

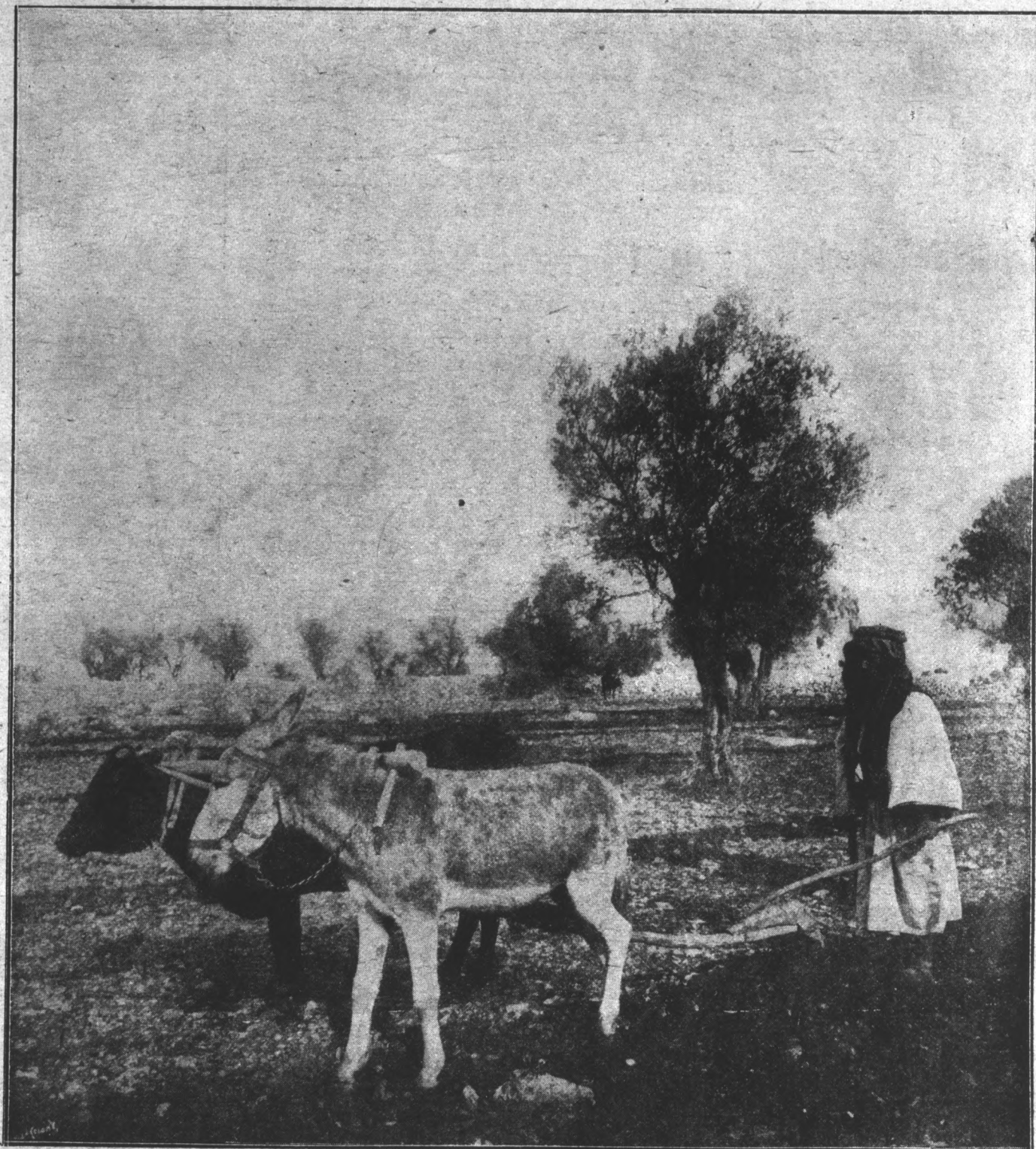
# MICHIGAN FARMER

AND LIVE STOCK JOURNAL  
PUBLISHED WEEKLY  
ESTABLISHED 1843.

VOL. CLXII. No. 15  
Whole Number 4600

DETROIT, MICH., SATURDAY, APRIL 12, 1924

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**WHAT THE ARMY WANTS.**

THE army bill carrying an appropriation of \$326,000,000 and providing for an army of 125,000 men has passed the House, and is now before the Senate. This is \$16,000,000 less than last year.

**FOR AIR MAIL SERVICE.**

THE appropriation for the air mail service for the next fiscal year will be \$2,750,000. The cost of the New York-San Francisco air mail service will be \$1,500,000.

**REVISE EXPORT BILL.**

A REVISED edition of the McNary-Haugen export corporation bill is H. R. 8021, introduced by Congressman Thomas L. Rubey of Missouri. The commission is eliminated and its functions combined with those of the United States Agricultural Export Corporation. The House committee on Agriculture has already accepted this provision, holding that there is no need for two separate groups of office holders. The scrip feature of the McNary-Haugen bill is also eliminated.

The corporation is required to publish for each month commencing after the issuance of the proclamation declaring a special emergency in respect to any basic commodity a price therefor to be known as the ratio price, which shall bear the same relation to the current all-commodities price in effect for such month as the pre-war basic-commodity price bears to the pre-war all-commodities price.

The ratio price of any basic agricultural commodity is to be finally determined by adding to the ratio price a sum equal to 10 per cent of such ration price so calculated. Whenever the ratio price is thus finally determined the corporation shall publish the same in the primary markets with the relative value of such finally determined ratio price in each market.

**WILL FIGHT AGRICULTURAL .  
TARIFF SCHEDULES.**

THE next big fight which the farmers of America will be called upon to wage will be on the defensive—to save whatever benefits they may be receiving from the tariff on agricultural products. There is much evidence accumulating, which shows that under the McCumber-Fordney tariff act of 1922 the farmers are receiving considerable direct advantage in the tariff on dairy products, potatoes, wool and a few other farm products.

Indications are unmistakably certain that the opponents of the tariff are laying plans for an organized assault upon the agricultural schedules. Propaganda is already being extensively circulated, aimed to lead the consumers to believe that the tariff on farm products is the cause of the present high prices of clothing and food products.

The statement issued some time ago by the American Farm Bureau Federation in which an attempt was made to prove that the tariff costs the farmer more than he gets out of it, is being used as the basis of propaganda circulated among the farmers for the purpose of weakening the support of the farm organizations.

It is contended, however, by the tariff advocates that if the farm organizations fail to defend the present tariff they will find their farmer members paying the tariff on the goods they buy without any compensatory tariff whatever on their own products. It is also argued that without a tariff the American farmers will fail utterly because of their inability to compete with colie labor and European peasant farming. The big fight this year will be to elect a Congress unfriendly to the tariff on agricultural products.

It seems apparent that there are some who wish that they had had more to do with toll and less with oil.



DEVOTED  
TO  
MICHIGAN  
VOLUME CLXII

# MICHIGAN FARMER

AND LIVE STOCK JOURNAL  
PUBLISHED WEEKLY  
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A Practical Journal for the Rural Family  
MICHIGAN SECTION THE CAPPER FARM PRESS

QUALITY  
RELIABILITY  
SERVICE  
NUMBER FIFTEEN

## Patience and Will, Courage and Skill

*Enables this Handicapped Man to Succeed in the Bee Business*

By C. E. Gunderson

UP in Gogebic County, at Ironwood, resides Maurice Geary for 12 years a helpless cripple with arthritis rheumatism, yet one of the most courageous and resolute souls we have known. He is a bee enthusiast, one who has worked wonders with them in his garden, just two blocks from the business district. In the early days of his affliction, Mr. Geary became a diligent student of bees, chiefly as a pastime, when he hit upon the idea, as his fund of knowledge of bees increased, that he would engage in bee culture.

At first he was greatly attracted to the bees because of their strange and curious ways. It was his custom to while away many a happy hour watching these interesting creatures in their methodical work, but as time went on, Mr. Geary conceived the idea of bee keeping as a profitable and interesting side line—profitable, at first, chiefly from his many friends, as something which he himself was producing, which they did not have. And so, from a small two-pounds package of bees a few years ago, Mr. Geary's apiary has grown to 17 colonies at the present writing. His happiest moments are spent in the bee-yard out in God's sunshine. He loves the hum of the bees and they rarely sting him.

In 1922 he produced 1772 lbs. of honey from 12 colonies of bees. In 1923 he produced 2300 lbs. from 11 colonies, spring count. From the strongest of the 11 colonies, he made an increase of 4 colonies before white clover-honey flow. All of the honey was of excellent quality and sold at home for good prices, quite a little of it in the crystallized form, for which there is a greater demand each year. A Chicago expert declared it the finest honey he ever tasted. This was a blend of basswood and clover. Mr. Geary's honey is manufactured under the Cloverland Brand, in his own home factory.

He now thinks he would have had a much larger crop had he requeneed all the colonies the previous year.

Mr. Geary raises his own queens. He raised 32 beauties last season. And all colonies went into winter quarters

headed by vigorous young queens, with ample stores, mostly sugar syrup. He finds that in this cold climate where the bees go sometimes for three months without a flight, that they winter best on sugar syrup. This year he is trying out the automatic feeder on five colonies. He is also trying out cellar wintering on 3 colonies.

At this writing, his winter cases are buried deep beneath the snow, and the thermometer has registered as low as 30 degrees below zero.

He is spending his winter at home this year for the first time in many years. Heretofore, he has gone to Florida and has not seen his bees from November till May, but he says he is much happier at home among his friends. A radio installed in his home, keeps him in close touch with the world. This spring he hopes to be on the job early in April instead of May.

Last spring, Mr. Geary offered some 35 farm boys an opportunity to learn the bee business. Only 6 responded. In July two more became interested when the season was half over. One of these, a boy of 13, produced 90 lbs. of honey. This was more than Mr. Geary got the first three years, when

he had none to coach him. He was then the only bee-keeper in the county.

Not only did Mr. Geary teach these boys the work, but gave each a three frame nuclei to take out on his farm. A prize was offered to the one making the best showing, the honey produced to be shared equally. Mr. Geary furnishing everything to work with.

Leonard Uylund won first prize of \$10, producing 375 lbs. of honey. Herbert Strand, second prize, "A B C & X Y Z in Bee Culture" donated by M. H. Hunt & Son of Lansing, Michigan; Oliver Ilminen, 13 yrs. old, 3rd prize, an Alexander Bee Veil.

One boy of 11, a real dyed-in-the-wool bee enthusiast was turned down because he was not strong enough to lift a hive. But he'll get his bees the coming season, Mr. Geary having a plan of manipulation especially for him. This lad built a hive of his own and caught every bee that came his way regardless of its name or nationality. We are told it is a wonderful collection.

Besides his bees Mr. Geary has a large flower and vegetable garden, which he shares with his friends.

During the years that Mr. Geary has

had his bees, only once has he had a man that had any previous knowledge of the work. Two of his men when stung said they had been bitten. Three of them, at first sight of the bees, said, "Oh, my, what little fellows." They had always thought that a bumble bee was a honey bee.

Mr. Geary exemplifies his motto: "Patience and Will, Courage and Skill are the Four Leaves of Life's Clover" in many ways. It requires real courage to make ten trips to the southland and back on a stretcher, especially when frequently he has faced the necessity of making the trip with his man who on occasions has been as much a stranger to him as those among whom he traveled. But his skill in judging human nature has enabled him to pick men that are winners so he has been blessed with many fine attendants. He speaks of them as his shock absorbers. One of the outstanding characteristics of Maurice Geary is his keen sense of humor, which has helped him over many a sore situation. The merry twinkle in his eye reveals the laughter of his heart, even under the most trying circumstances. When something ludicrous occurs there is an immediate response to it in Mr. Geary's nature. Here is an unusual man. From his small beginning with bees he has built up a successful back lot bee yard, notwithstanding his inability to scarcely move hand or foot. Bee literature is read to him while he lies almost motionless in bed, and his observations are made from a wheel chair in the bee-yard.

His success is one of the outstanding features in bee culture, and it is doubtful whether any man or woman in the world's history has made such a remarkable record, considering the exceedingly difficult handicaps under which he has been compelled to work. It also seems that he is not content with his success alone, but is stimulating others to engage in this profitable enterprise by his noble example, which illustrates that ambition, will and determination surmount all seemingly impassable barriers.



Maurice Geary and Assistant in his Apiary.

## Relief for Bill, Jack and Jim

*If Crop Plans are Out of Joint, You Too, May Get Relief from the Same Source*

By H. C. Rather

THREE situations which now confront many Michigan farmers will have to be definitely met within the next few weeks. John Brown, that well known old agriculturalist, seeded clover last spring but the drought caught it, so John says. Anyway it looks as though the Brown farm is going to be out of luck for hay.

Bill Smith, of equal fame, went in on the wave of a great bean acreage last year. But being outside the real bean districts of the State Bill's yield wasn't anything to grow chesty over, and besides, the wet weather gave his beans a pretty high pick. Then the great production of 1923 with a probable large carry over hasn't left beans any too high priced.

Then Jimmie Green, that new renter across the way,—well, Jimmie's just

plain up against it getting his start and trying to figure what crops he can put in that really hold some promise for harvest time. Sugar beets are good but Jim doesn't live in sugar beet territory. Alfalfa's best of all but his 15 acre field of Grimm that he is seeding this spring won't be ready till next year. Oats and barley? Yes, better than wheat and he is putting in some, but there is still that 12-acre lot on the back forty that is adding on just as much overhead as the rest of the farm. All three of the neighbors are in something of a pinch. Well, what is there to relieve the tension?

A. G. Wilson of Mason, Michigan, says soy beans. He is going to put

in twenty acres of them this spring. Not a bad answer either based on Mr. Wilson's experience of 1923. He had only three acres last year but they yielded 26 bushels to the acre and qualified as registered seed when they were inspected by the Michigan Crop Improvement Association. Harry Oven at Ovid, Keith Brothers at Sawyer, W. O. Skiver of Cedar Run in Benzie County, and Erwin Krauss at Sebewaing, are growers from widely scattered sections of Michigan who are united in their enthusiasm for soybeans. These men have been growing the Manchurian variety for seed under the inspection of the Michigan Crop Improvement Association and are finding a yearly demand at attractive prices.

A yield of from 12 to 20 bushels can be expected as an average, with 25 to 30 bushel yields frequently reported under more favorable Michigan conditions. A 15-bushel crop at  $\frac{1}{2}$  per bushel, a fair farm price in the fall, is worth \$13.68 more than the average acre of wheat, \$16.24 more than the average acre of oats, \$3.09 more than the average acre of corn and is exceeded in acre value only by potatoes, beans and sugar beets, the figures for these crops being taken from the 1923 crop report.

It looks as though Bill Smith and Jimmie Green have one answer to their problems.

Now, how about John Brown with his prospective empty hay mows? The Michigan Experiment Station can answer that pretty effectively. In tests

(Continued on page 542.)



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VOLUME CLXII NUMBER FIFTEEN

DETROIT, APRIL 12, 1924

## CURRENT COMMENT

## High Acre Production

THE planting season is at hand. We are thinking in earnest about the season's farming program. Many farms with an established rotation and a regular system of live stock production, have their schedule well made out in advance. All farming, however, has its vicissitudes that often call for sudden changes in well laid plans, and this season promises to be a more than ordinary exception to the rule. This reason may be found in lack of help and lack of money.

It takes good money to buy good fertilizers and pay for high class seeds and hire poor help—that seems to be the only kind available for farm work these days—but the thing we want to emphasize is this: That if a sacrifice or a change in the regular program is necessary, it should be at the expense of quantity rather than quality.

These are times when the overhead or fixed expenses, as well as average production costs are high. It costs about as much to produce and harvest a crop regardless of the yield. It is in the bushels or tons secured over and above enough to pay this cost, that the profit lies. A whole farm full of light crops and cull live stock that leave no margin over costs will not enhance the farmers' financial rating very fast. Better half the land well farmed and a reasonable margin assured. It may seem like slower going, but actually the progress will be swifter. The use of inferior seeds, the practice of half tillage, or the dispensing with fertilizers where needed may be saving for the time, but it is not economy.

## Records Of Performance

THE cow testers of Michigan are gathering much interesting and valuable information about the fourteen thousand or more dairy cows coming under their direct supervision. Many of these cows are excellent producers and have real value as breeding stock, providing their performances were known. It is only by accident, however, that farmer or dairyman becomes acquainted with their records. It would though, be of the highest importance to every person who is anxious to improve his herd to have a long list of such cows available for consideration.

To make known the records of the best cows in the cow testing associa-

tions of the state, is the purpose of a plan just perfected by the extension workers of the dairy department of the M. A. C., providing for an annual report on the performance of these good cows. This, the extension men feel, would tend to encourage greater care in selecting and breeding; to emphasize the value of bulls according to the production records of their daughters; to enhance the value of good cows and their offspring; and to preserve the records of superior cows, either grade or purebred.

The rapid but healthy growth of cow testing associations in Michigan proves their value when considered in the light of present benefits. But if to these benefits could be added the advantages enumerated above which would result from the publication of a record of performance, then cow testing associations would become the very backbone supporting a general movement to make dairying the nucleus of Michigan's future agricultural prosperity.

## Not Necessary To Organize

THE farmer for so long has associated the ideas of co-operation and organization, that, in his mind, they are practically impossible. The first seems impossible without the other.

But as a matter of fact there can be cooperation without any real organization structure. It is not necessary to have constitutions and by-laws, and officers, and halls to cooperate. In fact, it is nearer the truth to say, that more cooperation is done without these appurtenances. That sort of understanding popularly known as "gentlemen's agreements" come within this class.

Usually this type of cooperation is confined to the halls of commerce; but, the farmer should not hesitate to use it if he can find it advantageous to himself and not injurious to the public welfare. A case in point is the marketing of this year's wool crop. Under present conditions, with national and world shortages, the producer should realize a reasonable profit on the fleeces he has to offer. Wool dealers have been in session and confided to one another that the season should start off on a forty cent basis; when, in reality, no reason can be offered for not starting the buying at the half dollar mark. One way of cooperating to secure this price is for wool growers to hold for fifty cents per pound. Organization is unnecessary; all that is required under the circumstances is an understanding of the wool situation and a little phosphorus in the spinal column.

## To Buy Or To Build Up

AN era of better times in agriculture is on the way. Foresighted men are preparing themselves to take as great advantage of this coming prosperity as possible. Many will be enlarging their farming operations.

The method of increasing the farming operations is an important one. There are really only two ways to do this; one, to buy more land, and the other, to make more productive the land now in the farm.

Overhead is one of the big factors in the profit or loss of any business, including farming. To farm acres of low production means high overhead.

It is just as if the dairy farmer wanted to increase his milk production by buying more cows, whereas he could do it by keeping the same number of higher producing cows. If ten good cows will produce as much as twenty poor ones, it is logical to assume that the labor costs, the feed costs and the equipment costs will not be as great for the ten as for the twenty. And it has been proven many times that the ten good ones will pro-

duce more profit with less labor and worry than the twenty poor ones.

So it is with land. That well fertilized and well tilled will often double the yield of the commonly cared for soils. As a little brain work and a few dollars will often accomplish this, it stands to reason that, for efficiency and bigger profits, it is usually better to build than to buy.

## Value of Introspection

IT gives one a very exalted feeling to stand on a pedestal, aloof from the crowd, telling it what to do and how to do it. It makes one feel as above the common herd, but, when one comes to council with oneself, that is a different matter. Then we meet our proposition on the level and our conference with our conscience makes us feel very humble.

Most of us dislike this humble feeling, so we do not often have this quiet personal conference. So, we go along holding on to a false pride which permits us to keep half-baked notions that we are all O. K. but that the drought spoiled the crop, the worms ruined our fruit, the pig was a runt anyhow, or, in other words, something outside of ourselves has been to blame for the unsatisfactory results we have attained.

If we would but get into a quiet place at frequent intervals to have a conference with ourselves and seek the answers to pertinent, personal questions, it would, without doubt, be time well spent.

We may ask such questions as: Am I unprejudiced in my consideration of the latest finding in agricultural work; am I doing justice to my land in tillage and fertilization; am I doing my best to live a full and useful life; am I endeavoring to eliminate prejudices which hinder my progress and the happiness of my self and family?

If we will but conscientiously ask ourselves such questions, we may find answers which may broaden our views of life, materially change our agricultural practices, and add considerably to our happiness. Too often we obstruct our own roads to a greater and more happy life.

## Finding A Market

THE breeder of beef cattle and swine has recently had a new experience. It is doubtful if there has been a period in any but the older breeders' days, long gone, when the task of finding a market for breeding cattle and swine has been so difficult. Prospective buyers have been well night absent from the scene.

The attempt has been made by several men with a surplus of good breeding stock on hand, to use the public sale method, which is usually infallible, as a means of unloading the surplus. The demand at public sale, however, has been very similar to the private demand. It simply has not been. The results, therefore, in most cases have been very discouraging for the seller. Where animals have sold at all, the prices received in many instances have been at or below the market price.

The demand is what makes the price, and if it insists on establishing it at the prevailing market level, then it appears that the breeders' best and simplest method of marketing at the present time is at the stock yards. There is little encouragement for the breeder or for the prospective breeder to see their prized animals go begging at public sale, and much of the expense and trouble can be eliminated by shipping them direct to the market.

This being the case, now would seem to be the time for breeders to do some needed culling. Every herd will stand more or less of it, and the culls will bring more money at Detroit or Buffalo now, than at any breeder sale. It is the proper place for them, anyway.

The pedigree will not count for much there, to be sure, but what is it worth anyway if not backed up by real merit. It is not every day that an opportunity comes to sell the culls for the top prices, the average customer usually selects the best in the herd.

## A Man of Affairs

I AM a man of affairs, I want you folkses to know. They say a prophet is without honor in his own country, and that's why you folkses and my neighbors don't appreciate my standin' in this world of great undertakin's and undertakers. But other folkses do.

Now, the man what undertakes to undertake is got a dead job on his hands what is live with possibilities. But he ain't in it with the farmer what is supposed to be payin' a income tax.

Well, this is the way. Somebody says to somebody else that somebody told him I was payin' a income tax, which ain't so. Now since that bit o' scandal is got around, these's men what is dressed up like the king of Hogan's Alley, comin' ta see—no,



ta interview me.

Seein' as I am a man of affluence, respectability, and sound judgment (I got them word from them fellows), they is offerin' me ground floor oppurtunities ta share in the flow o' wealth what comes from the Horn o' Plenty.

One o' them fellows says he was willin' ta give me two lots near a nice lake free just fer the use of my name. All I'd have ta do would be to pay \$49.50 each fer makin' out the papers, and etc., and etc. Where the lots is, is a swamp.

One says he ain't goin' ta offer nothin impossible but just a good sound business investment in a rubber tire co. what should pay 15% on the money ta start. The speeshull price ta me is \$1.50 a share, in five years it'd be worth \$150. He says the records of the past show it kin be done and the man what's makin' the money is the one what takes advantage of oppurtunities. He says he was offerin' me the same way of gettin' rich as all the rich men got rich. And he says, there's lots of men with good business judgment like myself what is in this company. Then he showed me lots a names of men what was presidents of this and that, and etc.

That man made me feel like the King o' Sweden. I just could see a lot o' servunts around me and Sophie was never askin' me ta do another thing. He says all you gotta do is ta sign your name here and you will be a part of the greatest profit-makin' oppurtunities in this country.

Just then Sophie calls me from the other room. I says, "Just a minute" to the man but when I see Sophie she says ta me "Don't be a fool and sign anythin'. All he's got is a lot o' stock certificates but not even enuf ta paper the house, fer all the money he's invested. These slickers is makin' money on John's big opinion o' himself."

Then I goes back ta the fellow and says, "My money is just now tied up in other investments (my mortgages and other debts) so I gotta let this tire oppurtunity go. Much oblige just the same."

That fellow didn't have no good opinion of Sophie, but she's right. You don't get nothin' fer nothin' but lots o' times you pay somethin' fer nothin'.

HY SYCKLE.

When subscribing for the Michigan Farmer through an agent, be sure that he gives you an "Official Michigan Farmer receipt." This receipt will have the name and Detroit address of the Michigan Farmer printed thereon. Also, make certain that the agent signs the receipt in the place designated for his name.



## When Shall I Seed Alfalfa?

*Dodging Weeds, Preserving Moisture, Accomodating Companion Crops, Etc., Make this Question Important*

By G. W. Putnam

**W**HEN is the best time to seed alfalfa? It is surprising how many people really believe that this question is the all important one in the successful growing of this valuable crop. It is important and if interpreted broadly so as to include the preparation of the seed bed and the kind of seed to use it is responsible for easily 50% of the alfalfa failures in Michigan. The other 50% of failures is spread over the condition of the soil that influence the alfalfa crop as discussed in an earlier paper.

When discussing the problem of seeding alfalfa at least three factors are to be considered, namely, preparation of the seed bed, time of sowing, and the seed itself.

### Keep Out of the Way of Weeds.

Preparation of a good seed bed for alfalfa requires a thorough knowledge

where from a loam to a heavy clay, the best method of seeding the alfalfa is to put it in with the grain crop early in the spring. It is not the intention that this grain crop will act as a nurse crop but rather that the soil is strong enough to support both a grain crop and the alfalfa seeding.

Two things are gained where this method of seeding is practical. First, that some income is derived from the field that year and, second, that the grain crop will take the place of what might otherwise be weeds. The dangers of this method of seeding is that two many growers who have light soils or soils low in fertility are not willing to admit it and try to grow both a grain crop and a seeding. The result is inevitable that the alfalfa seeding burns up where the grain is harvested and then the weather catches it as being to blame for the failure of the



Farmers Interested in Getting Marl From the Bed of a Small Lake.

of the plant itself. Alfalfa is reputed to be one of the hardiest of our farm crop plants and so it is when once established. But there is a time when it is a very delicate seedling, requiring all the nursing that it is possible to give it. It is particularly susceptible to crowding by weeds that may have started ahead of the alfalfa seedling.

This then indicates one requirement, that is, that all fowl weeds be well subdued before seeding. It doesn't mean that alfalfa has to be seeded on weed free ground. But rather, that the seed bed be prepared in such a way that the alfalfa will get started ahead of the weeds and when once it gets the start it will have no difficulty in maintaining the lead providing the other growing requirements of the crop have been met.

### Have the Water Handy.

It is also susceptible to drough in this seedling stage and so the seed bed must be prepared with the intention of keeping available a supply of moisture. Which can only be done by conserving the soil moisture as rains and showers are to uncertain to depend on. The humus content of the particular soil in question will quite largely determine this last requirement.

The heavy clay loams and clay soils are usually so well supplied with organic matter that most any kind of a seed bed that includes thorough firming will have sufficient moisture to secure good results with the alfalfa seeding. The sandy loams and sandy soils are usually so low in organic matter that it is necessary to conserve a goodly portion of a season's supply of moisture and so summer fallowing has been found the most reliable seed bed under light soil conditions.

The preparation of the seed bed and the kind of soil envolved will quite largely determine when to seed. If the ground is reasonable rich in fertility and inclined to be in texture any

seeding. The facts are that the grower's judgment was at fault in overtaxing the land.

### Choosing a Companion Crop.

If the conditions are right to seed with a companion crop what one is best? Barley is probably the best companion crop among the cereals while canning peas is probably the best among the miscellaneous crops. Wheat is an excellent companion crop for alfalfa if the seed is put on early in the spring either with clover seed drill or else broadcasted and harrowed in. It is not a good practice to seed on top of the ground and trust to the weather to cover it. Many growers have done this successfully but many others have failed because of that practice. The oat crop is a good one to seed with when grown on heavy land and when a variety is used that will not lodge badly and thus smother out the young seedlings.

### Where Soils Are Light.

Seeding along on summer fallow is the best method where the soils tend to be light and on the medium heavy soils where the fertility has been excessively run. The best time to seed on summer fallow will vary with particular fields and also with different seasons. In general if work has been started on the fallow early enough so that a firm well compacted seed bed well stored with soil moisture is available and the weeds well subdued by June 1st, that is an excellent time to seed.

If, on the other hand, the fallow is not well prepared at June 1st it is usually better to thoroughly prepare the fallow ground and seed the alfalfa the last of July or the first week in August. It is not usually safe to prolong the seeding later than this because of the necessity of getting the young seedlings well started before winter sets in. Frequently the tendency is to wait for a rain and sometimes this rain does not come until

(Continued on page 561.)

10 Shaves FREE See Coupon



## Don't Buy Yet

First prove our claims—Make this ten-shave test

By V. K. Cassady, Chief Chemist

### GENTLEMEN:

The claims we make on Palmolive Shaving Cream seem hard to believe, we know.

So we never ask men to buy. We never state its price—never say that druggists sell it. All we urge or offer is a ten-shave test at our cost. We ask you to prove our claims in fairness to us both.

### It is better than we expected

Palmolive Shaving Cream surprised us as much as it will you. We never dreamed that shaving creams could be so improved.

But we are masters of soap making. We had devoted our lifetimes to soap study. We had done some great things. In Palmolive Soap we had created the leading toilet soap of the world. We learned what men wanted in a Shaving Cream. We worked 18 months to meet those desires to the limit. We made up and tested 130 formulas before we satisfied ourselves.

### Men were amazed

We did better than we dreamed. This Shaving Cream, when perfected, became an instant sensation. Millions asked us for the 10-shave tube, and they flocked to this Cream when they tried it.

They told others about it. They wrote us letters—tens of thousands—to thank us for making it.

Thus Palmolive Shaving Cream attained the pedestal place, without ever a man being asked to buy.

Now we ask you to make this test, if you have not. Do it as a courtesy to us. Do it in fairness to yourself. Cut out the coupon now.

### HOW IT EXCELS

- 1—Multiplies itself in lather 250 times.
- 2—Softens the beard in one minute.
- 3—Maintains its creamy fullness for ten minutes on the face.
- 4—Extra-strong bubbles support the hairs for cutting.
- 5—The palm and olive oil blend brings fine after-effects.

To add the final touch to shaving luxury, we have created Palmolive After Shaving Talc—especially for men. Doesn't show. Leaves the skin smooth and fresh, and gives that well-groomed look. Try the sample we are sending free with the tube of Shaving Cream.

There are new delights here for every man who shaves. Please let us prove them to you. Clip coupon now.

Shaving mugs often cause rough skins. Germs collect in the cup which cause infection, eruptions. Men everywhere have found new skin health by using Palmolive Shaving Cream, protected by sanitary tube.

## PALMOLIVE SHAVING CREAM

© P. Co. 1924



### 10 SHAVES FREE

and a Can of Palmolive After Shaving Talc  
Simply insert your name and address and mail to  
THE PALMOLIVE COMPANY  
Dept. B724 60 N. Michigan Ave., Chicago, Ill.



# LATE AGRICULTURAL NEWS

## MORE LIGHT FOR TRUTH-IN-FABRIC BILL.

THE Senate Interstate Commerce committee has indicated that it will report on truth in fabric legislation soon, and the House Interstate and Foreign Commerce committee, by a vote of 11 to 7 has decided to hold brief hearings on truth in fabrics in a short time.

The wool growers are depending upon the American Farm Bureau Federation to get favorable reports from both committees for the Capper-French bill. The Washington office of the Federation is appealing to the state Farm Bureaus to urge their members to write congressmen and senators asking them to vote for the truth-in-fabrics bill when it comes onto the floor for action, a favorable report being expected from both committees.

## A WORLD AGRICULTURAL CONGRESS.

SIXTY-TWO nations will be represented at the International Institute of Agriculture which meets at Rome, May 2-10. It is expected that sixteen American delegates will attend this meeting. The following persons have been recommended for appointment as delegates: Chester Davis, state commissioner of agriculture of Montana, representing the wheat growers; B. W. Kilgore, director of state extension work, North Carolina, representing the cotton interests; E. L. Harrison, Kentucky, representing the cooperatives; Tait Butler, Alabama; Professor W. R. Stevenson, Iowa, representing the experiment stations; A. W. Gilbert, commissioner of agriculture, Massachusetts, representing the Grange; O. E. Bradfute, Ohio, representing the American Farm Bureau

Federation; Mrs. C. B. Ware, of Massachusetts, secretary of the delegation, and Charles B. Holman, Washington, representing the dairy industry.

A committee of 100 composed of state agricultural department officials, farm organization representatives, and representatives of foreign governments, just concluded a meeting in Washington in which they discussed the work of the institute and made suggestions for future development.

## TO PREVENT FARM CHILDREN FROM WORKING.

THE child labor bill, H. R. 174, has been reported out by the House Judiciary committee. This bill provides for a constitutional amendment to be referred to the states, giving Congress authority to legislate on the employment of children. The farm organization have opposed this proposed amendment to the Constitution on the grounds that it will compel the farmers to fight continuously to keep the faddists from inducing Congress to enact legislation making it a crime to permit children under the age of sixteen or eighteen years of age performing any manual labor whatever on the farms. As city children are nearly all denied the privilege of working it is believed that the prevention of farm children working is the ultimate aim of this bill.

## AGRICULTURAL SITUATION FURTHER IMPROVES.

THE agricultural situation on April 1, as summarized from reports of state statisticians to the Bureau of Agricultural Economics, shows a slight improvement in price trends in case of the crops, excepting cotton, and animal products excepting butter and eggs. Products that are higher than

the general price level still include cotton, wool, eggs and butter. Among the products below the general price level are potatoes, corn, wheat, hay, beef cattle and hogs.

Compared with the average at this time, stocks in cold storage are low in case of butter, beef, lard and mutton, and high in case of pork, apples and eggs.

## CONDITIONS IN NEW YORK STATE.

IN his report on New York state conditions, Dr. Warren of the State Agricultural College, says that the general situation is not greatly different from what it was last year. Most farmers made moderate incomes in 1923, and taxes and expenses were heavy. Farmers, however, have been more careful in their purchases and in expenses, and in many instances have paid off part of their debts. Many farmers are discouraged and would like to quit, but there are few purchasers for farms.

The decline in farm population during 1923 is estimated by Dr. Warren at three per cent. This is partly due to reduction in number of hired men, partly to young men and women leaving the farms for other employment.

The number of persons living on farms in New York state in January, 1917, was 898,000; in January, 1920, U. S. census figures, 800,000, and in January, 1924, only 741,000 out of a total population in the state of 10,385,227 in 1920.

The sales of standard agricultural implements, such as mowers, binders and rakes, during 1923, were about 30 per cent below the pre-war average. But the sales of newer lines, such as tractors and milking machines, were much above pre-war. Machinery dealers are expecting sales in 1924 to exceed those of 1923.

The acreage of wheat and rye is

reduced owing to low prices. Beans have been profitable for some time and will show an increase in acreage. A larger acreage of potatoes is expected.

In Western New York fruit growers are discouraged on account of low prices and large stocks of apples in storage, but the outlook is fair for an average crop of fruit except raspberries which have been severely affected by diseases.

An increase in hogs in New York is due to the fact that farmers are raising a larger proportion of the food consumed on the farm. They are also slaughtering more beef animals for home use.

## PROMINENT LIVE STOCK BREEDER DIES.

NATHAN A. CLAPP, one of the earliest breeders of Shorthorn cattle and Berkshire hogs in Oakland county died recently at Jamestown, N. Y. He had lived on his farm at Milford, Mich., from 1865 to 1901. He held many positions in various agricultural associations. Among them were: President of the Michigan Shorthorn Breeders' Association; vice-president of the American Berkshire Breeders' Association; president of the State Association of Farmers' Clubs; farmers' institute lecturer of note, and contributor to many agricultural publications, particularly to the Michigan Farmer. He also made himself useful and helpful in many other ways, in promoting a sane agricultural and livestock program. While it has been some time since Mr. Clapp's name has been before the readers of this journal, many will remember him for his constructive writings, deep interest in and sympathy for, the man upon the soil.

# OUR SERVICE DEPARTMENT

Always Give Name and Address When Sending Inquiries,  
as Satisfactory Service Cannot be Given to Unsigned Letters

## WHO MAINTAINS SCHOOL YARD FENCE.

Who builds and maintains the fence about the school property?—Subscriber.

If the property adjacent to the school property is used as indicated by your letter each party will maintain one-half of the fences, that is, the school district would take care of part of it and the persons owning the adjacent property part of it.

If there is a question about children destroying property so far as the fence is concerned, this is a matter that would need to be adjusted between yourself and the school board.—W. L. Coffey.

## REPAIRING PUBLIC DRAIN.

A township drain was put in about ten years ago, and now it is filling up and flooding the land. What steps should be taken to have it cleaned out? There was no money left in the fund. If the drain commissioner refuses to act on the petition, what steps then?

Also there was a petition circulated and signed for an open drain. Drain commissioner accepted job and now it is caving in (began to do so as soon as dug.) This was an expensive drain and there is talk of adding more expense by putting in tile along this highway to protect it. Tile will cost \$4,000. If drain had been made according to petition, this would not be necessary. Who is responsible, and how should responsibility be placed?—R.S.

The same statute covers locating, extending, deepening and cleaning out public drains. Before anything in that

way can be done there must be a petition signed by over half of the registered freehold owner's whose lands are traversed by the drain; and that done the commissioner is bound to notify the town clerk, who calls the meeting. If the commissioner refuses to act he may be compelled by mandamus. See county prosecutor.—Rood.

## GROWING SWEET POTATOES.

How does one start sweet potatoes and how secure the plants?—C. K.

Sweet potato plants can be purchased from most any seed house. Sweet potatoes or sprouts are ordinarily sold at approximately 75c per 100 or \$6 per 1,000.

In case you expect to plant a relatively large acreage to sweet potatoes, I would recommend that you buy the potato sprout from some growers who specialize in these plants.

Sweet potato sprouts can be grown by putting the potatoes in a hot bed about 6 weeks or so before the time of planting in the spring. Potato plants must not be put out in the open until all danger of frost is past. One bushel of medium sized potatoes will make approximately 2,000 to 2,500 plants. In the hot bed you should use fresh stable manure so as to maintain sufficient heat, the manure should be covered with about 2 inches or so of fine sandy loam.

The potatoes should be placed on top of the loam by hand, taking care

to place the potatoes so they cannot touch one another. The potatoes should not be cut except perhaps a few of the very large ones can be split lengthwise laying the cut surface against the soil. After the potatoes are placed, cover them with 2½ to 3 inches of fine sandy loam soil. Take care there are no coarse lumps in it. The soil should be firmed over the potatoes and then should be well watered. The sash on the hotbed should be put down and a temperature for the first few days of 85 degrees or so should be maintained. The temperature can gradually be reduced if the sprouts are well watered.

Before setting the plants in the field they should be well hardened. On warm days the sash should be removed from the hotbed. Two or three drawings of the sprouts can be made. After every drawing is made the bed should be well firmed and thoroughly watered.

Care must be taken in watering and ventilating the hot bed so that the plants maintain steady growth.—H. C. Moore.

## PURCHASERS NOT RESPONSIBLE.

A buys a piece of land from B on contract which calls for wood for home use only. He then cuts wood and sells around the neighborhood. Now B is trying to collect from the people who have paid for their wood once to pay over again and to him?

No. B cannot collect from the

people purchasing the wood but he can hold A to the terms of the contract.—F. F. R.

## ASSIGNMENT OF LEASE.

A lets B have a cow to double on the 3 year plan. B holds the cow one year then wishes to sign her over to C for the remaining two years but A objects and takes the cow. Could B lawfully sign the cow over to C? By what steps?

B would not have any right to sign the cow over to third party without first having an understanding with A.—R.

## LIABILITY ON EXECUTION.

If a party buys furniture or clothing on installment plan and is unable to finish paying for it at once, can they be imprisoned for debt. How much property is a wife entitled to before any company can levy and sell the property? Can they sell household goods? We are bound under contract to stay on this place until October 1, and as soon as we can, we will go where we can get a job that pays better than working for a farmer and pay up the account. But the company say they will sue. We are trying to feed and cloth six on ten dollars a week.—T. H.

Imprisonment for debt is forbidden by the state constitution. This does not apply to liabilities contracted by fraud, trespass, or violence. Household goods and furniture to the extent of \$250, also fuel and provisions for the family for six months, are exempt from execution.—Rood.



## WHAT DO WE PLANT?

By Henry Abbey.

What do we plant when we plant the tree?  
 We plant the ship, which will cross the sea.  
 We plant the mast to carry the sails;  
 We plant the planks to withstand the gales—  
 The keel, the keelson, the beam, the knee;  
 We plant the ship when we plant the tree.

What do we plant when we plant the tree?  
 We plant the houses for you and me.  
 We plant the rafters, the shingles, the floors,  
 We plant the studding, the laths, the doors,  
 The beams and siding; all parts that be;  
 We plant the house when we plant the tree.

What do we plant when we plant the tree?  
 A thousand things that we daily see;  
 We plant the spire that out-towers the crag.  
 We plant the staff for our country's flag,  
 We plant the shade, from the hot sun free;  
 We plant all these when we plant the tree.

## BEET GROWERS DISCUSS PROBLEMS.

MORE than 150 sugar beet growers of Saginaw Valley met Saturday at the town hall at Merrill to hear a discussion of the problems facing the sugar beet growers. T. C. Price and A. B. Love, county agriculturist, were the chief speakers on the program.

Both these speakers explained the methods by which growers might organize more effectively for group bargaining as to sugar beet contracts. The farmers were told what the Michigan Sugar Beet growers' association is doing to band the sugar beet growers of the state together into a strong organization. Mr. Love explained how through proper organization along the lines adopted by other co-operative marketing associations, their ends might be gained.—Mills.

## FEEDING THE SUGAR BEET.

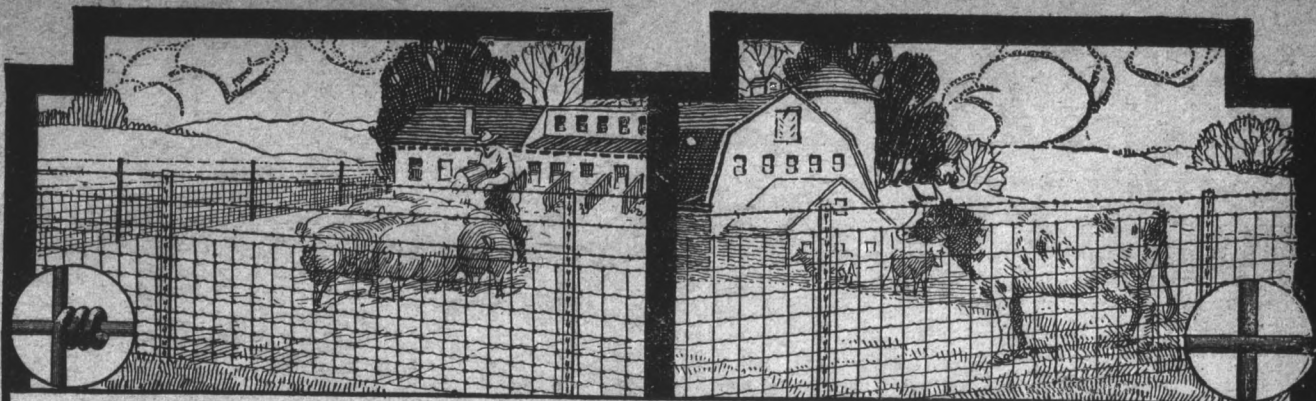
PLANT food can be supplied to the sugar beet in two form—manure and commercial fertilizers. Manure, when applied fresh in the spring causes short, prongy, low-yielding beets. Manure often carries weed seeds that greatly increase the subsequent labor necessary to keep the crop clean.

A mistake commonly made is to use fertilizer of too low an analysis or too small an amount per acre. In the majority of instances, the most profitable rate of application will lie between 200 and 600 pounds per acre.

If the beet drill has a fertilizer attachment, a part of the fertilizer, not to exceed 200 pounds per acre, may be applied through the attachment. The remainder should be broadcast by means of a fertilizer, grain drill or fertilizer distributor, and harrowed or disced in before planting. When beet seed is sown with a grain drill, leaving every third hole open for the seed, all of the fertilizer holes may be left open. Some growers prefer to broadcast all of the fertilizer, which is a good practice when 600 to 800 pounds are used to the acre. Such an application should be made just before the last harrowing so that the fertilizer can be worked thoroughly into the soil.—O. J.



America Needs More Sheep.

What is the Right Fence?

The right fence for one inclosure may be entirely unsuitable for another. The nature of your land, the kind of live stock you have and the crops you raise must be considered in the selection of the fences that can give you the most satisfactory service.

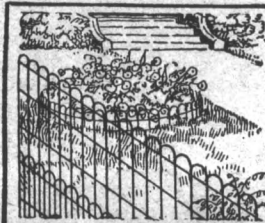
We manufacture both of the approved types of fences—Hinge-Joint and Stiff-Stay, in a full range of heights and weights. Our agent in your town, therefore, is unbiased, and will help you choose the exact type and style that best serves your needs.

"Columbia" <sup>HINGE</sup>JOINT Fence

In fabricating this excellent fence we employ the "Columbia" Hinge-Joint that "grips with grit". Short length wires are wrapped firmly together around the continuous lines wire forming strong, flexible stays from top to bottom of the fence. Made in standard farm and poultry designs that you can rely upon for dependable service.

"Pittsburgh Perfect" <sup>STIFF</sup>STAY Fence

The construction of this fence adapts it to many pleasing and effective styles. The wires are joined by our perfected electric welding process, combining strength with neatness, and the heavy galvanizing assures durability. It is especially appreciated for inclosing sheep and thoroughbred livestock. The several lawn fence designs are exceptionally attractive.



## Attractive Lawn Fences

"Pittsburgh Perfect" Lawn Fences are made in several unusually neat and attractive designs. The heavy, closely spaced wires effectively keep out chickens, hogs and dogs, affording a permanent inclosure which enables you to have a nice lawn and a safe place for your children to play.

We have a correct fence for every purpose. See your dealer, if he does not have these fences, write us and we'll see that you are supplied. Our Good Fence Catalogues sent free.



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 A Practical, Proven Power Cultivator for  
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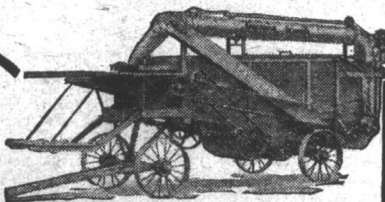


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 W. T. Greathouse writes: "Fence received yesterday. I saved \$30.00 in buying from you." Our new cut prices are way below others—and Brown Pays Freight  
 Write for our new 1924 cut price catalog—see the dollars you save 150 styles. Double galvanized, open hearth wire. Roofing and paints. THE BROWN FENCE & WIRE CO. Dept. 2801 Cleveland, Ohio

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"Saved 15c to 20c a Rod."

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The more zinc on the wire, the longer the wire fence will last.

Wires used in Zinc Insulated Fences receive more than DOUBLE the usual heat treatment in the zinc bath—the proper and only way to give a heavier coating of galvanizing with lasting quality.

This better process not only applies more zinc to the wire, but makes the coating uniform and inseparably a part of the steel. It insulates the wire with more zinc and with no cracking, flaking or peeling off.

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Are now Zinc Insulated—At No Extra Charge.

We make only one grade of fence, every brand Zinc Insulated—and sell it at no higher price. Think of it!—fence that will outlast any fence you have used before—yet costs no more than ordinary grades of farm fence. Only our quantity production, vast resources and equipment make this offer possible.

Hang your fences on Arrow Tee-Steel Posts for greater strength, durability, dependability and long life. Built like a railroad rail—will not bend, twist, buckle or work loose. The large Anchor plate locks firmly into the ground while being driven, forming the most solid anchorage. Closely spaced notches enable you to attach every line wire to post, if desired. Many other big features.

Your local dealer carries Zinc Insulated Fences and Arrow Tee-Steel Posts in stock for quick delivery. We stand back of him for your protection.

**AMERICAN STEEL & WIRE COMPANY**

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Boston

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Denver

TRY a Michigan Farmer Classified Liner—They cost little and bring big results. See rates on page 565.

## BLAST those STUMPS

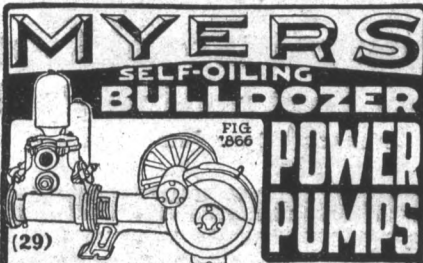
Blow them out, roots  
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cheaply with

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Most efficient and economical aid in clearing stump land, swamp draining, ditch digging and tree planting. Full strength and 100% quality maintained for 17 years. A grade for every need. If your dealer can't supply you, get in touch with us direct.

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## Distributing Price of Potatoes

THE grower, county buyer and railroad receive 50 per cent and the city distributor 50 percent of the retail price of potatoes, according to an analysis of the retail price of potatoes grown in Maine, Minnesota, Wisconsin and Michigan last year, made by the United States Department of Agriculture.

In arriving at these figures the investigators recognized that certain services must be performed by those handling potatoes in their way from grower to consumer, including assembling, warehousing, shipping, and protecting, by the county buyer; assembling at terminal markets, sorting and distributing to the retailer, by the jobber, and assembling with other foods, grading, and distributing to the consumer by the retailer.

In addition to planting, cultivating, and harvesting the crop, the growers performed several marketing services, such as grading, hauling, and storage, which is especially important with this crop. The performance of these services of production and marketing requires that the farmers provide or expend money for labor, care and maintenance of buildings and operation of equipment, interest on investment or rent, taxes, and fertilizer.

It was found that the growers received from 20.5 per cent in Minnesota to 30.8 per cent in Maine, of the consumer's dollar. The Wisconsin and

Michigan growers received 25.7 and 22.6 per cent respectively.

The country buyers' margins range from 9 per cent in Maine to 16.9 per cent in Wisconsin. The portion by the country dealers in Minnesota was 15.7 and in Michigan 14.3 per cent.

It is suggested that this variation in margin received by buyers may be due in part to differences in buying practices and methods of handling. In Maine potatoes are brought by barrel measure and a quantity allowance is sometimes made for those which appear to be off grade. They are seldom graded, sacked or weighed until just before or during loading. In the middle northwestern area, it is the common practice to grade and weigh the potatoes on receipt from the farmers and this often necessitates weighing and grading at time of sacking or loading.

Freight charges range from 10.4 per cent on Wisconsin potatoes sold in Chicago to 18.2 per cent on Maine potatoes sold in Boston.

The margins received by the retailers were 34.8 per cent, 38 per cent and 39 per cent respectively in Boston on Maine potatoes, and in Chicago on Wisconsin and Minnesota potatoes. In Chicago the combined wholesaler-jobber margin was 9 per cent on Wisconsin potatoes and 11.1 per cent on Minnesota potatoes. In Boston it was 7.2 per cent of the retail price.

## Relief for Bill, Jack and Jim

(Continued from page 537.)

conducted over a three-year period, soy beans yielded 2.67 tons of air-dry hay per acre. It exceeded in yield those other emergency hay crops, Hungarian and common millet, oats and vetch, oats and peas, and oats alone, but was itself outyielded by Sudan grass, Golden Millet and Barnyard Millet.

Average yield of air dry hay secured per acre for 1919, 1920 and 1921 at the Michigan Agricultural Experiment Station Farm, East Lansing as reported in the Agricultural College quarterly are:

| Crop                                             | Average Yield. |
|--------------------------------------------------|----------------|
| Sudan                                            | 3.33           |
| Golden Millet                                    | 3.25           |
| Japanese Barnyard Millet or Billion Dollar Grass | 3.22           |
| Soybeans                                         | 2.67           |
| Hungarian Millet                                 | 2.48           |
| Common Millet                                    | 1.94           |
| Oats and Vetch                                   | 1.99           |
| Oats and Peas                                    | 1.78           |
| Oats Alone                                       | 1.77           |

While the yield of hay has not been quite so high with soy beans as with Sudan Grass and a couple of the millets, its feeding value per acre is much higher. It is a protein feed comparable to alfalfa and contains 11.7% digestible crude protein as compared to 8.3% for oats and pea hay and 4.8% for golden millet.

Soy beans being leguminous are of value as a soil building crop too. The roots of plants grown from inoculated seed are characterized by large nodules of nitrogen fixing bacteria. The culture for inoculation can be obtained from the Department of Bacteriology of the Michigan Agricultural College.

The crop is best when planted at or just after corn planting. It is not considered sensitive to a lack of lime and good yields may be secured on land too sour to grow red clover or alfalfa until such time as the better farm practice of liming and growing the alfalfa can be followed.

On fields that are clean the soy beans may be sown with a grain drill, all holes open, at the rate of five to seven pecks per acre. This makes possible a finer quality of hay.

For seed, or where cultivation will be necessary to control the weeds, soy beans are grown in 28 or 32 inch rows,

using two to three pecks of seed per acre.

In tests at the Michigan Experiment Station the Manchu variety has proven most dependable both for forage and seed. Over-state tests have also favored the Manchu for seed, but for forage it has had a keen competitor in the Wilson variety of soys, a variety too late for seed production in this State.

For hay the soy bean crop is cut when the pods have nicely formed but before the leaves start to turn yellow and drop off. The hay is best cured in small cocks where about a week of good drying weather is required to cure it.

For seed either the mowing machine or binder can be used to cut the crop when a majority of the pods have reached maturity.

Pure seed of varieties like the Manchu and Ito San, thorough cultural practices, the use of acid phosphate, and a careful handling of the crop for either seed or hay, will insure yields of soy beans in Michigan that are a positive answer to the questions puzzling the John Browns, Bill Smiths, and Jimmie Green of this State. While the crop will not replace alfalfa for forage and possibly will not become prominent for its grain, yet in the emergency soy beans fill the bill.

### PRaises THE POTATO.

RECONSIDER the lowly spud. Potatoes are as important as coal in the maintenance of industrial civilization, says the April issue of the American Medical Association's Magazine.

When large populations are crowded in small areas, wage and other living conditions make the general consumption of meat impossible. In such instances the potato is a genuine god-send, states the author of this article. This starchy vegetable classes with the cereals as a food for energy production, and it possesses in addition the necessary vitamins.

There is little demand for farm labor this spring the farmers being inclined to economize in man labor by a larger use of labor saving machinery.



## TREAT OATS THIS SPRING.

By G. H. Coons, M. A. C.

MICHIGAN has established an excellent record for cleanliness from smut in the oat crop. The strong effect of county agents in the past has resulted in oat treatment becoming fairly general practice. It is, however, urgent that the practice again become general if the cleanliness of the crop is to be maintained.

Directions are simple. Secure fresh formaldehyde from a good reliable source—good formaldehyde is water clear and without white sediment. The follow this plan.

## The New Concentrated Formaldehyde Treatment.

Use formaldehyde at the rate of one pint to 50 bushels of grain. For smaller amounts of grain use correspondingly smaller amounts of formaldehyde. It is unnecessary and unsafe to use more formaldehyde than the amount recommended. Put the right amount of fresh formaldehyde just as it comes from the druggist, into a pint or quart hand sprayer or atomizer, dilute from 4 to 10 times, then spray the grain as it is shoveled over and over. If the sprayer is kept close to the grain and if the treatment is given in a room where there is a good draft, the penetrating odor of the formaldehyde will give no discomfort.

When the right amount of formaldehyde has been applied, shovel the oats into a heap and cover for exactly four hours with a canvas or blanket. The grain should then be spread out thinly for a thorough airing in a warm place. Rake the grain over during this airing, then plant at once.

Here is a farm problem which has been solved. The method is tested and reliable. It is up squarely to the grower to put the method to use in order that he may have efficient acres.

## MICHIGAN SEED BRINGS REMARKABLE YIELD.

FIFTY-THREE farmers from 21 Pennsylvania counties have been awarded life membership in the "400-Bushel Potato" Club of that State, as recognition of their achievement in growing 400 or more bushels of potatoes on a measured acre of land. The 53 men made a combined average acre yield of 44 bushels, the ten highest averaging just 56 bushels more, 500 bushels per acre.

Jacob S. Wile, Souderton, won the highest ranking, with a yield of 532.4 bushels on one acre. This acre was part of a 5.9 acre piece on which Mr. Wile grew 2,630 bushels of potatoes, an average of 445.8 bushels. Michigan Russets were used as seed on this piece—a good clover sod, well manured the previous fall. About 1,200 pounds per acre of fertilizer were applied and the land was thoroughly plowed and disced. The crop was cultivated three times before and four times after it came up. It was sprayed nine times.

The total cost on the 5.9 acre piece, of seed, fertilizer, plowing, discing, planting, cultivating, spraying, digging, picking and hauling was \$717.50—\$121.60 per acre, or 27.2 cents per bushel. On the best acre, the cost was 22.8 cents a bushel, one of the lowest figures on record.

Production records supplied by 43 of the 53 winning farmers revealed the following facts as to their methods: All but two sprayed; all but two used manure, and all but four used fertilizer. Clover or alfalfa sod was used by 33. The average quantity of manure was 8.5 tons and of fertilizer, 825 pounds. Eleven used only acid phosphate; three used acid phosphate broadcast and complete fertilizer in the row.

According to Professor Nixon, "the winners in the '400-Bushel Potato' Club grew the cheapest potatoes that were grown in Pennsylvania last year.

## EXCEPTIONAL RIDING COMFORT

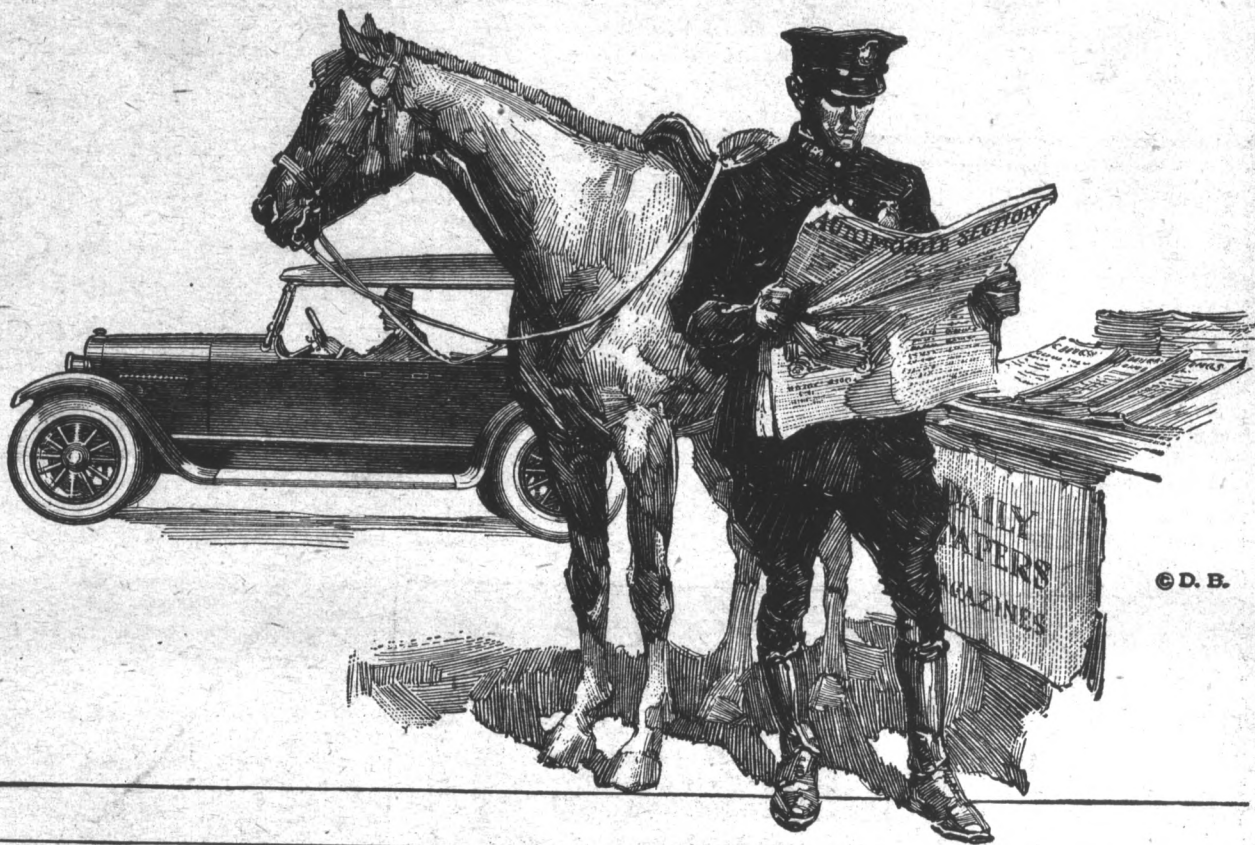
Owners continue to comment on the marked riding comfort of Dodge Brothers Motor Car.

Increased chassis length, low-swung body and generous seat depth have much to do with this

Primarily, however, it must be accredited to the greater buoyancy of the new spring equipment. The rear springs are ten inches longer, and underslung.

The price of the Touring Car is \$895 f. o. b. Detroit

DODGE BROTHERS



© D. B.

**STRAWBERRY PLANTS** Complete line of Fruit Trees, Small Fruit Plants, Asparagus Roots, Roses, Gladioli, Perennials, Ornamental Shrubbery, Etc. CATALOG FREE. WATSON'S STRAWBERRY ACRES Grape Vines \$25 and up per thousand. R. 3, Box 7, Grand Rapids, Mich.

**STRAWBERRY PLANTS** \$3 per 1,000. Black Raspberry \$12; Red \$13. 20' Iris \$1. 8 apple trees \$1; 15 grapes \$1; 1,000 grapes \$25. We grow the best plants in Michigan. Free Catalogue. THE ALLEGAN NURSERY, Allegan, Mich.

**Strawberry Plants** Dunlap, \$3.00 per 1,000; Gibson, \$3.25 per 1,000. Seven other varieties. **RASPBERRY PLANTS** Cumberland and Plum Farmer, \$12.00 per 1,000. King Red, \$15.00 per 1,000. **FRED STANLEY**, Bangor, Michigan.

**300 STRAWBERRY PLANTS \$2 POST PAID** New Ground Senator Dunlap HAMPTON & SON, R. 3 Bangor, Mich.

**FOR SALE** Senator Dunlap, Dr. Burrell and Gibson Strawberry Plants. None better at any price. 50c per 100; \$4.00 per 1,000. delivered. John J. Williams, Fremont, Mich.

**Get Healthy** Vigorous, Sure-to-Grow Plants. 15 different varieties of Strawberry plants. Raspberry and Grapes. Send for price list. H. F. Larson's Nursery, Sawyer, Michigan.

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For Corn, Wheat, Etc.

A FIRE-PROOF—RAT-PROOF—snow and rain-proof Martin Steel Corn Crib or Grain Bin pays its cost (which is less than a wood crib in the end) with the corn it saves from mould, rats, shrinkage, etc. in a short time, and the higher prices it brings because Better Cured. This is not a mere claim—it is a PROVED fact. Send for our FREE BOOK—see how much HIGHER prices and the big savings other farmers are getting. A postal brings the FREE Book—it may save you many dollars this year. Send for it NOW.

**Martin Steel Products Co.** Dept. 32 Mansfield, Ohio



## The WINDMILL with a RECORD



The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production. The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

**AERMOTOR CO.** Chicago Kansas City Dallas Minneapolis Des Moines Oakland





## Don't let this happen to your apples

Kill the aphids before they have a chance to do serious damage to fruit or trees. Spray with Hall's Nicotine Sulphate. It contains 40% pure Nicotine—the deadliest aphid-poison known.

Being a vegetable extract, it does not harm blossom, fruit or foliage; but it does kill aphids every time.

A ten-pound tin makes 800 to 1100 gallons of spray. The cost is less than 2c a gallon.

When spraying for scab, codling moth, etc., mix Hall's Nicotine Sulphate with the solution and make one spray do double duty.

Buy from your dealer. If he cannot supply you, send us your order along with his name.

Note—Hall's Nicotine Sulphate is also deadly effective against thrips, red bugs, leaf hoppers, psylla and many similar insects on fruit trees and truck crops.



10 lb. tins, \$13.50  
2 lb. tins, 3.50  
1/2 lb. tins, 1.25  
1 oz. bottles, .35

**HALL'S**  
NICOTINE SULPHATE

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3955 Park Avenue, St. Louis, Mo.

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out of Lakes or Marshes

If you want to dig 25 or 500 yds. per day we can furnish you the equipment at a price that will suit you.

American Mfg. & Engineering Co.  
Kalamazoo, Michigan.

APPLE AND PEACH TREES: Improve your property. Increase your income. Plant fruit trees, vines and plants this spring. Our trees grow. Free catalog. MITCHELL'S NURSERY, BEVERLY, O.

CERTIFIED MANCHU SOYBEANS \$3 bushel, bags free. Inoculating Bacteria for bushel any legume, 60c postpaid. E. E. BASIL, LATTY, OHIO.

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EXTRA SELECTED GERMINATION GUARANTEED

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| Improved Leaming .....             | \$3.50 per bu. |
| Pride of the North .....           | \$4.00 per bu. |
| Early Yellow Dent .....            | \$4.00 per bu. |
| Johnson County White .....         | \$4.00 per bu. |
| Early Butler .....                 | \$4.00 per bu. |
| Virginia Ensilage Corn .....       | \$3.50 per bu. |
| Canadian—No. 47 Swedish Oats ..... | \$1.00 per bu. |
| Fancy—No. 40 Swedish Oats .....    | \$.90 per bu.  |
| Swedish—No. 35 Oats .....          | \$.80 per bu.  |

New Jute Bags Extra @ 15c each.  
Will furnish samples upon request. Any seeds that are not satisfactory, may be returned to us, and your money will be cheerfully refunded.  
J. P. EASTON, SEEDGROWER, Monroeville, Ohio.

### BARGAIN CATALOG

of Fruit Trees, plants, Ornamentals, Garden and Flower Seeds, 3 to 4-foot Apple 25c; 3-foot Peach 20c each postpaid. Send for 1924 catalog of Reliable Trees and Seeds. Allen's Nursery & Seed House, Geneva, Ohio.

## Garden Pointers I've Learned

By R. G. Kirby

I TRIED planting Kentucky Wonder beans which are climbers by the side of sunflower stalks. The soil was very fertile and the sunflowers grew rapidly. They soon shaded the beans and drew so heavily on the moisture that the bean crop was poor. I had better luck when using stakes for climbing beans.

Mangel seed sometimes shows a poor per cent of germination. This resulted in vacant spaces in the rows and the plants that were moved from thicker parts of the row received a setback and did not develop into large beets. I tried planting three or four seeds together every foot in the row. Later they were thinned to one plant. This seemed to help produce a more even stand in the beet rows. They were quite easy to thin and very little transplanting proved necessary.

Sunflowers produce the best heads when the individual stalks have plenty of room. I thinned the sunflowers to three feet apart. The seeds were planted three to a hill three feet apart in the row. Then each hill was thinned to one plant. They were far enough apart to avoid crowding and produced heads that were heavy with seed.

I have had good luck planting cucumbers in rows instead of in hills. They are easy to cultivate when small and can be thinned to one foot apart as soon as the bug menace is reduced. Alternate plants can be placed to extend in different directions from the row and the foliage is soon thick enough to smother out weed growth. The rows must be about six feet apart.

A strong sharp sugar beet hoe is a great help in thinning and weeding out the rows in the farm vegetable garden. The wheel hoe is also a useful tool even when there are plenty of horses. When the teams are busy or tired there are sometimes opportunities to use a few minutes breaking

up the soil in the vegetable rows. You can sometimes cultivate a little patch while you would be hitching up the horse. Shoving the wheel hoe in heavy soil is a man-size job however if it is done for long periods at a time.

A good mouse-proof and rat-proof seed storage box can be made of a wooden packing case with quarter-inch mesh hardware cloth tacked on the outside. The bottom of the box can be knocked off and covered with the wire cloth to furnish ventilation. A small cleat nailed on each end of the bottom will raise the box from the shelf where it stands and permit the air to enter. The cover can be made of wire nailed on cleats. Such a box will last for life and may save a lot of garden seed from being chewed up by mice.

One reason for occasional failures of home-grown garden seed results from eating all the good specimens in the row and then gathering seed from a few plants that were too poor to use for food. If you seed it pays to pick out a few of the best plants in the row while they are growing vigorously. A small stick pushed down beside the plant will indicate that it is being saved for seed.

If you wish to raise nice flowers, plant a few rows in the richest of the garden soil where they can be thinned and cultivated just like vegetables. Then they thrive much better than flower gardens crowded into fence corners where the soil often bakes hard and fertility may be low.

Our Chinese cabbage row was a great success again last year. The large white heads furnished a fine salad plant all summer. During dry weather the row furnished a lot of succulent green leaves for the poultry flocks. I think Chinese cabbage should be tried on rich moist soil for the best results.

## The Blight Situation

By H. H. Cardinell

A STRAW vote, if taken over a series of years, would undoubtedly indicate that Fire Blight is the most baffling problem with which apple and pear growers of Michigan have to cope. Certain Peculiarities of the Situation.

Fire blight of apple, pear, etc., has its off and on years and therefore the interest of growers fluctuates accordingly. Likewise, varieties often differ each year in the amount of injury that will result from blight.

The writer, in company with several county agents, attempted to find a single orchard that had received during 1922 or any previous year, a complete blight control program. None were found, although there may be orchards in the state that have received such a "clean up."

Nearly every owner of blighted trees has performed some removal of blighted tissue but the recommendation of the pathologists of this state have not been correctly interpreted. For example, Dr. Coons of the M. A. C. Botany Department, has consistently urged the removal of blighted twigs during early summer in order to catch the first phase of blight and thereby prevent or reduce later "outbreaks" so common in July and August. Growers, however, have usually awaited the full showing up of blight before they began to "summer cut" and often by that time blight has run its course for that season and it is often a waste of time and money to cut blight late under our conditions.

### Demonstration Methods.

These county blight control demonstrations are being conducted as county-wide blight cutting schools. An orchard in Berrien County was given

a "canker clean-up" the first week of December, 1923. A similar school was held in Van Buren County and one will be conducted in Allegan County in the early spring. These orchards will be plotted and each tree numbered so that a statistical study may be made at any time.

### Spring and Summer Plans.

These three orchards will be watched carefully during early summer months and by means of insect control and early summer removal of blighted twigs it is hoped that a marked reduction in blight may be noted the first year. These orchards will be handled under these procedures until a severe blight year is encountered in those counties before extensive demonstrations are conducted over the state.

### Outlook and Interest.

The growers have followed their requests for help by showing active interest and attending the schools held for that purpose. Furthermore, as a result of the blight cutting demonstration in the spring of 1923, several growers cut out cankers and twigs during the year. We have examined these orchards and are encouraged by the small amount of infection that followed as compared with previous years of equal severity but when no blight cutting was done except late in the summer when the bacteria had reached the peak of development.

From these continuing demonstrations, assuming that results justify, the interest will grow around these "practical demonstrations" and only as adjoining orchards are freed of blight in concentric circles around these orchards will large scale results appear.

# Quality CROPS

Abundant crops that quickly reach full maturity bring money returns in profitable proportion. How SOLVAY—guaranteed 95% carbonates—makes farms pay handsomely is fully explained in our booklet, sent FREE on request. It's well worth writing for.

THE SOLVAY PROCESS CO., Detroit, Mich.

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PULVERIZED  
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# Quantity PROFITS



## CROSSING OF GARDEN TRUCK.

WHAT is the matter with Z. Steinhausser and E. P. Lewis? Are they really scrapping over the care and planning of the garden? It matters little to me whether they call me a Kicker or a But-in-sky. I'll say this much to E. P. L., you ought to know better than to contradict Dutchmen on gardening. They are an honest, hard-working people and you can't fool them worth a cent. The old saying is "That beats the Dutch and the Dutch beats the Devil."

I take sides with Steinhausser. Let's shake hands just for fun. I doubt it Mr. Lewis can lick two Dutchmen. But laying all joking aside, the party setting type may have made a mistake; papers can get things wrong as well as women, "dontherknow." It may be possible that Z. S. wrote that water-melons and citrons will cross, and sweet corn and field corn also will cross, there may be something in it, all right.

Hubbard squash and pumpkins will cross. You will find the rind of squash will be softer than it should be so that instead of being hard and good keepers, it will be as easily carved as a pumpkin. In smaller seeds I find it quite different, such as cauliflower and cabbage seeds; they can be planted in one garden bed or small patch. Going back to the pumpkin and squash, the pumpkin is very apt to be neither one thing nor another; it is neither squash nor pumpkin.

I couldn't help but notice Lewis was trying to slap Z. S. back for his contradictiveness, so I am contriving to turn the argument into a little polly scrap. It takes lots of hard work and experience, instead of books, to prove the farming problems. Come again, E. P. Lewis. Maybe you can teach us something. No one is more humble in taking advice than myself.—P. M. L., Ogemaw County.

## MELONS AND CUKES.

WHILE I have no intention of disputing the assertion made by E. P. Lewis in a recent number of the Michigan Farmer that melons, squashes, pumpkins and other members of the Cucurbitaceae family will not cross, for he undoubtedly has scientific knowledge with which to back up his statement, a somewhat mysterious incident occurred in my gardening experience a few years ago.

I remember it was a common belief in the neighborhood where I grew up that melons would cross with pumpkins and cucumbers. While my father planted melons and cucumbers in the same garden, he separated them as widely as the limits of the garden would permit. Sometimes our melons were good, sometimes worthless. This might have been occasioned, as Mr. Lewis says, by insects, diseases or to climatic conditions. I know that a year ago last summer I never had better melons in my life, while last summer with the same arrangement of vine crops, my melons were tasteless.

The incident, however, that mystified me happened a few years ago. I planted a hill of cucumbers right beside a hill of hubbard squash. The vines entwining as they grew to maturity. The majority of cucumbers that grew upon that vine were shaped identically like a hubbard squash. Small neck and protuberant body. Now I am not claiming that the singular parallelism of formation displayed in the cucumber towards its larger and probably more thrifty neighbor, the squash, was caused by cross pollenizing, but nevertheless I have been unable to secure a satisfactory explanation from any other angle. I shall make a similar experiment the coming summer.—Greeley Everitt.

If you do not dock the lambs this spring, the market man will dock the price next fall or winter.

## What Type of Oil Stove Do Most Women Prefer?

MOST women prefer an oil stove with the short chimney burner because of its speed, efficiency and economy. Of all short chimney burners they find the Lorain High Speed Burner most efficient.



It transforms the oil into gas, and then burns the gas with a clean, odorless blue flame of great intensity, which comes in direct contact with the cooking utensil (see illust. No. 1). This means well-cooked food without waste of time. Then there's the improved oil well construction. This allows an extra

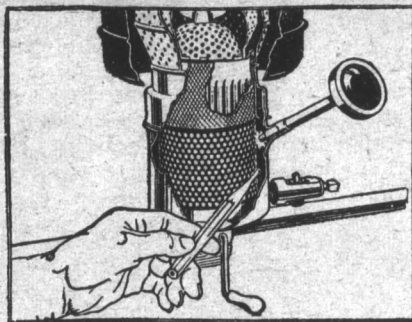


Illustration No. 2

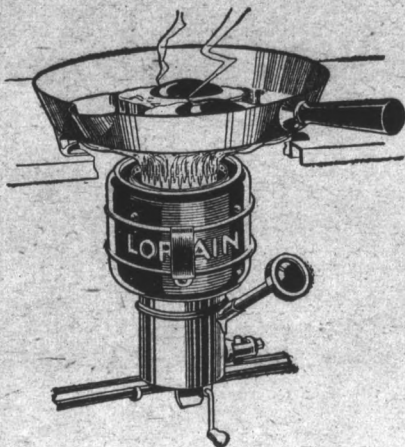


Illustration No. 3

wide space between the wick and the outer tube (see illust. No. 2.) This is an exclusive Lorain feature which absolutely prevents wick-sticking and makes re-wicking easy. Again, the Lorain patented wick-stop automatically stops the

wick at the correct starting and burning point (see illust. No. 3.) This saves fussing and bothering about "getting the wick just right." For twelve years oil stoves equipped with this burner have given perfect cooking satisfaction in thousands upon thousands of homes. And last year's sales proved conclusively that an oil stove equipped with Lorain High Speed Oil Burners is the type that most women prefer.

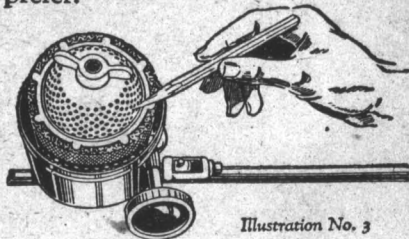


Illustration No. 3

Before you buy any oil stove, examine one of the many famous makes equipped with Lorain Burners. If there's no Lorain dealer near you, write us—we'll give you the name of the nearest one.



## GUARANTEE

Should the inner combustion tube of the Lorain High Speed Oil Burner burn out within 10 years from date of purchase, replacement will be made entirely free of charge.

Many famous makes of Oil Cook Stoves are equipped with the Lorain High Speed Burner, including:

DANGLER—  
Dangler Stove Company Div., Cleveland, O.  
DIRECT ACTION—  
National Stove Company Div., Lorain, Ohio  
NEW PROCESS—  
New Process Stove Co. Div., Cleveland, O.  
QUICK MEAL—  
Quick Meal Stove Co. Div., St. Louis, Mo.  
CLARK JEWEL—  
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## AMERICAN STOVE COMPANY, St. Louis, Mo.

Sole Manufacturers of Gas Stoves equipped with the Lorain Oven Heat Regulator  
World's Largest Manufacturers of Cooking Appliances

LORAIN  
HIGH SPEED  
OIL BURNER

179 W. Washington St.  
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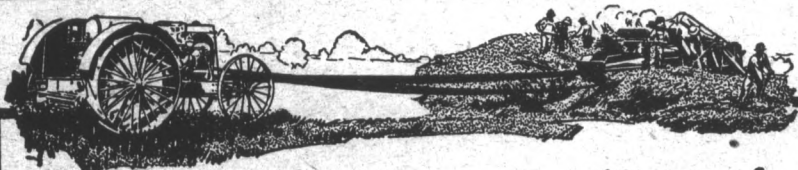
## ONION SEED ONION SETS

Peerbolte's onion seed and onion sets are INTERNATIONALLY KNOWN AND SOWN. YOU WILL MAKE MONEY when you buy your onion sets and onion seed from the man that GROWS AND SPECIALIZES in the Products he sells. WRITE TO PEERBOLTE.

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LARGEST GROWERS AND DEALERS  
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for price list.



## A money making outfit

THE most profitable threshing outfit consists of a Huber Super Four Tractor and a Huber Supreme Thresher. It travels farther and faster, and threshes more wheat at less expenditure for labor, fuel, and operating expense. The tractor, with more than 40 horse-power at the belt will do big work in threshing.

It is light enough to travel on  
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plowed ground and do all kinds of field and belt work. It is kept busy the year around. Pulls three plows and turns an acre an hour in any soil.

For the large individual farmer or neighborhood threshing association, the Huber Light Four and Huber Jr. Thresher is the ideal equipment.

Write for printed matter and prices.

TRACTORS **HUBER** THRESHERS  
SINCE 1898 SINCE 1879

FROSTPROOF CABBAGE PLANTS, Wakefield, Copenhagen, flats, 300 \$1.25, 500 \$1.50, 1000 \$2.50. Insured postpaid, well packed. 10,000 express col. \$17.50. Tomato, Sweet potato, May delivery, write for prices, varieties. Maple Grove Plant Farms, Franklin, Va.

## BERRY SUPPLIES

A grade Berry Baskets (wood) and 16 quart crates, 40% cash discount till May first. Send for price card. See supply catalog for the asking. General agents in Michigan for Root's goods.

M. H. HUNT & SON

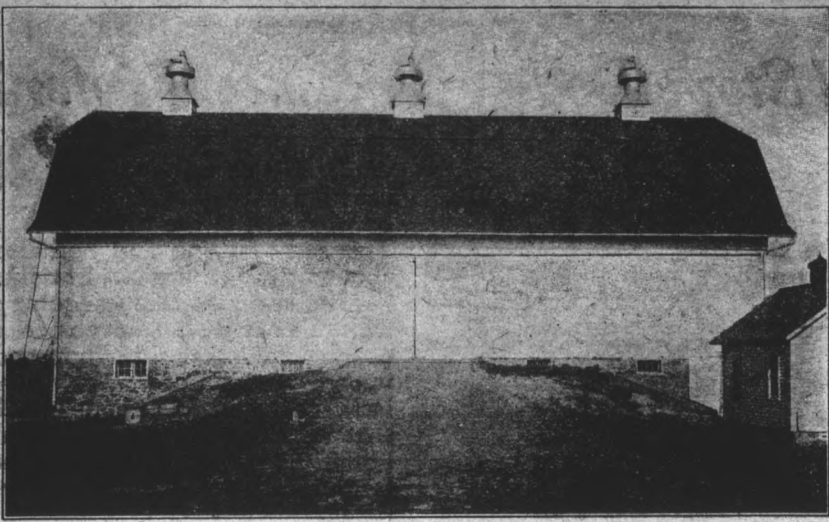
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"Originator of the Asphalt Shingle"

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44 styles, colors, sizes. SAVE  
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SEND NO MONEY—Pay the postman.  
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300 W. WALNUT STREET, DEPT. D  
GREEN BAY, WIS.

### CHARLOTTE SHIPS MOST CATTLE TO BUFFALO.

BY reason of the fact that Charlotte shipped more cattle than any other cooperative live stock shipping association of the state to the Producers' Cooperative Commission Association at East Buffalo, that local will receive \$681.45 of the \$24,225.69 being distributed by the farmers' commission concern as patronage dividends. This was the highest dividend paid from this fund to any single shipping association in the state.

### RED ROCK WHEAT LEADS IN TESTS.

TESTS made of the milling and baking qualities of thirty varieties of American wheat by the United States bureau of plant industry resulted in highest honors going to Red Rock wheat, a variety developed at the Michigan Agricultural College. The report says, "Red Rock proved highest in water absorption, volume, texture and color of loaf, and for these reasons can be considered the variety of best baking quality of the soft winter wheats of the central area."

### HESITATE TO URGE HIGHER TARIFF ON DAIRY PRODUCTS.

SCENTING the tariff fight the more conservative farm organization representatives and dairy leaders are somewhat diffident in giving their support to the demand from the Northwestern creamery interests for an increase in the tariff rate on butter from 8 to 12 cents a pound. It is feared that such a raise at this time might be used advantageously by the opponents of protection in their efforts to eliminate the entire agricultural schedules.

### MICHIGAN POTATO PRODUCERS TO HOLD ANNUAL MEETING.

THE annual meeting of the Michigan Potato Producers' Association will be held April 22nd and 23rd at Traverse City. This is the first time that the annual meeting has been held in the northern section of the state and it is believed that the attendance will be large since Traverse City can be conveniently reached by the majority of the members. Heretofore the annual meeting has been held at East Lansing.

A good educational program emphasizing the best practices in Certified Seed Production and in the economical growing of high quality market potatoes will be featured. Considerable stress will be placed on standardization, grading and marketing. Several of the leading growers of the state as well as one or two out of state specialists will discuss the subject of potato growing from different angles. It is hoped that potato growers will make a special effort to attend the meetings.

In connection there will be staged complete educational exhibits illustrating grading, standization, seed selection, potato diseases, storage house construction, etc. The State Department of Agriculture, the Michigan Potato Growers' Exchange and the Michigan Agricultural College will co-operate with the Michigan Potato Producers' Association in making the meetings a success.

On the night of April 22nd a banquet will be held and good eats and a good time are assured. The business session and the election of officers will be held on Wednesday, April 23rd. Programme of the meetings is being published and may be procured from the Secretary, East Lansing, Michigan.

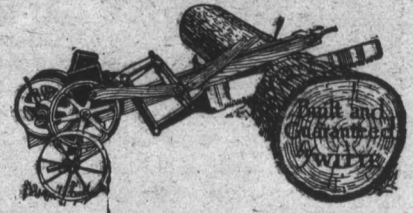
There were over two thousand cows in the 76 Michigan cow testing associations that produced more than forty pounds of butter fat during the month of February.

### EASY NOW TO SAW LOGS AND FELL TREES

**WITTE Log-Saw Does the Work of 10 Men at 1-20 th Cost—Saws 25 Cords a Day.**

A log saw that will burn any fuel and deliver the surplus power so necessary to fast sawing is sure to show every owner an extra profit of over \$1,000.00 a year.

Such an outfit is the WITTE Log-Saw which has met such sensational success. The Witte, equipped with the celebrated Wico Magneto, is known as the standard of power saws—fast cutting, with a natural "arm-wing" and free from the usual log-saw troubles. It uses kerosene, gasoline or distillate so economically that a full day's work costs only twenty-two cents.



In addition to sawing from 10 to 25 cords a day, the powerful Witte Engine can be used to run all other farm machinery,—pump water, grind feed, etc.

Mr. Witte says that the average user of a WITTE Log and Tree saw can make easily \$40.00 a day with the outfit and so confident is he that he offers to send the complete combination log and tree saw on ninety days' guaranteed test to anyone who will write to him. The prices are lowest in history and under the method of easy payments you can make your own terms. Only a few dollars down puts the Witte to work for you.

If you are interested in making more money sawing wood and clearing your place at small cost, write Mr. Witte today for full details of this remarkable offer. You are under no obligation by writing.

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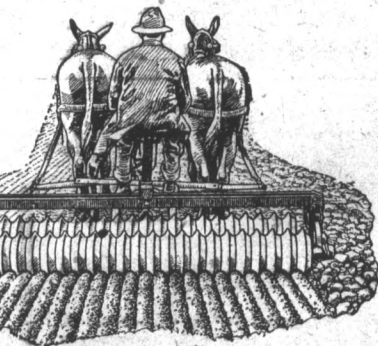
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## Paring Production Costs

*Where Mutual Effort Assists in Keeping Down Farming Costs*

By J. T. Horner

THE community which produces at a lower cost than others selling in the same market, will be the most prosperous. Individuals who produce for less than their neighbors can have better houses and barns, more home conveniences, longer vacations and give their children better educations. As long as we are under our present competitive system, the greatest rewards are going to those who produce good products at the lowest prices.

Milk production costs depend partly upon the price of feed. Through proper cooperation these costs can be reduced. The cost of supplies necessary for the production of all farm products influence the final cost of the finished product. Profits can be just as effectively increased by reducing costs as by increasing price.

Cost per unit depends upon expense and yield. In order to get low unit costs, expenses should be kept as low as possible and the highest possible yields secured. The lower the costs, the higher the profits—other things being equal.

This does not mean that production should be increased without thought of the needs of the market. Production should be guided in accordance to market demands—no more should be produced than can be profitably sold. The quantity needed should be produced at the lowest possible cost. It is the height of folly to attempt to improve marketing conditions and bring prosperity to agriculture if no attention is to be given the problems of production. Those agencies which aid the farmer in producing good quality products at a low cost are making a return of profits possible.

To illustrate this point, reference is made to the condition of the market for Michigan potatoes. On March 18th, Michigan potatoes sold in the Pittsburgh market for \$2.00 a bag. New York and Pennsylvania potatoes sold on the same day for \$2.50 a bag. The reason for the difference in these prices is the inferior quality of potatoes from Michigan. The trade in Pittsburgh won't pay such a high price for Michigan potatoes—not because they are from this state but because the quality is not good. What is needed to improve this market and return the growers of potatoes more money is better quality potatoes. Better quality potatoes can be secured only through better productive practices. So in order to improve marketing conditions thought must be given to production, and the man who can render the greater service along this line is the production specialist. The man who criticizes such a policy of better and cheaper productive methods does not know about the factors which make price.

The farmer who is successful and far seeing is looking for better productive methods. He is striving to secure better yields at lower costs. His aim is the best quality at the lowest possible cost per unit. With a good quality product he goes into the market with an advantage over the producer of poor quality produce. With low costs he goes into a market better able to take a lower price if competition forces him.

Agriculture is conducted on a small scale as a general rule. The small farmer cannot secure the services of specialists in production as can the large manufacturer. Agriculture is conducted on such a small scale by so many different managers that it is impossible to secure these productive-improvement services individually. To overcome the handicaps of small scale operation and small individual production, farmers have turned to coopera-

tion to help them with some of these productive problems.

Most farmers are familiar with these cooperative producers' organizations. In the dairy sections of the state, the cow testing associations is the most common. It is wasteful and brings no profit to feed a cow that will not give sufficient milk to pay for her keep. The main purpose of such an association is to eliminate from the herd the cows which cost more than their milk will sell for. Such cows are worse than no cows at all for they eat up the profit which good cows yield. These testing associations have done much to decrease the cost of producing milk. The farmers who test their cows regularly and eliminate all the unprofitable ones are the farmers who are getting ahead. The small farmer as a rule cannot have his cows tested unless he joins with his neighbors and has it done on a cooperative basis.

Cooperative bull and other pure-bred sire associations are types of producers' cooperative associations which brings to the small farmer benefits of which he would otherwise be deprived. Poultry associations result in better poultry with higher egg records. Decreased costs and better products are the result of better livestock and better handling, feeding and other productive methods. In many instances where the expense is too great for the individual to bear these benefits can be secured by cooperative action.

Community threshing and silo-filling is a type of producers' cooperation which is practiced because it brings economy. There are many productive problems such as the control of insect pests and animal disease which could not be successfully met at all except through cooperative action.

These productive cooperative enterprises are the ones which are bringing real results to farmers. They are the ones which should receive more attention and consideration for they are the cause of bringing more money to farmers. The marketing associations have done much work along the line of quality improvement. Marketing associations such as the California Fruit Growers' Exchange, and the Eastern Shore of Virginia Produce Exchange have organized the necessity for good quality produce. The successful marketing associations insist that only quality produce be sent to market and that it be properly prepared. Experience in the field of marketing has taught these organizations that good quality produce is essential to proper marketing.

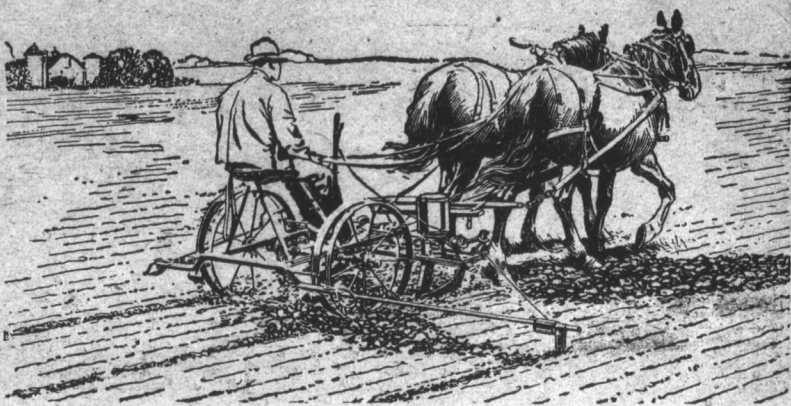
If produce is to be marketed cooperatively every member of the organization is vitally interested in the quality of produce grown by every other member. The result is that certain productive operations must be carried on in a cooperative manner.

In this series of articles, the different types of cooperation have been dealt with separately. It is very difficult, however, to draw the line definitely between cooperative production and cooperative marketing. The things which are done during the producing period have such an influence on the quality of the produce. The quality of the produce is one of the controlling price factors.

Satisfactory marketing conditions will never be attained until there is the production of quality products at the lowest possible costs consistent with quality produce. It is impossible to separate production and marketing. They are merely different stages of the same process.

The loss of little pigs will mean the loss of big profits.

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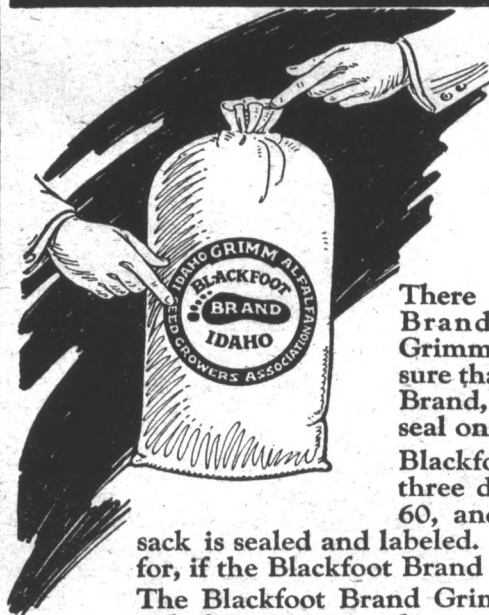
Also talk to the McCormick-Deering dealer about McCormick-Deering corn cultivators. He can show you two-row cultivators, walkers, riders, shovel, disk, and surface cultivators.

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# GRIMM ALFALFA SEED



## NEWS FROM CLOVERLAND

### WILL BUILD A MILLION-POUND CREAMERY.

ONE hundred and forty farmers of southern Ontonagon County have decided to erect this year a 1,000,000 pound per year creamery at Bruce's Crossing on the South Shore Railroad. Each farmer, it is stated, has pledged to take at least one fifty dollar share of stock in the creamery. The total subscriptions sought is \$10,000, which, it was anticipated, would be forthcoming by April 5.

The new concern will be known as the "Ontonagon Valley Co-operative Creamery Association." Seven directors chosen by the stockholders will control the business of the association. These directors are to be distributed among the communities supporting the enterprise. This creamery will serve one of the most progressive dairy sections of the peninsula and appears to have a bright future assured to it under good management.

### LAND VALUES IN CLOVERLAND.

THE Department of Agriculture's crop report for Michigan for March shows the average value of good plow-lands in the Upper Peninsula to be \$46 per acre and of poor plow-lands to be \$22 per acre. The average value per acre of all farm lands with improvements is given as \$63 per acre and without improvements \$36 per acre. It is well known that agricultural lands usually run lower in price in this territory although their productiveness may be equal to that of farms farther south.

### SHOWS DEVELOPMENT IN DAIRY BUSINESS.

HOWARD E. NADEAU, a Menominee Banker, recently gave an account of the agricultural advance in Cloverland. According to Mr. Nadeau, it was the impetus given by county fairs and agricultural college institutes that started the better dairy movement in this section about a quarter of a century ago.

The first organization, he says, with a plan for the importation and breeding of better dairy animals was the Menominee County Dairy Stock Association formed in 1914. The plan followed by this association resembles the "Ashland Plan."

Thirty or forty business men signed a guarantee under which the purchase of high-grade and registered dairy animals was financed. The plan was executed by a board of five directors which passed on the application for credits on the part of purchasers. The county agricultural agent made the purchases and the local banks took over the notes given by the purchasers to the association.

During the ensuing seven years many carloads of cattle were brought into Menominee County through this agency until unfavorable market prices caused a cessation of activity. All notes were paid in full by the borrowers without the guarantors having to pay a cent, says the banker. Now that prices are more normal revived interest in such a co-operative plan of financing dairying is manifest.

### ROAD PROGRAM PLANNED.

AT the recent meeting of Upper Peninsula road-builders held at Menominee, State Highway Commissioner Rogers stated that the Upper Peninsula had received better than one-sixth of the proceeds of the state bond issues for road work.

The biggest trunk-line job undertaken last season was in the Upper

Peninsula, said Mr. Rogers. This is the fifty-mile stretch of bad road in Mackinac County which hitherto has interfered with entrance into the peninsula from below the Straits, and which is now under re-building operations.

Mr. Rogers also called attention to the purchase of automobile ferries for the Straits of Mackinac which will greatly facilitate traffic between the peninsulas. He predicted that the service during the coming season will be eight times as efficient as last year.

Hereafter, state construction work will be under the direction of the county engineering forces, with four supervising state engineers to see that state requirements and policies are adhered to, it was announced. Among the new projects that will be carried forward, this season, is the new concrete road connecting Marquette, Ishpeming and Negaunee, and the Baraga Trunkline which will afford a second route from the Marquette district to the Copper Country, a portion of which will pass through virgin country rich in scenic interest.

### CAPERS OF THE WEATHER.

DURING the month of February the temperature in the Upper Peninsula averaged 4.3 degrees above the normal according to the monthly review of weather conditions recently given out by the Lansing office of the United States Weather Bureau. The highest temperature occurred at Bergland and Marquette on February 26, being 52 degrees.

On the other hand Humboldt showed 35 below zero on February 23. Humboldt, be it noted plays somewhat the same role as Medicine Hat in the low temperature sale. It is an interior point of sparse population. In comparing the state's record for precipitation, it is somewhat curious to note that Eagle Harbor on the Keweenaw Peninsula showed the lowest precipitation, amounting only to .53 of an inch. This shore line is usually superabundantly supplied with snow at this season.

### WILL TRY STATE PLAN.

HOUGHTON COUNTY sportsmen have asked the appointment of game wardens by the county board of supervisors, believing that the work of the state wardens was inadequate. But at the March meeting of the board, the State Conservation Department presented a new plan for the services of state wardens and it was decided to try out the new state plan before taking county action.

Under the new state plan there will be two full time deputy game-wardens in Houghton County, with the part-time services of two other deputies and the part-time services of two district deputies, it is reported. A state trapper will also reside in the county and give a part of his time to the enforcement of the game and fish laws. It was also stated that the State Department of Conservation is arranging to have a forest fire warden in each township to act as key-man and fire-boss for the protection of timber against fire. This local man will have jurisdiction over the entire township and will have powers similar to state wardens in securing aid in the fighting of fires. These township wardens will be under the direction of the state wardens.

THE Upper Peninsula will be represented, as last year, at the National Travel and Out-door Life Exposition to be held at Chicago, May 7 to 11. The exhibit this year will not be as elaborate as a year ago.



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# WORLD EVENTS IN PICTURES



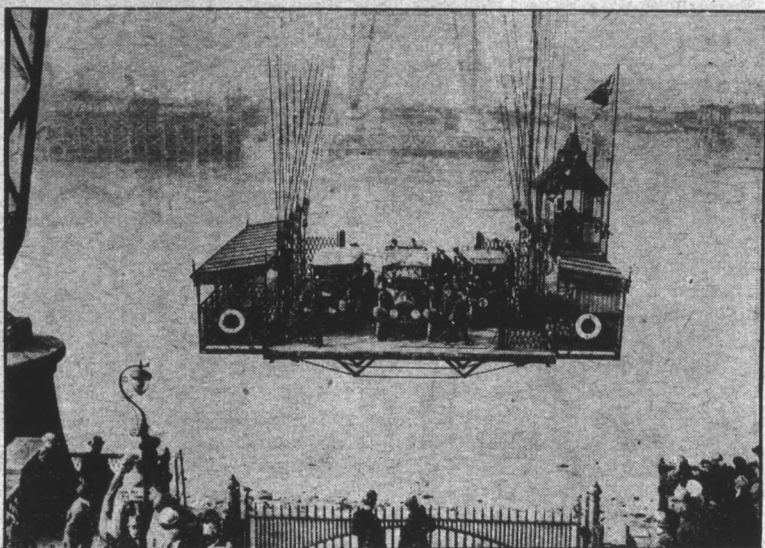
Dr. Harry Benjamin, New York physician has become a specialist in the prolongation of life.



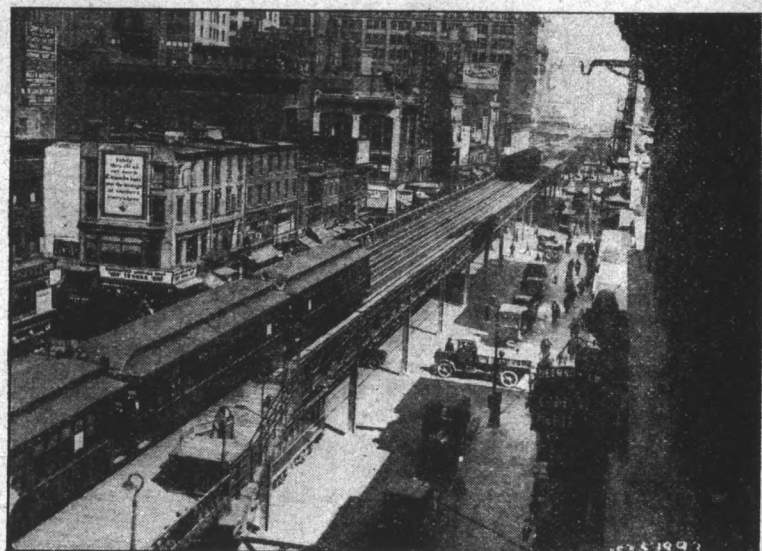
At her beautiful residence in Tokio, Princess Kaneko Higashi-Fushimi entertained this group of notables in honor of Mrs. Theodore Roosevelt and her son Kermit.



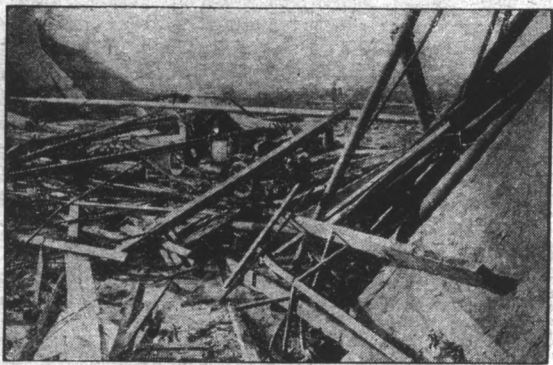
Thousands attended the celebration at Harvard in honor of Pres. Dr. Chas Wm. Eliot's 90th birthday.



In the auto in the center, the Duke of York is taking the first ride on the "transporter bridge" or aerial ferry at Newport, Wales, which he officially opened this month.



Darkened and deafened by overhead transit, Sixth Avenue in New York is soon to have this unsightly thing torn down. It will be replaced by a subway.



When this bridge at Los Angeles, California, collapsed without warning, one was killed, many injured and a Ford ruined.



Miss Francis Perkins, of New York, is one of the highest paid woman public officials in America.



With such faces as these, it is doubtful which of Great Britain's varsity crews, Cambridge (upper) or Oxford (lower) will win.



This Douglas cruiser, piloted by Major F. L. Martin, U. S. Army, is just taking off from Cloverfield, St. Monica, California, on its flight around the world.



As they looked after the first skirmish of the battle; Harry Sinclair and his corporation aids and legal advisers just after the Federal judge had issued the injunction against them.



HOURS they plodded and climbed, climbed and plodded, the blood again dripping from his lips, her features again shielded by the heavy folds of the bandanna; the moisture of their breath at times swirling about them like angry steam, at others invisible in the areas of sudden dryness, where the atmosphere lapped up even the vapors of laboring lungs before it could visualize. Snow and cloud and rising walls of granite: this was their world, and they crawling pigmies within it. Once she brushed against the pack on his back and drew away with a sudden recoil. Houston dully realized the reason. The selfish, gripping hands of Winter, holding nothing sacred, had invaded even there.

Noon. And a half-cry from both of them, a burst of energy which soon faded. For above was Crestline—even as the little Croatian settlement had been—smokeless, lifeless. They had gone from here also, hurrying humans fleeing with the last snowplow before the tempest, beings afraid to remain, once the lines of communication were broken. But there was nothing to do but go on.

Roofless houses met them, stacks of crumpled snow, where the beams had cracked beneath the weight of high piled drifts; staring, glassless windows but huddled instead amid piles of snow; that was all. Crestline had fled; there was no life, no sound, only the angry, wailing cry of the wind through half-frozen roof spouts, the slap of clattering boards, loosened by the storm. Gloomily Houston surveyed the desolate picture, at last to turn to the girl.

"I must go on. I gave my promise." She nodded.

"It means Tollifer now. The descent is more dangerous."

"Do you know it?"

"Not as well as the other. If I only had something to guide me."

And as if in answer, the storm lifted for a moment. Gradually the wind stilled, in one of those stretches of calm which seem to be only the breeding spots of more terror, more bitterness. But they gave no heed to that, nor to the red ball of the sun, faintly visible through the clouds. Far below, miles in reality, straight jets of steam rose high above black, swirling smoke; faintly, distantly, whistles sounded. The snowplows.

He gripped her arm with the sight of it, nor did she resist. Thrilled, enthralled, they watched it: the whirling smoke, the shooting steam, the white spray which indicated the grinding, churning progress of the plows, propelled by the heavy engines behind. Words came from the swollen lips of Houston, but the voice was hoarse, strained, unnatural:

"They've started the fight! They've"

"It's on the second grade, up from Tollifer. It's fairly easy there, you know, for ten or twelve miles. They're making that without difficulty—their work won't come until they strike the snowsheds at Crystal Lake. "Oh—" and there was in the voice all the

## The White Desert

By Courtney Ryley Cooper

yearning, the anxiety that a pentup soul could know—"I wish I were a man now! I wish I were a man—to help!"

"I hope—" and Houston said it without thought of bravado—"that I may have the strength for both of us. I'm a man—after a sort. I'm going to work with them."

"But—"

He knew what she meant and shook his head.

"No—she does not need me. My presence would mean nothing to her."

melted from their clothing, through sheer bodily warmth. Black dots they became,—dots which appeared late in the afternoon to the laboring crews of the snowfighters far below; dots which appeared and disappeared, edging their way about beetling precipices, plunging forward, then stopping; pulling themselves out of the heavier drifts, where drops of ten and even twenty feet had thrown them, swinging and tacking; scrambling downward in long, almost running descents, then crawling slowly along the ice

## THE EARLY BIRD

By Al. Rice

"It's the early bird that catches the worm,"  
And the worm, it is good for the bird;  
While the death of a worm is only a squirm  
That never is seen or heard.

It's the early bird that's up with the sun,  
When it kisses the moon in good-bye.  
As his work is soon done, he's ready for fun,  
A sparkle and glint in his eye.

It's the early bird that greets the day,  
When it's breaking afar in the east;  
He's getting his pay, while lazy birds stay  
In bed, while they're losing a feast.

It's the early bird that wins in the race,  
And it's good for his health and his soul;  
For the time comes apace with hunger to face,  
And breakfast has crawled in a hole.

I can't tell you why. My place—is down there."

For an instant Medaine Robinette looked at him with frankly questioning eyes, eyes which told that a thought was beginning to form somewhere back in her brain, a question arising as to his guilt in at least one of the things which circumstances had arrayed against him. Some way Barry felt that she knew that a man willing to encounter the dangers of a snowy range would hurry again to the side of the woman for whom he had dared them, unless— But suddenly she was speaking, as though to divert her thoughts.

"We'll have about three hours—from the looks of the sky. Unless conditions change quickly, there'll not be another blow before night. It's our chance. We'd better cut this cord—the one in the lead may fall and pull the other one over. We had better make haste."

Houston stepped before her. A moment later they were edging their way down the declivity of what once had been a railroad track, at last to veer. The drifts from the mountain side had become too sharp; it was easier to accept the more precipitous and shorter journey, straight downward, the nearest cut toward those welcome spires of smoke.

Gradually the snow shook or was

walls, while the jutting peaks about them seemed to close them in, seemed to threaten and seek to engulf them in their pitfalls, only to break from them at last and allow them once more to resume their journey.

Breaks and stops, falls, and plunges into drift after drift; through the glasses the workers below could see that a man was in the lead, with something strapped to his back, which the woman in the rear adjusted now and then, when it became partially displaced by the plunging journey. Banks of snow cut them off; snowshoes sank in air pockets—holes made by protruding limbs of the short, gnarled trees of timber line.—and through these the man fought in short, spasmodic lunges, breaking the way for the woman who came behind, never stopping except to gather strength for a fresh attack, never ceasing for obstacles or for danger. Once, at the edge of an overhanging ledge, he scrambled furiously, failed and fell.—to drop in a drift far below, to crawl painfully back to the waiting dot above, and to guide her, by safer paths, on downward. Hours! The dots grew larger. The glasses no longer were needed. On they came, stumbling, reeling, at last to stagger across the frozen, wind-swept surface of a small lake and toward the bunk cars of the snow crews. The woman wavered and

fell; he caught her. Then double-weighted, a pack on his back, a form in his arms, he came on, his blood-red eyes searching almost sightlessly the faces of the waiting, stolid, grease-smearing men, his thick voice drolling over bloody lips:

"Somebody take her—get her into the bunk cars. She's given out. I'm—I'm all right. Take care of her. I've got to go on—to Tollifer!"

### CHAPTER XXII.

IT was night when Barry Houston limped, muscles cramped and frost-numbed, into the little undertaking shop at Tollifer and deposited his tiny burden. Medaine Robinette had remained behind in the rough care of the snow crews, while he, revived by steaming coffee and hot food, had been brought down on a smaller snowplow, running constantly, and without extra power, between Tollifer and "the front," that the lines of communication be kept open.

"Nameless," he said with an effort, when the lengthy details of certification were asked. "The mother—" and a necessary lie came to his lips—"became unconscious before she could tell me anything except that the baby had been baptized and called Helena. She wanted a priest."

"I'll look after it. There's clothing?"

"Yes. In the pack. But wait—where does the Father live?"

The man pointed the way. Houston went on—to a repetition of his story and a fulfillment of his duties. Then, from far up the mountain side there came the churning, grinding sound of the snowplow, and he hurried toward the station house to greet it. There on a spur, in the faint glow of an electric light, a short train was sidetracked, engineless, waiting until the time should come when the road again would be open, and the way over the Pass free. One glance told him what it was: the tarpaulin-covered, snow-shielded, bulky forms of his machinery,—machinery that he now felt he could personally aid to its destination. For there was work ahead. Midnight found him in a shack buried in snow and reached only by a circuitous tunnel, a shack where men—no longer Americans, but black-smearing, red-eyed, doddering, stumbling human machines—came and went, their frost-caked Mackinaws steaming as they clustered about the red-hot stove, their faces smudged with engine grease to form a coating against the stinging blast of the ice-laden wind, their cheeks raw and bleeding, their mouths swollen orifices which parted only for mumbings: viking of another age, the fighters of the ice gangs, of which Houston had become a part.

The floor was their bed; silently, speaking only for the purposes of curses, they gulped the food that was passed out to them, taking the steaming coffee straight down in spite of its burning clutch at tender membranes, gnawing and tearing at their meal like beasts at the kill, then, still wadded in their clothing, sinking to the floor—

AL ACRES--Al Look Out Al! This May Make Your Head As Big As The Cabbage

By Frank R. Leet.





and to sleep. The air was rancid with the odor of wet, steaming clothing. Men crawled over one another, then dropped to the first open spot, to flounder there a moment, then roar in snoring sleep. Against the wall a bearded giant half leaned, half lay, one tooth touching the ragged lips and breaking the filmy skin, while the blood dripped, slow drop after slow drop upon his black, tousled beard. But he did not wake.

Of them all, only Houston, tired even as they were tired, yet with something that they had forgotten, a brain, remained open-eyed. What had become of Medaine? Had she recovered? Had she gone to Tollifer, perhaps on a later trip of the plow? The thoughts ran through his head like the repetition of some weird refrain. He sought sleep in vain. From far away came the whistles of locomotives, answering the signals of the snowplows ahead. Outside some one shouted, as though calling to him; again he remembered the bulky cars of machinery at Tollifer. It was partially, at least, his battle they were fighting out there, while he remained inactive. He rose and sought the door, rumbling aimlessly in his pockets for his gloves. Something tinkled on the floor as he brought them forth, and he bent to pick up the little crucifix with its twisted, tangled chain, forgotten at Tollifer. Dully, hazily, he stared at it with his red eyes, with the faint feeling of a duty neglected. Then:

"She only said they might want it," he mumbled. "I'm sorry—I should have remembered. I'm always failing—at something."

Then, dully anxious to do his part, to take his place in the fighting line, he replaced the tiny bit of gold in his pocket, and threading his way through the circuitous tunnel of snow, stepped forth into the night.

It was one of those brief spaces of starlight between storms, and the crews were making the most of it. The wind had ceased temporarily, allowing every possible workman to be pulled from the ordinary task of keeping the tracks clear of the "pick-ups" of the wind, blowing the snow down from the drifts of the hill, and to be concentrated upon the primary task of many,—the clearing of the packed siftings which filled the first snowshed.

Atop the oblong shed, swept clear by the wind, a light was signalling, telling the progress of the plow, and its consequent engines, within. Even from the distance, Barry could hear the surge of the terrific impact, as the rotary, pushed by the four tremendous "compounds" and Malletts which formed its additional motive power, smashed against the tight-jammed contents of the shed, snarled and tore at its enemy, then, beaten at last by the crusted ice of the rails, came grudgingly back, that the ice crews, with their axes and bars, might break the crystallization from the rails and give traction for another assault. Houston started forward, only to stop. A figure in the dim light of the cook car had caught his eye. Medaine RobINETTE.

She was helping with the preparation of the midnight meal for the laborers, hurrying from the steaming cauldrons to the benches and baskets, filling the big pots with coffee, arranging the tin cups in their stacks for the various crews, and doing something that Houston knew was of more value than anything else,—bringing a smile to the tired men who labored beside her. And this in spite of the fact that the black rings of fatigue were about her eyes. He heard her singing above the clatter of kitchen ware and the scuffling of the men with their heavy, hobnailed shoes. And he knew that it was a song of the lips, not of the heart, that she might lighten the burden of others in forgetfulness of self.

(Continued next week.)



Great Falls of Yellowstone National Park, Painted by Magnus Norstad

© U. S. Rubber Co., 1924

A GOOD many men believed, some months ago, that they weren't going to see any further great progress in low-priced tire values.

When the USCO Cord was announced and a few thousand pioneers tried it out, it changed their whole conception of what a low-priced cord can be.

It is an established



thing that the USCO is the only cord that compares with the U. S. Royal Cord in money's worth and economy.

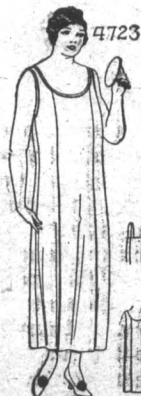
USCO Cords provide a low-cost cord equipment for light sixes and fours in both clincher and straight-side. The clincher is made in 30 x 3 as well as 30 x 3½.

United States Rubber Company

# USCO CORD

## Michigan Farmer Pattern Service

4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 4 yards of 36 inch material. The width at the foot is about 2 yards. Price 12c.



4723. Ladies' Slip. Cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3½ yards of 36 inch material. The width at the foot with plaits extended is 2½ yards. Price 12c.



3971. Ladies' Apron Dress. Cut in



4704. Child's Dress. Cut in 4 Sizes: 2, 4, 6 and 8 years. A 4 year size requires 3 yards of 36 inch material, for dress and guimpe. For the guimpe alone ¾ yard is required. Price 12c.



4708. Child's Dress. Cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2¾ yards of 32 inch material. Price 12c.

4718. Misses' Dress. Cut in 3 Sizes: 16, 18 and 20 years. A 16 year size



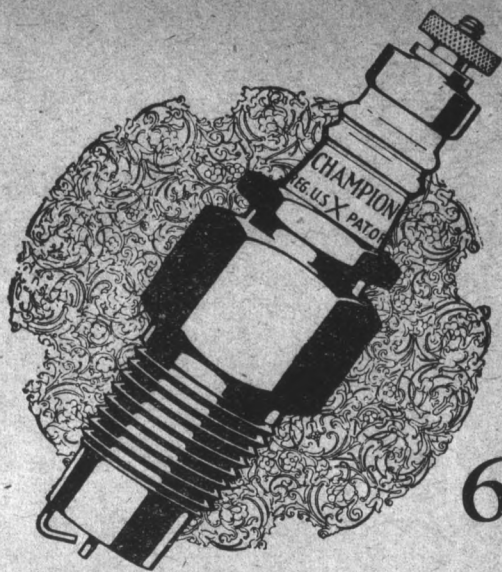
and without flounces 3¾ yards of one material 32 inches wide is required. The width of the skirt at the foot is 1½ yard. Price 12c.



4717. Ladies' Dress. Cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size will require 3½ yards of 54 inch material. The width at the foot is 1½ yard. Price 12c.

requires 1½ yard of plain material and 3½ yards of the figured material 32 inches wide if made as illustrated in the large view. With short sleeves





60°

## Champions on Ford for 12 Years

It is a significant tribute to Champion dependability that Champions have been standard on Ford products for 12 years.

They are also equipment on the entire range of motor cars, including 70 per cent of the makes

selling for \$2,000 and upward.

More than 90,000 dealers sell Champions. You will know the genuine by the Double-Ribbed sillimanite core. Champion X is 60 cents. The Blue Box 75 cents.

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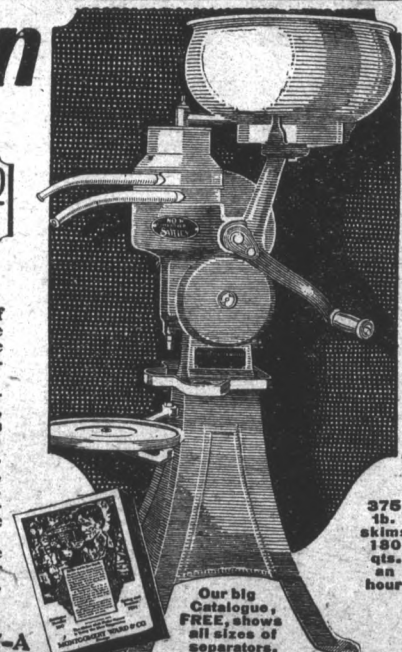
The Sattley Separator is made in our own factory—it is strong, firm on its base, smooth running, easy to turn and clean—and easy to buy. It stands up—and it bears our absolute guarantee.

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## Elijah, Man of Iron

Our Weekly Sermon—By N. A. McCune

MANY stories are built around one man, as the hero who opposes all his enemies single handed, or with but a few companions. Most schoolboys have recited Macaulay's "Horatius," where the patriot volunteered to hold the bridge against an army, with but two to assist him.

Then out spake brave Horatius,  
The captain of the gate:  
"To every man upon this earth  
Death cometh soon or late.  
And how can man die better  
Than facing fearful odds,  
For the ashes of his fathers,  
And the temples of his gods.  
Hew down the bridge, Sir Consul,  
With all the speed ye may;  
I, with two more to help me,  
Will hold the foe in play.  
In yon straight path a thousand  
May well be stopped by three.  
Now, who will stand on either hand,  
And keep the bridge with me?"

No story every written surpasses in dramatic power the struggle of Elijah with the priests of Baal. So great was



the impression that Elijah made on his generation, that his return was confidently expected. When Christ came, some thought he might be Elijah. A delegation of prominent citizens went out from Jerusalem to interview John, the Baptist, and inquired if he were not the fiery prophet revisiting the scenes of his labors. We are told that it was a belief of the Jews that he had come again and again disguised as an Arabian merchant, to wise and faithful rabbis at their prayers on their journeys. "A seat is still placed for him to superintend the circumcision of Jewish children. Pass-over after pass-over, the Jews of our day place the paschal cup on the table, and set the door wide open, believing that that is the moment when Elijah will reappear. When goods are found and no owner comes, the answer is, 'Put them by till Elijah comes.'"

HIS whole manner of life was such as to give rise to such beliefs. There was something mysterious about him. He suddenly appeared, pronounced judgment, uttered words of warning, and disappeared. No one knew where he went. The king searched his kingdom over to find him, when the long drought was on. He was stern, fearless, impetuous in word and act. He lived much alone, seemed to have no intimates. The only description we have of his appearance is brief but vivid: "He was a hairy man girt with a girdle of leather about his loins," Stanley says of him: "Of all the prophets, he is the one who is most removed from modern times, from Christian civilization. There is a wildness, an isolation, a roughness about him, contrasting forcibly with the mild beneficence of his immediate successor, Elisha."

IN one of his unexpected appearances he announced, "As the Lord God liveth, before whom I stand, there shall not be dew nor rain three years, but according to my word." The drought lasted three years, and its punishment was fearful. The prophet was cared for by the birds at first, then by a poor widow. Meanwhile King Ahab was dispatching his secret service agents everywhere to find this disturber of the peace, and bring him to trail. One day the two men met face to face. The king blustered but soon his imperiousness melted into awe. Like others he was mastered, not master, in the presence of this redoubtable hermit. He plainly told the king that

his wickedness and the idolatry of his people had brought on this devastating three-year drought. He announced there would be a contest on Mount Carmel between the two religions, to ascertain which was the true one.

Carmel is one of the most commanding sites in Palestine. It had been a place of retreat and worship from the earliest times. It commands a glorious prospect of the Mediterranean and of the land. No spot could have been chosen for this contest more awe-inspiring, or more appropriate to the lofty decision that was to be reached. Sir George Adam Smith says, "Before him, who stands on Carmel, nature rises in a series of great ranges, stages from sea to Alp: the Mediterranean, the long coast to north and south, with its hot sands and palms; Esdraelon covered with wheat, Tabor and the lower hills of Galilee with their oaks, then, over the barer peaks of Upper Galilee and the haze that is about them, the clear snow of Hermon, hanging like an only cloud in the sky. It was in face of that miniature universe that the Deity who was Character was vindicated as Lord against the deity who was not."

OF course we shall not describe the struggle that took place between the prophet of the true and the prophets of the false. That is told in First Kings with unapproachable vividness. The frenzied earnestness of the fanatical priests of Baal, the mockery of Elijah, the building of the altar, the prophet's short, confident prayer, the answering fire from heaven,—this forms one of the unforgettable pictures of the Old Testament. Children should be told it before they are old enough to read. Adults should read it for the good of their own faith in the God of Heaven and Earth.

It makes us feel our kinship with Elijah to know that once he was afraid, and ran for his life from—a woman. Personally I don't blame him.

And the woman who had evil designs on the prophet was crafty, cruel and vindictive to the full meaning of those words. I doubt it even John Knox could have handled her, as successful as he was with Mary Queen of Scots. He might have, but it would have tested him out. Elijah did the only sensible thing. He got out of town by the nearest route.

THE narrative of what happened to him while in flight is as interesting as the struggle with the priests of Baal. There are some people who invest everything they touch with interest. Where they sit is the head of the table. Where they go, newspapers are sure to follow. Elijah was like that. The reporters must have followed him, too; at least some one who could write wonderfully well got the facts and put them into form. Naturally this servant of Jehovah went to Mount Horeb, where the law had been given to Moses. It was to all loyal Hebrews sacred ground. There he may have thought, not only could he rest and be safe from the fangs of Jezebel, but he would receive a blessing from God. It may be doubted whether he should have gone to Horeb at all. When he had been fed by the angel should he not have gone back to his people where he was so sorely needed? At all events, the "voice of gentle stillness" recalled him to his work. Duty spoke and Elijah responded.

SUNDAY SCHOOL LESSON FOR  
APRIL 13.

SUBJECT:—Elijah and the Struggle with Baal. 1 Kings 18: 20-24, and 36-39.

GOLDEN TEXT:—No man can serve two masters—Ye cannot serve God and Mammon. Matthew 6:24.





## Doings In Woodland

*Bruin and Rolly Play Doctor*

**H**O, Ho, hum—um," yawned Bruin one bright sunny morning. "The sun is up and I must be getting up, too."

As he was dressing he heard a flutter at the window and "Cheer-up, Chee—chee—ee," over and over again. Peeping between the curtains, he saw a little bird on the window sill singing just as hard as any little bird ever could. And how glad that little bird's song made Bruin feel.

"A lucky day it will be for me, when a little bird sings at my window like that," thought Bruin to himself.

Carefully he put down the curtain and hurried into the pantry for some



"Your wing is broken," said Bruin.

crumbs for that little bird's breakfast. But when he got back with them the bird was gone.

Of course he had to tell his friend Rolly Rabbit all about it. But Rolly only laughed at him when he told him that this little bird would bring him good luck.

Now the real part of our story begins when Bruin was coming back from the Woodland grocery store that morning. He was nearing the bend in the road when a flutter in the bushes nearby made him stop.

"What was that?" asked Bruin to himself. "Guess I'll have to go over and see."

Carefully he tiptoed in among the bushes that he might not frighten it away with his clumsy feet. He looked

of a sudden he saw a flutter right by his big foot. He had almost stepped on a little bird. It lay so very still that Bruin picked it up. One little wing fell limp at its side.

"You poor little thing," said Bruin "your wing is broken. How did you ever do it?"

But the bird could only answer him by a faint little "che—chee," with a note that told how dreadfully it did hurt him.

"I'll take you right home with me and see what we can do for this," said Bruin.

Although the bird did not know the animal language, he seemed to understand what Bruin meant and nestled friendly in his arm.

"What have you there?" asked Rolly as Bruin came in.

"I found this little bird down the road, Rolly. It has a broken wing. And, do you know, Rolly, I think it is the same little bird that was singing on my window sill this morning," answered Bruin.

"No matter what bird it is, we must do something for it, quickly," said Rolly Rabbit.

So together they doctored the bird and mended the broken wing with tiny splinters and fed him everything that little birds should eat. In a few days he was so much better that he could sing to Bruin and Rolly for being so kind to him. It was not long before he could fly about the house. He would light upon first one shoulder and then the other and chirp and sing to them, but always in the strange bird-language that neither Rolly nor Bruin knew, but seemed in a way to understand.

Then one bright morning Bruin opened the door and the little bird flew out, but as he went he seemed to say to his two strange friends "Thank you so much for what you have done. I'll come back to see you again."

And next week we'll find out what he did when he came back.

## Rural Health

*By Dr. C. H. Lerrigo*

### SYMPATHY FOR THE TUBERCULAR PERSONS.

**O**NE who has never faced in person the menace of the Great White Plague may find it hard to give due need of sympathy to those who are its victims. There is too strong a tendency to feel provoked rather than sympathetic; a stronger interest in making sure that the consumptive brings no harm to you and yours than in any efforts to help lift the weight that rests upon him.

This feeling is not likely to be helpful in fighting tuberculosis for if we make outcasts of all those who have the disease there will be a stronger inclination than ever to hide it up, call it by other names, and thus allow it to get a stronger hold. Tuberculosis is dangerous. Let on one try to hide that fact. But the intelligent patient who has tuberculosis may yet be quite harmless. It all depends upon the care that the patient takes to avoid open coughing and the disposition that he makes of the sputum. A patient who is educated to do this in the proper way is not a dangerous person and there is no reason why

neighbors should not call upon him and people go back and forth to his home.

One of you wrote me last week about your school teacher having tuberculosis and keeping the schoolroom very close and hot in cold weather. I am very sorry that anyone having pulmonary tuberculosis should attempt to teach school. This is putting the children to unwarranted exposure and is also very bad for the teacher. Most people who have tuberculosis are very considerate for the welfare of others. This teacher should leave her position until she has overcome the disease.

### REMOVING BLACK HEADS.

Is there any remedy for removing black heads and pimples from the face?—Miss E. F.

A good plan of treatment is to wash the face thoroughly every night with soap and water and then apply a lotion consisting of precipitated sulphur, 8 gm.; salicylic acid, 0.66 gm., and lime water sufficient to make 120 gm. The diet should be regulated, and candy, pastry and rich and greasy foods avoided. Careful attention to bowels is also important.

## JELL-O

*America's most famous dessert*

—for Sunday night supper

It seems as though Jell-O were just made for Sunday night suppers, when Mother wants something easy, and the Family wants something festive. Jell-O is easy to prepare as a cup of tea; you can do it on Saturday for Sunday night. And Jell-O is party-like in its tempting flavor and sparkling color. Children love it. There is no end of interesting ways to serve Jell-O. Ask for a Jell-O Recipe Book.

THE GENESEE PURE FOOD COMPANY  
Le Roy, New York

### RECIPE Cherry-Strawberry

Pour off juice from a can of plain sour cherries, add enough water to make one pint, heat to boiling point and dissolve in it a package of Strawberry Jell-O. When it begins to harden add the drained cherries and one half cup nutmeats. Serve with whipped cream.



If you have a Farm or Farm Land for sale, let the Michigan Farmer find you a buyer through an advertisement in its columns.

## Riverside Tires

OVERSIZE  
CORD

### 10,000 Mile Guarantee and You Save 1/3

What more can any other tire do for you? Riverside Oversize Cords will run 10,000 miles—guaranteed—often up to 18,000 miles. What is the use of paying one-third more?

One-third on tires is a big saving. And this saving is sure—because Riverside Oversize Cords are guaranteed for 10,000 miles service on your car.

And this guarantee is fifty-one years old. It has back of it fifty-one years of straightforward dealing.

### Quality Gives the Mileage

The big mileage of Riverside Oversize Cords over rough roads is put into them in the factory. It is the mileage built in by quality. High, thick, strong treads—firsts in every particular—built with the largest amount of good live rubber.

This extra Quality of Riverside Cords has made us the largest retailers of tires in this country. One user tells another. Just try Riverside Oversize Cords. You, too, may as well save one-third.

### You Don't Risk One Cent

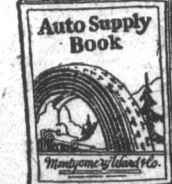
Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for \$5.00 or \$15.00 more.

Then, if you don't find them the equal of any first-quality oversize cord made, send them back. We will refund your money. These prices buy 10,000 miles of service—and more.

CATALOGUE No. 464M00—Be sure to give size

| SIZE       | PRICE   | POSTAGE | SIZE       | PRICE   | POSTAGE |
|------------|---------|---------|------------|---------|---------|
| 30 x 3 1/2 | \$ 9.75 | 28c     | 32 x 4 1/2 | \$20.95 | 45c     |
| 32 x 4     | 16.95   | 42c     | 34 x 4 1/2 | 21.95   | 48c     |
| 33 x 4     | 17.45   | 43c     | 33 x 5     | 28.75   | 58c     |
| 34 x 4     | 18.25   | 43c     | 35 x 5     | 29.95   | 61c     |

Wire your order. Orders received by telegraph will be shipped the same day C. O. D. Write today to our house nearest you for free Auto Supply Book. Address Dept. 37T.



"I find your Riverside Cord tires give wonderful service. They have proved to be better than any tire I ever used and I have used some of the most expensive tires on the market. You will find me a strong booster for Riverside tires."  
H. J. Armbruster  
Urbana, Ohio.

"I have been using Riverside Cord tires for some time and think they are great. I have got more service out of them than any other tires I have ever used. When I need tires again I will buy the Riverside."  
Alfred L. McNay  
Williamstown, Ky.

"Would say that the Riverside tires are all right. I have been in the delivery Business for ten years and find that the Riverside Cord tires last longer than other tires, even those costing a great deal more money."  
Chas. Cassen  
Petersburg, Ill.

Established 1872  
**Montgomery Ward & Co.**

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# Woman's Interests



## Make Inexpensive Changes In Spring

*These Housecleaning Suggestions Put in Practise Will Add Up-to-date-ness to Homes*

IT is easy to make changes in a home during house-cleaning time, and there are usually a number of little things that can be changed, without cost, that will contribute toward a more artistic atmosphere.

If your pictures have been hung with a wire coming to a point at the moulding and forming a V shape, try hanging them with two wires, each wire being vertical thus agreeing with the vertical line of the frame. The other way is inartistic and not restful to the eye.

If your woodwork is tan, light brown or yellow, dye your white window curtains cream color. They will harmonize with the woodwork and give a warm glow to the room. The dyeing is very simple. Purchase a pound of yellow ochre at any paint or hardware store. This will cost less than ten cents and is enough for six or seven usings. Put a little of this powder into a small salt bag and tie up the top. Dip this in a pan of water until the water becomes the desired shade. After the curtains have been washed, dip them in this solution until they are the right color remembering that

I THINK the first virtue is to restrain the tongue; he approaches nearest to the gods who knows how to be silent, even though he is in the right.—Cato.

they will dry lighter. Stretch them if possible. If not, hang them up before ironing as rolling will often leave them streaked.

Enamel a few olive bottles of good lines, in bright colors to harmonize with the room. Absolutely no artistic skill is necessary. Simply purchase a small can of enamel and a brush and paint right on the glass. If you desire light blues, rose color or other light colors mix white enamel with the color. Clean the brush with turpentine. The plain black vases are very attractive. Budding branches, pussy willows or flowers in a new vase of the right color will add a bright touch to a room.

If you possess an old fashioned china closet containing a motley array of dishes, curtain it with cretonne, or gingham.

Eliminate all unnecessary bric-a-brac, photographs and calendars.

There is no rule better than the old one of William Morris': "Have nothing in your home that you do not know to be useful, or believe to be beautiful," and it can be applied to every home. Mrs. E. M. Clark.

### CHEESE MAKES A CHANGE.

THESE tasty cheese sandwiches are especially good for the lunch pail and also splendid to serve at parties and luncheons.

#### Deviled Cheese Sandwiches.

1½ cups grated cheese 1 level tsp. dry mustard  
2 tb. olive oil 1 tsp. vinegar  
2 tb. vinegar

Mix all together until creamy and spread on toast or crackers and heat five minutes in a quick oven.

#### Cheese Butter Sandwiches.

¾ cup butter 1 level tsp. mustard  
6 tb. grated cheese 1 tsp. vinegar

Beat the butter into a cream and add the cheese and seasonings. When

well blended spread between buttered bread.

### COOKING VEGETABLES CORRECTLY.

HERE is a table for housewives to clip out and post in the kitchen. Home economics experts, after a

be some of the food value, for a vegetable will never be eaten if it is disagreeable to look at and to taste."

#### Avoid Overcooking.

Most housewives make the mistake of cooking their vegetables too long, the article brings out. Cabbage and cauliflower, for example, should cook

Quite as important as short boiling is quick serving. The longer a vegetable is kept hot, the more of the strong flavor will be developed, the more of the vitamins will be destroyed, and, if kept in hot water, the more of all the nutrients will be extracted.

## Household Service

### PREPARING SAUSAGE TO SELL:

We are planning to can meat to sell and are, as yet unfamiliar with a practical way to put up the sausage, especially pork. We have fried some down and covered it with lard for our own use, but do not think it would sell good. If put in skins, does it require smoking?—Mrs. J. L.

It might be well to smoke some of the pork sausage. After filling the cases, smoke as for bacon, and then wrap in air-tight sacks and store in a dry cool place. Some advise dipping the cases in paraffin.

I believe you would find a ready market for the canned sausage following the recipe given in bulletin.

### TO MAKE MAPLE SYRUP.

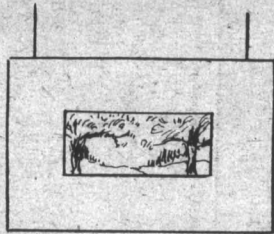
It takes 25 to 40 gallons of sap to 1 gallon of syrup. It takes 2 eggs and ½ quart of sweet milk to cleanse a gallon of syrup. 1 gallon of syrup must weight 11 pounds if you want to sell it. We made 96 gallons last spring and everyone said it was fine. This will keep in a syrup can without sealing in jars.

After your syrup is all cooked add eggs and milk and boil. If there are settlings after it is strained put more eggs and milk in and reboil and strain again. Beat eggs until frothy then add milk and stir before you stir it in syrup.—Mrs. M. B.

We regret that there were misleading statements in the Mar 29 issue regarding how to make maple syrup. The above is the experience of a farm-wife and one would do well to follow it when the sap runs again.

Narrow loaf pans insure thorough baking.

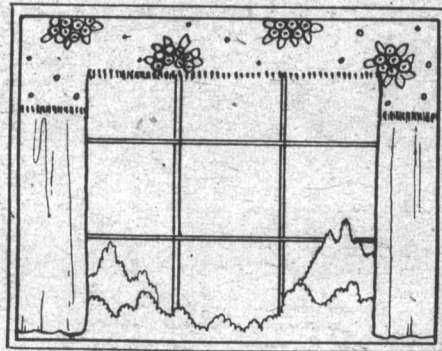
### CHANGES TO MAKE AT HOUSE-CLEANING TIME...



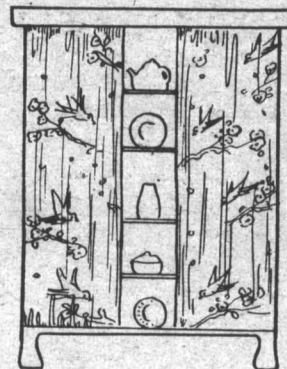
RE-HANG PICTURES



MAKE DECORATIVE VASES



DYE CURTAINS



CURTAIN CHINA-CLOSET



ELIMINATE MOST PHOTOGRAPHS AND BRIC-A-BRAC.

long series of experiments, have determined just what method of cooking is best to preserve the appearance, taste and food value of various vegetables

in fifteen minutes, instead of the customary period of half an hour or over.

| BAKE           | STEAM            | BOIL           |
|----------------|------------------|----------------|
| Irish potatoes | Sweet potatoes   | Spinach        |
| Sweet potatoes | Squash           | Green peas     |
| Squash         | Parsnips         | Green beans    |
|                | Carrots          | Cabbage        |
|                | Yellow wax beans | Brussels       |
|                | Beets            | sprouts        |
|                | Sinach*          | Cauliflower    |
|                | Green peas*      | White turnips  |
|                | Green beans*     | Yellow turnips |
|                |                  | (Rutabagas)    |
|                |                  | Onions         |
|                |                  | Red cabbage**  |

\*May be steamed. They will retain more food value, but will lose a little color.

\*\*Add 1 tablespoon vinegar to each cup of cooking water.

"In cooking the aim should be to save food value as well as appearance and flavor, and by the intelligent selection of a method of cooking it is usually possible to do so. If, however, we have to sacrifice anything, let it

## Should We Answer Their Questions?

A CHILD is by nature a questioner and seeker of knowledge. In trying to know himself and the world about him, he asks questions of everyone who comes his way. But many, too many, of these questions pass unanswered or are evasively answered.

Questioning is thinking. When a child asks questions, he is thinking and his mind is growing. Whether we answer his questions or not, and how we answer them influences the extent of development of the child's mind. If we answer the child's questions honestly, truthfully and understandingly, his mind will grow steadily and as surely as his healthy body grows.

If the parents and others turn the child aside with an excuse that they must not be bothered with questions and "to run along and play," it forces the child's mind into a rut, robs the child of the thrill of learning, and of discovering new things, and dulls his enthusiasm for knowledge.

We recall the incident of the little boy who had listened to a very impressive ghost story as narrated by an older friend. Hurrying home he asked his father, "What is a ghost, daddy?"

"It is a boogy man who will get you if you're not a good boy," answered the father as he went on about his work.

This little fellow went through boyhood timid and afraid of the dark dreading to be alone for fear this boogy man whom he heard mentioned often would get him, and laughed and joked at by his playmates when he voiced his fears to them.

Then we urge that every mother and individual having children in their training answer their questions honestly and truthfully to the children's satisfaction, no matter to what subject their inquiring minds happen to turn. Perhaps there will be a lot of them just when mother is the busiest, but do not turn them aside if your child is to develop his mind and natural inclinations.



## Coaxing Spring Appetites

*Some Readers' Tested Recipes That Will Help to Drive Away That Laggy Feeling*

**R**ECIPES for so many good things were sent in this week that to select of the prize winners was a difficult task. But a short time ago one of our readers told me about the experience she had recently when planning to entertain. She had planned to have Swiss steak for dinner. In the midst of preparing it she discovered that her larder contained no onions. Of course, she modified her recipe just as the home cook has to do a great many times.

With this experience in mind I have selected the recipes which contain the ingredients that are most likely to be available to the farmwife. The five best recipes follow here.

### Dandelion Green Salad.

This is the best dish I know of to stimulate the appetite in the spring. Gather dandelion greens as soon as the frost is out of the ground. They are small, but real tender and crisp and not bitter. Clean about a two-quart pan full. Wash them thoroughly. Make a dressing as follows: Melt a heaping tablespoon of lard in a skillet. While hot mix in a rounding tablespoon of flour. Stir till a smooth paste is formed. Add vinegar enough

nutmeg, dot with butter and bake twenty minutes. Serve with medium cream.—Mrs. C. B. Tipton, Ind.

### Buttermilk Muffins.

Sift together one cup of white flour, one cup and a quarter of graham flour, half a teaspoon of salt, two teaspoons of baking powder and a half a teaspoon of soda. Mix a third of a cup of molasses with a cup of buttermilk, add to the dry ingredients. Bake in buttered and floured gem-pans in a hot oven for twenty-five minutes.

### Lettuce a New Way.

The most appetizing dish that really sharpens our appetites is my method of preparing lettuce.

Wash and finely shred lettuce, placing it in a large salad dish. Mixed through this a finely minced onion. The lettuce has just a little salt sprinkled upon it.

Next cube 5 or 6 slices of bacon and fry crisp. This with a little more than ½ of the fryings and 2 or 3 tablespoons of vinegar added at the last, is poured over the lettuce. It must be done as the very last article to set upon the table.—Mrs. F. K., New Lothrop, Mich.

Corn meal spoils more readily than flour and for most families it is best to buy in small quantities.

### What I Have Discovered

**I**N doing our daily housework and being forced many times to solve our own problems, the housewife often finds a different method of doing her work or discovers some home or cooking hint.

If we could pass these hints on to other housewives they would undoubtedly help them over some rough spots.

So this week we will give a three piece kitchen knife set for your two best household discoveries. The next three prizes will be two piece kitchen knife sets.

Address your letters to Martha Cole, Michigan Farmer, Detroit, Mich., before April 18.

to make a gravy. Add salt to taste. Pour this hot over the greens. Do not cook. Garnish with sliced boiled eggs. They are delicious served this way and very appetizing. This also serves as a good spring tonic.—Mrs. O. E. G. Owosso, Mich.

### Vegetable Cutlets.

Boil 1 pound parsnips and rub through a sieve. Boil ½ cup milk and pour, while hot, over 4 ounces bread crumbs. Add the parsnip puree, 1 tablespoon butter, salt and pepper, 1 onion grated, a few chopped mushrooms. 1 tablespoon chopped parsley, 1 teaspoon grated cheese, a few drops lemon juice and the yolks of 2 eggs. Mix thoroughly and form into cutlets. Brush over with the beaten whites of eggs. Roll in bread crumbs and fry a golden brown in boiling fat.—Mrs. A. C. M., Berrien Springs, Mich.

### Beet Salad.

A dish which is a great favorite with us at this time of year, is a combination of beets and horseradish.

Chop desired amount of nice red beet pickles. Add about one-fourth the amount of horseradish which has been standing in good vinegar. Mix well, and serve either as a salad or relish. It is both wholesome and appetite inducing.—Mrs. C. G. N.

### Brown Betty.

This is my best springtime recipe. To three cups of sweetened rhubarb sauce add two cups bread crumbs. Mix thoroughly and place in baking dish. Sprinkle with brown sugar and

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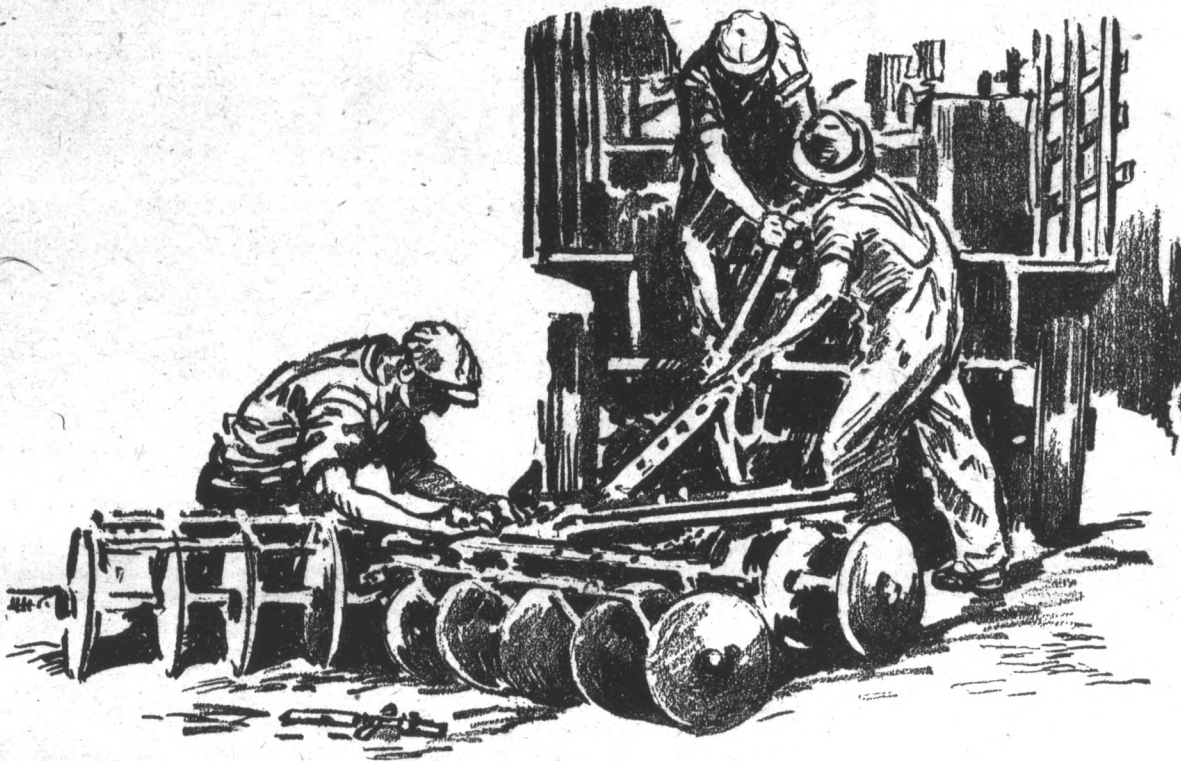
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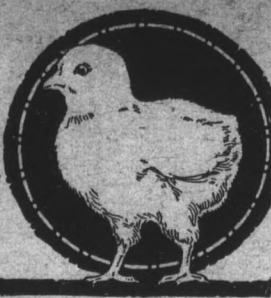
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Tom Barron White Leghorns Heavy Type Brown Leghorns  
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You want strong, healthy chicks that grow fast into heavy producing Leghorns. You can have these chicks from us at a very reasonable price. Old customers took over 65 per cent of our chicks last year. H. A. Burke, of Green Bay, Wis., writes he had 70 per cent production during Dec. and Jan., 22 below zero, of chicks bought from us May 1st, 1923. 12 years of breeding for heavy egg production. Carefully selected breeders, headed by large, vigorous males and many years of successful hatching and shipping chicks, gives you chicks that will bring you success. 100 per cent live arrival guaranteed. Catalog price list free. Write today. ROYAL HATCHERY AND FARMS, S. P. Wiersma, R. 2, Zeeland, Mich.



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From well kept, well fed, free range heavy laying flocks. Barred Rocks, 50, \$7.75; 100, \$15; 500, \$72.50; Anconas, 50, \$8.75; 100, \$13; 500, \$62.50 White Leghorns, 50, \$5.75; 100, \$11; 500, \$52.50. Order direct from ad, saving time and money. Our nine years' experience hatching and selling Chicks, your best protection. 100 per cent live delivery guaranteed. Good reference.

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Are from pure-bred flocks culled by M. A. C. graduates. Only choicest breeders kept. Best utility and exhibition matings. Barred Rocks, 230 to 302 egg strain. R. I. Reds from Liddicoat's best. Anconas direct. Sheppard's White Leghorns direct M. A. C. Get 1924 catalog, price list. Reference, Dundee State Savings Bank.

THE DUNDEE HATCHERY

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White, Brown and Buff Leghorns..... \$7 \$13 \$38 \$62  
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Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Orders booked for 10 percent down balance 10 days before chicks are to be shipped. Catalog free. HUNDERMAN BROS., POULTRY FARM, Box 25, Zeeland, Michigan.

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From Early Maturing Stock.

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Early maturing means that our stock has been selected and mated to produce fowls capable of making high yearly records. Great winter layers from pure-bred flocks under our own personal supervision. They are carefully culled and mated and from flocks headed by cockerels of high producing blood lines. Our best quality chicks have record breeding on both sides. B. P. Rocks, R. I. Reds, W. P. Rocks, W. Wyandottes, W. Leghorns, Anconas. Sent prepaid to your door. 100 per cent live delivery guaranteed. Write for illustrated catalog and price list. Low prices on quality chicks, \$12.00 per hundred and up. Bank References.

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Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every chick. Order from this Ad.  
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Hatched under best conditions in Newtown Incubators. Every Chick carefully inspected. 100 per cent live delivery guaranteed. Reference, State Commercial Savings Bank, this city. Write for prices on special matings. GREAT NORTHERN HATCHERY, Box 56, Zeeland, Michigan.



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From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State. Pure-bred Tom Barron-English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, well-hatched Chicks from tested Hoganized free-range stock that make wonderful winter layers. Chicks sent by Insured Parcel Post, Prepaid to your door. 100 per cent live delivery guaranteed. Satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality chicks before placing your order.

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And eggs for hatching. Rose and Single Combs. Michigan's greatest color and egg strain. Bred from fourteen generations of winter layers. Write for free catalog. Interlakes Farm, Box 39, Lawrence, Mich.

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S. C. White Leghorn Day-old Chicks (English Strain) from 2-year-old hens from our own stock. Strong and vigorous. Best breeding. Also Barred Rock Chicks from 2-year-old hens from best laying strain. Catalog free. Write today. Hillcrest Poultry Farms & Hatchery, Box A, R. 2, Holland, Mich.

## April Poultry Notes

BY R. G. KIRBY.

IT is a great satisfaction to have plenty of chestnut hard coal in sight to operate the coal burning brooder stoves. They will burn soft coal or a mixture of hard coal and Solvay coke but the chestnut hard coal furnishes the best heat with the least danger of the fire going out. I have tried Solvay coke for brooding chicks but it burns too fast and there is danger of the fire dying out before morning.

Beginners with coal brooders should watch them carefully at the end of the first week. That is the time the ashes begin to accumulate around the sides of the stove and clinkers may clog the grates. Above that time give the ashes a thorough shaking, remove the clinkers and turn on the draughts until the fire burns briskly. The renovation will make the fire safer for another week.

When installing brooder stove pipes, saw a hole about a foot wide in the wooden roof and cover it with one of the galvanized flanges furnished by tinners. Then the stove pipe will not touch the wood and the fire risk is reduced. Nail the flange securely to the roof and seal the seams and the nail holes with tar.

Two pipes about three feet long are needed for the brooder stove. One is covered by a cap and fits on the roof where it remains permanently. The other can be shoved up into the flange and then down on the stove. Then the stove can be quickly installed in the brooder house and easily removed when the chicks are through with the stove and ready to roost.

In emptying brooder ashes be careful not to drop hot coals into the dry litter beneath the canopy. Occasionally inspect the litter and see that it does not become banked up too high against the sides of the stove or interfere with the working of the thermostat. If the thermostat wafers become old or show signs of leaks it may be best to order new ones to be sure that the thermostats will respond quickly to changes in temperature.

### Fight Colds Now

A lot of the colds that cause losses next fall can be prevented by teaching the chicks to roost at an early age. Then they do not crowd and become overheated at night and catch cold in the morning on the cool ground. The slight running at the nostrils which may trouble a growing chick all summer may be the cause of the swollen head which suddenly develops during the cool fall weather.

Keep the brooder houses as free as possible from dust and it may help to prevent colds. This is done by occasionally changing the litter and brushing the stove and brooder canopy which is soon thickly covered with dust. Keep down the accumulation of cobwebs and keep the windows clean to permit the sunshine to enter and help disinfect the house.

Mites often sap the blood from young stock and make them more susceptible to colds. The roosts in colony houses need just as much spray dope as the laying house roosts. Often the colony house roosts are nailed to the uprights furnishing crevices where millions of mites can hide during the day. Soak those crevices with the engine oil drained from a crank case and you will help protect the young stock from mites.

### Watch Breeding Stock.

If any of the male birds seem to be light in weight or lacking in vigor isolate them for a few days and feed heavily. Some of the most valuable cockerels generously give most of the feed to the hens and spend too much of their own energy in fighting. If they are out of condition the poultry keeper pays the bill with infertile eggs and weak chicks.

Hens sometimes become crop bound in the spring by eating too much dry grass when first allowed on the range

## White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 507, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa.

### Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

### Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

### Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

### You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO., Dept. 507,  
Waterloo, Iowa

Send me the [ ] 50c regular size (or [ ] \$1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

Name.....

Town.....

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

Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.



## Chicks Dying

Quick, drop an Avicol tablet in the drinking water

White diarrhea kills half of all the chicks hatched, yet this loss is easily prevented, easily stopped. For years, thousands of poultry raisers have stamped out the trouble almost entirely, by putting Avicol in the drinking water. Within 48 hours, the sick ones are lively as crickets. Mrs. Wm. May, Rego, Ind., says: "I was losing 15 chicks a day before I received the Avicol. I haven't lost one since."

### Trouble gone in 2 days

Chas. N. Kittinger, Willows, Calif., writes: "Twelve of my chicks had diarrhea by the time I received my Avicol. I immediately gave them some, and by the second day, the trouble disappeared and now they are all as lively as crickets. If I had only known of Avicol sooner, I would have saved lots of chicks."

### Stop dying at once

"Last spring I bought 25 baby chicks," writes Mrs. John Shaffer, Owen, Wis. "When about a week old, they began dying, would get droopy and in a few hours would die. When I had 15 left, I began giving Avicol and they stopped dying at once. I did not lose another one."

### Costs nothing to try

Don't let white diarrhea get started in your flock. Prevent it! Stop it! Readers are urged to write to Burrell-Dugger Co., 602 Allen Ave., Indianapolis, Ind., sending 50c as a deposit for a package by mail prepaid (or \$1 for large size holding nearly 3 times as much). If you prefer, send no money but deposit the money with the postman on delivery. If the Avicol doesn't stop your chick losses immediately, if you're not more than satisfied, every cent of your money will be promptly refunded by the manufacturers.

Burrell-Dugger Company,  
602 Allen Avenue Indianapolis, Indiana

**140 Egg Incubator**  
EXPRESS PREPAID **\$13.85**

Made of California Redwood, covered with galvanized iron, double walls, air space between, built to last for years; deep chick nursery, hot water heat, copper tanks.

Shipped complete, set up, ready to run, express paid east of Rockies.

**140 Egg Incubator with Brooder \$19.75**  
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30 Days Trial

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at \$13.25. Shipped complete, set up ready to use.

**140 Egg Incubator and Brooder - \$17.75**  
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WISCONSIN INCUBATOR CO. Dept. 120 Racine, Wis.

**"It Fills the Bill"**  
**"Self-Serve" Chick Feeder**

Holds 12 quarts. Can't clog. Chicks can't roost on cover nor touch feed with feet. Price \$1.50 plus postage. Send for booklet.

**Ira P. Hayes**  
Dept. B-11, Eckford, Michigan

**The Balance is Perfect**  
—that's why chicks thrive on—  
**DICKINSON'S Globe Chick Mash**  
(With Dried Buttermilk)

**DICKINSON'S GLOBE CHICK MASH**

100 LBS. NET  
THE ALBERT DICKINSON CO.  
CHICAGO, ILL.  
CHICKEN FEED  
100 LBS. NET  
THE ALBERT DICKINSON CO.  
CHICAGO, ILL.  
CHICKEN FEED

They stuff on the grass because they have lacked green feed while in winter quarters. I find that hens which receive green feed throughout the winter and a dry mash before them at all seasons do not have the abnormal craving which makes them eat too much of the dead grass. When a bird is found to be crop bound the material must be removed by massaging or an operation before the system of the bird is thoroughly poisoned by the material in the crop.

Cases of limberneck result from burying chicks in a few inches of dirt where they are later scratched out by other animals. The coal burning brooder stove is the best place for dead chicks. The body of the chick and the disease germs which it contained are entirely destroyed. That is one advantage of the coal burner over the oil stove. Scrap bones can also be placed in a coal burner and the ashes from the bones fed back to the chicks.

### Building Poultry Houses.

In spite of all new ideas on poultry house construction I notice that many poultrymen still favor the shed roof and half span poultry houses. When on a well drained site they do give good satisfaction. A farmer needs a poultry house that can be constructed for a moderate sum. After it is built he has little time for manipulating fancy systems of ventilation.

A board floor in a poultry house is not permanent and may harbor rats which are one of our most destructive chicks pests. The concrete floor costs more to build but does not need repairs. It may seem that hens on a concrete floor are practically living on a cold heap of stone. Of course that is true but when the floor is deeply covered with litter the hens do not know what is beneath the litter and they are comfortable. The important factor is to build up the concrete floor on about 18 inches of field stone and sand so that it will always be well drained. The new plan of painting the stone floor with asphalt paint is proving very successful in keeping down capillary water.

I still believe that lumber gives the poultryman the most hen house for the money. Tile and cement have been successfully used for hen houses but the fact that most breeders use lumber is evidence of its superior value in poultry house construction.

I think that poultry houses should be at least 18 feet deep. Then the hens can roost far enough from the windows to avoid draughts. It a little snow blows in the open front there will still be a wide area of dry litter in which the hens can scratch.

### CURING COLDS.

Our rooster and young pullets seem to have a scum over their eyes and are going blind. Rooster does not have the scum as the pullets but the eye is a bit swollen and he is already blind in one eye and the other eye is almost closed. Their combs are red and healthy looking. Can you advise me what to do for them?—E. J.

The inflammation of the eyes is probably caused by colds which may develop into roup. The colds are caused by exposure to draughts and overcrowding at night. Dampness and lack of ventilation also cause colds. Try dipping the head of each sick bird in a dilute solution of Zenoleum or some other commercial dip. Inject a little of the solution in the nostrils after removing as much of the mucous as possible with tissue paper.

Often young stock catch cold by crowding in the corners of brood coops instead of roosting in a large house.

It is usually a matter of efficiency and economy to use mechanical instead of human energy wherever possible to do work. Human energy had better be used in brain work which a machine lacks.



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## Some Thrilling Experiences

*By a Few Merry Circleers*

THE most thrilling experience I have ever had was when the forest fire swept through the locality where I live. I was about eight years old when it happened.

One morning my sisters, mother and myself went raspberrying. The berry patch was about a half mile from our home. We picked berries until noon. We had smelled smoke all morning, but had thought it was from a fire a long distance off.

There was a large hill between the berry patch and my home. As we went

But he taught me how to drive so if I ever got in a tight place again I would know what to do.—James McMillan, Chatham, Mich.

ON a late February forenoon, two of my brothers and I went to the lake, which is right across the road from our house. Floyd, the oldest of my brothers, and I were pulling Chris, my younger brother, on a hand-sled.

We went part way around the lake when we came to a place where the

bottom of a stump stuck up through a hole in the ice. I didn't think it was near warm enough for the ice to be melting, so I thought the water had come on top of the ice. Floyd and I pulled the sled up about eight feet from the hole and began throwing snowballs into the hole, but they floated so we could not tell if there was ice under the water or not.

I went to the shore and got a bushy tree and walked up two feet or so from the stump and stuck it into the water. Then all at once the ice broke and down I went. But I caught myself on the ice behind me so I didn't go clear under. I couldn't swim, but I turned around, crawled out and went to the house. Reuben Esch, Mio, Mich.

## What the W. B. Didn't Get

*Some Lucky M. C. Letters*

Dear Mr. Puddin' Tame:—

I, as well as Beatrice Leggerdine, like that name, because, if you can't tell us your name when we guess and guess without even coming within a thousand miles of it, why then that must be it.—Your niece, Rhoda E. Huber, M. C., Sturgis, Mich.

Why shouldn't that name be as good as any, provided you don't like to use "Uncle Frank." It doesn't matter what you call me, I would be the same fellow anyway.

Dear Uncle Frank:—

I have been very busy with my school work, but must stop now and write. What is the use of belonging to the Merry Circle if we don't write once in a while?

My mother just renewed the subscription for the Michigan Farmer and I am glad she did, for it would certainly be a great loss to read the letters of our cousins once a week. We take many other papers but the Mich-



Ariel Denton's conception of the South Wind.

igan Farmer is the only one I read. Well, I must close.—Your Niece, Ruth Tabor, M. C., Belleville, Michigan.

If you belong to a thing you might as well use it and get the pleasure from it. I am glad you are with us for another year.

Dear Uncle Frank:—

My brother and I have been "silent readers" just about ever since the Boys' and Girls' paper was started but have never answered any of the contests or written letters. Does it make any difference if brother and sister both answered the same contest?

I am just a "Freshie" in the Decatur High school and like it all very well, except Algebra. It is the most hateful thing. I wonder if anybody else hates it so? Well, I will have to ring off and make room for somebody else.—Your niece, Helen Lapekas, Decatur, Mich.

Even if there are a dozen between the ages of eight and eighteen in the family, all could answer the contest even if they do hate algebra. You can save postage by putting all the letters or contest papers in one envelope.

Dear Uncle Frank:—

I am at home with a light case of tonsillitis and for the loss of something to do I wrote another poem.

Maybe some of the boys and girls would like to know how I "do it." I just take my pencil and paper and sit down and wait for "inspiration." I never have the least idea what I'm going to write about until I get done. It sounds "fishy," but it's true.—As ever, Rex Ellis, Richland, Mich., R. 2. B. 35 a.

It may sound fishy to some, but I know it's so, for I often work in the same way. Often when I try the hardest I do the worst.

Dear Uncle Frank:—

On February the second, I saw a letter written by Viola Stein. I was so delighted to see her letter in the Farmer. Viola goes to the same high school as I do. She has a smile for everybody and she always looks on the bright side of things.

Say, Uncle Frank, I think you should have a prize for the Critic Contest Comment. I surely agree with you about the writing of the contest. Your "Work-to-Win Helper," Bessie Broderish, M. C., Ann Arbor, Mich., R. 3.

I am glad to know that Viola is putting M. C. principles into practice. The Merry Circle will get a great reputation if we all have smiles for others and look on the bright side of life.

Dear Uncle Frank:—

I answered one contest and had my answer just as you published the correct solution so I decided that the reason I failed must have been because the more fortunate ones wrote neater than I did.

It's hard work for a child my age to write as neat as some one sixteen or eighteen years old. Some way I don't seem to get every letter exactly the same size and the same slant. Maybe I can when I get older. I hope so anyway. Mother is a very pretty writer. She gets every letter just so and her pages always look so neat.



Florence Hustain and her Hobby.

She tells me to keep right on trying to do my very best because at my age her writing was irregular, too.

With best wishes to you, Uncle Frank, I am your M. C. niece, Muriel Frey.

Just because it is hard for the younger M. C.'s to compete. I have changed the method of giving prizes as announced last week. Your mother is giving you good advice, as mothers usually do.



## Art Lesson Contest

THE other day an artist was in and saw some of the drawings we got in the drawing contests. She said that our young artists needed instruction in using shadows effectively. In modern art, she said, mass shadows gave the best effect and details had best be ignored.

In order to pass this information on to you, I thought it best to have her make up a drawing and then have you copy it. The drawing below is what she made for me.

Do not trace it but make an actual



free hand copy of it yourself. This is the only fair way to do it, and I know all M. C.'s want to do things the fair way.

The ten who make the best copies of it will get prizes. The first two prizes will be fountain pens; the next three, flash lights; and the next five boxes of candy.

Put your drawing on a sheet of paper by itself with your name, address and age in the upper left hand corner of the paper. If you are a Merry Circle, put M. C. after your name.

This contest closes April 18th. Send your drawings to Uncle Frank, Michigan Farmer, Detroit, Mich.

### CONTEST WINNERS.

THIS trying to make a sentence of three words out of the letters in Uncle Frank was some hard job. When only five out of several hundred get it right, it is an indication that the problem was a real one.

A peculiar part of the results was that three of those who got the answer correct came from one family. Undoubtedly, they got their three heads together to work the problem out. Anyhow it looks as if the Shelby family will get a windfall in prizes this time. Also, I think that Gwendolyn Boltz and Wilfred Smith are due special mention for getting the correct answer alone.

The correct sentence is FLECK AN URN. This means to spot, or varigate an urn, or jar.

The other five who got prizes had something that nearly made sentences with sense to them.

Some had FUN CAN LERK, which would be all right if you could use an "e" instead of a "u" in spelling lurk. Undoubtedly what I said about fun lurking in this contest lead many astray.

I really do not like to give so many prizes to one family, as I like to spread them around, but under the circumstances I cannot award them in any other way.

The prize winners are as follows:

#### Fountain Pens.

Gwendolyn Boltz, Tecumseh, Mich., R. 2

Wilfred Smith, Montague, Mich.

#### Flashlights.

Helen Shelby, Coleman, Mich., R. 3.

Ruth Shelby, Coleman, Mich., R. 3.

Margaret Shelby, Coleman, Mich., R. 3. Candy.

Geraldine Witmer, Levering, Mich., R. 2.

Edna Cole, Linden, Mich., R. 2.  
Della G. Bowman, Fremont, Mich., R. 5

Alice Hocking, Ishpeming, Mich.  
Madge Dadow, Jackson, Mich., R. 1.

## More Lucky Letters

Dear Uncle Frank:—

I wrote not long ago, but I just can't suppress my ideas concerning the argument, "are boys rude to girls?"

I answer with a "yes." I'd like to put three exclamation points after it and three lines for emphasis under it; so that all the girls who think "boys aren't very rude" would take notice. Expressing my feelings is a slangish way I ask, "How do they get that way?"

Boys don't think they are rude. O, no! they think they're such dear, little, sweet little innocent things. But why try to knock my nose to one side of my face and spoil my looks for life with a snow ball as hard as a stone?

They slam the door right into my face, providing no teacher is around and just yesterday a boy stole my last apple.

If just for one year things would change. Girls escort the boys to different amusements. Oh, my goodness, how popular I'd be! I'd see that my "cuddly little dear" providing of course that I took one out; would have his collar down, his gashes buckled, his ear flaps down, collar up and hands warm.

Maybe some boys think they're that good now. I wish they'd announce themselves.—Just another M. C., Polly Svinisky, Stephenson, Mich.

I bet that meeting of the snowball and Polly's nose must have been a recent one. I bet Polly would make a good mother the way she would take care of these "cuddly little dears." I expect we will hear from a lot of good boys now.

Dear Uncle:—

I received my pen and I thank you very much for it. Three other Homer girls are going to try in the contests now after seeing my pen, so they must think it a prize worth trying for.

About the question "are most boys rude to girls." I don't think they are quite polite to girls. I think that some boys are polite to some girls and not to others and that sometimes it is the girl's fault if boys are rude to her. Best Wishes from your niece, Elva McClintic, M. C. Homer, Mich.

I am glad the prize makes such a favorable impression. I think there may be some truth to what you say about rudeness.

Dear Uncle Frank:—

I have no uncle in America. Will you be my American uncle?

Uncle Frank please don't tell your



## DARK FEAR

Caroline Wallen's prize drawing.

name, but I think I know it. Don't you write about Al Acres?

I just hate powder on girls faces, don't you? I believe in the old saying, "Don't try to make yourself what you're not." From a would like to be niece, Ethel Moore, Stanwood, Mich., R. 3.

I am glad you don't want me to tell my name. You guessed wrong about Al Acres. I say "Amen" to your last paragraph.



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| White Rocks, B. C. R. I. Reds, White Wyandottes.....                | 4.00       | 8.00       | 16.00       | 77.50       | 150.00       |
| S. C. White, S. C. Buff Orpingtons.....                             | 4.25       | 8.50       | 17.00       | 82.50       | 160.00       |
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| S. C. Mottled Anconas.....                   | 17.00   | 80.00   | 160.00   |
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| The A. D. Richardson Hatchery, Dundee, Mich. | 12.00   | 57.50   | 115.00   |

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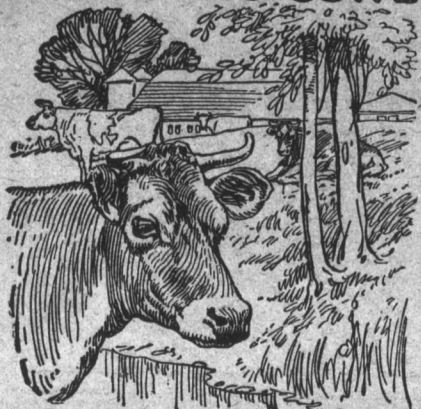
S. C. English White Leghorns and Barred Rocks. Every chick from carefully-mated, culled pure-bred flocks, owned and developed by us for 15 years. Flocks mated with males from 260-280 trap-nested hens. Free Catalog. Write for prices.

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CHICKS BARRED ROCK, English Strain White Leghorns and Brown Leghorns. Guarantee full 100 per cent alive. Free Delivery. Hillview Poultry Farm & Hatchery, C. Boyen, Prop., R. 12, S. F. Holland, Mich.



## Wherever there are cows



### Udder Troubles WILL Creep In

You know from experience that hardly a week goes by without some one of your cows suffering a more or less painful injury to the teats or udder.

Besides the difficulty of milking there is a sure loss in the free "letting down" of the milk. This may soon wipe out the month's profit for that cow—unless the trouble is promptly relieved.

BAG BALM is your sure aid in this emergency. This great soothing, penetrating ointment protects and heals injuries to the most tender tissues—does it with surprising promptness. Scratches, cuts, chaps, bruises, inflammation or hardened tissues become normal as Bag Balm heals and restores natural circulation.

For the treatment of Caked Bag, Bag Balm can be relied upon for quick results. A valuable aid, too, in cases of Bunches and Cow Pox.

Bag Balm is equally valuable as a general healer of any external injury on any animal. Pleasant and economical to use.

Feed dealers, general stores and druggists sell the big 10-ounce can—60c. Useful booklet, "Dairy Wrinkles," free by writing.

DAIRY ASSOCIATION CO., Inc.  
Lyndonville, Vermont

## BAG BALM

MADE BY THE KOW-KARE PEOPLE

### FREE 2-OUNCE SAMPLE

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Please send me sample package of Bag Balm

My name.....

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One HOOSIER BUILDING  
TILE for all permanent  
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The Kalamazoo Ensilage Cutter is the product of long experience. Thousands of enthusiastic users acclaim its superiority. Compare the Kalamazoo before you buy. It gives you more for your money, does the work in less time, with less power, less trouble and makes better ensilage.

**Many Superior Features**  
Have a sturdy lifetime frame of channel steel, unbreakable knife wheel, center shear cut, triple feed rollers that insure steady feeding; reversible shear bar and many other valuable features that will please you. They take the extra big bundles easily and run without vibration, insuring long life.

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## DAIRY IMPROVEMENT WORK

### Feeding--Weeding--Breeding

Pays In Lansing-Ingham Cow Testing Association

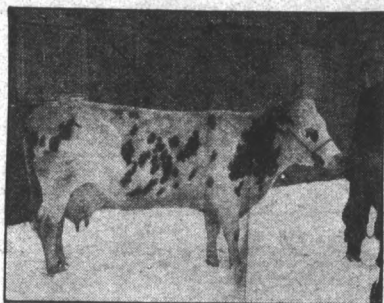
DURING the past year, through the efforts of Mr. J. G. Wells of the Dairy Extension Section of the Michigan Agricultural College, three cow testing associations were organized in Ingham County. The first of these located around Lansing with twenty-three members living in Ingham County and one member in Clinton County, began to operate in February, 1923. Soon thereafter another association was operating at Mason and a third was operating at Leslie. The work has begun to bear fruit.

In the annual summary drawn up by Mr. J. I. Falconier, Tester for the Lansing-Ingham Cow Testing Association, he points out that James Ranney, the Clinton County member of the Lansing-Ingham Association, of Detroit, Michigan, had the high herd in butter fat during the past year. His herd of twelve purebred Guernsey cows produced a gross total of 103,351 pounds of milk and 390.9 pounds butter fat. This purebred herd proved to be very efficient at the pail. Mr. Ranney knew that he had good cows but the C. T. A. gave him definite figures on their actual producing ability.

The high herd in milk production was owned by Mr. Frank Thompson of Holt, Michigan. His twelve cows averaged 10,510 pounds milk and 377 pounds fat. Mr. Thompson remarked that he did not know how good his cows were last year before the Association started. However, now that the association summaries are completed, he has the three highest fat producing cows in the Association, all of them purebred Holstein cows.

The lone Jersey herd ranked third highest in the association averages. This herd belonged to J. R. Worthington of Okemos. His five purebred Jerseys averaged 6877 pounds milk and 371 pounds fat. Other herds that averaged better than 300 pounds butter fat for the association year were as follows: Messrs. Bateman and Poxson with high grade Guernseys and Holsteins, Emil Everett with purebred Guernseys, Vern Keller with purebred Guernseys, Ed. Eifert with grade Guernseys and Holsteins, Hope Gladdin and F. E. Fogle with purebred Holsteins.

Aside from the three purebred Holsteins that were the highest butter-fat producers in the association, owned by Mr. Thompson, Mr. James Ranney



"Pet" took double honors with 16,386 lbs. milk and 574.9 lbs. fat. Owner is Mr. Thompson.

had three purebred Guernseys in the ten high cows. J. R. Worthington, Hope Gladdin, Vern Keller and C. Bateman had one cow each in the list of ten high cows in butter fat production in the association. It is interesting to note that of the ten highest cows in milk production nine of them were purebred Holsteins and one a grade Holstein.

The twenty-six Association members owned one hundred fifty-six purebred cows and one hundred twenty-six grade cows. There are ninety-eight purebred Holsteins, fifty-two purebred Guernseys, six purebred Jerseys, with seventy-one grade Holsteins and fifty-

five grade Guernseys among the membership. They are using fifteen purebred Holstein sires, seven purebred Guernseys and one purebred Jersey sire. Seventeen of the men grow alfalfa and six of them are planning to get started in alfalfa this year. Twenty-three silos are in use among the membership while two members are without silos.

One member when asked if he found that it paid to belong to this association during the past year said, that he could not afford to take the time to do the cow testing work on the basis that the tester does it. This man



"Margot," 4-yr. old Guernsey of Mr. Ranney, gave 10,688 lbs. milk and 462.8 lbs. fat.

found to his satisfaction that his herd compared very favorably with what he had read about as being efficient producing herds.

Fifteen cows were sold to the butcher as unprofitable cows. Further, better than twenty-five cows were sold out of the association to buyers who wanted to buy profitable cows with cow testing association records.

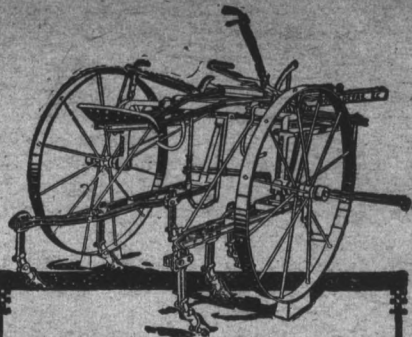
Ingham County in the cow testing association work is doing very creditable. The average production for the cows in this association for the past year is given at 7,757 pounds milk and 245 pounds fat. There are other associations in the State and have averaged better than 300 pounds fat for the association year. Such associations have been testing for a long period of time. Bearing in mind that the Lansing-Ingham Association has operated just one season and is now reorganizing to continue the work for the second year, better production is expected in the year to come. It is only through consistent testing and constant weeding out of undesirable cows and constant efforts to improve feeding methods that the best results are obtained in the cow testing work.

### INSIDE FACTS ON DAIRYING IN ONTONAGON.

W. C. GALE has finished the testing year in the South Ontonagon Cow Testing Association. Through the help of W. N. Clark, County Agent, the first year's cow testing association work in this county has been successfully completed. Mr. Gale, the Tester, mentions that 256 cows average 5,037.3 pounds of milk and 217.1 pounds fat for the association year.

There were only sixteen purebred cows in the total of 256 cows that were under test. The purebreds in the association work did well even though the high cows in both milk and butter fat production were grade cows. Arnold Egger of Ewen, with a grade Guernsey three-year old, had the high cow in butter fat production. A grade Jersey owned by Rudolph Stint produced 11,567.5 pounds milk and 471 pounds fat, the high milk producing cow in the association.

Mr. Egger with grade Guernseys had high herd in both milk and butter fat production. His ten cows averaged 7332.5 pounds milk and 365.3 pounds butter fat. It will be noted that this



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Shovels penetrate level and work uniformly at depth set; they always point to the front—always cut out full width—no skips and jumps—all of the soil is worked uniformly.

And you will be sure to like its simple, easy operation.

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## JOHN DEERE

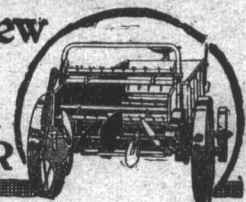
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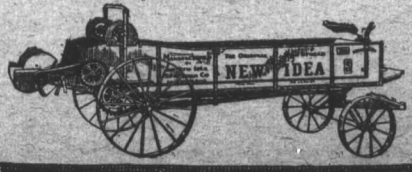
It has all the qualities that have made it the leader for twenty-five years—with many new features. These will be a revelation to you, especially the

### Steel Construction

This makes for light weight, sturdiness, durability and freedom from trouble. And the new low price is especially interesting.

The name and the guarantee protect you. If your dealer hasn't the New Idea write at once for full details.

THE NEW IDEA SPREADER COMPANY  
Coldwater, Ohio  
Makers of New Idea Transplanters





is 2300 pounds of milk and 150 pounds of fat higher than the average production of the Ontonagon C. T. A. cows.

Other herds that made good herd averages are as follows: August Schroeder, grade Guernseys; John Laird, grade Holsteins; John Horsma and Rudolph Stint with mixed herds; and Hands Olsen with grade Holsteins.

The following comparison of the highest and lowest herds in this Association is interesting:

| No. Cows | Breed     | Milk   | Fat   |
|----------|-----------|--------|-------|
| 17       | Mixed     | 3757.1 | 155.8 |
| 10       | Gr. Guer. | 7332.5 | 365.3 |

The good cows returned \$3.20 for every dollar expended for feed while the poor cows returned only \$1.65. It is evident from the above comparison that the C. T. A. work has just opened the way to improve the efficiency of the dairy cows in Ontonagon County.

Mr. Clark reports that this Association is planning to re-organize and continue the work as soon as the roads open up. It is to be hoped that other sections in the Upper Peninsula will make use of the cow testing association for improvement of the dairy industry in the Upper Peninsula.—A. B.

#### THE TESTER FOUND THEM.

ALFONSO KLUSKENS was one of the far sighted dairymen last fall who joined the Cow Testing Ass'n. to find out just how much profit each one of his cows were making him. In a herd of mixed Guernseys, with a lot of just ordinary cows, he found those two extremes. One making him a return of \$141, the other \$12. Now Kluskens has a complete record. Can tell a buyer just what he made on each cow. When he wants to raise a heifer calf, he knows exactly from which cow to keep it. Recently he sold all but just the very good ones. He doesn't like to keep cows just to have his family kept busy all year round.—Art. Lonsdorf.

#### FEEDING.

A STATEMENT heard occasionally is that the greatest problem of Michigan dairymen today is that of feed and care, and that without this feed and care the best bred animals are of little value for milk production.

This point seems to be borne out in the first three months' records of the Alpena-Leer Cow Testing Association. Sixteen of the 28 herds belong to the Leer Guernsey Bull Association, which has been grading up for the past 14 years with pure-bred bulls. The other herds are either pure-bred or have been graded up with pure-bred bulls.

During January 15,000 pounds more milk was produced from the 223 cows than in December. During February, a short month of 29 days, 19,000 pounds more milk was produced from the association cows than in December. Four fresh cows were milking during January but five less cows were milking, so that point was evened up. During December eight cows produced more than 40 pounds of fat, while there were 16 cows above that figure for January and 17 cows above that figure for February.

Carl Jennings, Tester for the Association, gives as a reason for the increased efficiency of production, better feed and care, especially in the feeding of more grain, and more protein to balance the grain mixture. Efficiency in Feeding, Breeding and Weeding for a Better Michigan Dairy Cow.

#### MORE COW TESTERS NEEDED.

THE need for cow testers to carry on the work in 80 cow testing associations now running in Michigan is again urgent. Indications point to a further growth in the cow testing association work. The economic situation and the realization of the need for better dairying methods on the part of dairymen of Michigan is creat-

popular varieties now being grown in Michigan.

ing a greater demand and requesting further organizations of cow testing associations. Herdsmen, farm boys, short course and college graduates with good dairy experience and further training in feeds and feeding, who might be interested in considering this type of work for a year, are requested to get in touch with the Dairy Department of the M. A. C. at East Lansing.

#### PRIZE CONTEST FOR MICHIGAN COW TESTERS

THE Creamery Managers and Owners Association of Michigan have offered a prize of \$100.00 to the Michigan Cow Testers in regular Cow Testing Associations making the best record as judged on the following basis:

1. Best and most efficient service rendered local Cow Testing Association for the year February 1, 1924, to February 1, 1925.
2. Application to detail, neatness, promptness and thoroughness in handling herd books and reports of daily routine work.
3. Best short essay on "Value of Cow Testing Associations to Michigan Dairymen." This essay is to include reports on activities and accomplishments of local Association and suggestions for future improvement of Cow Testing Associations.

First Prize \$50.00. Second Prize \$25.00. Third Prize \$15.00. Fourth Prize \$10.00. Committee on Award to be announced later. Contest closes February 1, 1925.

#### WHEN SHALL I SEED ALFALFA?

(Continued from page 539.) too late for safe planting if the summer fallow has been well prepared and properly firmed there should be sufficient soil moisture to carry the young seedlings until fall rains start.

#### Do Not Overlook Quality in Seed.

With all other factors taken care of up to this point it now becomes necessary to use care and discretion in selecting the seed to use. The finest piece of soil adapted to the growing of alfalfa could be selected, then prepare an excellent seed bed, seed at the most favorable time and get a 100% failure from using seed that is not adapted to Michigan conditions.

There are about three classes of alfalfa seed coming into Michigan. First, just alfalfa seed, the origin of which is unknown. It may have excellent germination and be of exceptional purity but when seeded in Michigan be very severely winter killed because it was not adapted too northern winters. Second, is what is known as northern grown common alfalfa. This is alfalfa that has been produced under northern climatic conditions for a sufficient number of years to insure its becoming hardy. Third, the variegated varieties such as Hardigan, Grimm, Cossack and Liscomb. These varieties have in their make-up the hardy inheritance of the old sickle alfalfas of Northern Europe and are called variegated because they have traces of the yellow flower inheritance of the Sickle alfalfa along with the purple of the common. It being quite characteristic, though not always true, that all colors of flowers can be found from yellow to yellowish green and slight variations of purple and white.

Of these various classes it can be said that Michigan farmers cannot afford to use the first class, the just alfalfa seed. Of the other two classes the variegated strains are the more hardy and will prove to be the better buy for most Michigan conditions. The Northern grown common is giving very good satisfaction in those sections where alfalfa is used only for two or three years for hay. Wherever winter killing is a factor, the variegated strains are proving more dependable. Of the variegated strains, Grimm, Hardigan and Cossack are the

## "What I thought was just sales talk about the De Laval Milker is the Absolute Truth"

writes W. A. Shoemaker, a De Laval Milker user of Dayton, Ohio. He says:

"Having been termed the hardest and most contrary man to sell, I am sending you unsolicited a brief outline of my experience with a De Laval Milker. What was considered by me as sales talk, I find is the absolute truth.

"First, it increases production, as you may see by copy of enclosed chart of my cattle for the past year, under very adverse conditions. (An increase of about 18% for the entire herd.)

"Second, labor saving. It formerly took three to milk my herd; now one does it, and the actual saving for the year, after deducting the original cost of the machine plus the power and upkeep, is indeed very gratifying.

"Third, the satisfaction of owning such a perfect milker as the De Laval, and the good results obtained therefrom; the absence of any mechanical trouble in a year's trial. My cattle are now free from udder trouble. I had three that were frequently affected with it when I was milking by hand.

"That a De Laval Milking Machine will pay for itself, as claimed by your Company, has been positively proven to me."

## Let a De Laval pay for itself just as it did for these people

"I have used a De Laval Milker for nearly two years and it has paid for itself already, and is good for ten years yet."

—Ralph Steffes, Minnesota.

"I have used a De Laval Milker for a year and cannot praise it too highly, and feel that it has paid for itself already."

—H. A. Laube, Washington.

"I think every dairyman who milks 15 or more cows by hand pays for a De Laval Milker each year in loss of time and milk."

—R. E. Findling, Indiana.

"If I couldn't get another De Laval Milker I wouldn't take double what my outfit cost me."

—Donald L. Bryson, Illinois.

"It took some time to convince me that a De Laval Milker would pay on a 15-cow dairy, but after using one I have decided it was not 'hot air.' I certainly

couldn't afford to milk by hand again."

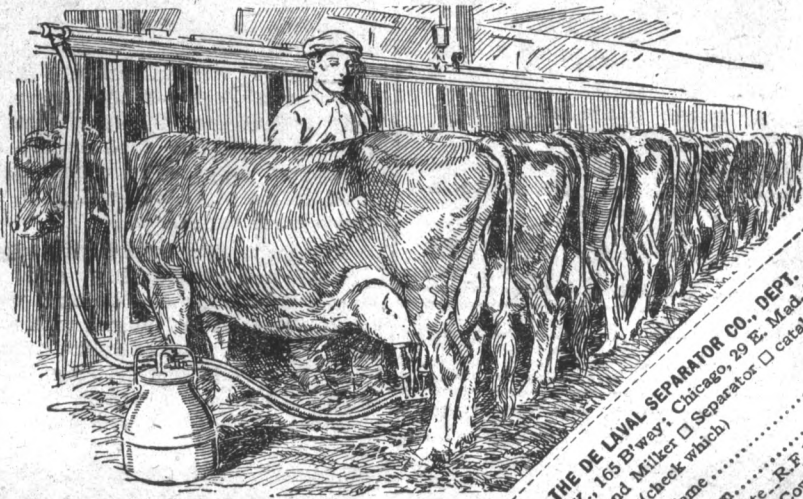
—H. H. Coston, Maine.

"I have had experience with every make of milker, and the De Laval is absolutely the best, and in the long run the cheapest, just because it is practical."

—C. W. McFerron, Veterinarian, Kentucky.

Thousands of other De Laval users are just as well satisfied as these, and you will be, too. Why not save time, money, and eliminate the drudgery of milking by installing a De Laval?

You can get a De Laval Milker on such easy terms that it will pay for itself while you are using it. Many De Laval owners are paying for their milker in this way. Often they find that the saving in money for extra help is more than enough to meet the monthly installments.



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\$3.42 monthly pays for a genuine KIRSTIN Stump Puller. Big cut in price. Now you can clear idle land quick, easy and cheap without help or horses.

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West Bend Automatic Stanchions equipped with our wonderful locking-releasing lever save you time and labor—and insure safety in locking up or releasing the cows, yet you pay no more for West Bend equipment than for ordinary stanchions that must be opened and closed singly by hand. The West Bend lever controls from instantly by one throw of the lever. Cow stops are operated at same time, and when set guide cow into the stanchion. Every user says it's the greatest idea ever brought out in modern barn equipment. You certainly want it in your barn. Write today for catalog showing complete line of West Bend Barn Equipment. Write TODAY, West Bend Equipment Corp., West Bend, Wis., Syracuse, N. Y. Write nearest office, Dept. E.



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**Reg. Guernseys** Two Nice Bulls, nearly ready for service. Special terms if desired. J. M. Williams, North Adams, Mich.

## Complete Dispersal Holstein Sale

75 head of very choice registered cattle consisting of 5 bulls, 30 heifers, and 40 milking cows.

AT FLINT, MICHIGAN, APRIL 15th

35 of these cows and heifers have completed their year's work in a Cow Testing Association, averaging above 10,000 lbs. milk. Some with records as high as 13,000 lbs. They were fed and handled under ordinary farm conditions, milked twice a day.

All of these cattle have good A. R. O. backing and many good seven day records. Part of the herd was selected by Mr. Carter from some of the best herds to be found in the State, representing the highest producing and most popular families of the breed. The balance were bred and raised on the farm.

**SEGIS FLINT HENGVELD LAD.** No. 256976, who heads the herd will be sold at this sale. He was born December 25, 1918, a son of Flint Hengveld Lad, whose daughters are making splendid records and who has been Grand Champion at Michigan State Fair, Segis Flint Hengveld Lad's full brother was also champion of Michigan State Fair, Central Michigan, Jackson and Bay City Fairs.

The sire's dam is a 2-times 31-lb. cow and also a 1,000-lb. cow. She is a full sister to Michigan's only 30,000 lb. cow.

The dam is a 30-lb. cow of good transmitting ability. She is sired by a grandson of Sir Kordyke Manor De Kol and is from a 24-lb. Grand-daughter of King Segis, thus uniting closely the blood of these two great sires.

All the females of breeding age are bred to the above sire. He also has about twenty daughters in the sale.

The herd is free from tuberculosis and under State inspection. Will be sold under the usual 60-90 day return.

Terms of Sale one-year's time, approved bankable notes.

Sale at the Farm, one mile west of City limits on River Rd. 10 o'clock Eastern Standard time.

Catalogs April 1. Apply to  
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**OR MORTIMER CARTER, R. 5, FLINT, MICHIGAN.**

## MICHIGAN STATE HERDS

Offer—

A grandson of Champion Echo Sylvia Pontiac, born March 7, 1923, out of a granddaughter of Champion Echo Sylvia Pontiac. May Echo Sylvia on both sides of the pedigree of this young bull insures production.

A good individual, nicely marked, three-fourths black. His dam, an 18-lb. Junior two-year-old daughter of a 30-lb. cow, is now on test and will make a much better record.

Send for pedigree of Ear Tag No. 499.

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**Herefords For Sale.** Cows with calves, yearling and two year old heifers also young bulls at beef prices. Ralph Calhoun, Bronson, Mich.

## Brookwater Jerseys

Bull calves for sale. Majesty breeding. Herd tuberculosis free. Come or write. Brookwater Farm, Ann Arbor, Mich.

**FOR SALE** Jersey females, all ages. Herd of fifty to pick from. Sophie Tormentor Breeding, Grandson of "Sophie 19th of Hood Farm" head of herd. A. H. Donaldson, Fenton, Mich.

**FOR SALE** Jersey bulls ready for service. All cows Register of Merit. Accredited herd. Would take a bankable note. **SMITH AND PARKER, R. 4, Howell, Mich.**

**Registered Jersey** cattle, young bulls, for sale. Tuberculin tested.  
**J. L. CARTER, Lake Odessa, Mich.**

**15** Cows, 4 bulls from R. of M. Cows. Chance to select from herd of 70. Some fresh, others bred for fall freshening. Colon C. Lillie, Coopersville, Mich.

**Francisco Farm Shorthorns and Big Type Poland Chinas**  
Now offering three good bulls and a few choice gilts bred to Elvetrand Revelation 2nd.  
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**When In Need** of Red Polled Bulls, Cows or Heifers, Buy from Michigan's leading herd, owned by Westbrook Bros., Ionia, Mich.



## NEW METHOD OF CONTROLLING WARBLES.

ON page 486 of the Michigan Farmer issued March 29, 1924, one finds an article on the "Hide of a Steer." This article points to the fact that Michigan hides, many of them, contain blemishes caused by the ox-warble, which is sometimes called "grub-in-the-back" and which is known, in the southwest, as the "heel fly." It also explains that the most valuable part of the hide comes from what is known as the "table" which is the part of the hide covering the back of the animal.

Now, a comparatively new method of control of warbles has been discovered which does not seem to have yet become common knowledge among the stock growers.

The exact life history of this ox-warble,—that is its method of egg-laying, the exact development of the maggot and its habits,—is still a mooted question. Nevertheless, this new method of control works practically every time and, as its application is cheap and has thus far, resulted in no injury to the animal, the writer hopes that the practice will become general, that Michigan cattle may may soon become free from warbles, and that consequently the price of Michigan hides may permanently improve.

The treatment is carried out as follows:—Secure a quantity of iodoform a malodorous compound kept in every drugstore, and combine one part of iodoform, by weight, with five parts of petroleum jelly,—crude petroleum jelly because for this particular purpose it is just as good as the more highly refined vaseline, which could be used in its place but which is many times more expensive.

Mix these two ingredients together evenly and thoroughly and then anoint each lump containing a warble, on the back of the animal with a little dab of this ointment-like mixture. Rub in a little and be sure that the opening, thorough which the insect breathes, is covered with some of the ointment. The work should be done, of course, while the lumps are small just as soon as they can be nicely detected. In a few weeks the grubs will have died and become somewhat shrunken so that, if one care to take the trouble, one can readily grasp the end of the grub, where it comes to the surface of the animal's skin, and pull it out.

The wound will then heal up, leaving a comparatively slight blemish which will detract only slightly, if at all, from the value of the hide.

Furthermore, two or three years of a campaign against this grub should result in cleaning up the state so that

warbles would be found only in animals brought in from outside. If each man in a district were to follow this practice for two or three years the loss from ox-warble could easily be made a negligible loss.—B. H. Pettit.

## REARING MOTHERLESS LAMBS.

DESPITE the best of management at lambing time, a ewe may die, lose the use of her udder, disown her lamb, or, for some unaccountable reason, the lamb fails to nurse and must be reared by hand. Some question the expediency of trying to raise these lambs. We have found, however, that, properly fed, these will come along about as well as those raised by the mother.

The motherless lamb should be placed in a light dry place near at hand where it may receive frequent attention for the first month or two. There is more danger in over-feeding than in under feeding. Milk from a fresh cow is best since it more nearly resembles that of the ewe, being more easily digested. Add a little sugar to warm water and use this to reduce the milk, so it will approximate in fat content the milk of the sheep. Avoid irritating stimulants for constipation may follow.

Feed regularly every two hours during the day and four hours apart during the night until it is ten days or two weeks old. Give the lamb just what it will take quickly and no more. It is safer to leave it a little hungry than to over-feed. Give plenty of warm water to drink. Keep the motherless lamb in a pen with a small yard adjoining for exercise. Do not handle.—Leo C. Reynolds.

## DECEPTION IN SALE

I bought a grade cow at an auction sale for \$75. When the cow was led out the owner said the cow was bred August 18, 1923, was giving 30-35 lbs. of milk and was right in every way. I paid cash. That night she gave 17 lbs. of milk, the next morning she gave 6 lbs. and by good feeding I got her up to 22 lbs. per day. I discovered after purchasing her that she was a kicker, and they milked her by using chains on her legs. She came in heat January 12. She is evidently not a breeder although she has the earmarks of a high producing cow. I feel I have been imposed upon. Should I state the facts to former owner and demand my money and upon refusal sue for the amount; or should I sell the cow to the butcher and demand the difference? Or had I better forget it?—W. C.

If the cow has been retained after discovering the deception, the right to return is waived, and the only remedy is suit for damages—the difference between her value as she is and what her value would have been if as represented.—Rood.



Sweet Clover Will Aid in Keeping Down Feeding Costs.

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Quality plus Economy

## Oxford Sultan of Oaklands

Herd sire

The only herd west of Pittsburgh headed by a sire winning first prize over the Island of Jersey for "Bull and Progeny."

## THE OAKLANDS

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Ann Arbor, Mich.

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**Milking Shorthorns** all ages, either sex, sale by members of Central Michigan Shorthorn Breeders' Association. M. E. MILLER, Secretary, Greenville, Mich.

**For Sale** 2 Shorthorn Bulls 9 and 10 months old, also cows & heifers. Priced reasonable. Matthew Sprowl & Sons, Crosswell, Mich.

**FOR SALE** Herd of milking shorthorns, 3 cows, calves by side, 3 coming fresh. 2 yearling heifers, and herd bull. Price right. E. H. KURTZ, Mason, Mich.

## HOGS

## DUROC JERSEYS SOWS AND SPRING PIGS

Bred Sows, long body and heavy bone; excellent breeding; finest practical type, to farrow April 15 to May 15.

Spring Pigs, boars and sows, fine thrifty fellows at 8 weeks. Orders booked in advance; an economical way to get into thoroughbred stock.

Every pig guaranteed satisfactory to you when you have received it. Send for photos, description and breed.

**STATE FARMS ASSOCIATION**  
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**FOR SALE.**—Young boars and gilts bred from the best herds in Michigan and Ohio, at reasonable prices and fully guaranteed. W. E. Bartley, Alma, Mich.

**DUROC JERSEYS** Spring pigs either sex of March April and May farrow, sired by three outstanding herd boars. If you want sixties and quality combined come and see or write us. F. J. Drott, Monroe, Mich. R. I.

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Chas. A. Bray, Okemos, (Ingham Co.), Mich.

**FOR SALE** Choice Registered Durocs, Jerseys, fall boars. Matt. Matthyse, Cutserville, P. O. Address, Byron Center, Mich.

**DUROC** fall and spring boars of the best breeding and quality, at prices to sell. Fall pigs at bargain prices. W. C. Taylor, Milan, Mich.

**Duroc Jerseys** Extra choice bred gilts at reasonable prices.  
**CAREY U. EDMONDS, Hastings, Mich.**

**LARGE TYPE** Chester White Gilts. Bred for spring farrow. Bred to Denby's Giant, of Colonel Denby and The Monster Breeding. Prices very reasonable. W. H. Bentley, Lenox, Mich.

**Chester White Gilts** Fall and Spring  
Jack. ALDRICH & WILLIAMS, Tekonsha, Mich.

**O. I. C.'s** 75 spring pigs, pairs not akin, from 3 good sires, also fall pigs, recorded free. Otto Schulze & Sons, Nashville, Mich.

**25** Reg. O. I. C. Sows. Bred for April and May farrow. All Stock Shipped on Approval. Priced Right. Fred W. Kennedy, R. 2, Plymouth, Mich.

**O.I.C.'s** Sept. pigs. Sired by "Giant Boy," Senior Champion at West. Mich. State Fair, 1922. Milo H. Peterson, R. 2, Ionia, Mich. "Elmhurst Farm."

**O. I. C.'s.** A few choice service Boars and spring pigs either sex.  
**CLOVER LEAF STK. FARM, Monroe, Mich.**

**L. T. P. C.** Bred gilts. Fall pigs, either sex. A. A. Feldkamp, Manchester, Mich.

**Fall Pigs** either sex, by the great Boar, The Wolverine. Priced reasonable. Best of dams. W. E. Livingston, Farna, Mich.

**Hampshire** Bred gilts, spring and fall boars, at bargain prices. 12th year. Write your wants. John W. Snyder, R. 4, St. Johns, Mich.

**Hampshire** Best of breeding. Choice gilts bred to farrow March and April. Herman Barchet, R. 3, Watervliet, Mich.

## SHEEP

## Shropshire Ewes For Sale

Fifteen Head of registered Shropshire Ewes. Bred to a good son of the Champion ram of Michigan 1921. will begin to lamb middle of April. Price \$25.00 for Head. Union Phone. C. V. TRACY, Ithaca, Mich.

**Breeding Ewes** with lamb, in car lots at much more than pay for them in 5 or 6 mos. Must move quickly. First come, first served. Don't ask for description unless you mean business. Geo. M. Wilber, Marysville, Ohio.



# GUERNSEYS

## Broadacres Stock Farm Dispersal Sale

Kokomo, Indiana, Saturday, May 10, 1924

Senior sire, 'Butterfly's' Coronation of Crane Farm No. 69,542. 24 cows in milk. Several A. R. Six on test. 20 heifers and heifer calves.  
A real opportunity to get a sound healthy foundation. Bankable paper accepted if arrangements are made in advance. Farm is 3 miles from Kokomo, a car will drive buyers to farm. Kokomo is 92 miles North of Indianapolis. For further information and catalogues write E. A. Nelker, Kokomo, Indiana, or Louis McL. Merryman, Sparks, Md.

## Western Pennsylvania Guernsey Breeders Annual Consignment Sale Friday, May 16, 1924, at Pittsburgh, Penn.

20 cows of superb breeding, including daughters of Langwater Africander and Langwater Stars and Stripes 20. 17 Bred Heifers. 20 Heifer calves, 4 bull calves and a son of Langwater Eastern King, 2 yearling bulls.

The sale will be held in the Riverside Sales Pavilion only three blocks from Pennsylvania Station, in Pittsburgh. Plan attending this sale on the way back from the National Sale. For Catalogue write, Louis McL. Merryman, Sparks, Md.

## Louis Merryman's Semi-annual Guernsey Sale, Thursday, June 12th, 1924, at Timonium, Md.

We have made arrangements to catalogue 100 head up to our previous standard. Two Bulls from Langwater.

The females include several show animals of unusual merit, including the Boy's Calf Club Champion heifer at the National Dairy Show. She is a daughter of May Flower's Fawn Face, sold in our 1923 spring sale for \$1,800.00.

For catalogues of these sales write Louis McL. Merryman, Sparks, Md.

We wish to revise our mailing list and will mail catalogues only to those who write.

### HORSES

## Farmers Attention

We have on hand a choice selection of Belgian and Percheron Stallions with size and quality and best of breeding, including some International and State fair prize winners, also Champion and Grand Champion. If your locality is in need of a good draft Stallion, let us know about it and we will try to place one on our breeding plan which will interest you. Write.

FRED G. STEVENS COMPANY, INC.  
Breckenridge, Michigan.

Registered Belgian Stallions  
For sale or trade. Chas. Baumgarber, Waterville, O.

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**Certified  
White Leghorn  
CHICKS**

**HOLLYWOOD**  
MATED \$15 per 100  
Sired by Hollywood males  
whose dams had egg records  
of 230 to 290. Stock  
certified by Michigan Baby  
Chick Ass'n.

**Rural Strain, \$13**  
Brown Leghorns, \$14-\$15  
Anconas, Barred Rocks,  
Large Illustrated catalog free

**RURAL POULTRY FARM**  
Box 109, Zeeland, Mich.

**DAY OLD CHICKS**  
HOMESTEAD FARMS

Pure-bred poultry, bred and  
cullered for years for egg pro-  
duction.

Barred and White Rocks; R. C.  
and S. C. Reds; White Wyandottes;  
White and Buff Orpingtons;  
Anconas; American and  
English White Leghorns; Brown  
and Buff Leghorns.

This is practical production  
stock that will make you money.  
Send for description and price  
list and note egg records reported by our customers.

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307 N. Rose St. Kalamazoo, Mich.  
Active Member International Baby Chick Association

**EGG BRED CERTIFIED  
CHICKS**

From our Free range flocks of Hollywood and  
Barron Improved English White Leghorns, 250-  
300 Egg-bred line. Sheppard's Strain of Ancon-  
as direct. Parks strain Barred Rocks & Br.  
Leghorns. Quality and high egg yield due to 11  
years careful breeding on our .65 acre farm.  
Culled, mated, rated by experts. Strong vigorous  
Chicks. 100 percent live delivery. Extra selected  
chicks 100, \$14; 500, \$65. Barred Rocks 100,  
\$18; 500, \$85. Write for catalog and prices on  
selected Special Star matings. Postage prepaid.

**John Line  
POULTRY FARM**  
ZEELAND MICH.

**Barred Rock Baby Chicks**

We hatch only Barred Rock Chicks from  
choice selected stock shipped by pre-  
paid parcel post to your door, satisfac-  
tion and alive delivery guaranteed  
Circular on request.

**THE KAZOO HATCHERY CO.**  
R. R. 3 Kalamazoo, Mich.

### ABOUT THE WOOL MARKET.

THE report of the wool dealers' annual meeting which appeared in these columns last week confirms the general impression that wool prices must go higher. From the dealer's standpoint he is playing safe. If the auctioneer at a public sale were to take the first bid offered, and strike off the article to this first bidder, the sale would probably be declared off, or a new auctioneer be found. The farmer who accepts these first bids for wool is equally injudicious, when a higher bid, it seems, is sure to be made.

The dealers are a little like the principle involved in Gen. Grant's horse story. When his father told him to ask one-hundred dollars, to take seventy-five if he could not get more, he injudiciously told these conditions to the prospective buyer, and, it is needless to say, he took the less price.

The wool dealers have practically said that wool will be worth more money and a later meeting is authorized to consider later development.

The next move is up to the wool producers to say our wool is ready for you at 50 cents. It is good wool and well worth the money. Similar wool to ours is being bought at 47 cents in Arizona with a heavier shrink and a higher freight rate.

The United States in 1923 produced 47,000,000 lbs. less wool than the average for 1909-1913, and the world's production measured for the same period, is 400,000,000 lbs. less. To put it another way, there is a world's short age equivalent to about 100,000,000 ment's suits.

The prospect is good for the truth-in-fabric bill becoming a law. If it does, it will strengthen the market. The use of shoddy is not objected to by its provisions, but to palm it off on the consumer as "all good wool," is deception. If one will notice the coats of men and women after a few months wear, he will observe the coarse warp with the shoddy worn away. The high labor cost put on inferior fabrics is poor economy, and the loss falls on those least able to bear it.

The men who are worrying about timber conservation are undoubtedly far sighted and public spirited. However, the question of clothing is immediate and pressing. There is in all the state of Michigan no agency of any sort that has any fostering care or constructive planning to aid in meeting the approaching wool shortage. The immediate idea at the present time is for individual wool growers to go in with his neighbor in asking a fair price for wool based on supply, which should be no less than fifty cents a pound.—J. N. McBride.

## Guaranteed Pure-Bred Chicks and Pullets

Special Star Mating Aristocrat Strain Barred Plymouth Rocks

Breeding Stock, Chicks and Eggs. Only a limited number of these. Write for prices.

Barron S. C. White Leghorns. Sheppard's Strain Anconas. Special Star Matings.

|                            |         |         |          |
|----------------------------|---------|---------|----------|
| April                      | Per 100 | 500     | 1000     |
| May                        | \$16.00 | \$77.50 | \$150.00 |
| Grade "A" Matings.         | 15.00   | 72.50   | 140.00   |
| April                      | \$13.00 | \$62.50 | \$120.00 |
| May                        | 12.00   | 57.50   | 110.00   |
| Utility Bred-to-lay Rocks. | Per 100 | 500     | 1000     |
| April                      | \$16.00 | \$77.50 | \$150.00 |
| May                        | 15.00   | 72.50   | 140.00   |

Pullets of Quality at Moderate Prices.

|         |         |            |            |            |
|---------|---------|------------|------------|------------|
| 5 Wk.   | 8 Wk.   | 10 Wk.     | 3 Mos.     | 4 Mos.     |
| 60c ea. | 85c ea. | \$1.00 ea. | \$1.25 ea. | \$1.50 ea. |

Reference: Two Banks. 100 per cent live delivery. Don't wait. Order from this ad or write today.

**FAIRVIEW POULTRY FARMS, R. 2, Box E, Zeeland, Michigan.**

## Certified Chicks

at popular prices. We won 1st and 4th prize this year on English strain White Leghorn Hen at the National Poultry Show, Chicago. Also first at Zeeland Poultry Show. Other breeds have had same careful supervision in developing and breeding. Pure-bred stock carefully culled. 100 per cent live arrival guaranteed. Our chicks are money makers and will improve your flock. Write for catalog and prices. A trial will convince you. All flocks certified.

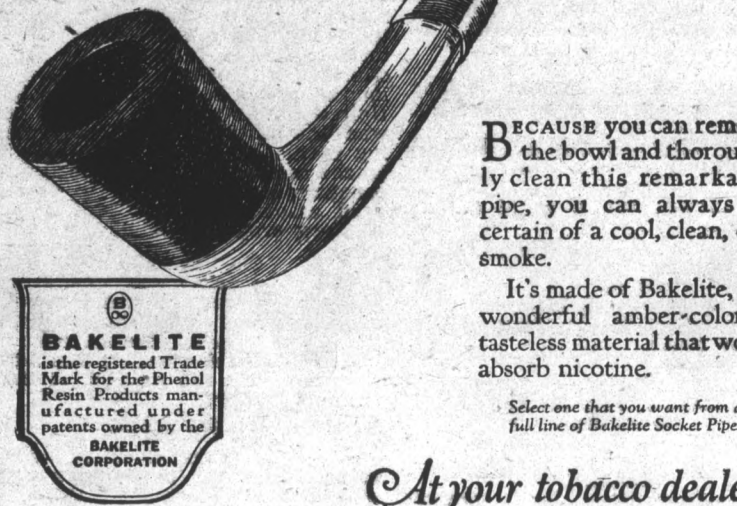
**AMERICAN CHICK FARM, B. 115-A, Zeeland, Mich.**

**BOS QUALITY; CLASS A CHICKS ONLY.**  
Strong, Healthy. From heavy layers. S. C. Tom Barron Eng. White Leghorns, Brown Leghorns 12c. Sheppard's Anconas 13c; As-sorted 10c. No money down with order. 100 percent safe delivery. Postpaid. Catalog free. Bos Hatchery, Zeeland, Mich., R. 2M.

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BECAUSE you can remove the bowl and thoroughly clean this remarkable pipe, you can always be certain of a cool, clean, dry smoke.

It's made of Bakelite, the wonderful amber-colored, tasteless material that won't absorb nicotine.

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What our Customers say—  
Elmer Arnold—801 eggs in 14 days in December from 85 June hatched White Leghorns; Herman Broecker—Bought 100 Ancona chicks, raised 69 pullets, 30 cockerals. F. R. Wallis—Ordered 100 chicks, received 103, raised every one. This wonderful vitality and laying ability shows why, as this is written, our S.C.W. Leghorns lead in Michigan International laying contest. Our strains are Tom Barron Imported and Hollywood S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Parks Bred to Lay Barred Rocks. Chicks shipped postpaid, 100% live delivery guaranteed. Big illustrated catalog sent free.

**Silver Ward Hatchery, Box 29, Zeeland, Mich.**

**PURE BRED BABY CHICKS**

We have been carefully developing our flocks for eight years. Every chick pure-bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today for May Delivery.

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|-----------------------|-------------|-------|-------|
| Wh. Leghorns          | .....\$7.00 | 100   | 500   |
| Bd. Rocks, R. I. Reds | .....8.00   | 15.00 | 72.00 |

Postpaid. 100 per cent live delivery. You take no chances. Ref. Farmers' & Mechanics' Bank, this city. No catalog. Order from this ad.

**WASHTENAW HATCHERY, R. 5, Ann Arbor, Mich**

**QUALITY CHICKS AT REASONABLE PRICES**

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 990 birds competing. Catalog free.

**PINE BAY POULTRY FARM, HOLLAND, MICH.**

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Postpaid to your door. Guarantee 100 per cent live arrival. Heavy laying, pure-bred flocks. White, Brown & Buff Leghorns, 50¢; 100, \$13. Barred Rocks, Reds, Anconas, Minorcas, 50¢; 100, \$15. White and Columbian Wyandottes, White Rocks, Black Spanish, Black Minorcas (choice). 50, \$9; 100, \$17. Catalog Free. WHY NOT BUY GOOD CHICKS? THE C. M. LOWER HATCHERY, Box 30, Bryan, Ohio.

**Baby Chicks S. C. W. Leghorns**

—Only Pedigreed Certified

Michigan's Largest S. C. W. Leghorn Farm, over 2000 Birds. Hatch our own eggs only. Supply limited. Order early. One trial will convince you. Free Circular.

**SIMON HARKEMA and SON, Holland, Michigan**

**BABY CHICKS**

Strong healthy chicks. Flocks culled by M. A. C. graduate.

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| 50                                                 | 100     | 500     |
| E. W. Leghorns, Tom Barron Strain, Anconas, \$7.00 | \$13.00 | \$60.00 |
| Barred Rocks & R. I. Reds 8.00                     | 15.00   | 72.00   |

Order from this ad. and get your chicks at once, or send for literature.

Reference McLachlin State Bank, Petersburg, Mich.  
**PETERSBURG HATCHERY,**

**BEST CHICKS at Low Prices**

Send for free catalog describing best bred chicks in the country. Tom Barron and Tanager White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S. C. R. I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

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**FREE FEED "Just-Rite" CHICKS**

Most Profitable Varieties. Trapnest-Exhibition, Pedigree, and Utility Matings, direct from prize-winners at New York, Chicago, Nat'l Egg Laying Contests. Nabob quality. None better at any price. Satisfaction and 97 per cent live arrival guaranteed. Postpaid. Low Prices. Big Catalog FREE. Stamps appreciated.

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Ohio Chicks are Better

**STURDY CHICKS**

From high grade, heavy egg producing strains of S. C. White Leghorns, S. C. Rhode Island Whites and White Wyandottes. All from pure bred, healthy, vigorous stock, carefully culled and tested to insure your getting chicks that will be easy to raise, develop rapidly and become heavy winter layers. Shipped postpaid, 100% live delivery guaranteed. Catalog Free.

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**White Leghorn Baby Chicks**

TANCRED-BARRON 200 to 300-egg bred line. Wonderful layers of large white eggs that bring premium prices. Over 2,000 selected breeders on free range. Get quality chicks from these tested layers, mated to the choicest pedigreed sires, 11½ cent and up. 100 percent live arrival guaranteed by prepaid parcel post. Write at once for valuable illustrated catalog and latest price list.

**J. PATER & SON R. 4 Hudsonville, Mich.**

**SUPREME CHICKS**

LAYERS! That's what you want. Standard Chicks are from just that kind of flocks. Our strain of Supreme Laying White Leghorns is the result of our many years experience, breeding and selection. They are large sized, long deep wedge shaped bodies, keen alert eyes, large lopped combs. The kind you will be proud of and eventually buy. Shipped postpaid. 100% live delivery guaranteed. Illustrated catalog sent free.

**STANDARD HATCHERY, Box A, Zeeland, Mich.**

**QUALITY CHICKS**

Strong, vigorous, pure-bred. From heavy lay Barron strain S. C. White Leghorns that have been carefully culled and mated to pure-bred males. The kind that develop quick and lay early. Prices—25, \$3.50; 50, \$7.00; 100, \$13.00; 500, \$62.50. Postage and live delivery guaranteed. Reference: Peoples State Bank.

**LAKE BLUFF HATCHERY, R. F. D. No. 1, Holland, Mich.**

**CHICKS WHITE LEGHORN** Heavy laying, pure bred English strain. Flocks culled and tested for laying ability. Strong healthy chicks. 100 percent live delivery guaranteed. Prices right. Catalog Free. **CATALPA GROVE HATCHERY, Box 1 R 2 Holland Mich.**

**BABY CHIX**

PEDIGREE Sired Eng. W. Leg. (Barron Strain), direct from our farm, delivered 100 per cent alive at your door at \$13.00 per 100; \$60 per 500; \$110 per 1,000. Chix sold from our own flock only. Send for circular. Model Poultry Farm Zeeland R. 4, Mich.

**Leghorn B-A-B-Y---C-H-I-X Heavies**

Black, Brown, Buff, White, Brahmas and Orpingtons, Anconas and Minorcas, Reds, Rocks, Wyandottes, Allegan Hatchery on Highway No. 89. Send for 1924 price list. Crescent Egg Company, Allegan, Mich.





# THE LATEST MARKET REPORTS



## GRAIN QUOTATIONS

Wednesday, April 9.

### Wheat.

Detroit.—No. 1 red \$1.11; No. 2 red \$1.10; No. 3 red \$1.07; No. 2 white \$1.11; No. 2 mixed \$1.10.  
Chicago.—May at \$1.01½; July at \$1.03¼@1.03½; September \$1.04½.  
Toledo.—Cash \$1.08@1.09.

### Corn.

Detroit.—Cash No. 3 yellow at 83c; No. 4 yellow 86c; No. 5, 74@76c; No. 6, 71@73c.  
Chicago.—May 76½@76¾c; July at 78½@78¾c; September 78c.

### Oats.

Detroit.—Cash No. 2 white 54½c; No. 2, 52½c.  
Chicago.—May 45½c; July at 43½c; September 40c.

### Rye.

Detroit.—Cash No. 2, 70½c.  
Chicago.—May 65½c; July 67½c; September 68½c.  
Toledo.—67½.

### Barley.

Barley, malting 84c; feeding 78c.

### Buckwheat.

Buckwheat.—New milling at \$2.02 per cwt.

### Beans.

Detroit.—Immediate and prompt shipment \$4.50@4.55 per cwt.  
Chicago.—Navy \$5.25; red kidneys \$7.35.  
New York.—Choice pea at \$5.50@5.75; red kidneys \$7.40@7.50.

### Seeds.

Detroit.—Prime red clover cash at \$11.40; alsike \$8.45; timothy \$3.75.

### Hay

Strong.—No. 1 timothy \$23.50@24; standard and light mixed \$22.50@23; No. 2 timothy \$21@22; No. 1 clover at \$21@22; No. 1 clover mixed \$21@22; wheat and oat straw \$12.50@13; rye straw \$14@14.50.

### Feeds.

Bran \$28; standard middlings \$28; fine do \$30; cracked corn \$35; coarse cornmeal \$34; chop \$30 per ton in 100-lb. sacks.

### Apples.

Chicago.—Barrels, "A" grade Greenings \$5; Jonathans \$5.50@6; Spies at \$5.50@6; Steele Red \$4@4.50.

## WHEAT

While future prices did not follow the full gains made in the cash prices they were influenced by the strength in the cash market and May wheat closed on Friday about one cent higher than last week. May corn was up 3½ cents, while May oats advanced about two cents. The wheat market was influenced more by the strength in the coarse grains than by any developments in the wheat market situation itself. Winter wheat crop prospects continued good, with reports indicating less than the average abandonment of acreage. Foreign crop prospects also continued favorable, while there was a fairly large movement of Australian and Argentine wheat to the European markets. This wheat, it is stated, is being offered in the foreign markets lower than the Canadian wheat which is being offered at Atlantic ports at about six to seven cents under United States wheat. This has practically eliminated export sales of our wheat, except from the Pacific Coast ports. Light receipts of wheat, especially of the higher grades, widened the premiums paid for this wheat at the various markets. Mills were more active buyers, although the demand was not of large volume. Stocks in store were drawn upon and between 2,000,000 and 3,000,000 bushels of Canadian wheat were reported sold to the northwestern mills. Fourteen per cent protein wheat sold at Kansas City as high as thirty cents over the May price. With the spring work coming on and the light stocks in the country elevators no material increase in the movement is expected in the immediate future.

## CORN

The corn market ruled very firm during the week because of the very light receipts and a fairly active demand. Gains ranging from three to six cents per bushel were reported at the principal markets. The future market did not follow the full advance in the cash market and prices at the close of the week had declined slightly from the high point reached about the middle of the week. The southern demand has slackened somewhat as dealers have accumulated supplies for their immediate needs. The feeding demand in the central west continued of good volume and shippers and ele-

vator interests absorbed the moderate offerings upon arrival.

## OATS

The movement of oats also continued light and the market was firmer than during the previous week. There was a good demand at most of the markets for the limited offerings as the trade was not expecting any material increase in receipts. Further offerings of Canadian oats to New England at prices below quotations in the United States markets offset somewhat the influence of the delayed seeding in the central west. While farm stocks are fairly large the heavy farm consumption is expected to absorb a good amount of these stocks before the new crop is available.

## RYE

The rye market was steady during the current week. Future prices declined slightly at Minneapolis, but there was a good demand from milling industries and cash prices advanced more than the amount of the decline in futures.

## BEANS

The bean market declined last week to \$4.75 per 100 pounds for C-H-P whites f. o. b. Michigan. Demand became very light, deliveries to elevators increased and the speculative buying of the previous week ceased. Demand is rather lighter than usual at this season of the year. It is estimated that more beans had been sold up to April 1 than in the entire previous crop year, and it is possible that retailers are a little better stocked up than they were in the spring of 1923.

## SEEDS

Seed markets continue dull and the prices are easy. Since the sowing season is two or three weeks late, it is believed that the demand for clover and grass seed will persist throughout April. Imports of cloverseed have declined sharply. Old red clover is quoted about \$2 per bushel higher than seed from the 1923 crop.

## HAY

Hay markets were strong last week with a good demand and light receipts as a result of bad country roads. It is generally believed in the trade that the remaining supply will be cleaned up without difficulty before much new hay becomes available. The depart-

ment of agriculture reports that 75 per cent of the marketable surplus of timothy hay had been sold by March 15; 80 to 85 per cent of the surplus clover hay; 75 per cent of the alfalfa, and 70 per cent of the prairie hay. The reserves of alfalfa and prairie hay are larger than at this time last year but holdings of timothy and clover hay are lighter. The freezing out of winter oats in the south is prolonging the demand for hay from that section.

## WOOL

Domestic wool markets have eased slightly. Ohio delaine which has been holding firm at 57 cents at Boston, moved at 56 cents during the week. Foreign markets remain extremely strong and another 2,000,000 pounds of foreign wools in bond was sold for re-export. Contracting wool in the west is quiet. The sale of Michigan quarter and three-eighth wool at 48 cents f. o. b. country points was reported. Mills still complain of an unsatisfactory market for goods, although a little improvement is noted occasionally. Wool was consumed by domestic mills in January and February at a rate equal to about 750,000,000 pounds annually, which is over two and one-half times the amount of the domestic clip. The pre-war average consumption was less than 600,000,000 pounds. In spite of the reported dullness in the goods market, mills have not materially reduced operations in the last six weeks. At the rate that they have been buying for six months, their stocks must be depleted so that they will need to replenish by the time the new clip is available in volume.

## POULTRY AND EGGS

Egg prices strengthened last week. Many of the arrivals failed to grade up to "firsts" and quality products found easy sale and will continue to do so during the approaching Easter season. Receipts at the four leading markets are not as heavy as a year ago and have not yet begun to reflect the increase in production estimated by the department of agriculture at 10 to 12 per cent over last year. Eggs are not moving into storage in any volume as operators hesitate to store at existing prices although values are the lowest in many years.

Chicago.—Eggs, miscellaneous 20½@21c; dirties 19c; checks 19c; fresh firsts 21½@22c; ordinary firsts 20@

20½c. Live poultry, hens 24½c per pound; springers 28c; roosters 17c; ducks 28c; geese 18c; turkeys 22c.

Detroit.—Eggs, fresh candled and graded 22¼@22½c. Live poultry, heavy springers 28@29c; light springers 23@24c; broilers 60@65c; heavy hens 26@27c; light hens 22@23c per pound; roosters 16@17c; geese 18c; ducks 34@35c; turkeys 28@30c.

## BUTTER

Butter prices regained part of their recent loss last week. Receipts at the four leading markets were much lighter than during the preceding week. Production reports indicated an increase in the make, however, and arrivals next week may weaken the market slightly. Buying demand was good as dealers who had not been purchasing for some time were forced to replenish their stocks. Foreign butter is still a factor in the market. It is estimated that 1,500,000 pounds of low grade Argentine butter are being offered in New York. Arrivals last week included 4,410 casks of Danish, 7,024 boxes of Argentine, and over 23,000 boxes of New Zealand butter. Prices on April 5 were: 92-score fresh creamery, Chicago 39½c; New York 40c; Boston 41c; Philadelphia 41c; Detroit, fresh creamery in tubs sells for 45@48c.

## POTATOES

The department of agriculture estimates that the eleven surplus states had 33,613,000 bushels of potatoes on March 1 available for shipment out of the country. This is 31 per cent less than a year ago when similar holdings were 52,145,000 bushels. New York, Maine and Pennsylvania have more potatoes than a year ago, but in all the other western states, stocks are much lighter. Wisconsin stocks are only 40 per cent of last year, Minnesota 46 per cent, and Michigan 75 per cent and the Dakotas 37 per cent. Potato prices are steady to slightly higher than a week ago. Northern sacked round whites, U. S. No. 1, are \$1.25@1.50 per 100 pounds sacked in the Chicago carlot market.

## GRAND RAPIDS

Potato prices were a nickel higher in Grand Rapids early this week, the farmers making sales at 55@60c per cwt. The leaf lettuce market continued its upward trend, prices moving to 16c a pound, while hothouse radishes remained firm at 70c a dozen bunches. The city whole market has opened up and vegetables are moving better, parsnips touching \$1.75 a bushel early in the week. Carrots were steady at \$1@1.25 a bushel; turnips at 60c bushel; rutabagas 60c a bushel, and cabbage at 75c@1.25 bushel. Receipts of poultry are light and prices are mainly unchanged, with best fat hens topping around 25c a pound. Eggs were firm at 20@21c a dozen, with receipts barely equal to the demand. Beans were weak at \$4.10@4.25 cwt.

## DETROIT CITY MARKET

With some farmers cleaning up their stocks of old potatoes, and road conditions preventing others from coming to market, the supply has been only moderate and the market has held firm. Apples are less plentiful and are selling fairly well. Nearly all of the local supply of cabbage is cleaned up but southern shipped-in cabbage is preventing increased prices. Onions, unless not large, have found slow sale. Horseradish and dark red beets are in demand by Jewish trade. Fat hens find ready sale, with the market firm. Springers move slowly at about two cents less than hens. Market for eggs is steady, as the consumptive demand increases and more are being put into storage. Veal and hogs are sold evenly. Apples, fancy \$2@2.50; No. 1, \$1.40@1.75; cabbage \$1.25@1.50 per bu; potatoes 85@90c; onions \$1.25 per bu; fancy horseradish \$5.50@6 per bu; No. 1, \$4@5; beets \$1.25@1.50; hens 28@29c wholesale; 30@32c retail; springers 27@28c; eggs 23@25c wholesale; 25@30c retail; veal 17@18c lb; hogs \$12.

## COMING LIVE STOCK SALES.

### Guernseys.

May 6.—Berrien County Guernsey Breeders' Association, Eau Claire, Mich. Earl Hemingway, Secretary, Sodus.

## Live Stock Market Service

Wednesday, April 9.

### DETROIT

#### Cattle.

Receipts 509. Market strong on all grades.  
Good to choice yearlings \$ 9.00@10.00  
Best heavy steers 8.25@ 9.00  
Handyweight butchers 7.50@ 8.50  
Mixed steers and heifers 7.25@ 8.00  
Handy light butchers 6.75@ 7.25  
Light butchers 6.25@ 6.75  
Best cows 5.50@ 6.50  
Butcher cows 4.50@ 5.50  
Cutters 3.50@ 4.50  
Canners 2.50@ 3.50  
Choice bulls 5.00@ 6.00  
Bologna bulls 4.50@ 5.25  
Stock bulls 4.00@ 4.50  
Feeders 6.00@ 7.00  
Stockers 5.25@ 6.50  
Milkers \$ 45@ 80

#### Veal Calves.

Receipts 916. Market steady.  
Best \$13.00@13.50  
Others 6.00@12.50

#### Sheep and Lambs.

Receipts 166. Wool lambs are 25c higher; clipped 15c higher.  
Best lambs \$16.50@16.75  
Light to common 10.00@11.50  
Fair 13.50@14.50  
Fair to good 9.50@10.00  
Clipped lambs 13.75@14.25  
Culls and common 2.50@ 3.50  
Fair to good sheep 9.00@10.00

#### Hogs.

Receipts 3,333. Market steady.  
Mixed and heavies \$ 7.65@ 7.70  
Pigs 6.00@ 6.25  
Roughs 6.15@ 6.25  
Yorkers 7.50@ 7.70  
Stags 4.00@ 4.50

### CHICAGO

#### Hogs.

Receipts were 18,000. Market was slow. Values were mostly five cents higher than yesterday's average. Shippers were moderately active while the packers did practically no buying. The bulk of good 250-lb. butchers \$7.40@7.50; top lights and heavyweights at \$7.50; packing sows \$6.80@6.90; killing pigs slow to 25c higher; bulk of good strong weights \$5.75@6.25.

#### Cattle.

Receipts were 6,000. The weighty steers were active at from 10@15c higher. Others and lower grades and light yearlings were barely steady. Best native steers \$12.40; bulk of fed steers \$8.50@11; several loads sold at \$11.50@12; best yearlings \$11.35; she stock was slow and steady; light vealers were a shade lower.

#### Sheep and Lambs.

Receipts 7,000. Market was active. Fat lambs were strong to 25c higher. Sheep rule around 25c higher. Good fat woolled lambs sold at \$16.50; medium natives \$15; good shorn lambs \$14.50; choice fat woolled ewes \$12.40@12.50.

### BUFFALO

#### Cattle.

Receipts 10 cars. Market slow. Calves at \$12.50.

#### Hogs.

Receipts 40 cars. Market is lower. Heavy and yorkers \$8@8.10; pigs and lights \$7.25@7.50.

#### Sheep and Lambs.

Receipts 10 cars. Market is steady. Wool lambs \$17; clipped lambs \$14.50; yearlings \$11.50@12.50; wethers \$10.50@11; ewes \$9@9.50.



## BANKERS AND COLLEGE TO CO-OPERATE.

THROUGH plans formulated by the American Bankers' Association and the agricultural commission of the Michigan Bankers' Association, the bankers in the rural sections of the state will cooperate with the extension department of the Michigan Agricultural College.

These bankers will specifically support the boys' and girls' club movement, the better seed, better crops and more efficient production movements, and the dairy alfalfa campaigns.

Through the federal land banks the farmer can now get long term loans. Short term loans, he can procure from the local bank. Therefore the credit situation is not bad but often more efficient methods are necessary to enable the farmer to get the wherewithal to repay these loans. Through the present plan, the banker will interest himself in the farmer's methods and cooperate with him to get better methods established.

This will help much in better farming for between forty and fifty percent of the farmers are never reached by the college men through the ordinary channels for they do not attend meet-

ings or take part in any of the public agricultural activities. Through the bankers many of these farmers will be brought in contact with the county agent or the extension workers from the college, who persistently have refused to have anything to do with state and federal agricultural leaders.

When buying a hickory handle for an ax or pick, see that the grain of the wood runs straight through to the end. Small pores at the end of the handle mean solid wood.

**Eggs, Etc.**—Small consignments from producers in your territory bring very attractive prices NOW. Prompt returns, always. Refer to Dunn or Bradstreet. Ship us your next case. ZENITH BUTTER & EGG CO., 170 Duane St., New York, N. Y.

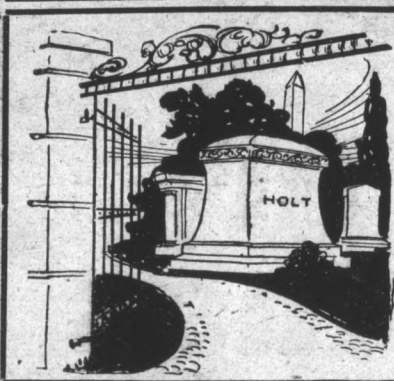
## Ship Your Cattle, Hogs and Sheep to Warns, Iles and Dankert

Union Stock Yards, Toledo, Ohio. For Top Prices. Big Fills—Quick Returns. Correspondence solicited.

Ship Your **Hay and Grain** to the OLD RELIABLE HOUSE  
GEO. E. ROGERS & CO., Pittsburgh, Pa.

## Holmes, Stuve Co., 2429 Riopelle St.

Commission Merchants. Dressed Beef, Hogs, calves, Poultry, Live & Dressed. Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank. Bradstreet. Detroit, Mich. Cherry 7654



## HIGH GRADE Monuments

Let us figure with you on that monument.

We have a man in your neighborhood that will be glad to explain our line to you.

Highest grade—all styles. Write for particulars.

**R. W. CARR**  
107 South Ave., Battle Creek, Mich.

## CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates. Rates 3 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

## Rates in Effect October 7, 1922

| Words   | One time | Four times | Words   | One time | Four times |
|---------|----------|------------|---------|----------|------------|
| 10..... | \$0.80   | \$2.40     | 26..... | \$2.08   | \$6.24     |
| 11..... | .88      | 2.64       | 27..... | 2.16     | 6.48       |
| 12..... | .96      | 2.88       | 28..... | 2.24     | 6.72       |
| 13..... | 1.04     | 3.12       | 29..... | 2.32     | 6.96       |
| 14..... | 1.12     | 3.36       | 30..... | 2.40     | 7.20       |
| 15..... | 1.20     | 3.60       | 31..... | 2.48     | 7.44       |
| 16..... | 1.28     | 3.84       | 32..... | 2.56     | 7.68       |
| 17..... | 1.36     | 4.08       | 33..... | 2.64     | 7.92       |
| 18..... | 1.44     | 4.32       | 34..... | 2.72     | 8.16       |
| 19..... | 1.52     | 4.56       | 35..... | 2.80     | 8.40       |
| 20..... | 1.60     | 4.80       | 36..... | 2.88     | 8.64       |
| 21..... | 1.68     | 5.04       | 37..... | 2.96     | 8.88       |
| 22..... | 1.76     | 5.28       | 38..... | 3.04     | 9.12       |
| 23..... | 1.84     | 5.52       | 39..... | 3.12     | 9.36       |
| 24..... | 1.92     | 5.76       | 40..... | 3.20     | 9.60       |
| 25..... | 2.00     | 6.00       | 41..... | 3.28     | 9.84       |

## Special Notice

All advertising copy discontinuance orders or change of copy intended for the Classified Department must reach this office ten days in advance of publication date.

## MISCELLANEOUS

**FOR SALE**—Farm 160 Acres 1 1/2 miles from Onaway, Mich. on State Pike. 125 acres cultivated, some timber. 2 1/2 story 9 room house, furnace, toilet and bath. Bank barn. A. Brenner, Onaway, Mich.

**FOR SALE**—40 acre estate, 5 miles east of Charlotte, Eaton County, Michigan. Fine clay loam land, nice orchard, terms, for price of buildings. M. E. Depew, 23 Third St., Pontiac, Mich.

**FARMS WANTED**—We have buyers for Michigan farms. Give description and lowest cash price. Warren McKee Farm Agency, Logansport, Ind.

**CABBAGE PLANTS**—Fullwood's Frost Proof plants will produce headed cabbage three weeks before your home grown plants and will stand a temperature of 20 degrees above zero without injury. I have twenty million now ready. Varieties: Jersey Wakefield, Charleston Wakefield, Copenhagen Market, Succession and Flat Dutch. Prices by express any quantity at \$2.00 per 1000. By parcel post, postpaid, 200 for \$1.500 for \$1.75, 1,000 for \$3.00. First class plants and safe arrival guaranteed. F. D. Fullwood, Tifton, Ga.

**MILLIONS "FROSTPROOF" CABBAGE PLANTS** for sale. Fine outdoor grown. Wakefields, Copenhagen Market, Succession, etc. 300 \$1; 500 \$1.50; 1000 \$2.50. Mailed prepaid. Express 10,000 \$15; 100,000 \$125. Cash. If you want early cabbage, set these plants. Good order delivery positively guaranteed or money refunded. Also grow Tomato and Sweet Potato plants. J. P. Council Company, Wholesale growers, Franklin, Virginia.

**FROST PROOF CABBAGE PLANTS**. Early Jersey, Charleston Wakefield, Flat Dutch, Copenhagen Market and Succession. Prompt shipment of fine plants. Tomato Plants, Earliana, Redfield Beauty, Livingston Globe and Greater Baltimore. Postpaid, 250 for \$1.00, 500 for \$1.60, 1,000 for \$3.00. Express Collect, \$1.50 per 1,000. Tifton Potato Co., Inc., Tifton, Ga.

**1000 STRAWBERRIES** \$3.00; Champions \$9.00; 20 Grapes \$1.00; 50 Raspberries \$1.00; 50 Dewberries \$1.00. Catalogue Free. Hellenga's Nursery, Three Oaks, Mich.

WE ARE in position to supply you at all times with good second-hand egg crates, 30 doz. size, including fillers and covers, complete for shipping, at the following rates: Carload lots \$1.00 B. Detroit, 14c each; less than carload lots, 10c each. We also sell fillers flat and excelsior pads. Wm Spitz & Sons, 2645 Chene St., Detroit, Mich.

**HAY FOR SALE**—Write for prices delivered your station. E. D. White, Rudyard, Mich.

**BUY your alsike seed** from the grower, also soy-beans. C. W. Johnson, Palms, Mich.

**BUSINESS stationery** for farmers, dairymen, poultrymen. Rock bottom prices. Free cut service. Samples Free. National Printing Company, Worcester, Mass.

**IMPROVED ROBUST BEANS**—Heaviest yielding existing variety and latest improved Agricultural College Strain. Ninety-four per cent germination. Not polished or hand-picked. Ninety-pound bag, six dollars, freight prepaid. Will pick about three pounds to bag. A. B. Cook, Owosso, Mich.

**PLANTS**—Cabbage, Tomato, Beet, Lettuce, Pepper, etc. Hardy open field grown. Ready May 1st. Low prices. Safe delivery guaranteed. Customers in forty states. Catalogue free. Reinhardt Plant Co., Ashburn, Georgia.

**30 GLADIOLUS BULBS**—new colors, including rare purple, \$1. postpaid. Send for 20-page illustrated catalog of 125 beautiful varieties. Howard W. Gillet, New Lebanon, N. Y.

**GLADIOLUS**—Beautiful large flowering varieties mixed 50 fine bulbs. Postpaid, \$1.00. Satisfaction guaranteed. Phil Laesser, Sun Prairie, Wis.

**CHOICE GLADIOLUS BULBS**—Many varieties. Write for price list. George Hunter, 412 Evergreen Ave., East Lansing, Mich.

**ROBUST SEED BEANS**, grown from certified seed \$3.00 per bu. 3 registered Jersey Bulls. Arthur J. Schanck & Son, Metamora, Mich., Oxford Phone.

**CERTIFIED Manchu soy beans** 96 percent germination. Reasonable price. Charles Martin, Otterbein, Indiana.

**IMPROVED Robust Beans**, M. A. C. latest strain. \$3.00 per bu. Fritz Mantey, Fairgrove, Mich.

**SHIP YOUR DRESSED CALVES** and poultry to Geo. McCutcheon & Co. In business over 50 years. We want shipment direct from the farm. We charge only one cent a pound commission for selling calves and five cents on the dollar for poultry. Write for quotations and tags. Geo. McCutcheon & Co., 1132-33 Fulton St., Chicago, Ill.

**FOR SALE**—Well drilling machine, particulars address Mrs. Etta Rexstrow, Fostoria, Mich.

**SOYLAND BEANS**—We specialize in Manchu and Midwest soybeans, and inoculation. Also calico seed corn, and Victory oats. Get our catalogue and prices. Fouts Bros. Camden, Ind.

**ORDERS** now booked for best varieties of vegetable plants at \$10 per 1,000. Price of potted and flowering plants on application. Chelsea Greenhouse, Chelsea, Mich.

**FOR SALE** New "Stober High Speed Knitter." Will knit any knit article. Is O. K. Can't run it on account of poor eyesight. Will sell for \$58. Address Michigan Farmer, Box 412.

**INCUBATORS and Brooders**, Queen, Buckeye and Reliable at half manufacturer's price. Don't miss this opportunity, send for list. Bartels, 45 Cortlandt Street, New York.

**FOR SALE**—Holton tractor with plows. Price \$300.00. Matt Makela, Houghton, Mich.

**SEED CORN**—Clement's Improved White Cap Yellow Dent. Field selected, dried on racks, ear tested, with a guaranteed germination. This was one of the heaviest yields in the State the past year in a test made by The Farms Crop Department of the Michigan Agricultural College. Write Paul Clement, Britton, Michigan, for catalog and prices.

**BERRY BOXES**—Our Berry Boxes will carry your fruit to market safely. \$4.50 per thousand. Write us. Central Basket Co., Berrien Springs, Mich.

## PET STOCK

**GERMAN SHEPHERD**—Airedales, Collies, Old English Shepherd dogs, puppies, 10c illustrated instructive list. W. R. Watson, Box 35, Macon, Mo.

**FOR SALE**—Collie puppies, Heel-driving champion ancestors. Males, \$12; females, \$10. Caleb Eldred, Climax, Mich.

**FERRETS**. A few ratters left. Thos. Sellars, New London, Ohio.

**A FEW Rat Terrier Puppies** Left. Price Right. H. C. Schrock, Shipshewana, Ind.

**REGISTERED Scotch Collie Puppies** from natural heeler. Silvercrest Kennels, Gladwin, Mich.

## TOBACCO

**HOMESPUN TOBACCO**—Chewing, 5 lbs. \$1.75; Ten \$3.00. Smoking, 5 lbs. \$1.25; Ten \$2.00. Pay when received. Pipe and recipe free. Farmers' Union Paducah, Ky.

**HOMESPUN TOBACCO**, five pounds chewing, \$1.75; ten, \$3; twenty, \$5.25. Smoking, five pounds, \$1.25; ten, \$2; twenty, \$3.50. Pipe and Recipe free. Send no money. Pay when received. Kentucky Tobacco Company, Paducah, Ky.

**NATURAL LEAF TOBACCO**: Chewing, Five pounds, \$1.75; Ten, \$3; Smoking, Five pounds, \$1.25; Ten, \$2; Twenty, \$3.50; Pipe and recipe free, pay when received. Cooperative Farmers, Paducah, Kentucky.

**HOMESPUN TOBACCO**, Quality Guaranteed. Smoking 10 pounds \$1.25, 20 pounds \$2.00. Pipe and Recipe free. Chewing 10 pounds \$2.50. Kentucky Tobacco Growers, Sedalia, Kentucky.

**TOBACCO**—Dandy smoking leaf scraps, 10 lbs. \$1.00. Pay for tobacco and postage when received. FARMERS' GRANGE, Hawesville, Ky.

## BABY CHICKS

**BRED TO LAY** Barred Rock chicks, hens, all blood tested for White Diarrhea by Michigan Agricultural College Bacteriological Dept. Pedigreed males from high-record hens rapid. Circular free. L. W. Aseltine, R. 1, Grand Rapids, Mich.

**CHICKS**—Genuine Tom Barron English Strain S. C. White Leghorns, bred from Imported Stock, and M. A. C. Barred Rocks. Write for our low price quality stock circular. Hillside Hatchery Farm, R. 3, Holland, Mich.

**CHICKS**—From 8 varieties; select heavy laying and exhibition stock. \$11 per 100 and up. Can't be beat for the money. Postage paid. 100 percent live delivery guaranteed. Send for prices. The Monroe Hatchery, Monroe, Mich.

**BABY CHICKS**—Write for our new free catalog and price list. Eight years' experience. H. H. Pierce, Jerome, Michigan.

**QUALITY CHICKS**, eggs; fifteen standard bred varieties; best winter laying strains. Free delivery. Reasonable prices. Catalogue free. Missouri Poultry Farms, Columbia, Mo.

**BABY CHICKS** from heavy-laying strains. All leading pure breeds. Low prices. Prepaid. Live delivery guaranteed. Catalog Free. Smith Bros. Hatcheries, Mexico, Mo.

**100,000 HOLLYWOOD**—Barron White Leghorn chicks. Foundation stock, 250-288 egg lines. Supreme quality, 100, \$15.00; 1,000, \$125.00. Postpaid. Order from this ad. Catalog. Highland Poultry Farm, Holland, Mich., R. 9, Box C.

**BABY CHICKS**—Remarkable for size and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. Tyrone Poultry Farm, Fenton, Mich.

**HA! Look!** 100,000 chicks 8c and up. 15 varieties. From highest producing contest winners. Hatching eggs. Circular. Lawrence Hatchery, Box J, R. 7, Grand Rapids, Mich.

**BABY CHICKS** from Bred-to-Lay farm flocks. Barred Rocks, Reds, English White Leghorns. Now booking orders for May delivery. 100 percent live delivery. Chicks 10c each and up. Goret's Poultry Farm, Corunna, Mich.

**RICHARDSON'S ROCKY RIDGE** pure Parks strain Barred Rock Baby Chicks, \$16 per 100. Hanover, Mich.

**BABY CHICKS** and eggs. Superior Ringlet Barred Rocks, R. C. R. 1, Reds, White Leghorns. Circular. Wyndham's Ideal Hatchery, Tiffin, Ohio.

**BABY CHICKS**—Rocks, Reds, Silver L. Wyandottes, White Wyandottes, Anconas, White and Brown Leghorns have been culled and inspected. We have real quality at commercial prices. One of the oldest hatcheries in Michigan. Write for prices. Shepard Poultry Farm, Litchfield, Mich.

**CHICKS AND EGGS**. Order now from my heavy laying strains. Rocks, Reds, Anconas, White and Brown Leghorns. Frank Heinz, Comstock Park Mich.

**BABY CHICKS**—Leghorns, Rocks, Reds, Wyandottes. 100 per cent live guaranteed. Write for price list. P. W. Stone Hatchery, Fenton, Mich.

**BAB'S BIG**, beautiful, brilliant Reds S. C. Chicks. Eggs, Stock, Quality at farmers' prices. Babcock & Son, R. D. 6, Battle Creek, Michigan.

**BABY CHICKS**—Barron S. C. W. Leghorns, 10c up. Park Strain Barred Rocks from 14c up. Sent by parcel post. 100 per cent live delivery guaranteed. Waterway Hatchery, R. 4, Holland, Mich.

**S. C. WHITE Leghorn chicks**, bred for heavy winter egg production. Breeding stock inspected by Michigan Agricultural College expert. Mrs. F. E. Ford, Norvell, Mich.

**BABY CHICKS**—Rhode Island Reds 12c. White Leghorns 10c; large mixed 9c. Live delivery guaranteed. Ida Prause, Maple City, Mich.

**PURE-BRED** Barred Rocks and Rhode Island Reds \$14.00. 98 percent live delivery guaranteed. Brookdale Poultry Farm, Paw Paw, Mich.

**WHITE ROX**, Barred Rox, Superior quality farm range stock, 2,000 breeders. Eggs any quantity. Chir. White Wing Egg Farm, Oregonia, Ohio, R. 2.

**BABY CHICKS**—Thoroughbred. White Wyandottes, Rocks, Reds and White Leghorns. Write for prices. Grace Milliken, P. O. Box 453, Fenton, Mich.

**S. C. BUFF LEGHORN** Baby Chicks from good laying strain. Willard Webster, Bath, Mich.

## POULTRY

**THE EVERGREEN** White Wyandottes proving themselves the best of egg producers. Making startling high records. They won the cup for winter production at Michigan Egg Laying Contest last year. They won all the firsts at Grand Rapids show and all but one at Lansing (in production class.) Now leading all heavy breeds at both Michigan and Ontario Egg Laying Contests. Write for circular and get the best. Evergreen Poultry Farm, Dep't. A, Greenville, Michigan.

**STOCK and Eggs** by 100 or 1,000 lots, all leading Varieties Chickens, Ducks, Geese, Bantams, Guinea, Turkeys, Fox Terrier Pups. Write your wants, Jesse Burnside, Judson, Ind.

**SINGLE COMB REDS**—Selected eggs from strong matings. Win M. A. C. Silver and Bronze Medals. Birds under Ribbons in both exhibition and utility classes. Postal card request brings free circular. Satisfaction guaranteed at live prices. Harry J. Theis, 283 Hunter St., Battle Creek, Mich.

**BARRED ROCKS**, Eggs and cockerels for sale at reasonable prices. Write for circular: Fair View Poultry Farm, R. 3, Hastings, Mich.

**YEARLING** Barred Rock Pullets, \$2.50 each. Barron White Leghorn and Rock Chicks. Low prices. H. Close, Tiffin, Ohio.

**PULLETS**—Barron English and Ferris American Leghorns. Eight weeks, 85c. Barred Rocks, White Rocks, Rhode Island Reds, \$1. Ready April 21st. Early Hatches make bigger, stronger birds. Early fall and winter eggs. Rufus Morse, Belding, Mich.

**BARRED ROCKS**—Park's best pedigreed stock, mated with M. A. C. and Dennison pedigreed cockerels. Hatching eggs \$2 per \$15; \$5 per \$50; \$10 per 100. Chicks \$20 per 100. Prepaid by parcel post. R. G. Kirby, Route 1, East Lansing, Mich.

**STOCK & EGGS**—Buff & W. Leghorns, Orpingtons, Reds & Anconas, \$1 for 15; \$5 per 100, parcel post. Turkeys, Ducks & Geese, Indianapolis winners. W. C. Jackson, R. 3, South Bend, Ind.

**ROSE COMB REDS**—heavy layers, winners 1st cockerel, 2nd young hen, Michigan Red meet. Order eggs now. Mating list on request. L. B. Hendrickson, 81 Frisbie Ave., Battle Creek, Mich.

**RHODE Island White** hatching eggs, \$1.25 per 15, \$7 per 100. Best winter layers, chicks \$20 per 100. White China goose eggs, 30 cents each. Hillview Farm, Mattawan, Mich.

**S. C. BLACK MINORCAS**—Heavy birds, Northrup strain. Hatching eggs, \$1.50 for 15. \$8.00 per 100. C. J. Deedrick, Vassar, Mich.

**REGAL-DORCAS** White Wyandotte and Bourbon Red Turkey eggs for hatching. Chas. A. Beatty, Milford, Mich.

**S. C. BROWN LEGHORNS**—Record producers. Fresh selected range eggs postpaid. 30, \$2.40; 45, \$3.10; 100, \$5.75. Floyd Robertson, Lexington, Indiana.

**BUFF ROCK EGGS**—\$1.05—15; \$6.00—100. Hendrick Bros., Shelbyville, Mich.

**RHODE ISLAND REDS**—Rose Comb. Large fancy cockerels and pullets, \$3 each. Burt Sisson, Imlay City, Mich.

**S. C. R. J. REDS**—Pure-bred eggs for setting, 15, \$1.25; 100, \$8.00. Louis Morris, R. 1, Mt. Morris, Michigan.

**SNOWY WHITE ROCKS**, Fishel strain. Eggs prepaid, 15—\$1.50; 50—\$3.75; 100—\$7.00. Mrs. Earl Dehnhoff, Vanburen, Ohio.

**MAMMOTH Pekin Duck** eggs—\$1.50 for 12, \$2.75 for 24 or \$9.00 per hundred. W. Bixby, R. 4, Davison, Mich.

**EGGS FOR SALE**—Ringlet Barred Rocks bred to lay, weigh and win. \$1.50 per setting or \$5.00 per 100. Robert Martin, Woodland, Mich., R. 3.

**ROSE COMB Rhode Island Reds**, Hatching Eggs \$1.25 per 15. Postpaid. Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

**WHITE WYANDOTTES** Exclusively. Eggs \$4.50 per 100. Prepaid. Raymond Eash, Shipshewana, Indiana.

**SILVER LACED** and White Wyandotte Choice Cockerels. C. W. Browning, Portland, Mich.

**EGGS** from State Fair Laying Contest Winning Barred Rocks. C. D. Finkbeiner, Clinton, Mich.

**WHITE ROCK EGGS**, 15—\$1.00; 100—\$6.00. D. Barnett, Waynetown, Ind.

**TEN EGGS**—pure Toulouse geese \$5.00. Fifteen eggs, pure R. I. Reds, \$1.50. Insured parcel post prepaid. Mrs. Amy Southworth, Cassopolis, Mich., R. 2.

**68 VARIETIES** fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby chicks. Large catalog 5c. A. A. Ziemer, Austin, Minn.

**TURKEY EGGS**, Giant Bronze. Twelve, \$6 postpaid. Raymond Black, Quincy, Ohio.

## HELP WANTED

**FARMER AGENTS WANTED**—to make big money selling reliable auto replacement batteries and farm electric lighting plants to your friends and neighbors. Also Radio sets complete. Exclusive territory if you write today. Service Station Corporation, 501-B Industrial Bank Building, Flint, Michigan.

**DO YOU WANT MORE MONEY?** Our Special Sales Plan enables agents to make big money selling Martin Corn Cribbs to farmers. Full or part time—no experience necessary. Write today for full details. Martin Steel Products Company, Mansfield, Ohio.

**MAKE BIG MONEY**—go into business for yourself selling automobile accessory. Every Ford owner a prospect. Big profits—sell yourself. Write for full information. Dept. A. RYD-E-Z Co., Cleves, Cin., O.

**MASON** sold 18 Comet Sprayers and Autowashers one Saturday. Profits \$2.50 each. Particulars free. Established 30 years. Rusler Co., Johnstown, Ohio. Box C-26.

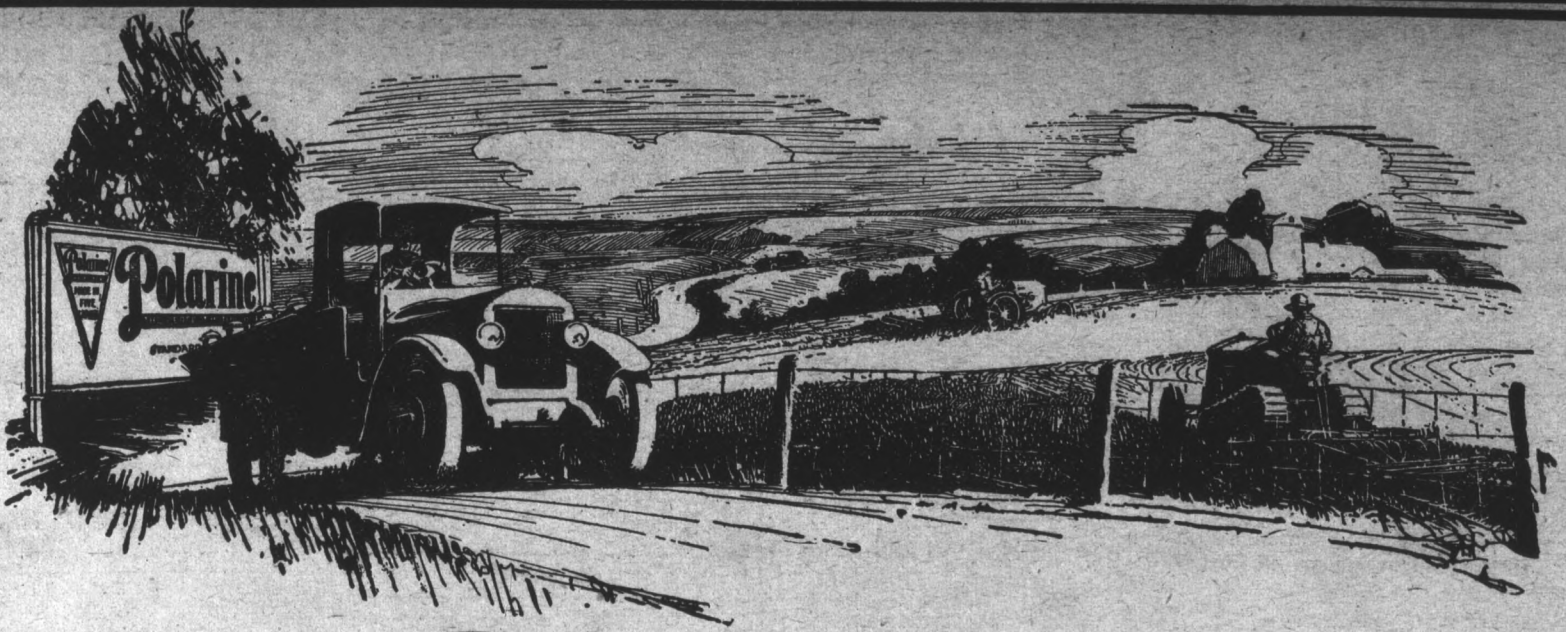
**TEACHER** for out of town summer position; guaranteed salary plus bonus. Write Educators' Association, Park Avenue Bldg., Detroit, Mich.

**WANTED**—Single Farm Hand Now. Box 1215 Michigan Farmer.

**WANTED**—Married man, first class milk and farm hand. \$85.00 per month and privileges year round job. J. Gale, Bour Farm, R. 3, Pontiac, Mich.

**WANTED** man to help around Nursery. Edw. Lubke, New Buffalo, Mich.





# Polarine

THE PERFECT MOTOR OIL

Made in Five Grades

## Makes Record in Protecting Bearings

### Tractor Chart of Recommendations

| TRACTION                             | Motor Oil | TRACTION                                      | Motor Oil |
|--------------------------------------|-----------|-----------------------------------------------|-----------|
| Adaptable.....                       | H.        | Monarch.....                                  | H.        |
| Allis-Chalmers, 6-12.....            | H.        | Nilson.....                                   | S. H.     |
| Allis-Chalmers, Other Models.....    | S. H.     | Oil-Gas.....                                  | E. H.     |
| All Work.....                        | S. H.     | Peoria.....                                   | E. H.     |
| Andrews-Kincade.....                 | E. H.     | Pioneer.....                                  | E. H.     |
| Appleton.....                        | S. H.     | Reed.....                                     | S. H.     |
| Aultman-Taylor, 15-30.....           | S. H.     | Rix.....                                      | S. H.     |
| Aultman-Taylor, Other Models.....    | S. H.     | Rumley, Oil Pull, 12-20, 16-30 and 20-40..... | E. H.     |
| Automotive.....                      | H.        | Rumley, Other Models.....                     | E. H.     |
| Avery, C. & Road Racer.....          | H.        | Russell.....                                  | S. H.     |
| Avery, Track Runner.....             | S. H.     | Samson.....                                   | S. H.     |
| Avery, Other Models.....             | E. H.     | Shawnee.....                                  | H.        |
| Bates Steel Mule, Midwest Motor..... | S. H.     | Square Turn.....                              | E. H.     |
| Bates, Other Models.....             | H.        | Stinson.....                                  | S. H.     |
| Bear.....                            | S. H.     | Titan.....                                    | S. H.     |
| Best Tractor.....                    | E. H.     | Topp-Stewart.....                             | S. H.     |
| Big Farmer.....                      | E. H.     | Toro.....                                     | H.        |
| Case, 10-18, 12-20 and 15-27.....    | H.        | Townsend.....                                 | E. H.     |
| Case, 22-40.....                     | S. H.     | Traylor.....                                  | H.        |
| Case, Other Models.....              | E. H.     | Trundac.....                                  | S. H.     |
| Cletrac, F.....                      | H.        | Twin City, 12-20 and 20-35.....               | S. H.     |
| Cletrac, W.....                      | S. H.     | Twin City, Other Models.....                  | E. H.     |
| Coleman.....                         | E. H.     | Uncle Sam.....                                | S. H.     |
| Dart.....                            | S. H.     | Wallis.....                                   | S. H.     |
| Eagle.....                           | S. H.     | Waterloo Boy.....                             | S. H.     |
| E-B.....                             | S. H.     | Wetmore.....                                  | S. H.     |
| Ellwood.....                         | H.        | Wisconsin.....                                | S. H.     |
| Farm Horse.....                      | E. H.     |                                               |           |
| Fitch.....                           | E. H.     |                                               |           |
| Flour City, Junior and 20-35.....    | S. H.     |                                               |           |
| Flour City, Other Models.....        | E. H.     |                                               |           |
| Fordson.....                         | S. H.     |                                               |           |
| Fox.....                             | E. H.     |                                               |           |
| Frick.....                           | S. H.     |                                               |           |
| Gray.....                            | S. H.     |                                               |           |
| Hart-Parr.....                       | E. H.     |                                               |           |
| Heider.....                          | S. H.     |                                               |           |
| Holt, 2-Ton.....                     | H.        |                                               |           |
| Holt, Other Models.....              | E. H.     |                                               |           |
| Huber.....                           | S. H.     |                                               |           |
| Indiana.....                         | H.        |                                               |           |
| International.....                   | H.        |                                               |           |
| J. T.....                            | E. H.     |                                               |           |
| Klumb.....                           | E. H.     |                                               |           |
| La Crosse.....                       | E. H.     |                                               |           |
| Lauson.....                          | S. H.     |                                               |           |
| Leader.....                          | S. H.     |                                               |           |
| Leonard.....                         | S. H.     |                                               |           |
| Liberty.....                         | E. H.     |                                               |           |
| Lincoln.....                         | S. H.     |                                               |           |
| Little Giant.....                    | S. H.     |                                               |           |
| McCormick-Deering.....               | H.        |                                               |           |
| Minneapolis, 12-25 and 17-30.....    | S. H.     |                                               |           |
| Minneapolis, Other Models.....       | E. H.     |                                               |           |
| Mogul.....                           | S. H.     |                                               |           |
| Moline.....                          | S. H.     |                                               |           |

#### KEY

L.—Polarine Light  
M.—Polarine Medium  
H.—Polarine Heavy  
S.H.—Polarine Special Heavy  
E.H.—Polarine Extra Heavy

N. B.—For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Company (Indiana) station.

"Burned bearings on a crankshaft or elsewhere", says a leading automotive authority, "means that the bearing is cut, caused by friction from lack of oil."

Polarine protects bearings, by maintaining at all times, an unbroken cushion of oil. That it can do this, is due solely to its correct scientific structure.

One Polarine user writes: "In checking back records of the last five years (during which we have used only Polarine Oils and Greases) on the upkeep cost of our tractors and trucks we had only one case of burned out bearings, and this one case was the fault of neglect on the driver's part to supply the necessary amount of oil."

"This, with eleven tractors and trucks running continually, we believe is some record."

Numerous other letters tell a similar story.

Polarine minimizes friction because it maintains its body. It maintains its body because (First) it is made from selected crude. (Second) because it is refined and treated by a special process to remove those elements which tend to form gum, carbon and other impurities. (Third) because it undergoes elaborate laboratory and field tests which check up the refiner in his efforts to produce a lubricant which will stand up under all temperature and mechanical conditions.

The chart at the left tells the *right* grade for your tractor to give you perfect protection against friction.

The essence of economy is to drain your crankcase frequently and fill up with the correct grade of Polarine. Your tractor will give you better service and it will last longer.



Standard Oil Company, (Indiana) 910 S. Michigan Ave.  
Chicago, Illinois

3486