts of spring & summer farrow. Good individuals at reasonable prices. **John McNeill, Station A, R. 4, Bay City, Mich.**

**KORN-EL STOCK FARM** now offer Duroc Jersey pigs of either sex at reasonable prices. **E. R. CORNELL, Howell, Michigan.**

**Durocs**—25 large high class sows, bred for March & April to farrow. Crimson, Cherry Advance & Oakland Fancy. Write or come & see. **J. C. Barney, Coldwater, Mich.**

**DUROC JERSEYS**—A few fall pigs of both sexes for sale. **CAREY U. EDMONDS, Hastings, Michigan.**

**DUROC JERSEYS**—Fall gilts of the large, heavy boned type, bred for Aug. and Sept. farrow. Also spring pigs, not akin. **F. J. Drott, R. 1, Monroe, Mich.**

**Duroc-Jerseys**—Spring boars from prize-winning strains. Sows all ages. **Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.**

### MY OH MY!

#### What an Opportunity.

Starting May 1st, we are going to give to the farmers and breeders an opportunity to get started right in the breeding industry. We are going to give you a chance to get hold of foundation stock that will give you a nucleus for one of the finest and best herds in your community. We are going to show you as we have others, that you will have greater success with our big type

#### POLAND CHINAS

than with any other breed. We want to place at least one pig, or a pair in every community, to advertise our herd. We will send sample pair on time and give agency, if not already taken. If interested, write for our plan and prices.

**HILLCREST FARM, KALAMAZOO, MICH.**

**LARGE TYPE P. C.**—Largest in Mich. Bred gilts left. Watch this space for something large and good, they please where ever they go. **W. E. LIVINGSTON, Parma, Michigan.**

**POLAND CHINAS**—Both Western and Home Bred. Either sex, all ages. Prices right. **W. J. HA GELSHAW, Augusta, Mich.**

**Poland China Boar; Sows Bred, All of the Big Type.** **A. A. WOOD & SON, Salline, Michigan.**

**P. C.**—Fall boars and gilts. Spring pigs. Shorthorn females, Oxford Sheep. **C. W. CRUM, Sec'y., Cent. Mich. Shorthorn Ass'n., McBrides, Michigan.**

**POLAND CHINA PIGS**—From large Prolific stock. Shorthorn Bull Calves. Eggs \$1 per 15 from choice Barred Rocks. **ROBERT NEVE, Pearson, Michigan.**

**BUTLER'S Big Boned Prolific Poland Chinas.** Grow big, keep easy, mature early, ready for market at 6 months. Why? Because we've bred them that way for more than 20 years. We have 25 big boned boars ready for service. Buy one and make more money on your hogs. You can't get any better at any price. **P. C. History Free, J. C. BUTLER, Portland, Mich.**

**30** Poland China Fall Pigs—Good ones from immune sows \$10 and \$15 each, while they last. Bred sow sale Feb. 27th, send your name for catalog if you want to buy Big Types with Quality. **Wm. Waffle, Coldwater, Mich.**

**350** BIG TYPE MULE FOOT HOGS—America's Champion Herd. Prolific, hardy. Best for Mich. Also Ponies. **J. DUNLAP, Box M, Williamsport, Ohio.**

**YORKSHIRE SWINE**—Boars all sold. Yearling sows bred for March farrow. Weanling pigs ready May 1st. **GEO. S. McMULLEN, Grand Ledge, Mich.**

**Mule Foot** Bred sows, bred gilts and boar pigs, not related, for sale. Satisfaction guaranteed. **G. C. KREGLOW, Ada, Ohio.**

**FOR SALE**—Yorkshires, milk fed, spring pigs and a few sows bred for April farrow. Prices reasonable. **C. H. JOBBE, Mt. Clemens, Michigan.**

**Yorkshires** Guaranteed to not die of Cholera. Prolific, long deep and well fleshed. Feb. and March pigs. Trios not akin. Boars, Cribbs Bros. Watervliet, Mich.

**Yorkshires**—Spring Pigs Of Excellent Quality. **GUY J. DOTY, R. 2, Monroe, Michigan.**

#### YORKSHIRES

The large, long-bodied, heavy-boned prolific kind. Sows and gilts bred for spring farrow. 60 head of September, October and November pigs. Prices reasonable. **W. C. COOK, R. 42, Ada, Michigan.**

**Lillie Farmstead Yorkshires**  
Open gilts and gilts bred for September farrow. Spring pigs either sex, pairs and trios not akin. Satisfaction guaranteed.

**COLON C. LILLIE, Coopersville, Michigan.**



Phelps' 140 Page Illustrated

# FREE BOOK



125  
Snappy  
Styles for  
You to  
Choose  
From

## Where's the Man Who Wouldn't Like This Buggy?

Phelps says that farmers are most particular buggy buyers in the world, and when nearly 200,000 of them have put their stamp of approval on Split Hickory Vehicles, it proves that he gave quality and actually did save his customers \$25 to \$40. Every man and woman who has seen and ridden in Split Hickory Vehicles is *enthusiastic*. Young people praise the *stylish appearance* of these buggies. Their parents admire the *strong construction* and *long life*—easy riding qualities appeal to *everybody*.

The very best thing for you to do is to get Phelps' Big Book. 140 pages of buggies of all descriptions. *Color illustrations* showing the buggies just as they appear all *painted and varnished*. See your buggy just as it will come to you.

Besides, a *vast fund of practical, valuable information* on buggy manufacture and selling. Pages and pages about harness with illustrations. This book is *just crammed with facts and figures* on the entire buggy business. A real buggy encyclopedia. These facts will *save you money*.

### Phelps is Ready to Show You An Actual Saving of \$25 to \$40

Phelps' Big Book will *prove* the big saving. Phelps *sells direct*. He shows you *quality* and *variety* and *price* that the local dealer *never* could offer.

### Fill in This Coupon NOW—Phelps Even Pays the Postage on This Big Free Book

because he wants you to have a copy no matter what make of buggy you are going to buy. Phelps sends you his book *without obligations*. *Buy where you like*. But *get the facts*. Phelps will show you how to invest your buggy money to the best advantage regardless of what buggy you get. Now—why delay? Write at once—use this coupon or send a postal, just as you like. Address it to H. C. PHELPS, President.

THE OHIO CARRIAGE MANUFACTURING COMPANY  
Station 32 Columbus, Ohio

No wholesaler or jobber stands between Phelps and his customers. *No middleman can make a profit* on Split Hickory Buggies. The middleman's share is surprisingly large. Maybe you didn't realize how much of your buggy money went to the dealer and wholesaler and how little to the manufacturer. *Phelps shows you in his book how you can save the middleman's profit*. Price isn't all—

### Split Hickory Buggies Are Built Better Than Any Others

Phelps watches *personally* every part of this great factory. He is a practical buggy builder. He knows what material and workmanship *must* go into his buggies and he looks after it himself. Get the book that tells about the careful, painstaking processess that make Split Hickory Buggies.

### Ten Reasons Why You Ought to Decide on a 1914 Split Hickory Buggy

Here are ten *reasons* for buying a Split Hickory Buggy. *They're just as strong arguments for getting Phelps' book* and investigating his entire offer.

1—30 Day Free Road Test. 2—2 Years' Guarantee. 3—\$25 to \$40 Saving. 4—Choice of 125 Styles. 5—14 Years' Record of Satisfying Customers. 6—Nearly 200,000 Buggies Sold. 7—Split Hickory Running Gears, Shafts, Etc. 8—Your Buggy Made to Order. 9—Phelps' Standing Accredited by Bankers. 10—Big Book Shows Exactly What You Are Getting Before You Even *Try* a Split Hickory. With an offer like this you simply can't think of hesitating or delaying, you should write *quick*. Find out at least what the *meaning* of this offer is. Find out *why* such astounding prices can be offered on high quality vehicles.

H. C. Phelps,  
Pres., The  
Ohio Car-  
riage Manu-  
facturing Co.  
Station 32  
Columbus, Ohio

Please send me your Free 140-page Buggy Book and your offer complete.

NAME.....

Street No. or Rural Route.....

Town.....State.....

From Our  
Factory  
Direct  
To You